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EMPLOYMENT AND PAY ROLLS

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Employment and Pay Rolls

SUMMARY OF REPORTS FOR DECEMBER 1940

Total Nonagricultural Employment

CIVIL nonagricultural employment increased by approximately 540,000 workers in December 1940, bringing total employment to more than 37,100,000 persons. The December increase was larger than any reported in the past 11 years and more persons were engaged in civil nonagricultural occupations in December than at any time since October 1929. Wholesale and retail trade establishments, in which 430,000 workers were added, accounted for most of the employment gain. A substantial portion of this gain was due to the hiring of temporary workers to handle the Christmas trade. Manufacturing industries continued to expand under the spur of defense expenditures and showed a contraseasonal gain of nearly 120,000. Federal, State, and local Government services, exclusive of the armed forces, added more than 45,000 persons to pay rolls in December—most of this rise was due to increased activity at navy yards and Government arsenals and to the hiring of temporary employees by the Post Office Department for the Christmas rush. The finance, service, and miscellaneous group of industries added approximately 11,000 workers in December. Transportation, public utilities, and mining reported seasonal decreases in employment in December. Construction firms, however, showed a less than seasonal decrease of 27,000 workers.

Total civil nonagricultural employment in December 1940 was 1,500,000 above the December 1939 level. Manufacturing industries added 640,000 workers during the year and 450,000 found jobs in private and public construction work. Of all the industries surveyed, the only major group to report an employment decrease (15,000) over the year interval was mining.

These figures do not include emergency employment which increased 155,000 over the month as a result of the following changes: Increases of 63,000 on projects operated by the Work Projects Administration, 65,000 on the out-of-school work program of the National Youth Administration, 62,000 in the military service, and a decrease of 35,000 in the Civilian Conservation Corps.

Industrial and Business Employment

Of the 157 manufacturing industries surveyed, 102 showed more wage earners at work in December than in November and 128 showed larger pay rolls. Of the 16 nonmanufacturing industries regularly covered, 8 reported gains in employment and 13 in pay rolls.

The contraseasonal gain of 1.3 percent (119,000 workers) in factory employment was coupled with an increase in weekly pay rolls of 5.2 percent or more than \$11,300,000. The employment gain was in contrast to a seasonally expected decline of 0.9 percent or 82,000 workers and the pay-roll expansion was about 14 times as large as the customary seasonal increase of 0.4 percent or \$880,000. In only 1 year (1919) has a more pronounced pay-roll increase been reported for December, and in only 2 years (1919 and 1924) have larger employment gains been shown.

The December 1940 employment index for all manufacturing industries combined stood at 116.2 on the basis of 100 for the 3-year period 1923-25, the highest point since the series began (January 1919) and 7.8 percent above the level of a year ago. The corresponding pay-roll index (122.4) exceeded all levels since June 1920 and showed an increase of 16.1 percent over December of last year. The 12-month average index of employment in 1940 was 107.5 compared with 99.9 in 1939, and the corresponding pay-roll indexes were 105.4 and 92.2.

For the durable-goods group of industries, the employment and pay-roll indexes in December 1940 were 117.6 and 131.6, the gains since last year being 14.4 and 24.4 percent, respectively. The average 1940 indexes for this group were 104.3 in employment and 107.8 in pay rolls as against 1939 averages of 90.2 and 86.2.

The December 1940 employment and pay-roll indexes for the non-durable-goods group were 114.8 and 112.1, the gains since a year ago being 2.0 and 6.8 percent, respectively. The average indexes for the year 1940 were 110.6 and 102.7, while for 1939 they were 109.2 and 98.9.

The durable-goods group as a whole showed employment and pay-roll gains between November and December 1940 of 1.8 percent and 5.2 percent, respectively, while the nondurable-goods group showed somewhat smaller increases (0.8 percent and 5.2 percent). As in the preceding month, most of the employment gains in the individual industries were either larger-than-seasonal or contraseasonal, and most of the decreases were smaller-than-seasonal. Among the many industries showing employment gains due in part to defense orders were the following: Foundries and machine shops (15,900); electrical machinery (11,100); cotton goods (10,600); shipbuilding (9,300); steel (8,900); shoes (8,300); aircraft (7,900); men's clothing (6,200);

woolen and worsted goods (3,900); brass, bronze, and copper products (3,700); engines (3,400); and machine tools (2,900). The percentage increases in industries recently added to the monthly report and engaged in defense work were as follows: Fire extinguishers, 10.3 percent; machine-tool accessories, 6.4 percent; ammunition, 5.8 percent; screw-machine products, 4.9 percent; instruments and apparatus, 4.7 percent; firearms, 4.4 percent; optical goods, 4.1 percent; abrasives, 1.9 percent. The largest employment decline was in the canning industry, which showed a seasonal recession of 16,600. Sawmills reported 6,700 fewer workers and automobile plants a decline of less than 1,000.

Employment in retail stores increased more than seasonally by 11.6 percent, and corresponding pay rolls increased 10.7 percent, the latter gain being the largest December pay-roll increase recorded in the 12 years of the Bureau's survey. Both employment and pay rolls in retail trade as a whole were at the highest levels since December 1929, while for the general merchandising group, they were at the highest points recorded in the Bureau's survey. Department stores took on 35.8 percent more employees to handle the holiday trade, variety stores 50.9 percent, jewelry stores 23.7 percent, men's and boys' apparel stores 22.8 percent, family clothing stores 16.9 percent, and women's apparel stores 10.8 percent.

In wholesale trade the employment gain of 1 percent between November and December was larger than the December increase reported in any of the preceding 11 years with the exception of 1936. This gain was reflected in all important wholesale lines with the exception of dry goods and apparel and farm products which showed declines of 0.4 and 1.6 percent, respectively. Wholesalers dealing in general merchandise increased their forces by 8.7 percent; farm supplies, 5.8 percent; electrical supplies and hardware, 2.5 percent each; leather goods and tobacco, 1.6 percent each; agents and brokers, 7.5 percent; and assemblers and country buyers, 7.3 percent.

In anthracite mines employment increased seasonally by 0.9 percent and pay rolls rose 13.4 percent. While employment in anthracite mining remained virtually unchanged over the year¹⁹⁴⁰ interval, the December pay-roll level was 60 percent above that of December 1939, indicating substantially increased production. In bituminous-coal mines, employment increased less than seasonally by 0.2 percent, while pay rolls showed a substantial gain of 8.1 percent. Since December 1939, employment in this field has decreased by 2.8 percent and pay rolls have increased 8.4 percent. Employment in metal mines decreased seasonally by 0.4 percent since November, quarries showed a smaller-than-seasonal employment loss of 3.5 percent, and crude oil producers a decline of 0.6 percent.

Private building construction employment decreased much less than seasonally (1.9 percent) from November to December, the average November-December drop of the past 8 years being 11.3 percent. Three of the nine geographic divisions showed increased employment, namely, the West South Central States (2.9 percent), the South Atlantic States (3.0 percent), and the Pacific States (1.5 percent). All of the geographic divisions except the East South Central States showed increases in weekly pay rolls. General contractors reported 2.3 percent fewer workers while special trades contractors reported a net employment decrease of 1.8 percent. Of the fifteen special building trades surveyed, increases were reported for structural steel erection, plastering, elevator installation, roofing and sheet metal work, wood flooring, ornamental metal work, and electrical contracting. Employment decreases were reported for painting and decorating, building insulation, carpentering, plumbing and heating, masonry, excavating, tile and terrazzo contracting, and glazing. The level of employment in private building construction as a whole in December 1940 was 28.7 percent higher and weekly pay rolls 34.3 percent higher than in December 1939.

A preliminary report of the Interstate Commerce Commission for class I steam railroads showed an employment decline of 1.8 percent between November and December, the total number employed in December being 1,024,806. Corresponding pay-roll figures for December were not available when this report was prepared. For November they were \$165,481,736, a decrease of \$11,107,452 since October.

Hours and earnings.—The average hours worked per week by manufacturing wage earners were 39.8 in December, an increase of 3.1 percent from November. The corresponding average hourly earnings were 68.3 cents, an increase of 0.8 percent from the preceding month. The average weekly earnings of factory workers were \$27.89, an increase of 3.7 percent since November. Of the 16 nonmanufacturing industries regularly surveyed 14 reported increases in average weekly earnings. Of the 14 nonmanufacturing industries for which man-hours are available, 11 showed gains in average hours worked per week and 10 reported increases in average hourly earnings.

Wage-rate increases were reported by 211 of the 33,789 manufacturing establishments which supplied employment information in December. These increases averaged 6.3 percent and affected 74,102 of the 6,468,688 wage earners covered. Among the industries in which substantial numbers of workers received pay raises were sawmills (13,342), electrical machinery (8,962), steel (7,374), foundries (7,255), chemicals (4,019), paper and pulp (2,532), and smelting and refining (2,547). Out of a total sample of about 90,000 nonmanufacturing establishments (excluding building construction firms) having approximately 3,000,000 employees in December, 43 estab-

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lishments reported wage increases affecting 4,045 workers, more than half of whom were metal miners. These increases averaged 8.5 percent. As the Bureau's survey does not cover all establishments in an industry and, furthermore, as some firms may have failed to report wage changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

Employment and pay-roll indexes and average weekly earnings for December 1940 are given in table 1 for all manufacturing industries

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

Industry	Employment			Pay roll			Average weekly earnings		
	Index De- cember 1940	Percentage change from—		Index De- cember 1940	Percentage change from—		Aver- age in De- cember 1940	Percentage change from—	
		Nov- ember 1940	De- cember 1939		Nov- ember 1940	De- cember 1939		Nov- ember 1940	De- cember 1939
All manufacturing industries combined ¹	(1923-25=100) 116.2	+1.3	+7.8	(1923-25=100) 122.4	+5.2	+16.1	\$27.89	+3.7	+7.7
Class I steam railroads ²	57.4 (1929=100)	-1.8	+1.6	(³) (1929=100)	(³)	(³)	(³)	(³)	(³)
Coal mining:									
Anthracite ⁴	50.8	+9	-3	42.7	+13.4	+60.3	27.60	+12.4	+60.7
Bituminous ⁴	90.0	+2	-2.8	91.3	+8.1	+8.4	27.19	+7.9	+11.5
Metalliferous mining	72.2	-4	+7.3	73.3	+4.9	+12.8	31.71	+5.4	+5.1
Quarrying and nonmetallic mining	45.5	-3.5	+3.4	42.8	+1.2	+9.4	23.74	+4.9	+5.8
Crude-petroleum production	60.9	-6	-4.5	55.8	-1.8	-5.8	33.70	-1.2	-1.3
Public utilities:									
Telephone and telegraph ⁵	79.6	+4	+5.1	104.9	+1.6	+7.7	\$32.40	+1.2	+2.5
Electric light and power ⁵	91.3	-5	+1.3	106.4	-5	+3.9	\$35.54	+(?)	+2.5
Street railways and busses ^{5,6}	68.4	-3	-9	73.2	+4.2	+4.9	\$34.92	+4.6	+5.7
Trade:									
Wholesale ⁹	92.7	+1.0	+6	84.0	+4.0	+6.1	\$31.31	+2.9	+5.5
Retail ⁹	107.5	+11.6	+3.2	96.4	+10.7	+5.0	\$20.24	-8	+1.8
Hotels (year-round) ^{4,10}	92.7	+3	+2.1	84.4	+1.0	+4.1	\$15.85	+6	+2.0
Laundries ⁴	100.2	+6	+4.9	89.0	+2.0	+6.4	18.40	+1.5	+1.4
Dyeing and cleaning ⁴	103.2	-2.6	+5.9	75.8	-2.5	+8.5	20.14	+(?)	+2.5
Brokerage	(³)	-6	-12.0	(³)	+2.5	-11.4	\$38.28	+3.1	+7
Insurance	(³)	+1	+1.6	(³)	+1.0	+2.8	\$36.75	+9	+1.2
Building construction	(³)	-1.9	+28.7	(³)	+5.6	+34.4	32.63	+7.6	+4.3
Water transportation ¹¹	76.2	+4	(³)	(³)	(³)	(³)	(³)	(³)	(³)

¹ Revised indexes—Adjusted to preliminary 1939 Census of Manufactures. See table 9 for comparable series back to January 1919.

² Preliminary—Source: Interstate Commerce Commission.

³ Not available.

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

⁵ Retail-trade indexes adjusted to 1935 Census and public utility indexes to 1937 Census. Not comparable with indexes published in pamphlets prior to January 1940 or in the MONTHLY LABOR REVIEW prior to April 1940. Revised series available upon request.

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

⁷ Less than 1/10 of 1 percent.

⁸ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

⁹ Indexes adjusted to 1933 Census. Comparable series in November 1934 and subsequent issues of pamphlet or February 1935 and subsequent issues of MONTHLY LABOR REVIEW.

¹⁰ Cash payments only; the additional value of board, room, and tips cannot be computed.

¹¹ Based on estimates prepared by the United States Maritime Commission.

combined, for selected nonmanufacturing industries, for water transportation, and for class I railroads. Percentage changes over the month and year intervals are also given.

Public Employment

Approximately 122,000 additional men were given jobs on construction projects financed from appropriations to regular Federal agencies in the month ending December 15. Efforts to rush completion of army camps resulted in a gain of 151,000 on building construction projects. The number of workers engaged in building naval vessels was increased by 6,000 during the month. Employment decreases on nondefense construction partially offset the gains on building and naval vessel construction, leaving a net gain of 122,000 over November. Pay-roll disbursements of \$82,887,000 to the 753,000 men employed on all types of projects exceeded November payments by \$17,748,000.

Seasonal curtailment of employment to the extent of about 3,000 men occurred on low-rent projects of the United States Housing Authority. Wage payments of \$4,887,000 to the 48,000 building-trades workers employed were \$616,000 less than in November.

Employment on construction projects financed from Public Works Administration funds fell to 25,000 in the month ending December 15, a decrease of 6,000 from the preceding month. Pay rolls of \$2,703,000 were \$911,000 less than in November.

Construction projects financed by the Reconstruction Finance Corporation furnished employment to approximately 1,800 workers in the month ending December 15. This figure represents a slight decrease from the preceding month. Pay-roll disbursements for the month totaled \$177,000.

Work relief projects financed by the Work Projects Administration gave employment to 1,809,000 persons in December, an increase of 63,000 over November. Wage payments of \$100,148,000 were \$9,348,000 greater than in November. The number of persons at work on Federal agency projects financed by the Work Projects Administration declined 7,000 in December, leaving 66,000 persons still employed. Pay-roll disbursements totaled \$3,149,000.

The National Youth Administration increased employment on both the student-work program and the out-of-school work program in December. A gain of 11,000 on the student-work program raised the total to 451,000 and an increase of 65,000 on the out-of-school work program brought the number employed up to 331,000.

The end of an enlistment period resulted in a decline of 35,000 in the number of persons employed in camps of the Civilian Conservation Corps. Of the 286,000 persons on the pay roll, 251,500 were

enrollees; 1,500, educational advisers; 200, nurses; and 32,800, supervisory and technical employees. Pay-roll disbursements totaled \$12,928,000.

In the regular services of the Federal Government employment increases were reported in the executive and military branches, while decreases were reported in the judicial and legislative branches. Of the 1,186,000 employees in the executive service, 156,000 were working in the District of Columbia and 1,030,000 outside the District. Force-account employees (employees on the pay roll of the U. S. Government who are engaged on construction projects, and whose period of employment terminates as the project is completed) were 12 percent of the total number of employees in the executive service. Increased employment was reported in the War, Navy, and Post Office Departments and the Panama Canal, while decreases were reported in the Department of Agriculture and the Department of the Interior.

Seasonal influences were responsible for a decrease of 37,000 in the number of men working on State-financed road projects. Of the 143,000 on the pay roll, 35,000 were engaged in the construction of

TABLE 2.—*Summary of Employment and Pay Rolls in the Regular Federal Services and on Projects Financed Wholly or Partially from Federal Funds, December 1940*

[Preliminary figures]

Class	Employment			Pay rolls		
	December 1940	November 1940	Percentage change	December 1940	November 1940	Percentage change
Federal Services:						
Executive ¹	1,185,558	1,111,530	+6.7	\$183,606,341	\$168,388,802	+9.0
Judicial.....	2,907	2,919	— .4	681,361	669,379	+1.8
Legislative.....	5,921	5,932	— .2	1,305,706	1,294,629	+ .9
Military.....	884,094	821,662	+7.6	56,586,999	52,796,914	+7.2
Construction projects:						
Financed by regular Federal appropriations.....	752,830	630,848	+19.3	82,886,826	65,138,967	+27.2
U. S. H. A. low-rent housing.....	48,008	50,806	—5.5	4,886,898	5,502,764	—11.2
Financed by P. W. A. ²	24,676	31,117	—26.1	2,703,209	3,614,039	—12.6
Financed by R. F. C. ³	1,775	1,826	—2.8	176,660	191,592	—7.8
Federal agency projects financed by:						
Work Projects Administration.....	66,308	73,306	—9.5	3,148,501	3,474,911	—9.4
Projects operated by W. P. A.....	1,808,595	1,746,065	+3.6	100,148,212	⁴ 90,800,674	+10.3
National Youth Administration:						
Student work program.....	450,547	439,548	+2.5	3,107,372	3,067,736	+1.3
Out-of-school program.....	331,382	266,759	+24.2	6,522,370	5,504,433	+18.5
Civilian Conservation Corps.....	285,731	321,157	—11.0	12,928,027	14,016,434	—7.8

¹ Includes force-account and supervisory and technical employees shown under other classifications to the extent of 174,238 employees and pay-roll disbursements of \$22,819,794 for December 1940, and 164,277 employees and pay-roll disbursements of \$21,692,218 for November 1940.

² Data covering P. W. A. projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 4,034 wage earners and \$398,741 pay roll for December 1940; 4,629 wage earners and \$473,672 pay roll for November 1940, covering Public Works Administration projects financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 19,462 wage earners and \$2,205,877 pay roll for December 1940; 23,979 wage earners and \$2,906,994 pay roll for November 1940, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

³ Includes 546 employees and pay-roll disbursements of \$49,081 for December 1940; 606 employees and pay-roll disbursements of \$63,405 for November 1940 on projects financed by the RFC Mortgage Co.

⁴ Revised.

new roads and 108,000 on maintenance. Pay-roll disbursements of \$10,890,000 were \$1,787,000 less than in November.

A summary of employment and pay-roll data in the regular Federal services and on projects financed wholly or partially from Federal funds is given in table 2.

The value of material orders placed on projects financed from regular Federal appropriations during the fourth quarter of 1940 amounted to \$401,358,000. Approximately 833,000 man-months of labor were involved in the final fabrication of these materials. On P. W. A. projects orders were placed for \$13,375,000 worth of materials, for which it is estimated 27,000 man-months of labor were required in final fabrication processes.

The value of material orders placed on the various programs financed by Federal funds during the fourth quarter of 1940, the third quarter of 1940, and the fourth quarter of 1939, and the man-months of employment created in the final fabrication of the materials used are shown in table 3.

TABLE 3.—*Value of Material Orders Placed on Projects Financed Wholly or Partially From Federal Funds and Number of Man-Months of Labor Created*

[Subject to revision]

Program	Value of material orders placed			Man-months of labor created in final fabrication		
	Fourth quarter of 1940	Third quarter of 1940	Fourth quarter of 1939	Fourth quarter of 1940	Third quarter of 1940	Fourth quarter of 1939
Public Works Administration ¹	\$13, 374, 552	\$31, 597, 398	\$110, 913, 497	27, 222	65, 710	246, 106
U. S. H. A. low-rent housing.....	21, 276, 497	23, 636, 679	16, 891, 497	49, 437	53, 922	39, 586
Reconstruction Finance Corporation ²	1, 846, 261	1, 010, 378	2, 071, 189	3, 395	1, 980	4, 222
Regular Federal appropriations.....	401, 358, 476	221, 671, 123	134, 126, 867	832, 979	417, 217	255, 933
Federal agency projects financed from W. P. A. funds ³	1, 841, 371	1, 759, 319	3, 302, 237	3, 835	3, 481	6, 779
Projects operated by W. P. A.	(⁴)	83, 049, 180	79, 897, 219	(⁴)	182, 135	173, 356
Rentals and services on projects operated by W. P. A.	(⁴)	61, 488, 716	58, 664, 517	(⁴)	(⁴)	(⁴)

¹ Data covering projects financed from E. R. A. A. 1935, 1936, 1937, and P. W. A. A. 1938 funds are included. These data are not shown under projects financed from W. P. A. funds. Includes low-rent housing projects financed from funds of N. I. R. A. and E. R. A. A. 1935.

² Includes RFC Mortgage Co.

³ Includes projects financed by transfer of W. P. A. funds to other Federal agencies under sec. 3, E. R. A. A. 1938, and sec. 11-A, E. R. A. A. 1939.

⁴ Data not available.



DETAILED TABLES FOR DECEMBER 1940

Estimates of Nonagricultural Employment

THE estimates of "Total nonagricultural employment," given on the first line of table 4, represent the total number of persons engaged in gainful work in the United States in nonagricultural industries, excluding military and naval personnel, persons employed on W. P. A. or N. Y. A. projects, and enrollees in C. C. C. camps. The series described as "Employees in nonagricultural establishments" also

excludes proprietors and firm members, self-employed persons, casual workers, and persons in domestic service. The estimates for "Employees in nonagricultural establishments" are shown separately for each of seven major industry groups. Tables giving figures for each group, by months, for the period from January 1929 to date are available on request.

TABLE 4.—*Estimates of Total Nonagricultural Employment, by Major Groups*

[In thousands]

	Decem- ber 1940 (prelim- inary)	Novem- ber 1940	Change Novem- ber to Decem- ber 1940	Decem- ber 1939	Change Decem- ber 1939 to Decem- ber 1940
Total nonagricultural employment ¹	37, 168	36, 628	+540	35, 641	+1, 527
Employees in nonagricultural establishments ²	31, 025	30, 485	+540	29, 498	+1, 527
Manufacturing	10, 552	10, 434	+118	9, 908	+644
Mining	851	853	-2	866	-15
Construction	1, 627	1, 654	-27	1, 178	+449
Transportation and public utilities ..	3, 031	3, 065	-34	2, 976	+55
Trade	6, 862	6, 433	+429	6, 087	+175
Finance, service, and miscellaneous ..	4, 178	4, 167	+11	4, 125	+53
Federal, State, and local Government:					
Civil employees	3, 924	3, 879	+45	3, 758	+166
Military and naval forces ³	884	822	+62	422	+462

¹ Revised series—Excludes military and naval forces. Also excludes employees on W. P. A. and N. Y. A. projects, as well as enrollees in C. C. C. camps. Includes proprietors, firm members, self-employed persons, casual workers, and domestic servants.

² Excludes all of the groups omitted from "total nonagricultural employment" as well as proprietors, firm members, self-employed persons, casual workers, and domestic servants.

³ Not included in totals shown above. Includes members of the National Guard inducted into the Federal service by act of Congress.

The figures represent the number of persons working at any time during the week ending nearest the middle of each month. The totals for the United States have been adjusted to conform to the figures shown by the 1930 Census of Occupations for the number of nonagricultural "gainful workers" less the number shown to have been unemployed for 1 week or more at the time of the census. Separate estimates for "employees in nonagricultural establishments" are shown in table 5 for each of the 48 States and the District of Columbia for November and December 1940 and December 1939. Tables showing monthly figures for each State from January 1938 to date are available on request. Because the State figures do not include employees on merchant vessels, and because of certain adjustments in the United States estimates which have not been made on a State basis, the total of the State estimates will not agree exactly with the figure for the United States as a whole.

These estimates are based in large part on industrial censuses and on regular reports of employers to the United States Bureau of Labor Statistics and to other Government agencies, such as the Interstate Commerce Commission. Data derived from employers' quarterly reports in connection with "old age and survivors' insurance", and employers' monthly reports in connection with unemployment compensation have been used extensively as a check on estimates derived

from other sources, and in some industries they have provided the most reliable information available.

TABLE 5.—Estimated Number of Employees in Nonagricultural Establishments, by States

[Excludes proprietors, firm members, self-employed persons, casual workers, domestic workers, the armed forces of the United States, and employees on merchant vessels]
[In thousands]

Geographic division and State	December 1940 (preliminary)	November 1940	Change November to December 1940		December 1939	Change December 1939 to December 1940	
			Number	Percentage		Number	Percentage
New England.....	2,694	2,639	+55	+2.0	2,515	+179	+7.1
Maine.....	188	185	+3	+1.2	185	+3	+1.2
New Hampshire.....	131	128	+3	+2.5	126	+5	+4.6
Vermont.....	77	77	0	-1.0	75	+2	+2.5
Massachusetts.....	1,415	1,383	+32	+2.4	1,321	+94	+7.1
Rhode Island.....	248	245	+3	+9	235	+13	+5.3
Connecticut.....	635	621	+14	+2.2	573	+62	+10.8
Middle Atlantic.....	8,014	7,893	+121	+1.5	7,749	+265	+3.4
New York.....	3,966	3,915	+51	+1.3	3,899	+67	+1.7
New Jersey.....	1,235	1,214	+21	+1.7	1,141	+94	+8.2
Pennsylvania.....	2,813	2,764	+49	+1.8	2,709	+104	+3.8
East North Central.....	7,185	7,058	+127	+1.8	6,771	+414	+6.1
Ohio.....	1,855	1,823	+32	+1.8	1,770	+85	+4.8
Indiana.....	833	815	+18	+2.2	781	+52	+6.7
Illinois.....	2,344	2,292	+52	+2.3	2,216	+128	+5.8
Michigan.....	1,500	1,483	+17	+1.1	1,383	+117	+8.4
Wisconsin.....	653	645	+8	+1.2	621	+32	+5.1
West North Central.....	2,407	2,377	+30	+1.2	2,332	+75	+3.2
Minnesota.....	533	532	+1	+1	519	+14	+2.6
Iowa.....	409	403	+6	+1.5	398	+11	+2.7
Missouri.....	789	773	+16	+2.1	772	+17	+2.3
North Dakota.....	78	78	0	+9	74	+4	+5.4
South Dakota.....	84	85	-1	-1.1	81	+3	+4.7
Nebraska.....	206	202	+4	+1.8	198	+8	+3.9
Kansas.....	308	304	+4	+1.2	290	+18	+6.2
South Atlantic.....	3,705	3,639	+66	+1.8	3,467	+238	+6.8
Delaware.....	71	71	0	+9	67	+4	+5.9
Maryland.....	543	533	+10	+1.8	499	+44	+8.7
District of Columbia.....	369	361	+8	+2.2	331	+38	+11.5
Virginia.....	520	515	+5	+1.0	484	+36	+7.5
West Virginia.....	379	376	+3	+9	380	-1	-2
North Carolina.....	606	605	+1	+3	595	+11	+1.9
South Carolina.....	302	294	+8	+2.9	276	+26	+9.3
Georgia.....	503	487	+16	+3.1	469	+34	+7.0
Florida.....	412	397	+15	+3.6	366	+46	+12.5
East South Central.....	1,439	1,409	+30	+2.1	1,360	+79	+5.8
Kentucky.....	377	364	+13	+3.4	370	+7	+1.8
Tennessee.....	466	460	+6	+1.3	444	+22	+5.1
Alabama.....	392	384	+8	+2.0	364	+28	+7.6
Mississippi.....	204	201	+3	+1.8	182	+22	+11.9
West South Central.....	1,942	1,908	+34	+1.8	1,833	+109	+5.9
Arkansas.....	185	185	0	(1)	179	+6	+3.3
Louisiana.....	424	415	+9	+2.1	380	+44	+11.4
Oklahoma.....	301	297	+4	+1.4	294	+7	+2.3
Texas.....	1,032	1,011	+21	+2.1	980	+52	+5.3
Mountain.....	779	775	+4	+6	755	+24	+3.2
Montana.....	113	113	0	(1)	111	+2	+1.8
Idaho.....	86	85	+1	+1.3	85	+1	+1.6
Wyoming.....	52	52	0	+4	50	+2	+4.3
Colorado.....	224	224	0	-4	218	+6	+2.4
New Mexico.....	70	69	+1	+9	67	+3	+3.7
Arizona.....	90	90	0	+2	88	+2	+2.8
Utah.....	112	109	+3	+3.2	106	+6	+5.6
Nevada.....	32	33	-1	-9	30	+2	+8.3
Pacific.....	2,494	2,440	+54	+2.2	2,324	+170	+7.3
Washington.....	438	432	+6	+1.4	408	+30	+7.3
Oregon.....	229	229	0	+1	222	+7	+3.4
California.....	1,827	1,779	+48	+2.7	1,694	+133	+7.8

¹ Less than 0.1 per cent.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 157 manufacturing industries; 16 nonmanufacturing industries, including private building construction; water transportation; and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission and those on class I steam railroads are compiled by the Interstate Commerce Commission. They are presented in the foregoing summary.

The indexes of factory employment and pay rolls are based on the 3-year average 1923–25 as 100 and are adjusted to 1937 census data, except for the aircraft industry and the transportation equipment group, which have been adjusted on the basis of a complete employment survey of the aircraft industry made by the Bureau of Labor Statistics for August 1940, and for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group, which have been adjusted to preliminary 1939 census figures. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 90 of the 157 manufacturing industries surveyed. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries covered.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

The indexes for retail trade have been adjusted to conform in general with the 1935 Census of Retail Distribution and are weighted by lines of trade. For the public utilities they have been adjusted to the 1937 Census of Electrical Industries, for wholesale trade to the 1933 census, and for coal mining, year-round hotels, laundries, and dyeing and cleaning to the 1935 censuses.

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

The average weekly earnings shown in tables 6 and 7 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample vary slightly from month to month. Therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from December 1939 are computed from chain indexes based on the month-to-month percentage changes.

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

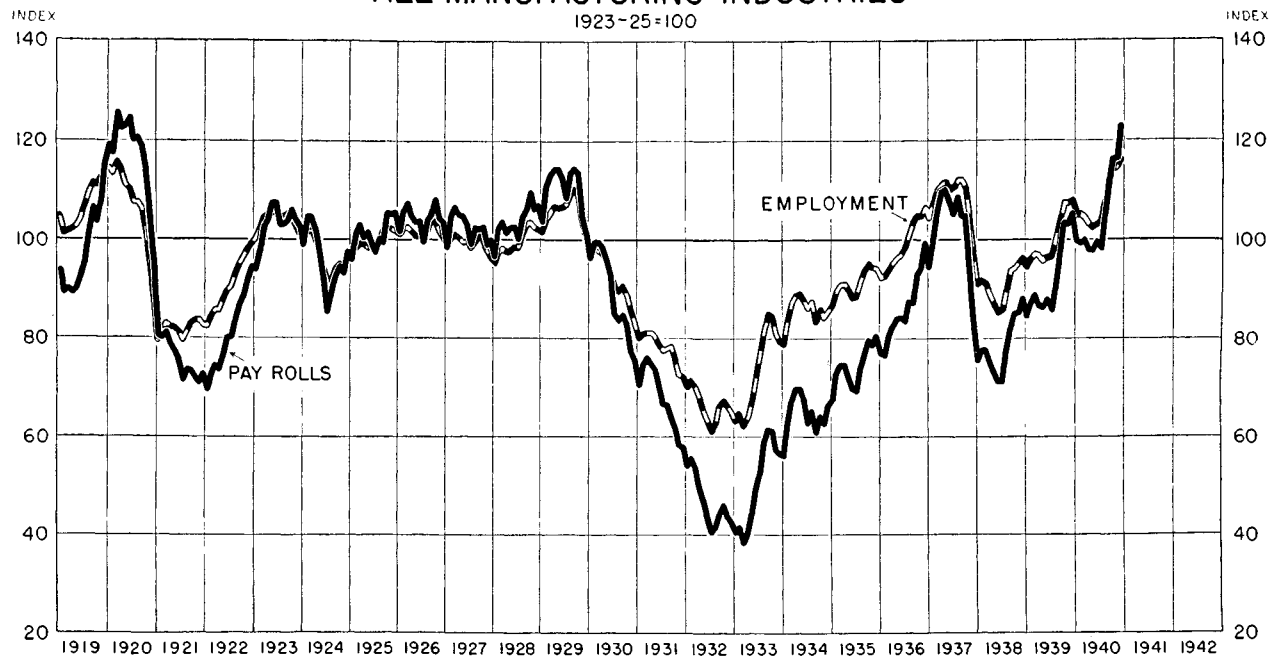
The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in December 1940 are shown in table 6. Percentage changes from November 1940 and December 1939 are also given.

The employment and pay-roll indexes, as well as average hours worked per week, average hourly earnings, and average weekly earnings for October, November, and December, 1940, where available, are presented in table 7. The October and November figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports.

In table 8 indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and non-durable-goods groups of manufacturing industries, and for each of 13 nonmanufacturing industries, by months, from December 1939 to December 1940, inclusive. The indexes for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group have been adjusted to preliminary 1939 census figures. Comparable indexes for all available months and years back to January 1919 are given in tables 9, 10, and 11. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to December 1940.

EMPLOYMENT AND PAY ROLLS ALL MANUFACTURING INDUSTRIES

1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

ADJUSTED TO 1939 CENSUS OF MANUFACTURES

*Use of Average Hourly Earnings in "Escalator" Clauses.*¹—Average hourly earnings of wage earners, such as those shown in table 6 have been compiled regularly by the Bureau of Labor Statistics since 1932. These averages are published for the use of those who wish either to compare the average earnings of wage earners in different industries or to study the changes in average earnings over a period of time.

Certain characteristics of the average earnings should be indicated. The average of the actual earnings of wage earners as a group may change from one period to another for either of two reasons: (1) By reason of changes in the wages paid or (2) by reason of changes in the composition of the group of wage earners actually at work in different periods. As an example of the latter cause of change, it is evident that if, from one month to the next, the number of wage earners employed in a high-wage industry increases proportionally more than employment generally has increased, the average of actual earnings for the group as a whole will increase. This increase might take place even though there were no changes whatsoever in the earnings of any wage earner in any one of the establishments. It is apparent, therefore, that the Bureau's averages reflect both changes in the actual hourly rates paid as well as changes in the composition of the wage earners in the group. The averages contained in table 6 for all manufacturing, for durable goods, for nondurable goods, and for the various subgroups of industries, such as "iron and steel and their products," reflect both types of influence upon hourly earnings; and they measure the average of the actual earnings of the wage earners actually at work in each respective period.

To an increasing extent use is being made of these average hourly earnings figures in so-called "escalator" clauses in Government contracts. These are designed to protect contractors from losses that might arise from general wage increases over which they could exercise no control. A number of contracts extending over many months have been written recently with clauses that provide for increased payments to the contractor in case of increases in the average of the hourly earnings in the durable-goods industries.

It should be pointed out that the characteristics of the Bureau's average hourly earnings figures, as described above, make it desirable to use these averages for other than their designed purpose with a certain degree of caution. The purpose for which they were compiled limits their usefulness, especially in July and August, as a measure of change in labor rates. In these months the averages show a seasonal movement unrelated to rates of pay. For example, the average hourly earnings figure in the durable goods industries dropped from 73.2 cents in June to 72.7 cents in July. This drop was due not to a general decline in wages in this period but almost entirely to the fact that em-

¹ Reprint from the August EMPLOYMENT AND PAY ROLLS pamphlet.

ployment in the automobile industry declined sharply as the result of model changes. This industry is a high-wage industry in which the average hourly earnings are about 95 cents an hour. Between June and July employment in the automobile industry dropped from 104.9 to 82.3. This relative decline, of a purely seasonable character, in the number of highly paid automobile workers was very largely responsible for the decline of half a cent noted in the average hourly earnings in durable-goods industries.

By way of illustration of the problem involved, it would be possible to construct an index of earnings that was unrelated to changes in the relative occupational composition of the group workers actually at work. For example, giving the averages for the several industries the same weights in July and August that they had in June and considering only the influence of changes in average earnings in each industry, we find no change in the rate of earnings from June to July and approximately the same percentage change as is shown by the published figures from July to August. This means that from June to August, the currently published figures show a slight decline over this 3-month interval whereas the series computed with constant weights shows a small gain.

It is not within the province of the Bureau to indicate the type of average that was contemplated by the contracting parties in the contracts already drawn; least of all can the method of compiling an average be changed. It is obvious however that in incorporating any statistical series in legal documents careful consideration should be given to the purpose for which the figures were originally compiled and to their relevance to some new purpose. The officials of the Bureau are at the disposal of all those who wish to apply any of the Bureau's series to administrative problems. Carefully interpreted and applied, these data have a present usefulness far greater than was imagined in the past. Their appropriate adaptation to new uses involves on the one hand a careful consideration by the Bureau of the purposes of the contracting parties; on the other, consultation with the Bureau to discover whether the new figures as they stand meet the purposes in mind.

TABLE 6.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1940*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment			Pay rolls			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	Index December 1940	Percentage change from—		Index December 1940	Percentage change from—		December 1940	Percentage change from—		December 1940	Percentage change from—		December 1940	Percentage change from—	
		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939
All manufacturing ²	116.2	+1.3	+7.8	122.4	+5.3	+16.1	\$27.89	+3.7	+7.7	38.8	+3.1	+3.1	Cents 68.3	+0.8	+3.9
Durable goods ²	117.6	+1.8	+14.4	131.6	+5.2	+24.4	31.96	+3.3	+8.7	41.2	+2.6	+4.5	74.9	+8	+3.8
Nondurable goods ²	114.8	+8	+2.0	112.1	+5.2	+6.8	23.09	+4.3	+4.6	38.4	+3.6	+1.5	61.7	+7	+2.9
<i>Durable goods</i>															
Iron and steel and their products, not including machinery	121.6	+1.9	+9.2	133.2	+5.7	+15.5	32.18	+3.7	+5.8	41.0	+3.4	+4.1	78.0	+3	+1.8
Blast furnaces, steel works, and rolling mills.....	129.5	+1.7	+5.1	142.1	+5.5	+10.0	34.65	+3.8	+4.8	40.4	+3.2	+3.4	85.8	+3	+1.2
Bolts, nuts, washers, and rivets.....	134.7	+5.1	+12.5	178.0	+10.2	+25.2	31.82	+4.8	+10.2	44.4	+4.7	+5.2	71.7	+1	+4.7
Cast-iron pipe.....	87.4	+1.3	+12.8	97.1	+8.9	+35.3	26.29	+7.5	+19.9	42.8	+5.8	+14.6	61.2	+1.7	+5.1
Cutlery (not including silver and plated cutlery) and edge tools.....	110.2	-2.1	+1.4	115.2	+6.4	+13.1	27.21	+8.7	+11.6	42.4	+4.8	+2.0	65.5	+3.2	+9.8
Forgings, iron and steel.....	88.4	+6.1	+21.8	118.8	+11.9	+34.8	36.28	+5.5	+10.7	44.7	+5.4	+6.0	81.7	-(³)	+4.4
Hardware.....	112.5	+3.2	+6.6	128.4	+5.0	+9.7	28.03	+1.7	+3.0	41.2	+2.2	+2.0	68.1	-5	+1.0
Plumbers' supplies.....	96.5	+2.5	+14.9	93.1	+5.6	+19.9	28.04	+3.0	+4.3	39.8	+2.2	-7	70.4	+8	+4.8
Stamped and enameled ware.....	196.1	+3.2	+18.4	227.9	+8.1	+31.2	27.26	+4.8	+10.7	40.8	+5.3	+5.2	66.0	-2	+5.4
Steam and hot-water heating apparatus and steam fittings.....	102.6	+4	+19.1	107.8	+1.6	+35.0	31.83	+1.1	+13.3	43.0	+1.7	+9.6	72.3	-5	+3.7
Stoves.....	103.1	-1.5	+15.4	98.8	-4	+25.9	27.57	+1.1	+9.2	40.4	+1.3	+5.5	68.2	-(³)	+3.1
Structural and ornamental metalwork.....	90.4	+4.5	+19.9	86.0	+9.4	+28.1	30.80	+4.7	+6.9	41.6	+3.5	+5.5	74.3	+1.2	+1.4
Tin cans and other tinware.....	98.9	-1.2	+3.7	113.2	+8.7	+12.8	25.59	+10.1	+8.7	40.5	+10.1	+4.3	63.5	+4	+4.0
Tools (not including edge tools, machine tools, files, and saws).....	116.5	+4.4	+20.2	136.1	+9.8	+33.4	29.24	+5.1	+11.0	45.4	+3.8	+5.0	65.0	+1.1	+5.4
Wirework*.....	206.8	+1.6	+17.2	242.0	+3.0	+18.4	28.68	+1.3	+1.0	41.1	+1.2	-4	69.8	+1	+1.2

Machinery, not including transportation equipment.	135.9	+3.7	+20.2	162.8	+9.0	+33.3	33.13	+5.2	+10.9	43.6	+3.9	+5.7	76.1	+1.2	+4.3
Agricultural implements (including tractors).....	143.2	+4.9	+9.4	171.3	+6.8	+13.1	31.87	+1.9	+3.4	39.5	+1.4	+7.7	81.0	+4.4	+2.5
Cash registers, adding machines, and calculating machines.....	134.7	+8	+5.2	147.8	+2.7	+12.3	34.15	+1.8	+6.7	41.1	+1.5	+4.9	84.1	+3	+2.3
Electrical machinery, apparatus, and supplies.....	125.6	+4.2	+22.5	157.5	+8.6	+37.9	32.62	+4.2	+12.6	43.0	+2.9	+7.3	76.6	+1.2	+4.9
Engines, turbines, water wheels, and wind-mills.....	210.4	+5.3	+75.7	303.5	+11.1	+93.8	38.17	+5.5	+10.4	45.4	+5.1	+5.5	83.6	+3	+4.2
Foundry and machine-shop products.....	114.1	+3.7	+17.4	126.6	+10.3	+28.4	32.85	+6.3	+9.2	43.6	+5.0	+4.9	75.5	+1.4	+3.9
Machine tools.....	276.0	+3.8	+43.6	394.2	+10.9	+53.9	39.56	+6.9	+7.2	50.6	+5.2	+5.2	78.1	+1.6	+1.8
Radios and phonographs.....	158.0	-9	-2.7	162.9	+4.7	+9.5	25.49	+5.6	+12.5	40.5	+3.1	+4.4	63.0	+2.4	+8.1
Textile machinery and parts.....	86.1	+4.1	+5	90.6	+13.2	+5.8	28.94	+8.7	+5.3	42.8	+7.3	+2.9	67.8	+1.4	+2.3
Typewriters and parts.....	132.2	+1.1	+3.8	147.3	-11.3	+21.2	27.31	-12.2	+16.7	41.7	-8.4	+14.4	65.4	-4.3	+1.9
Transportation equipment.....	149.2	+2.2	+26.9	168.9	+1.7	+34.7	35.98	-5	+6.2	40.2	-2	+5.1	90.0	-1	+1.4
Aircraft.....	4,686.3	+6.4	+123.2	5,257.0	+4.9	+156.9	32.45	-1.5	+10.6	44.6	+5	+5.6	75.4	-1	+2.8
Automobiles.....	129.3	-1	+9.4	144.8	-3.8	+13.2	36.54	-3.7	+3.5	38.5	-3.4	+1.2	95.0	-3	+2.2
Cars, electric- and steam-railroad.....	66.0	+7.1	+26.6	62.3	+16.0	+33.1	29.67	+8.3	+5.1	39.2	+4.7	+1.3	75.1	+2.8	+3.2
Locomotives.....	45.7	+8.3	+63.2	50.1	+15.0	+82.5	33.55	+6.1	+11.8	41.9	+4.9	+8.5	80.0	+1.2	+3.0
Shipbuilding.....	221.3	+8.4	+58.7	290.1	+21.4	+90.8	39.11	+12.0	+20.3	42.8	+11.4	+13.0	90.3	+1.4	+6.4
Nonferrous metals and their products.....	131.1	+9	+16.1	149.6	+5.6	+28.4	31.63	+4.7	+10.6	42.7	+3.1	+4.8	73.8	+1.6	+5.6
Aluminum manufactures.....	208.6	-5	+22.4	264.0	+1.9	+34.1	30.90	+2.4	+9.6	42.0	+1.6	+4.1	73.5	+9	+5.5
Brass, bronze, and copper products.....	168.1	+3.5	+22.0	219.3	+8.8	+38.0	35.74	+5.1	+13.1	44.5	+4.3	+5.6	80.5	+8	+6.8
Clocks and watches and time-recording devices.....	106.1	-6	+14.0	119.6	-1.8	+23.3	25.15	-1.2	+8.3	40.8	-2.0	+5.1	61.1	+8	+3.1
Jewelry.....	104.4	-5.6	+5.8	97.3	+3.2	+12.6	25.75	+9.3	+6.3	41.4	+5.0	+5.6	61.6	+4.5	+1.7
Lighting equipment.....	110.2	+3	+12.4	102.0	+1.9	+20.4	28.92	+1.6	+7.3	40.7	-9	+3.1	71.3	+2.5	+3.8
Silverware and plated ware.....	78.6	-1.1	+2.5	85.2	+4.8	+11.9	31.20	+6.0	+9.2	46.3	+4.9	+5.2	68.0	+1.1	+4.9
Smelting and refining—copper, lead, and zinc.....	96.6	+1.9	+11.1	102.6	+7.1	+16.8	29.92	+5.1	+5.1	40.1	+4.0	+1.0	74.6	+1.1	+4.2
Lumber and allied products.....	73.7	-9	+3.7	71.5	+8	+9.7	21.06	+1.8	+5.8	39.5	+1.3	+2.2	52.8	+4	+3.4
Furniture.....	97.4	+4	+2.7	92.6	+2.5	+8.4	22.64	+2.1	+5.5	41.0	+1.8	+2.0	55.5	0	+3.6
Lumber:															
Millwork.....	71.5	+4	+12.4	59.7	+2.6	+14.9	23.01	+2.3	+2.1	41.7	+1.3	-9	55.3	+9	+2.9
Sawmills.....	64.7	-2.1	+2.1	60.4	-9	+9.0	19.29	+1.2	+6.5	38.0	+8	+2.7	50.7	+4	+3.6
Stone, clay, and glass products.....	88.9	0	+8.3	85.8	+4.4	+12.3	26.25	+4.3	+5.6	38.2	+3.0	+2.5	68.0	+1.2	+2.8
Brick, tile, and terra cotta.....	65.8	+6	+5.2	57.2	+5.3	+11.0	22.52	+4.7	+5.4	38.5	+3.4	+2.9	58.2	+1.3	+2.1
Cement.....	71.7	-3.0	-8.0	72.4	-7	+14.4	28.88	+2.4	+6.0	40.5	+2.4	+4.5	71.2	-(*)	+1.4
Glass.....	116.8	-2	+7.6	137.6	+5.2	+15.8	28.77	+5.4	+7.7	37.7	+3.1	+3.9	76.4	+2.2	+3.6
Marble, granite, slate, and other products.....	45.1	-2.6	-7.0	33.3	+4.6	-4.3	25.72	+7.3	+3.0	36.5	+7.0	+1.0	71.1	+3	+1.2
Pottery.....	105.6	+3.1	+11.3	101.3	+5.1	+12.4	24.47	+2.0	+1.0	38.1	+1.3	-2.0	63.8	+4	+4.3

See footnotes at end of table.

TABLE 6.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1940—Continued

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index December 1940	Percentage change from—		Index December 1940	Percentage change from—		December 1940	Percentage change from—		December 1940	Percentage change from—		December 1940	Percentage change from—	
		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939		November 1940	December 1939
<i>Nondurable goods</i>															
Textiles and their products	107.0	+1.4	+1.3	97.6	+5.7	+6.6	18.46	+4.2	+5.2	36.7	+3.5	+1.9	<i>Cents</i> 50.7	+0.6	+2.4
Fabrics.....	100.4	+1.7	+1.9	95.6	+5.2	+6.8	18.28	+3.4	+4.7	37.9	+3.0	+2.1	48.8	+4	+2.5
Carpets and rugs.....	82.4	+9	-2.4	76.2	+4.3	+6	25.64	+3.4	+3.1	37.9	+3.7	+7	67.6	-4	+2.3
Cotton goods.....	100.5	+2.4	+3.8	98.0	+6.2	+7.1	15.70	+3.6	+3.2	38.0	+2.8	+1.4	41.3	+7	+1.7
Cotton small wares.....	89.6	+2.7	-1.5	91.5	+5.0	+4.8	19.87	+2.3	+6.3	39.9	+2.4	+2.5	49.8	-2	+3.7
Dyeing and finishing textiles.....	134.3	+1.8	+9	121.2	+6.8	+4.2	22.11	+4.9	+3.3	40.3	+4.7	+2.7	54.7	+6	+1.1
Hats, fur-felt.....	83.9	+2.4	-8.1	81.5	+12.2	-8.1	26.78	+9.6	+1	35.6	+6.6	-2.9	74.7	+2.6	+4.1
Hosiery.....	146.2	+9	-1.4	160.4	-(⁹)	+9	19.57	-9	+2.2	35.7	-4	+1.0	54.9	-2	+7
Knitted outerwear.....	71.4	-2.5	+10.2	61.5	-3.2	+23.2	17.89	-8	+11.8	36.4	-1.2	+7.1	48.2	+2	+3.8
Knitted underwear.....	77.4	+1.2	-1.9	74.2	+2.4	+2.5	16.14	+1.2	+4.8	36.6	+1.1	-2	44.1	+(⁹)	+4.9
Knitted cloth.....	147.5	-1.6	+2.4	129.8	+3	+11.5	19.64	+1.9	+9.1	39.3	+2.1	+7.0	50.0	+5	+2.1
Silk and rayon goods.....	65.3	+2	-13.2	54.4	+4.3	-10.0	17.13	+4.1	+3.7	37.3	+3.6	+1.9	45.8	+8	+1.7
Woolen and worsted goods.....	100.9	+2.2	+10.6	96.3	+8.3	+22.8	22.15	+6.0	+11.1	38.9	+5.8	+4.6	56.9	+1	+5.9
Wearing apparel	117.3	+9	+3	95.6	+6.7	+6.0	18.98	+5.8	+5.6	34.3	+4.3	+1.5	54.4	+9	+2.2
Clothing, men's.....	108.1	+3.2	+2.8	86.2	+12.8	+7.5	20.31	+9.3	+4.6	33.5	+8.1	+7	60.3	+6	+1.9
Clothing, women's.....	164.5	-6	-(⁹)	125.7	+5.0	+7.1	20.05	+5.7	+7.1	34.7	+3.3	+3.0	53.9	+1.6	+1.6
Corsets and allied garments.....	112.8	-4	-2.8	122.6	+1.2	+2.9	18.23	+1.6	+5.7	37.3	+3.3	+3.4	48.5	+1	+3.2
Men's furnishings.....	123.9	-3.5	-3.9	133.9	-4.6	+6.3	16.47	-1.1	+10.8	36.5	-1.4	+6.1	43.0	+(⁹)	+6.7
Millinery.....	60.8	-2	-8.0	41.5	+1.4	-10.9	20.39	+1.6	-3.1	29.7	+3.9	-9.3	63.6	-3.7	+3.3
Shirts and collars.....	122.1	+1.2	-3	115.0	+1.9	+3.6	14.75	+7	+4.0	35.0	+1.0	-5	41.9	+1.0	+3.6
Leather and its manufactures	90.6	+4.1	-2.8	78.5	+14.6	+4.1	20.45	+10.0	+7.0	37.1	+10.9	+3.3	55.8	-3	+4.7
Boots and shoes.....	88.0	+4.6	-3.1	73.2	+17.0	+4.2	19.07	+12.0	+7.6	36.4	+12.5	+3.4	53.3	-3	+5.3
Leather.....	85.8	+2.3	-1.4	89.5	+8.1	+3.5	26.16	+5.7	+4.9	39.9	+5.8	+2.6	65.9	+3	+2.2

Food and kindred products.....	130.4	-1.6	+3.5	132.4	+2.8	+6.4	25.78	+4.4	+2.8	40.6	+3.4	+3	64.1	+1.5	+2.1
Baking.....	144.1	-1.0	-5	137.7	-4	+2.8	26.39	+6	+3.4	41.0	+3	+1.3	64.4	+5	+2.5
Beverages.....	260.2	-1.1	-2	299.4	-1.0	+2	33.60	+1	+4	38.0	+6	-1.8	88.7	-6	+2.0
Butter.....	94.5	-4.9	+2.1	83.8	+1.9	+7.3	23.32	+7.1	+4.8	46.6	+5.2	+3.6	49.8	+1.8	+2.5
Canning and preserving.....	103.3	-16.1	+1.9	92.7	-7.8	+3.8	17.09	+9.9	+2.1	34.4	+3.4	-4.1	51.0	+6.9	+2.9
Confectionery.....	100.5	-1.9	+4.7	103.0	+2.9	+3.2	19.86	+4.9	-1.4	40.2	+3.3	-3.6	49.8	+5	+5
Flour.....	77.8	-1.6	-1.2	72.8	+7	+8	25.12	+2.3	+2.0	40.7	+1.5	+6	60.8	-1	+8
Ice cream.....	69.3	-2.3	+1.9	60.9	-2	+6.3	30.15	+2.2	+4.2	44.7	+2.3	-1	65.8	+(?)	+2.6
Slaughtering and meat packing.....	125.0	+7.5	+11.5	137.3	+15.5	+13.0	28.77	+7.4	+1.3	42.3	+8.5	+5	68.0	-8	+8
Sugar, beet.....	235.8	-14.9	+22.9	265.1	-8.0	+52.8	29.07	+8.1	+24.2	53.2	+7.3	+18.8	56.2	+2.1	+6.3
Sugar refining, cane.....	94.2	+7	-1.1	85.1	+1.6	+12.2	25.58	+9	+13.5	38.9	-1.6	+7.3	65.8	+2.5	+5.7
Tobacco manufactures.....	65.6	-1.8	-3	67.4	+1.5	+8.2	18.70	+3.3	+8.4	38.1	+2.5	+8.9	49.0	+9	+1.7
Chewing and smoking tobacco and snuff.....	57.4	+3.0	-5.6	69.8	+5.0	+3.8	19.60	+1.9	+10.2	37.0	+5.7	+8.4	53.5	-2.5	+2.1
Cigars and cigarettes.....	66.6	-2.2	+5	67.0	+1.2	+8.8	18.53	+3.5	+8.3	38.2	+2.2	+6.6	42.5	+1.3	+2.0
Paper and printing.....	119.9	+1.2	+1.2	120.7	+4.6	+3.3	30.37	+3.4	+2.1	39.3	+2.7	-4	79.9	+9	+3.8
Boxes, paper.....	125.2	-7	+2	145.3	+9	+6.1	23.20	+1.6	+5.8	41.2	+1.6	+2.5	56.7	+3	+3.5
Paper and pulp.....	115.9	+2	+7	128.5	+3.8	+4.8	27.30	+3.6	+4.1	41.3	+2.7	-1.6	66.0	+8	+5.7
Printing and publishing:															
Book and job.....	105.3	+2.7	+1.2	97.9	+8.7	+4.0	32.28	+5.8	+2.9	39.9	+4.4	+(?)	81.3	+7	+2.4
Newspapers and periodicals.....	121.1	+1.5	+2.0	116.0	+3.2	+9	38.38	+1.7	-1.1	35.9	+1.8	-2.3	103.8	+8	+2.0
Chemical, petroleum, and coal products.....	125.5	+2	+2.6	144.0	+3.2	+7.9	30.90	+3.1	+5.1	39.6	+2.3	+2.1	76.6	+5	+3.3
Petroleum refining.....	119.8	-8	-2.1	139.0	+4.2	+1.0	36.00	+5.0	+3.3	37.3	+4.9	+2.1	96.8	+(?)	+1.0
Other than petroleum refining.....	126.9	+4	+3.8	145.5	+2.8	+10.2	28.92	+2.5	+6.3	40.4	+1.5	+2.0	70.1	+8	+4.9
Chemicals.....	149.9	+1.3	+9.0	187.9	+3.4	+15.7	33.33	+2.1	+6.2	40.8	+1.1	+1.6	81.6	+1.0	+4.7
Cottonseed—oil, cake, and meal.....	123.5	-2.7	+7.4	121.7	+(?)	+10.4	15.94	+2.9	+2.8	46.5	+3.3	+9	33.1	+3	+1.2
Druggists' preparations.....	115.7	-4	-2.6	130.5	-3	-1.3	25.56	+1	+1.2	39.5	-2	-2.3	61.2	+2	+4.1
Explosives.....	146.7	-3	+36.0	196.0	+5.1	+52.3	36.84	+5.4	+11.9	40.9	+3.6	+4.6	89.3	+1.7	+7.1
Fertilizers.....	95.0	+3.1	-7.0	80.9	+4.9	-1.5	15.47	+1.1	+5.1	35.4	+4.5	+3.6	43.7	-3.2	+1.4
Paints and varnishes.....	126.2	+2	+1.6	138.9	+2.3	+6.5	30.18	+2.2	+4.7	40.8	+1.6	+1.7	73.7	+7	+3.2
Rayon and allied products.....	315.1	+2	+9	334.4	+9	+6.5	27.15	+7	+5.5	39.1	+1	+1.2	69.4	+6	+4.2
Soap.....	84.8	+3	-3	106.3	+6.1	+4.1	29.54	+5.8	+5.2	40.3	+3.6	+1.5	73.3	+2.1	+3.6
Rubber products.....	97.5	+3.3	+4.8	111.1	+8.9	+10.5	31.13	+5.4	+5.4	39.7	+4.7	+4.0	78.4	+7	+1.3
Rubber boots and shoes.....	66.9	+9.7	+6.1	81.3	+23.7	+23.8	27.92	+12.8	+16.7	43.9	+9.3	+12.1	63.6	+3.1	+4.2
Rubber tires and inner tubes.....	76.9	+2.3	+2.9	96.4	+7.4	+7.2	36.59	+5.1	+4.3	37.8	+4.5	+4.0	97.1	+4	+3
Rubber goods other.....	166.6	+2.3	+6.5	173.9	+6.8	+11.9	25.39	+4.5	+5.1	40.4	+3.4	+1.4	63.4	+9	+3.5

See footnotes at end of table.

TABLE 6.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1940—Continued*

NONMANUFACTURING

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

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index Decem- ber 1940	Percentage change from—		Index Decem- ber 1940	Percentage change from—		Index Decem- ber 1940	Percentage change from—		Index Decem- ber 1940	Percentage change from—		Index Decem- ber 1940	Percentage change from—	
		Novem- ber 1940	Decem- ber 1939		Novem- ber 1940	Decem- ber 1939		Novem- ber 1940	Decem- ber 1939		Novem- ber 1940	Decem- ber 1939		Novem- ber 1940	Decem- ber 1939
Coal mining:													<i>Cents</i>		
Anthracite ^{5 6}	50.8	+0.9	-0.3	42.7	+13.4	+60.3	\$27.60	+12.4	+60.7	29.7	+13.4	+57.4	92.0	-0.6	+1.0
Bituminous ⁵	90.0	+2	-2.8	91.3	+8.1	+8.4	27.19	+7.9	+11.5	31.0	+8.3	+11.7	89.0	+1	+2
Metalliferous mining	72.2	-4	+7.3	73.3	+4.9	+12.8	31.71	+5.4	+5.1	42.5	+4.4	+2.3	74.9	+1.8	+2.8
Quarrying and nonmetallic mining	45.5	-3.5	+3.4	42.8	+1.2	+9.4	23.74	+4.9	+5.8	40.6	+4.5	+2.2	59.0	+1.0	+3.5
Crude-petroleum production	60.9	-6	-4.5	55.8	-1.8	-5.8	33.70	-1.2	-1.3	36.7	-2.8	-3.4	89.6	+1.6	+2.1
Public utilities:															
Telephone and telegraph ^{7 8}	79.6	+4	+5.1	104.9	+1.6	+7.7	32.40	+1.2	+2.5	39.8	-1	+1.2	81.8	+1.3	+1.3
Electric light and power ^{7 8}	91.3	-5	+1.3	106.4	-5	+3.9	35.54	+ ⁽⁵⁾	+2.5	39.2	-1.5	-1.5	90.8	+1.7	+4.2
Street railways and busses ^{7 8 9}	68.4	-3	-9	73.2	+4.2	+4.9	34.92	+4.6	+5.7	47.4	+4.3	+4.5	73.1	+7	+2.4
Trade:															
Wholesale ^{7 10}	92.7	+1.0	+6	84.0	+4.0	+6.1	31.31	+2.9	+5.5	41.6	+2.1	+2	75.2	+7	+5.2
Retail ^{7 8}	107.5	+11.6	+3.2	96.4	+10.7	+5.0	20.24	-8	+1.8	43.0	+1.6	(11)	52.1	-3.0	(11)
Food ⁸	105.8	+1.1	-2	97.9	+1.2	+1.5	23.76	+1	+1.6	43.4	+7	(11)	52.5	-5	(11)
General merchandising ^{7 8}	151.3	+35.8	+3.3	131.0	+34.4	+4.1	17.16	-1.0	+8	39.9	+4.8	(11)	42.8	-5.2	(11)
Apparel ⁸	102.5	+12.0	+2.4	92.7	+11.7	+3.6	20.91	-3	+1.1	38.9	+2.3	(11)	54.1	-2.3	(11)
Furniture ⁸	81.8	+5.1	-1.4	75.1	+7.1	-1	28.83	+1.9	+1.3	44.9	+2.0	(11)	67.9	-1.2	(11)
Automotive ⁸	86.8	+1.0	+6.1	84.2	+2.3	+10.4	29.30	+1.3	+4.0	47.4	+1.4	(11)	62.4	-1	(11)
Lumber ⁸	76.0	-1.8	+3.5	72.5	+7	+4.8	26.65	+2.6	+1.2	42.5	+2.5	(11)	63.4	+1	(11)

Hotels (year-round) ^{6 7 12}	92.7	+3	+2.1	84.4	+1.0	+4.1	15.85	+6	+2.0	26.2	+2	+6	33.7	+1	+1.6
Laundries ⁵	100.2	+6	+4.9	89.0	+2.0	+6.4	18.40	+1.5	+1.4	43.1	+2.0	+7	42.8	+7	+8
Dyeing and cleaning ⁶	103.2	-2.6	+5.9	75.8	-2.5	+8.5	20.14	(3)	+2.5	42.3	+9	+1.6	48.9	-9	-1.1
Brokerage ⁷	(II)	-6	-12.0	(II)	+2.5	-11.4	38.28	+3.1	+7	(II)	(II)	(II)	(II)	(II)	(II)
Insurance ⁷	(II)	+1	+1.6	(II)	+1.0	+2.8	36.75	+9	+1.2	(II)	(II)	(II)	(II)	(II)	(II)
Building construction	(II)	-1.9	+28.7	(II)	+5.6	+34.4	32.63	+7.6	+4.3	33.8	+7.1	+3.0	96.7	+5	+1.5

¹ Revised series. Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

² See tables 9, 10, and 11 for comparable series back to January 1919 for all manufacturing and back to January 1923 for the durable- and nondurable-goods groups.

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

⁴ Revised series—Adjusted on basis of a complete employment survey made by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1938 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of this pamphlet.

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

⁶ See table 7 of October 1940 issue for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

⁷ Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁸ Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in MONTHLY LABOR REVIEWS prior to April 1940, with but one exception, retail furniture, which has been revised since publication of July 1940 pamphlet back to January 1936. Comparable series for earlier months available upon request.

⁹ Covers street-railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

¹⁰ Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet.

¹¹ Not available.

¹² Cash payments only; additional value of board, room, and tips not included.

*August and September 1940 average hourly earnings revised to 70.2 and 70.7 cents, respectively, and corresponding average weekly hours revised to 39.7 and 40.2.

TABLE 7.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings ¹			Average hours worked per week ¹			Average hourly earnings ¹		
	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940
All manufacturing ²	116.2	114.7	113.8	122.4	116.4	116.2	\$27.89	\$26.93	\$27.13	39.8	38.6	39.3	Cents 68.3	Cents 67.8	Cents 67.3
Durable goods ²	117.6	115.5	112.8	131.6	125.1	123.4	31.96	31.11	31.42	41.2	40.2	41.0	74.9	74.4	73.9
Nondurable goods ²	114.8	113.9	114.8	112.1	106.6	108.1	23.09	22.08	22.28	38.4	37.1	37.6	61.7	61.3	60.9
<i>Durable goods</i>															
Iron and steel and their products, not including machinery	121.6	119.3	117.1	133.2	126.0	123.6	32.18	31.01	30.97	41.0	39.6	39.9	78.0	78.1	77.8
Blast furnaces, steel works, and rolling mills.....	129.5	127.3	125.2	142.1	134.6	131.0	34.65	33.43	33.04	40.4	39.1	38.8	85.8	85.7	85.1
Bolts, nuts, washers, and rivets.....	134.7	128.1	121.3	178.0	161.5	149.5	31.82	30.30	29.68	44.4	42.4	42.4	71.7	71.5	70.0
Cast-iron pipe.....	87.4	86.3	83.9	97.1	89.2	84.8	26.29	24.57	24.10	42.8	40.6	39.8	61.2	60.3	60.2
Cutlery (not including silver and plated cutlery) and edge tools.....	110.2	112.6	111.3	115.2	108.3	106.3	27.21	25.10	25.02	42.4	40.8	40.9	65.5	63.4	62.2
Forgings, iron and steel.....	88.4	83.3	80.4	118.8	106.2	102.2	36.28	34.39	34.30	44.7	42.4	42.8	81.7	81.7	80.8
Hardware.....	112.5	109.0	105.3	128.4	122.3	118.8	28.03	27.66	27.74	41.2	40.4	40.6	68.1	68.3	68.4
Plumbers' supplies.....	96.5	94.1	91.0	93.1	88.2	85.1	28.04	27.18	27.26	39.8	38.8	39.2	70.4	70.0	69.5
Stamped and enameled ware.....	196.1	190.1	189.4	227.9	210.7	217.8	27.26	26.00	26.96	40.8	38.9	40.8	66.0	66.3	66.2
Steam and hot-water heating apparatus and steam fittings.....	102.6	102.2	99.4	107.8	106.1	102.5	31.83	31.47	31.34	43.0	43.2	43.2	72.3	73.0	72.7
Stoves.....	103.1	104.7	105.9	98.8	99.2	105.9	27.57	27.26	28.78	40.4	39.8	41.9	68.2	68.1	68.4
Structural and ornamental metalwork.....	90.4	86.5	85.6	86.0	78.7	79.6	30.80	29.26	30.02	41.6	40.0	41.0	74.3	73.2	73.3
Tin cans and other tinware.....	98.9	100.2	101.4	113.2	104.1	113.1	25.59	23.47	25.16	40.5	37.0	40.0	63.5	63.5	63.2
Tools (not including edge tools, machine tools, files, and saws).....	116.5	111.6	106.0	136.1	124.0	113.3	29.24	27.82	26.81	45.4	43.4	42.2	65.0	64.3	63.7
Wirework *.....	206.8	203.5	190.6	242.0	235.1	226.3	28.68	28.45	29.26	41.1	40.7	41.9	69.8	69.9	69.9
Machinery, not including transportation equipment	135.9	131.1	127.3	162.8	149.3	145.3	33.13	31.65	31.71	43.6	42.0	42.4	76.1	75.2	74.9
Agricultural implements (including tractors).....	143.2	136.6	134.9	171.3	160.4	158.8	31.87	31.29	31.41	39.5	39.0	39.2	81.0	80.6	80.2
Cash registers, adding machines, and calculating machines.....	134.7	133.6	132.0	147.8	144.0	142.1	34.15	33.77	33.68	41.1	40.6	40.5	84.1	83.9	83.6
Electrical machinery, apparatus, and supplies.....	125.6	120.6	116.1	157.5	145.0	138.2	32.62	31.61	31.26	43.0	41.9	41.7	76.6	75.7	75.2

Engines, turbines, water wheels, and wind-mills.....	210.4	199.7	190.4	303.5	273.2	263.4	38.17	36.21	36.74	45.4	43.2	44.4	83.6	83.4	82.2
Foundry and machine-shop products.....	114.1	110.1	106.7	126.6	114.8	111.7	32.85	30.99	31.18	43.6	41.6	42.1	75.5	74.5	74.0
Machine tools.....	276.0	265.9	257.9	394.2	355.4	352.3	39.56	36.85	37.73	50.6	48.0	49.1	78.1	76.8	76.9
Radios and phonographs.....	158.0	159.4	163.6	162.9	155.7	164.3	25.49	23.97	24.74	40.5	39.2	40.1	63.0	61.3	61.8
Textile machinery and parts.....	86.1	82.7	79.7	90.6	80.1	78.8	28.94	26.56	27.24	42.8	39.9	41.0	67.8	66.7	66.5
Typewriters and parts.....	132.2	130.7	126.8	147.3	166.0	163.2	27.31	31.13	31.52	41.7	45.5	45.8	65.4	68.4	68.9
Transportation equipment.....	149.2	146.0	139.5	168.9	166.1	163.3	35.96	36.39	37.39	40.2	40.4	41.6	90.0	90.2	89.8
Aircraft.....	4,686.3	4,402.3	4,115.9	5,257.0	5,012.9	4,639.4	32.45	32.93	32.62	44.6	44.3	44.3	75.4	75.5	75.0
Automobiles.....	129.3	129.5	125.1	144.8	150.5	149.3	36.54	38.11	39.24	38.5	39.9	41.3	95.0	95.5	95.1
Cars, electric- and steam-railroad.....	66.0	61.6	56.2	62.3	53.7	50.3	29.67	27.40	28.12	39.2	37.4	37.7	75.1	73.0	74.3
Locomotives.....	45.7	42.2	39.3	50.1	43.6	40.1	33.55	31.61	31.24	41.9	40.0	40.2	80.0	79.0	77.8
Shipbuilding.....	221.3	204.2	197.4	290.1	239.0	244.3	39.11	34.91	36.93	42.8	38.6	41.7	90.3	89.1	87.7
Nonferrous metals and their products.....	131.1	129.9	126.1	149.6	141.6	136.3	31.63	30.02	30.00	42.7	41.4	42.0	73.8	72.7	71.2
Aluminum manufactures.....	208.6	209.6	203.0	264.0	259.0	249.7	30.90	30.01	29.91	42.0	41.3	41.4	73.5	72.7	72.2
Brass, bronze, and copper products.....	168.1	162.4	154.9	219.3	201.6	190.0	35.74	33.98	33.64	44.5	42.6	43.4	80.5	79.9	77.7
Clocks and watches and time-recording devices.....	106.1	106.7	104.6	119.6	121.7	119.1	25.15	25.39	25.35	40.8	41.6	42.0	61.1	60.6	60.3
Jewelry.....	104.4	110.5	110.8	97.3	94.4	97.8	25.75	23.57	24.37	41.4	39.6	42.0	61.6	59.0	58.0
Lighting equipment.....	110.2	109.8	106.8	102.0	100.0	96.5	28.92	28.45	28.22	40.7	40.8	40.7	71.3	69.5	69.2
Silverware and plated ware.....	78.6	79.6	76.7	85.2	81.4	78.2	31.20	29.44	29.34	46.3	44.1	44.3	68.0	67.6	67.3
Smelting and refining—copper, lead, and zinc.....	96.6	94.8	94.6	102.6	95.8	93.4	29.92	28.46	27.82	40.1	38.4	38.3	74.6	74.0	72.7
Lumber and allied products.....	73.7	74.4	74.4	71.5	70.9	73.7	21.06	20.75	21.49	39.5	38.9	4.07	52.8	52.6	52.4
Furniture.....	97.4	97.0	96.8	92.6	90.4	91.3	22.64	22.23	22.49	41.0	40.2	41.3	55.5	55.5	54.7
Lumber:															
Millwork.....	71.5	71.2	69.3	59.7	58.2	58.4	23.01	22.55	23.30	41.7	41.2	42.6	55.3	54.8	54.7
Sawmills.....	64.7	66.1	66.6	60.4	60.9	65.1	19.29	19.06	20.23	38.0	37.7	40.0	50.7	50.5	50.6
Stone, clay, and glass products.....	88.9	88.9	87.5	85.8	82.2	83.0	26.25	25.17	25.75	38.2	37.1	38.1	68.0	67.1	67.1
Brick, tile, and terra cotta.....	65.8	65.5	65.0	57.2	54.4	55.1	22.52	21.47	21.87	38.5	37.4	38.5	58.2	57.2	56.6
Cement.....	71.7	73.9	75.7	72.4	72.9	75.5	28.88	28.22	28.55	40.5	39.5	39.9	71.2	71.2	71.6
Glass.....	116.8	117.0	113.2	137.6	130.8	129.8	28.77	27.26	27.90	37.7	36.6	37.4	76.4	74.6	74.7
Marble, granite, slate, and other products.....	45.1	46.3	47.9	33.3	31.9	37.3	25.72	23.96	27.03	36.5	34.0	37.8	71.1	70.8	71.7
Pottery.....	105.6	102.4	98.0	101.3	96.3	92.8	24.47	24.00	24.06	38.1	37.6	37.9	63.8	63.6	63.4
<i>Nondurable goods</i>															
Textiles and their products.....	107.0	105.5	104.5	97.6	92.3	93.2	18.46	17.80	18.10	36.7	35.5	35.9	50.7	50.4	50.9
Fabrics.....	100.4	98.7	96.1	95.6	90.9	89.5	18.28	17.71	17.95	37.9	36.8	37.3	48.8	48.7	48.7
Carpets and rugs.....	82.4	81.6	79.6	76.2	73.1	72.8	25.64	24.80	25.31	37.9	36.6	37.5	67.6	67.9	67.5
Cotton goods.....	100.5	98.1	95.1	98.0	92.3	90.3	15.70	15.24	15.41	38.0	37.0	37.2	41.3	41.2	41.4
Cotton small wares.....	89.6	87.3	83.2	91.5	87.1	83.0	19.87	19.39	19.41	39.9	39.1	39.2	49.8	49.7	49.6
Dyeing and finishing textiles.....	134.3	132.0	128.6	121.2	113.5	111.4	22.11	21.07	21.15	40.3	38.6	39.1	54.7	54.3	53.9
Hats, fur-felt.....	83.9	81.9	80.0	81.5	72.6	66.9	26.78	24.49	23.19	35.6	33.6	31.1	74.7	72.8	73.0
Hosiery.....	146.2	144.9	142.8	160.4	160.4	158.1	19.57	19.67	19.68	35.7	36.0	36.1	54.9	54.7	54.8
Knitted outerwear.....	71.4	73.2	75.3	61.5	63.5	65.6	17.89	18.15	18.22	36.4	36.9	37.4	48.2	48.4	47.9
Knitted underwear.....	77.4	76.5	76.0	74.2	72.5	72.1	16.14	16.02	16.03	36.6	36.3	36.7	44.1	44.2	43.8
Knitted cloth.....	147.5	150.0	157.3	129.8	129.5	136.3	19.64	19.24	19.34	39.3	38.7	39.6	50.0	49.5	48.2
Silk and rayon goods.....	65.3	65.2	64.6	54.4	52.2	52.4	17.13	16.43	16.63	37.3	36.0	36.6	45.8	45.4	45.3
Woolen and worsted goods.....	100.9	98.7	94.1	96.3	88.9	87.6	22.15	20.92	21.62	38.9	36.8	38.2	56.9	56.9	56.6

See footnotes at end of table.

TABLE 7.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*

MANUFACTURING

[Indexes are based on 3-year average, 1923-25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures. The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request]

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940
<i>Nondurable goods—Continued</i>															
Textiles and their products—Continued.													<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Wearing apparel.....	117.3	116.3	118.9	95.6	89.6	94.8	\$18.98	\$18.05	\$18.53	34.3	33.0	33.4	54.4	53.9	55.2
Clothing, men's.....	108.1	104.7	104.3	86.2	76.4	77.3	20.31	18.71	18.96	33.5	31.1	31.5	60.3	60.1	60.2
Clothing, women's.....	164.5	165.5	171.5	125.7	119.7	131.2	20.05	19.00	20.03	34.7	33.7	33.8	53.9	53.1	55.0
Corsets and allied garments.....	112.8	113.2	112.6	122.6	121.1	124.2	18.23	17.95	18.49	37.3	36.1	38.0	48.5	48.5	48.3
Men's furnishings.....	123.9	128.4	127.7	133.9	140.4	133.8	16.47	16.65	15.96	36.5	37.2	36.8	43.0	43.1	42.1
Millinery.....	60.8	60.9	76.1	41.5	40.9	55.3	20.39	20.07	21.62	29.7	28.6	30.6	63.6	66.1	64.4
Shirts and collars.....	122.1	120.6	122.0	115.0	112.8	114.5	14.75	14.77	14.91	35.0	34.8	35.6	41.9	41.7	41.8
Leather and its manufactures.....	90.6	87.0	90.0	78.5	68.5	73.4	20.45	18.59	19.28	37.1	33.5	34.8	55.8	55.9	55.7
Boots and shoes.....	88.0	84.1	88.4	73.2	62.5	69.1	19.07	17.03	17.93	36.4	32.4	34.0	53.3	53.4	53.3
Leather.....	85.8	83.9	81.6	89.5	82.8	81.6	26.16	24.57	25.04	39.9	37.9	38.3	65.9	65.8	65.7
Food and kindred products.....	130.4	132.5	141.3	132.4	128.8	134.2	25.78	24.43	23.82	40.6	39.3	40.0	64.1	63.2	61.0
Baking.....	144.1	145.5	145.9	137.7	138.3	139.2	26.39	26.20	26.31	41.0	41.0	41.5	64.4	64.0	63.5
Beverages.....	260.2	263.0	271.3	299.4	302.3	314.4	33.60	33.61	33.83	38.0	38.0	38.7	88.7	89.3	88.3
Butter.....	94.5	99.4	95.7	83.8	82.2	81.6	23.32	21.77	22.60	46.6	44.3	45.2	49.8	48.7	48.9
Canning and preserving.....	103.3	123.2	201.5	92.7	100.6	170.5	17.09	15.54	16.11	34.4	33.4	37.6	51.0	48.0	44.0
Confectionery.....	100.5	102.4	102.0	103.0	100.1	103.2	19.86	19.05	19.63	40.2	38.7	40.1	49.8	49.5	49.3
Flour.....	77.8	79.0	80.6	72.8	72.3	77.9	25.12	24.59	25.98	40.7	40.2	42.0	60.8	60.9	61.2
Ice cream.....	69.3	70.9	73.8	60.9	61.0	64.0	30.15	29.61	30.03	44.7	43.7	44.4	65.8	65.8	65.8
Slaughtering and meat packing.....	125.0	116.2	109.6	137.3	118.9	115.8	28.77	26.82	27.64	42.3	39.0	40.3	68.0	68.6	68.4
Sugar, beet.....	235.8	277.0	266.9	265.1	288.0	217.1	29.07	26.81	20.98	53.2	49.3	36.4	56.2	55.1	57.0
Sugar refining, cane.....	94.2	93.5	95.0	85.1	83.7	82.9	25.58	25.36	24.71	38.9	39.5	38.2	63.8	64.1	64.6
Tobacco manufactures.....	65.6	66.8	66.5	67.4	66.4	66.5	18.70	18.14	18.25	38.1	37.2	37.6	49.0	48.6	48.4
Chewing and smoking tobacco and snuff.....	57.4	55.8	56.6	69.8	66.5	67.6	19.60	19.21	19.28	37.0	35.0	35.7	53.5	54.9	54.3
Cigars and cigarettes.....	66.6	68.1	67.7	67.0	66.3	66.2	18.53	17.95	18.05	38.2	37.4	37.8	48.5	47.9	47.8

Paper and printing.....	119.9	118.5	117.6	120.7	115.4	115.2	30.37	29.35	29.35	39.3	38.4	38.7	79.9	79.3	79.2
Boxes, paper.....	125.2	126.1	124.1	145.3	144.0	141.7	23.20	22.79	22.77	41.2	40.4	40.9	56.7	56.5	56.1
Paper and pulp.....	115.9	115.7	115.1	128.5	123.8	123.8	27.30	26.35	26.45	41.3	40.2	40.5	66.0	65.6	65.4
Printing and publishing:															
Book and job.....	150.3	102.5	102.6	97.9	90.1	91.0	32.28	30.62	30.89	39.9	38.2	38.8	81.3	81.2	80.7
Newspapers and periodicals.....	121.1	119.3	117.6	116.0	112.4	111.5	38.38	37.73	37.98	35.9	35.2	35.9	103.8	102.9	102.6
Chemical, petroleum, and coal products.....	125.5	125.3	125.3	144.0	139.5	139.3	30.90	29.87	29.96	39.6	38.8	39.3	76.6	76.5	75.7
Petroleum refining.....	119.8	120.7	121.2	139.0	133.3	136.2	36.00	34.32	34.93	37.3	35.7	36.4	96.8	96.6	96.3
Other than petroleum refining.....	126.9	126.4	126.3	145.5	141.5	140.3	28.92	28.23	28.13	40.4	39.8	40.2	70.1	69.6	68.7
Chemicals.....	149.9	148.0	145.6	187.9	181.7	176.2	33.33	32.72	32.39	40.8	40.4	40.6	81.6	81.1	79.8
Cottonseed—oil, cake, and meal.....	123.5	126.9	131.1	121.7	121.6	128.2	15.94	15.50	15.91	46.5	45.0	46.2	33.1	33.0	32.7
Druggists' preparations.....	115.7	116.2	118.3	130.5	130.8	133.0	25.56	25.53	25.51	39.5	39.5	40.0	61.2	61.3	60.7
Explosives.....	146.7	147.2	144.9	196.0	186.5	180.9	36.84	34.95	34.44	40.9	39.8	40.1	89.3	87.8	85.9
Fertilizers.....	95.0	92.2	96.7	80.9	77.1	82.4	15.47	15.31	15.71	35.4	33.9	35.5	43.7	45.2	44.2
Paints and varnishes.....	126.2	126.0	125.1	138.9	135.8	135.8	30.18	29.35	29.60	40.8	40.2	41.1	73.7	73.1	72.0
Rayon and allied products.....	315.1	314.5	311.1	334.4	331.4	322.6	27.15	26.95	26.53	39.1	39.1	38.7	69.4	69.0	68.5
Soap.....	84.8	84.5	88.8	106.3	100.2	107.2	29.54	27.93	28.42	40.3	38.9	39.9	73.3	71.8	71.1
Rubber products.....	97.5	94.4	92.6	111.1	102.0	99.5	31.13	29.45	29.31	39.7	37.9	38.0	78.4	78.1	77.4
Rubber boots and shoes.....	66.9	61.0	58.7	81.3	65.7	62.9	27.92	24.76	24.64	43.9	40.1	39.5	63.6	61.7	62.4
Rubber tires and inner tubes.....	76.9	75.2	73.9	96.4	89.7	86.6	36.59	34.92	34.27	37.8	36.1	35.7	97.1	97.1	96.2
Rubber goods other.....	166.6	162.9	160.5	173.9	162.7	162.1	25.39	24.29	24.57	40.4	39.0	40.0	63.4	62.7	62.0

NONMANUFACTURING

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

Coal-mining:													Cents	Cents	Cents
Anthracite ^{4 5}	50.8	50.4	49.4	42.7	37.6	32.3	\$27.60	\$24.56	\$21.48	29.7	26.2	22.8	92.0	92.6	92.5
Bituminous ⁴	90.0	89.8	89.2	91.3	84.5	83.6	27.19	25.21	25.03	31.0	28.6	28.3	89.0	88.9	88.6
Metalliciferous mining.....	72.2	72.5	72.6	73.3	69.8	71.4	31.71	30.10	30.75	42.5	40.7	42.0	74.9	74.3	73.6
Quarrying and nonmetallic mining.....	45.5	47.2	48.8	42.8	42.3	46.7	23.74	22.64	23.98	40.6	38.9	42.1	59.0	58.5	57.0
Crude-petroleum production.....	60.9	61.3	62.4	55.8	56.8	57.6	33.70	34.11	33.89	36.7	37.8	38.0	89.6	88.1	87.5
Public utilities:															
Telephone and telegraph ^{6 7}	79.6	79.2	79.1	104.9	103.2	102.2	32.40	32.01	31.75	39.8	39.9	39.5	81.8	80.7	80.8
Electric light and power ^{6 7}	91.3	91.8	92.3	106.4	106.9	107.0	35.54	35.53	35.37	39.2	39.8	40.3	90.8	89.3	88.0
Street railways and busses ^{6 7 8}	68.4	68.7	68.7	73.2	70.3	70.7	34.92	33.40	33.63	47.4	45.4	45.7	73.1	72.6	72.5
Trade:															
Wholesale ^{6 9}	92.7	91.8	91.0	84.0	80.7	80.2	31.31	30.43	30.61	41.6	40.8	41.3	75.2	74.7	73.9
Retail ^{6 7}	107.5	106.3	104.3	96.4	87.1	85.8	20.24	20.70	20.87	43.0	42.3	42.7	52.1	53.7	53.2
Food ⁷	105.8	104.6	103.8	97.9	96.7	95.8	23.76	23.76	23.64	43.4	43.1	43.5	52.5	52.8	52.2
General merchandizing ^{6 7}	151.3	111.4	103.5	131.0	97.5	92.3	17.16	17.34	17.59	39.9	38.1	38.4	42.8	45.2	45.6
Apparel ⁷	102.5	91.5	91.4	92.7	83.0	82.2	20.91	20.98	20.95	38.9	38.1	37.8	54.1	55.4	54.9
Furniture ⁷	81.8	77.8	77.8	75.1	70.1	70.1	28.83	28.26	28.40	44.9	44.0	44.4	67.9	68.7	68.1
Automotive ⁷	86.8	85.9	85.0	84.2	82.3	79.7	29.30	28.94	28.08	47.4	46.7	47.1	62.4	62.4	60.2
Lumber ⁷	76.0	77.4	79.4	72.5	72.0	76.0	26.65	25.94	26.77	42.5	41.5	43.1	63.4	63.3	62.8
Hotels (year-round) ^{6 10}	92.7	92.3	93.4	84.4	83.6	84.2	15.85	15.75	15.57	46.2	46.1	46.3	33.7	33.6	33.3
Laundries ⁴	100.2	99.7	100.2	89.0	87.2	88.0	18.40	18.13	18.18	43.1	42.3	42.6	42.8	43.1	42.8

See footnotes at end of table.

TABLE 7.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries—Continued*

NONMANUFACTURING—Continued

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

Industry	Employment index			Pay-roll index			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940	December 1940	November 1940	October 1940
Dyeing and cleaning ⁴	103.2	106.0	109.4	75.8	77.8	82.4	\$20.14	\$20.13	\$20.61	42.3	41.9	43.0	Cents 48.9	Cents 49.4	Cents 49.0
Brokerage ⁶ ¹¹	- .6	+ .1	- 1.6	+2.5	+ .8	+ .9	38.28	37.14	37.10	(12)	(12)	(12)	(12)	(12)	(12)
Insurance ⁶ ¹¹	+ .1	- .1	- .3	+1.0	+ .4	+ .7	36.75	36.42	36.32	(12)	(12)	(12)	(12)	(12)	(12)
Building construction ¹¹	-1.9	-4.2	+3.9	+5.6	-13.7	+6.5	32.63	30.44	33.84	33.8	31.6	35.4	96.7	96.5	95.7

¹ Revised series. Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

² See tables 9, 10, and 11 for comparable series back to January 1919 for all manufacturing and back to January 1923 for the durable- and nondurable-goods groups.

³ Revised series—Adjusted on basis of a complete employment survey made by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1938 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of this pamphlet.

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

⁵ See table 7 of October 1940 issue for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

⁶ Average weekly earnings, hourly earnings, and hours not comparable with figures

published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

⁷ Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in MONTHLY LABOR REVIEWS prior to April 1940, with but one exception, retail furniture, which has been revised since publication of July 1940 pamphlet back to January 1936. Comparable series for earlier months available upon request.

⁸ Covers street-railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

⁹ Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of pamphlet.

¹⁰ Cash payments only; additional value of board, room, and tips not included.

¹¹ Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

¹² Not available.

^{*} August and September 1940 average hourly earnings revised to 70.2 and 70.7 cents, respectively, and corresponding average weekly hours revised to 39.7 and 40.2

TABLE 8.—*Indexes of Employment and Pay Rolls in Selected Manufacturing¹ and Non-manufacturing² Industries, December 1939 to December 1940, Inclusive*

Industry	1939			1940											
	A.v.	A.v.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Employment															
Manufacturing															
All industries.....	99.9	107.5	105.0	105.0	104.4	103.2	102.5	103.1	103.2	107.4	111.4	113.8	114.7	116.2	
Durable goods ³	90.2	104.3	100.1	99.2	99.1	98.7	99.2	99.8	98.4	102.4	108.2	112.8	115.5	117.6	
Nondurable goods ⁴	109.2	110.6	109.7	110.5	109.5	107.5	105.6	106.2	107.8	112.2	114.4	114.8	113.9	114.8	
Nonmanufacturing															
Anthracite mining ⁵	50.6	50.7	51.5	51.6	52.2	51.2	51.8	49.7	50.5	49.9	49.8	49.4	50.4	50.8	
Bituminous-coal mining ⁵	78.6	88.0	91.8	91.7	89.7	86.2	85.1	83.8	84.9	86.6	87.7	89.2	89.8	90.0	
Metalliferous mining	62.7	69.9	66.4	66.3	66.2	67.7	69.2	70.3	71.0	71.5	72.5	72.6	72.5	72.2	
Quarrying and nonmetallic mining	44.6	45.3	37.8	38.3	41.0	44.5	46.9	47.9	48.1	48.5	48.9	48.8	47.2	45.5	
Crude-petroleum production	65.8	62.9	63.2	63.0	63.2	63.1	63.3	63.8	63.7	63.6	63.0	62.4	61.3	60.9	
Telephone and telegraph ⁶	75.8	77.9	76.1	75.9	76.0	76.7	77.3	77.8	78.8	79.0	78.9	79.1	79.2	79.6	
Electric light and power ⁶	89.0	91.1	89.1	89.2	89.3	90.0	90.6	91.2	92.2	93.0	92.7	92.3	91.8	91.3	
Street railways and busses ^{6,7}	69.0	68.5	68.8	68.7	68.2	68.3	68.4	68.5	68.4	68.4	68.5	68.7	68.7	68.4	
Wholesale trade	89.2	90.4	90.6	90.2	90.5	89.3	88.9	89.6	89.2	90.1	90.9	91.0	91.8	92.7	
Retail trade ⁶	89.8	92.3	87.7	87.0	91.1	89.8	91.2	91.9	89.1	88.7	92.8	94.3	96.3	107.5	
Year-round hotels ⁵	92.0	92.0	91.3	92.1	92.0	92.7	93.4	92.0	90.3	90.3	91.6	93.4	92.3	92.7	
Laundries ⁵	95.9	99.5	96.0	95.8	96.2	97.2	99.1	102.1	102.5	102.8	101.9	100.2	99.7	100.2	
Dyeing and cleaning ⁵	101.3	104.7	94.0	93.7	99.5	104.5	108.7	112.6	108.2	106.7	110.0	109.4	106.0	103.2	
Pay Rolls															
Manufacturing															
All industries.....	92.2	105.4	99.8	99.3	99.8	97.9	97.8	99.5	98.2	105.5	111.6	116.2	116.4	122.4	
Durable goods ³	86.2	107.8	99.3	97.8	98.7	98.4	98.7	101.4	97.4	106.5	115.1	123.4	125.1	131.6	
Nondurable goods ⁴	98.9	102.7	100.4	101.0	101.0	97.3	96.8	97.4	99.1	104.4	107.7	108.1	106.6	112.1	
Nonmanufacturing															
Anthracite mining ⁵	39.5	38.5	52.5	32.9	38.4	36.3	40.0	40.6	36.5	33.1	39.3	32.3	37.6	42.7	
Bituminous-coal mining ⁵	69.9	81.2	87.0	87.0	78.3	72.2	75.3	73.9	75.2	82.5	83.2	83.6	84.5	91.3	
Metalliferous mining	56.0	66.8	63.6	64.2	63.2	63.5	65.7	65.4	63.7	68.5	69.5	71.4	69.8	73.3	
Quarrying and nonmetallic mining	38.7	40.5	29.6	30.8	34.1	38.1	42.7	43.9	43.5	45.2	46.2	46.7	42.3	42.8	
Crude-petroleum production	61.0	58.2	58.4	59.0	58.4	59.0	58.7	58.8	59.1	59.0	58.2	57.6	56.8	55.8	
Telephone and telegraph ⁶	95.6	100.3	97.4	96.9	98.1	98.7	98.8	100.0	101.3	100.4	101.8	102.2	103.2	104.9	
Electric light and power ⁶	100.4	104.9	101.6	102.2	102.3	103.3	104.2	104.8	105.8	108.1	105.8	107.0	106.9	106.4	
Street railways and busses ^{6,7}	69.5	70.4	69.0	71.5	69.5	69.2	69.2	70.5	70.0	70.4	71.5	70.7	70.3	73.2	
Wholesale trade	76.6	79.0	77.1	77.1	77.8	77.4	77.4	78.4	78.3	78.7	81.1	80.2	80.7	84.0	
Retail trade ⁶	80.8	84.2	79.9	79.1	82.0	82.3	83.4	84.8	82.6	81.5	85.1	85.8	87.1	96.4	
Year-round hotels ⁵	81.2	82.4	81.1	82.7	81.8	83.2	83.0	82.0	80.5	80.7	81.8	84.2	83.6	84.4	
Laundries ⁵	83.1	87.6	83.4	83.1	84.1	85.6	88.5	92.4	90.0	90.5	89.9	88.0	87.2	89.0	
Dyeing and cleaning ⁵	73.6	78.2	65.5	64.4	72.7	79.6	85.4	89.6	80.0	78.9	85.6	82.4	77.8	75.8	

¹ 3-year average 1923-25=100—adjusted to Preliminary 1939 Census of Manufactures. See tables 9, 10, and 11 for comparable figures back to January 1919 where available.

² 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of EMPLOYMENT AND PAY ROLLS, or in February 1935 and subsequent issues of MONTHLY LABOR REVIEW. For other nonmanufacturing indexes see notes 5 and 6.

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

⁴ Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

⁵ Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of this pamphlet.

⁶ Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable with indexes published in EMPLOYMENT AND PAY ROLLS pamphlets prior to January 1940 or in MONTHLY LABOR REVIEW prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.

⁷ Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

TABLE 9.—*Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined, by Months, January 1919 to December 1940*¹

[1923-25=100]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Employment													
1919	104.5	101.2	101.7	101.9	102.6	103.9	106.6	109.3	111.3	110.9	112.1	113.9	106.7
1920	114.3	113.3	115.6	114.0	111.1	110.1	107.5	107.4	106.1	102.1	95.6	88.0	107.1
1921	79.5	81.7	82.9	82.3	82.0	81.2	79.7	81.1	83.0	83.7	83.7	82.7	82.0
1922	82.4	84.5	85.8	85.7	87.9	89.6	90.5	93.1	95.1	96.6	98.0	99.1	90.7
1923	100.2	102.4	104.6	105.1	105.2	105.7	104.6	104.8	105.3	104.0	102.8	101.1	103.8
1924	100.1	101.7	101.9	100.1	96.8	93.8	90.6	92.0	94.2	95.0	94.5	96.1	96.4
1925	96.6	98.3	99.2	99.1	98.6	98.4	98.3	100.0	101.9	102.6	102.2	101.8	99.8
1926	101.0	102.0	102.5	101.8	100.8	100.8	99.7	101.8	104.0	103.6	101.6	100.3	101.7
1927	98.6	100.2	100.9	100.3	99.6	99.7	98.6	99.9	101.2	100.2	98.0	96.5	99.5
1928	95.3	97.2	98.2	97.8	97.8	98.5	98.4	101.1	103.3	103.5	102.6	102.1	99.7
1929	101.7	104.1	105.4	106.7	106.5	106.8	107.3	109.2	110.3	109.0	104.6	100.7	106.0
1930	98.2	98.3	97.9	97.3	95.6	93.6	90.4	89.7	90.7	88.7	85.4	82.9	92.4
1931	80.1	80.8	81.2	81.2	80.6	78.8	77.7	77.9	78.3	75.5	72.7	72.0	78.1
1932	70.0	71.2	70.1	67.8	65.2	63.2	61.0	62.7	66.1	67.2	66.3	65.1	66.3
1933	63.3	64.7	62.3	63.9	66.8	71.6	76.2	81.3	85.0	84.6	81.2	79.5	73.4
1934	78.8	83.7	87.2	88.8	89.0	87.8	86.3	87.4	83.5	85.9	84.3	85.6	85.7
1935	86.7	89.6	91.0	91.2	89.9	88.3	88.7	91.7	93.9	95.2	94.6	94.2	91.3
1936	92.3	92.7	93.9	95.5	96.4	97.0	98.4	101.2	103.8	104.9	104.9	106.4	99.0
1937	104.7	107.6	110.1	111.3	111.5	110.3	110.8	112.2	112.2	110.3	104.2	97.7	108.6
1938	91.0	91.6	91.2	89.3	87.0	85.4	85.9	90.2	93.6	94.2	95.3	96.2	90.9
1939	94.5	96.1	97.0	96.9	95.9	96.4	96.6	99.5	103.7	107.3	107.5	107.8	99.9
1940	105.0	105.0	104.4	103.2	102.5	103.1	103.2	107.4	111.4	113.8	114.7	116.2	107.5
Pay Rolls													
1919	93.8	89.3	90.0	89.2	90.1	92.7	95.6	101.7	106.3	103.6	107.8	115.4	98.0
1920	119.1	117.4	125.4	122.3	123.0	124.4	120.0	120.6	118.9	114.4	105.0	95.5	117.2
1921	80.6	80.1	81.0	78.8	77.4	75.6	71.6	73.6	73.3	71.9	70.9	72.7	75.6
1922	69.6	72.5	74.4	73.6	77.0	80.0	80.2	84.1	87.0	88.7	92.2	94.5	81.2
1923	93.9	97.8	102.6	103.8	107.3	107.2	102.9	103.1	103.8	105.9	103.9	102.7	102.9
1924	98.9	104.5	104.5	102.0	97.6	91.9	85.3	89.1	92.4	94.6	93.1	97.6	96.0
1925	96.0	101.0	102.8	100.4	101.4	99.2	97.5	100.1	99.4	105.3	105.1	105.5	101.1
1926	101.6	105.7	107.2	104.9	103.5	103.7	99.4	103.8	105.1	108.0	104.3	103.6	104.2
1927	98.6	104.8	106.6	105.0	104.8	103.2	99.1	102.5	102.1	102.7	98.9	100.0	102.4
1928	96.6	102.0	103.5	101.3	102.3	102.7	100.2	104.6	106.2	109.5	106.2	106.9	103.5
1929	103.8	110.8	113.0	114.1	114.3	112.7	108.6	113.5	114.4	113.7	104.9	101.2	110.4
1930	96.5	99.6	99.7	98.5	96.1	92.9	85.0	83.8	84.8	82.9	77.3	75.4	89.4
1931	70.3	74.4	75.9	74.7	73.6	69.9	66.6	66.4	63.8	61.8	58.3	57.8	67.8
1932	54.0	55.4	53.6	49.6	46.8	43.7	40.4	41.4	44.0	45.8	43.6	42.4	46.7
1933	40.3	41.4	38.3	40.4	44.4	49.1	52.7	58.6	61.3	61.1	57.3	56.5	50.1
1934	56.1	62.9	67.2	69.6	69.7	67.4	62.8	65.1	60.8	64.0	62.5	66.2	64.5
1935	67.5	72.6	74.4	74.6	71.8	69.8	69.1	74.0	76.8	79.5	78.6	80.5	74.1
1936	76.9	76.6	80.5	82.6	84.0	84.2	83.5	87.3	87.2	92.9	94.4	99.2	85.8
1937	94.6	100.1	105.9	109.7	110.1	107.6	105.2	108.7	104.9	104.9	93.3	84.6	102.5
1938	75.4	77.7	77.8	75.2	73.6	71.6	71.7	77.9	82.3	85.0	85.3	88.1	78.5
1939	84.7	87.1	88.8	86.8	86.3	87.9	85.8	91.2	95.4	103.2	103.2	105.4	92.2
1940	99.8	99.3	99.8	97.9	97.8	99.5	98.2	105.5	111.6	116.2	116.4	122.4	105.4

¹ Revised series—Adjusted to preliminary 1939 census figures.

² Preliminary.

TABLE 10.—*Indexes of Employment and Pay Rolls in the Durable Goods Group of Manufacturing Industries, by Months, January 1923 to December 1940, Inclusive*¹

[1923-25=100]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Employment													
1923...	97.7	101.0	103.6	105.6	106.6	107.4	106.1	105.8	105.4	104.6	103.7	101.6	104.1
1924...	100.6	102.6	103.8	103.4	99.3	94.8	90.7	90.6	91.4	92.8	92.5	94.3	96.4
1925...	95.3	97.3	98.7	99.9	100.1	99.2	97.9	98.7	100.1	102.0	102.3	102.2	99.5
1926...	101.3	102.9	103.9	104.3	103.7	103.2	101.8	103.0	103.5	103.0	100.8	98.6	102.5
1927...	96.0	97.9	99.1	99.3	99.2	98.2	95.8	96.4	95.9	95.2	92.9	91.5	96.5
1928...	90.3	92.8	94.9	96.1	97.7	98.2	97.4	99.9	101.3	101.6	101.0	100.6	97.7
1929...	101.0	103.9	105.9	108.0	109.3	109.3	109.2	110.3	109.8	107.7	102.5	97.6	106.2
1930...	94.8	95.3	95.1	94.9	93.8	90.8	86.3	83.7	82.3	80.9	78.1	75.7	87.6
1931...	72.3	72.4	72.5	72.6	71.9	69.8	67.1	65.8	65.0	62.2	60.6	60.2	67.7
1932...	58.1	58.8	57.5	55.5	54.0	52.5	50.1	48.9	49.2	49.6	50.0	49.6	52.8
1933...	47.7	48.6	46.8	47.9	50.9	55.3	59.8	65.0	68.3	68.0	66.1	65.8	57.5
1934...	65.1	69.4	73.5	76.6	78.3	77.6	75.1	72.9	70.7	69.3	68.8	71.2	72.4
1935...	73.5	77.3	79.3	80.2	79.7	77.4	77.3	79.1	79.9	83.8	85.1	84.7	79.8
1936...	83.2	83.0	84.7	87.5	89.6	90.5	91.0	91.3	92.5	96.3	98.3	100.4	90.7
1937...	97.9	101.2	104.9	107.4	109.1	107.8	108.2	107.5	106.8	107.2	101.4	92.4	104.3
1938...	82.5	81.1	80.4	78.3	76.4	73.9	71.9	73.5	77.2	81.1	84.4	85.5	78.9
1939...	84.1	85.3	86.2	87.0	86.3	87.1	85.5	86.5	92.4	98.8	100.9	102.8	90.2
1940...	100.1	99.2	99.1	98.7	99.2	99.8	98.4	102.4	108.2	² 112.8	² 115.5	² 117.6	² 104.3
Pay rolls													
1923...	89.3	94.9	100.7	104.0	109.0	109.2	103.5	105.0	104.5	107.9	106.7	103.8	103.2
1924...	98.3	106.6	107.8	106.7	100.9	92.7	83.6	86.9	88.7	92.0	90.8	95.4	95.9
1925...	92.7	99.9	102.2	101.6	103.3	100.2	96.3	98.5	98.1	105.8	106.1	106.6	100.9
1926...	99.9	106.4	108.6	107.8	106.5	106.1	100.2	104.7	104.6	108.2	103.9	101.1	104.8
1927...	93.6	101.8	104.8	104.6	104.7	101.2	94.8	98.5	96.1	97.7	93.7	94.7	98.9
1928...	90.1	98.0	101.0	101.4	103.9	103.0	99.0	104.5	104.8	109.4	106.1	105.8	102.3
1929...	102.2	111.5	114.6	117.5	118.7	115.8	109.8	115.4	114.6	113.4	102.9	97.4	111.2
1930...	91.0	96.1	96.8	97.0	94.8	90.3	79.1	76.0	75.4	74.4	68.6	66.1	83.8
1931...	59.1	63.7	65.2	64.6	63.7	58.7	53.6	52.2	48.8	47.7	45.3	44.9	55.6
1932...	40.7	41.8	39.5	36.9	35.8	32.6	29.4	27.9	27.9	29.8	29.5	29.0	33.4
1933...	27.5	27.8	25.8	27.5	32.0	36.4	39.6	45.2	46.0	46.3	43.6	43.8	36.8
1934...	43.1	49.6	54.8	59.6	60.9	59.2	51.3	51.7	47.1	48.2	48.1	52.7	52.2
1935...	55.1	61.6	63.6	64.9	62.6	60.0	58.2	62.5	64.6	70.4	71.9	73.5	64.1
1936...	69.1	68.1	73.2	78.2	81.0	81.6	78.7	79.8	80.1	88.6	92.4	97.3	80.7
1937...	90.3	96.8	104.9	112.0	113.3	109.9	106.1	109.2	104.7	107.0	93.8	80.2	102.4
1938...	66.6	66.7	67.0	65.2	63.9	61.4	58.5	63.5	68.6	75.1	78.2	80.2	67.9
1939...	76.7	78.4	80.2	80.3	79.7	81.7	77.0	82.5	88.8	100.7	102.1	105.8	86.2
1940...	99.3	97.8	98.7	98.4	98.7	101.4	97.4	106.5	115.1	² 123.4	² 125.1	² 131.6	² 107.8

¹ Revised series—Adjusted to preliminary 1939 census figures.² Preliminary.

TABLE 11.—*Indexes of Employment and Pay Rolls in the Nondurable Goods Group of Manufacturing Industries, by Months, January 1923 to December 1940, Inclusive*¹

[1923-25=100]

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av.
Employment													
1923.....	102.6	103.9	105.6	104.6	104.0	104.1	103.2	103.8	105.2	103.3	101.8	100.7	103.6
1924.....	99.6	100.9	100.2	97.1	94.5	92.8	90.6	93.2	96.9	97.0	96.4	97.7	96.4
1925.....	97.8	99.3	99.7	98.4	97.1	97.7	98.7	101.3	103.7	103.2	102.2	101.4	100.0
1926.....	100.7	101.1	101.2	99.4	98.0	98.5	97.7	100.7	104.4	104.2	102.4	101.9	100.9
1927.....	101.1	102.3	102.6	101.2	100.0	101.1	101.2	103.3	106.2	104.9	102.8	101.3	102.3
1928.....	100.1	101.3	101.3	99.4	98.0	98.7	99.4	102.2	105.1	105.4	104.1	103.6	101.6
1929.....	102.3	104.3	105.0	105.4	103.9	104.4	105.6	108.2	110.8	110.2	106.6	103.6	105.9
1930.....	101.4	101.2	100.5	99.6	97.4	96.3	94.3	95.3	98.6	96.2	92.3	89.9	96.9
1931.....	87.5	88.7	89.5	89.4	88.9	87.4	87.8	89.5	90.9	88.1	84.3	83.2	87.9
1932.....	81.4	83.0	82.1	79.5	75.9	73.4	71.5	75.9	82.2	83.9	81.8	79.8	79.2
1933.....	78.1	80.1	77.0	79.1	82.0	87.1	91.8	97.0	100.8	100.3	95.6	92.5	88.5
1934.....	91.8	97.2	100.2	100.4	99.3	97.6	97.0	101.2	95.8	100.3	99.0	99.4	98.4
1935.....	99.3	101.3	102.2	101.7	99.6	98.6	99.6	103.7	107.2	106.1	103.7	103.2	102.2
1936.....	101.0	102.0	102.7	103.0	102.8	103.1	105.4	110.7	114.5	113.1	111.3	112.2	106.8
1937.....	111.2	113.7	115.1	115.0	113.8	112.7	113.3	116.7	117.3	113.3	106.9	102.8	112.7
1938.....	99.1	101.6	101.5	99.8	97.1	96.4	99.2	106.1	109.2	106.7	105.7	106.4	102.4
1939.....	104.4	106.4	107.3	106.3	105.0	105.3	107.2	111.9	114.5	115.4	113.8	112.6	109.2
1940.....	109.7	110.5	109.5	107.5	105.6	106.2	107.8	112.2	114.4	114.8	113.9	114.8	110.6
Pay rolls													
1923.....	99.0	101.1	104.7	103.6	105.5	104.8	102.1	101.0	103.0	103.6	100.7	101.4	102.5
1924.....	99.6	102.2	100.8	96.8	93.9	91.0	87.2	91.6	96.6	97.4	95.6	100.1	96.1
1925.....	99.7	102.2	103.4	99.1	99.3	98.1	98.7	101.9	101.0	104.0	103.9	104.4	101.4
1926.....	103.5	105.0	105.6	101.6	100.2	101.1	98.6	102.8	105.6	107.9	104.9	106.3	103.6
1927.....	104.3	108.2	108.5	105.5	104.9	105.4	103.9	107.0	108.8	108.3	104.7	106.0	108.3
1928.....	103.8	106.4	106.3	101.2	100.6	102.3	101.5	104.8	107.7	109.7	106.2	108.2	104.9
1929.....	105.6	110.0	111.2	110.3	109.5	109.2	107.2	111.3	114.2	114.0	107.1	105.4	109.6
1930.....	102.6	103.5	103.0	100.3	97.6	95.7	91.6	92.6	95.3	92.5	87.0	85.8	95.6
1931.....	82.8	86.5	87.9	86.0	84.8	82.4	81.1	82.2	80.6	77.7	72.9	72.3	81.4
1932.....	68.9	70.6	69.3	63.8	59.1	56.1	52.8	56.4	62.1	63.8	59.4	57.4	61.6
1933.....	54.6	56.6	52.4	54.8	58.3	63.3	67.3	73.5	78.4	77.7	72.5	70.8	65.0
1934.....	70.7	77.8	81.2	80.9	79.5	76.7	75.7	80.2	76.2	81.6	78.5	81.4	78.4
1935.....	81.3	85.0	86.4	85.4	82.2	80.9	81.2	86.8	90.4	89.6	86.2	88.4	85.3
1936.....	85.7	86.1	88.8	87.4	87.3	87.1	89.0	95.8	95.1	97.8	96.6	101.3	91.5
1937.....	99.4	103.9	107.0	107.0	106.4	105.1	104.1	108.1	105.1	102.5	92.6	89.4	102.6
1938.....	85.2	90.0	89.9	86.4	84.5	83.0	86.5	94.0	97.6	96.1	93.2	96.9	90.3
1939.....	93.7	96.8	98.4	94.1	93.7	94.8	95.6	100.9	102.8	106.0	104.4	105.0	98.9
1940.....	100.4	101.0	101.0	97.3	96.8	97.4	99.1	104.4	107.7	108.1	106.6	112.1	102.7

¹ Revised series—Adjusted to preliminary 1939 census figures.

² Preliminary.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in November and December 1940 is made in table 12 for 13 metropolitan areas, each of which had a population of 500,000 or over in 1930. Cities within these areas but having a population of 100,000 or over are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table

6, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 Census of Population.

TABLE 12.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1940, by Principal Metropolitan Areas

Metropolitan area	Number of establishments, December 1940	Number on pay roll, December 1940	Percentage change from November 1940	Amount of pay roll (1 week) December 1940	Percentage change from November 1940
New York ¹	13, 628	801, 692	+3. 6	\$23, 496, 373	+5. 6
Chicago ²	4, 384	531, 220	+4. 3	15, 669, 065	+7. 3
Philadelphia ³	2, 488	275, 112	+3. 5	8, 024, 213	+6. 7
Detroit.....	1, 650	401, 349	+1. 4	14, 236, 020	— . 2
Los Angeles ⁴	3, 062	223, 502	+7. 5	6, 815, 885	+6. 9
Cleveland.....	1, 347	165, 007	+6. 0	5, 180, 177	+7. 6
St. Louis.....	1, 421	148, 440	+3. 6	3, 905, 247	+7. 3
Baltimore.....	1, 130	138, 918	+4. 6	3, 843, 538	+5. 1
Boston ⁵	2, 754	184, 344	+4. 3	5, 071, 757	+7. 1
Pittsburgh.....	1, 346	240, 744	+4. 0	7, 832, 051	+8. 3
San Francisco ⁶	1, 717	102, 339	+5. 9	3, 248, 669	+8. 6
Buffalo.....	800	104, 258	+3. 1	3, 151, 144	+4. 0
Milwaukee.....	964	120, 669	+4. 1	3, 682, 697	+5. 7

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

² Does not include Gary, Ind.

³ Does not include Camden, N. J.

⁴ Does not include Long Beach, Calif.

⁵ Does not include Cambridge, Lynn, or Somerville, Mass.

⁶ Does not include Oakland, Calif.

WAGE-RATE CHANGES IN AMERICAN INDUSTRIES

The following table gives information concerning wage-rate adjustments occurring during the month ending December 15, 1940, as shown by reports received from manufacturing and nonmanufacturing establishments which supply employment data to this Bureau.

As the Bureau's survey does not cover all establishments in an industry, and furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

TABLE 13.—*Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending December 15, 1940*¹

Group and industry	Establishments			Employees			Average per-centage change in wage rates of employees having—	
	Total number reporting	Number reporting—		Total number covered	Number having—		In-creases	De-creases
		In-creases	De-creases ²		In-creases	De-creases ²		
All manufacturing.....	33,789	211		6,468,688	74,102		6.3	
Iron and steel group.....	2,557	16		940,245	18,300		7.8	
Blast furnaces, steel works, and rolling mills.....	339	5		501,967	7,374		5.7	
Machinery group.....	3,855	44		932,152	19,344		5.8	
Electrical machinery.....	580	6		242,468	8,962		5.9	
Foundries and machine shops.....	2,283	25		311,645	7,255		5.5	
Machine tools.....	194	6		74,285	964		7.0	
Transportation group.....	739	7		737,199	979		6.1	
Autos.....	397	4		451,965	485		6.9	
Nonferrous metals group.....	1,085	9		223,611	2,860		7.7	
Brass, bronze, and copper.....	332	4		84,101	306		6.2	
Smelting and refining.....	51	4		30,488	2,547		7.9	
Lumber group.....	2,730	58		354,327	16,039		4.6	
Furniture.....	723	7		103,539	932		6.3	
Millwork.....	585	7		40,836	1,265		4.8	
Sawmills.....	797	39		136,875	13,342		4.4	
Stone group.....	1,646	5		209,407	723		7.7	
Fabrics group.....	3,247	5		944,444	1,125		7.8	
Woolens.....	416	3		154,530	770		7.2	
Wearing-apparel group.....	3,339	5		359,504	1,424		5.0	
Miscellaneous textiles n. e. c.....	367	3		43,038	1,237		4.0	
Leather group.....	1,053	6		223,504	1,469		10.4	
Boot and shoe stock.....	121	4		9,816	330		5.0	
Food group.....	5,590	15		488,260	1,268		9.1	
Slaughtering and meat pack- ing.....	339	4		128,308	436		13.6	
Paper group.....	4,005	22		381,113	3,648		6.0	
Paper and pulp.....	445	8		130,538	2,532		6.8	
Printing, book and job.....	1,606	5		82,479	87		3.6	
Printing newspapers.....	732	4		66,239	203		6.0	
Chemical group.....	2,218	15		310,829	5,325		5.3	
Chemicals.....	235	6		62,733	4,019		4.9	
Chemicals n. e. c.....	263	5		16,702	552		8.2	
Miscellaneous manufacturing.....	1,239	4		167,092	1,598		6.4	
All nonmanufacturing.....		43			4,045		8.5	
Metalliferous mining.....		13			2,248		10.0	
Street railways and busses.....		4			692		4.0	
Wholesale trade.....		7			289		5.7	
Retail trade.....		16			362		10.1	

¹ Figures are not given for some industries to avoid disclosure of information concerning individual establishments. They are, however, included, where practicable, in "all manufacturing," in "all non-manufacturing," and in the various industry groups.

² No decreases reported.

Public Employment

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

EXECUTIVE SERVICE OF THE FEDERAL GOVERNMENT

Statistics of employment and pay rolls for the executive service of the Federal Government in November and December 1940 are given in table 14.

TABLE 14.—Employment and Pay Rolls for the Executive Service of the United States Government, December 1940 ¹

[Subject to revision]

Class	Employment			Pay rolls		
	December 1940	November 1940	Per-centage change	December 1940	November 1940	Per-centage change
Entire service:						
Total.....	1, 185, 558	1, 111, 530	+6.7	\$183, 606, 341	\$168, 388, 802	+9.0
Regular appropriation.....	997, 262	932, 760	+6.9	159, 408, 978	145, 248, 171	+9.7
Emergency appropriation.....	48, 525	49, 090	-1.2	6, 487, 811	6, 566, 378	-1.2
Force-account.....	139, 771	129, 680	+7.8	17, 709, 552	16, 574, 253	+6.8
Inside the District of Columbia:						
Total.....	155, 973	152, 605	+2.2	27, 097, 405	26, 244, 698	+3.2
Regular appropriation.....	139, 204	136, 083	+2.3	24, 185, 785	23, 364, 972	+3.5
Emergency appropriation.....	7, 489	7, 517	- .4	1, 167, 395	1, 163, 721	+ .3
Force-account.....	9, 280	9, 005	+3.1	1, 744, 225	1, 716, 005	+1.6
Outside the District of Columbia:						
Total.....	1, 029, 585	958, 925	+7.4	156, 508, 936	142, 144, 104	+10.1
Regular appropriation.....	858, 058	796, 677	+7.7	135, 223, 193	121, 883, 199	+10.9
Emergency appropriation.....	41, 036	41, 573	-1.3	5, 320, 416	5, 402, 657	-1.5
Force-account.....	130, 491	120, 675	+8.1	15, 965, 327	14, 858, 248	+7.5

¹ Data relate to the last pay period of the month.

CONSTRUCTION PROJECTS FINANCED BY THE PUBLIC WORKS ADMINISTRATION

Details concerning employment, pay rolls, and man-hours worked during December on construction projects financed from Public Works Administration funds are given in table 15, by type of project.

TABLE 15.—Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, December 1940 ¹

[Subject to revision]

Type of project	Employment		Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maxi-mum ²	Weekly average				
All programs.....	24, 676	20, 825	\$2, 703, 209	2, 654, 312	\$1. 018	\$3, 446, 179
Federal projects financed from National Industrial Recovery Act funds						
All projects.....	\$ 557	505	\$54, 307	88, 294	\$0. 615	\$82, 347
Building construction.....	124	102	11, 768	10, 686	1. 101	18, 514
Public roads ⁴	(6)	258	27, 619	53, 589	. 515	55, 000
Reclamation.....	85	72	8, 706	12, 476	. 698	1, 961
River, harbor, and flood control.....	70	56	5, 398	8, 692	. 621	5, 398
Water and sewerage.....	20	17	816	2, 851	. 286	1, 474

See footnotes at end of table.

TABLE 15.—*Employment and Pay Rolls on Projects Financed From Public Works Administration Funds, December 1940—Continued*

Type of project	Employment		Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum	Weekly average				
Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	2, 833	2, 568	\$313, 081	334, 751	\$0. 935	\$428, 096
Airport construction (exclusive of buildings).....	300	299	33, 585	45, 458	. 739	55, 997
Building construction.....	1, 285	1, 149	135, 702	121, 792	1. 114	196, 550
Electrification.....	7	7	758	838	. 905	302
Reclamation.....	908	829	122, 605	138, 582	. 885	124, 953
River, harbor, and flood control.....	141	123	4, 378	8, 273	. 529	14, 183
Streets and roads.....	98	96	9, 168	13, 145	. 697	31, 794
Water and sewerage.....	18	16	2, 008	1, 683	1. 193	1, 561
Miscellaneous.....	45	33	3, 012	3, 148	. 957	2, 550
Professional, technical, and clerical.....	31	16	1, 865	1, 832	1. 018	206
Non-Federal projects financed from National Industrial Recovery Act funds						
All projects *	623	492	\$44, 284	50, 180	\$0. 883	\$35, 453
Building construction *	320	221	25, 172	19, 058	1. 321	22, 136
Streets and roads.....	254	231	15, 776	27, 245	. 579	13, 064
Miscellaneous.....	49	40	3, 336	3, 877	. 860	253
Non-Federal projects financed from Emergency Relief Appropriation Act 1935, 1936, and 1937 funds						
All projects.....	4, 034	3, 547	\$398, 741	516, 919	\$0. 771	\$696, 074
Building construction.....	514	406	58, 220	44, 800	1. 300	73, 007
Electrification.....	722	599	56, 170	82, 005	. 685	61, 591
Heavy engineering.....	2, 710	2, 469	273, 609	378, 984	. 722	554, 984
Water and sewerage.....	88	73	10, 742	11, 130	. 965	6, 492
Non-Federal projects financed from Public Works Administration Appropriation Act 1938 funds						
All projects.....	16, 629	13, 713	\$1, 892, 796	1, 664, 168	\$1. 137	\$2, 204, 209
Building construction.....	4, 179	3, 379	482, 222	376, 985	1. 279	714, 325
Electrification.....	476	391	55, 362	43, 149	1. 283	137, 595
Heavy engineering.....	4, 882	4, 156	671, 330	597, 663	1. 123	650, 165
Reclamation.....	109	76	7, 817	7, 818	1. 000	1, 648
Streets and roads.....	1, 596	1, 273	116, 746	128, 068	. 912	88, 386
Water and sewerage.....	5, 387	4, 438	559, 319	510, 485	1. 096	612, 090

¹ Data are for the month ending on the 15th.² Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.³ Includes weekly average for public roads.⁴ Under the jurisdiction of the Public Roads Administration.⁵ Not available: weekly average included in total for all projects.⁶ Includes data for workers engaged in construction of underground tunnel who, because of the additional risk involved, were paid at rates higher than those usually paid for building construction.

UNITED STATES HOUSING AUTHORITY

Table 16 shows data concerning employment, pay rolls, and man-hours worked in December 1940 on low-rent projects of the United States Housing Authority.

TABLE 16.—Employment and Pay Rolls on Low-Rent Housing Projects Operated by the United States Housing Authority, December 1940

[Subject to revision]

Geographic division	Employment		Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum ¹	Weekly average				
All divisions.....	48,008	40,824	\$4,886,898	5,171,666	\$0.945	\$6,699,014
New England.....	4,812	4,133	610,244	543,776	1.122	737,349
Middle Atlantic.....	6,999	5,880	892,921	713,467	1.252	1,184,921
East North Central.....	5,673	4,773	710,992	599,110	1.187	993,311
West North Central.....	269	228	25,617	28,234	.907	21,669
South Atlantic.....	12,959	11,175	1,109,941	1,430,934	.776	1,562,012
East South Central.....	6,200	5,147	552,207	662,211	.834	719,910
West South Central.....	7,100	6,040	662,468	787,856	.841	997,455
Mountain.....	851	729	103,760	86,050	1.206	236,830
Pacific.....	1,475	1,247	159,430	141,764	1.125	203,249
Outside continental United States.....	1,660	1,472	59,318	178,264	.333	42,308

WORK PROJECTS ADMINISTRATION PROGRAM

A record of employment, pay rolls, and man-hours worked in December on projects financed by the Work Projects Administration is shown in table 17, by type of project.

TABLE 17.—Employment and Pay Rolls on Projects Financed by the Work Projects Administration, December 1940

[Subject to revision]

Type of project	Employment		Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum ¹	Weekly average				
Projects operated by Work Projects Administration ²						
All projects.....	1,808,595	\$100,148,212	222,528,367	\$0.450	(³)	
Projects operated by other Federal agencies						
All projects....	66,308	64,459	\$3,148,501	7,293,567	\$0.432	\$455,455
Airport construction (exclusive of buildings).....	5,472	5,465	70,428	344,642	.204	18,318
Building construction.....	32,191	30,825	1,634,547	3,542,803	.461	292,694
Forestry.....	6,913	6,907	293,555	720,674	.407	43,415
Grade crossing elimination ⁴	45	32	3,495	5,299	.660	0
Hydroelectric power plants ⁵	1,212	1,184	52,259	204,772	.255	25,364
Plant, crop, and livestock conservation.....	6,481	6,451	321,584	688,674	.467	21,520
Professional, technical, and clerical.....	3,631	3,561	249,220	421,282	.592	6,956
Public roads ⁴	82	57	4,620	7,261	.636	0
Reclamation.....	8,187	8,049	433,540	1,132,014	.383	30,244
River, harbor, and flood control.....	175	162	7,962	16,389	.486	3,536
Streets and roads.....	835	718	38,392	107,266	.358	3,994
Water and sewerage.....	324	301	9,848	35,430	.278	304
Miscellaneous.....	760	747	29,051	67,061	.433	9,110

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

² Data are for the calendar month. Will be published by type of project in January pamphlet.

³ Data on a monthly basis are not available.

⁴ Projects under the jurisdiction of the Public Roads Administration.

⁵ Projects under construction in Puerto Rico.

Data on employment, pay rolls, and man hours worked in December on each type of project operated by the Work Projects Administration were not available when this report was prepared. The figures for November are presented in table 18.

TABLE 18.—*Employment and Pay Rolls on Projects Operated by the Work Projects Administration, by Type of Project, November 1940*

[Subject to revision]

Type of project	Employment ¹	Pay rolls	Man-hours worked	Average earnings per hour
All projects.....	1,746,065	\$90,800,674	200,560,625	\$0.453
Conservation.....	41,906	2,167,242	4,798,590	.452
Highways, roads, and streets.....	707,156	33,188,550	79,799,022	.416
Professional and service, excluding sewing.....	328,260	20,139,868	40,179,517	.501
Public buildings.....	157,146	8,521,405	17,552,602	.485
Publicly owned or operated utilities.....	174,607	8,884,360	18,962,790	.469
Recreational facilities.....	78,573	4,422,868	9,026,834	.490
Sanitation.....	20,953	1,083,582	2,614,160	.415
Sewing.....	122,225	5,899,955	14,714,568	.401
Airports and airways.....	45,398	2,044,501	4,530,066	.451
Not elsewhere classified—Total.....	69,841	4,448,343	8,382,476	.531
National defense vocational training.....	28,656	1,603,779	3,391,463	.473
Other.....	41,185	2,844,564	4,991,013	.570

¹ Data for "All projects" represent the average of the weekly employment counts made as of each Wednesday during the calendar month. The distribution by type of project is, except for "National Defense Vocational Training," estimated on the basis of employment on Nov. 27, 1940.

NATIONAL YOUTH ADMINISTRATION

Employment and pay rolls on the National Youth Administration projects for November and December 1940 are shown in table 19.

TABLE 19.—*Employment and Pay Rolls on National Youth Administration Projects December and November 1940*

[Subject to revision]

Type of project	Employment		Pay rolls	
	December	November	December	November
Total.....	781,929	706,307	\$9,629,742	\$8,572,169
Student work program.....	450,547	439,548	3,107,372	3,067,736
Out-of-school work program....	331,382	266,759	6,522,370	5,504,433

CIVILIAN CONSERVATION CORPS

Employment and pay rolls in the Civilian Conservation Corps in November and December 1940 are presented in table 20.

TABLE 20.—*Employment and Pay Rolls in the Civilian Conservation Corps, December 1940*¹

[Subject to revision]

Group	Employment		Pay rolls	
	December 1940	November 1940	December 1940	November 1940
All groups.....	285,731	321,157	\$12,928,027	\$14,016,434
Enrolled personnel ²	251,264	286,560	7,817,785	8,898,469
Nurses ³	180	204	24,760	27,120
Educational advisers ³	1,528	1,539	314,125	258,148
Supervisory and technical ³	32,759	32,854	4,771,357	4,832,697

¹ Employment figure is monthly average for enrolled personnel, and number employed on last day of month for other groups.

² December data include 4,023 enrollees and pay roll of \$86,463 outside continental United States; in November the corresponding figures were 4,053 enrollees and pay roll of \$77,987.

³ Included in executive service, table 14.

CONSTRUCTION PROJECTS FINANCED BY RECONSTRUCTION FINANCE CORPORATION

Statistics of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in December are presented in table 21, by type of project.

TABLE 21.—*Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, December 1940*¹

[Subject to revision]

Type of project	Employment ²	Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects.....	1,775	\$176,660	196,475	\$0.899	\$1,147,322
Building construction ³	1,384	123,311	137,281	.898	989,676
Streets and roads.....	92	9,168	11,902	.770	3,880
Water and sewerage.....	185	30,123	34,785	.866	142,380
Heavy engineering.....	114	14,058	12,507	1.124	11,386

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

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

³ Includes 546 employees; pay-roll disbursements of \$49,081; 52,247 man-hours worked; and material orders placed of \$50,265 on projects financed by RFC Mortgage Co.

CONSTRUCTION PROJECTS FINANCED FROM REGULAR FEDERAL APPROPRIATIONS

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular Federal appropriations during December are given in table 22, by type of project.

TABLE 22.—*Employment and Pay Rolls on Construction Projects Financed From Regular Federal Appropriations, by Type of Project, December 1940*¹

[Subject to revision]

Type of project	Employment		Monthly pay rolls	Man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum ²	Weekly average				
All projects.....	\$ 752, 830	697, 973	\$82, 886, 826	100, 350, 832	\$0. 836	\$152, 544, 727
Airport construction.....	23, 248	21, 993	2, 464, 914	2, 736, 076	. 901	4, 647, 264
Building construction.....	447, 631	408, 308	47, 519, 839	57, 614, 867	. 825	83, 816, 345
Electrification:						
Rural Electrification Adminis-						
tration projects ⁴	8, 384	6, 933	452, 727	875, 892	. 517	2, 152, 610
Other than R. E. A. projects.....	729	596	60, 324	65, 828	. 916	124, 781
Forestry.....	11	11	1, 003	1, 760	. 570	194
Heavy engineering.....	106	106	13, 747	11, 278	1, 219	79, 194
Public roads ⁴	(6)	39, 439	3, 438, 210	5, 258, 841	. 654	9, 524, 360
Reclamation.....	26, 055	25, 243	3, 639, 749	4, 025, 696	. 904	4, 880, 969
River, harbor, and flood control:						
Dredging, dikes, revetments, etc.	38, 243	34, 344	3, 661, 960	5, 131, 583	. 714	4, 999, 272
Locks and dams.....	7, 235	6, 476	920, 826	1, 090, 035	. 845	1, 122, 846
Ship construction:						
Naval vessels.....	112, 021	108, 194	16, 491, 093	18, 174, 969	. 907	34, 299, 080
Other than naval vessels.....	27, 417	25, 012	2, 999, 695	3, 488, 107	. 860	4, 897, 887
Streets and roads.....	4, 082	3, 619	377, 283	545, 418	. 692	637, 611
Water and sewerage.....	1, 168	1, 050	107, 916	136, 345	. 791	278, 655
Miscellaneous.....	17, 061	16, 649	737, 532	1, 194, 077	. 618	1, 083, 659

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

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

³ Includes weekly average for public-road projects.

⁴ Financed by Rural Electrification Administration loans.

⁵ Under the jurisdiction of the Public Roads Administration.

⁶ Not available, weekly average included in the total for all projects.

STATE-ROADS PROJECTS

A record of employment and pay roll disbursements on the construction and maintenance of roads financed wholly from State or local funds in December 1940, compared with November 1940, and December 1939, is presented in table 23.

TABLE 23.—*Employment and Pay Rolls on Construction and Maintenance of State Roads, December 1940, November 1940, and December 1939*¹

[Subject to revision]

Item	Employment ²			Pay rolls		
	December 1940	November 1940	December 1939	December 1940	November 1940	December 1939
Total.....	142, 539	179, 345	122, 882	\$10, 889, 588	\$12, 676, 303	\$9, 030, 150
New roads.....	34, 310	50, 846	19, 066	2, 320, 342	3, 660, 844	1, 246, 390
Maintenance.....	108, 229	128, 499	103, 816	8, 569, 246	9, 015, 459	7, 783, 760

¹ Projects financed wholly from State or local funds. December and November 1940 data are for the calendar month; December 1939 for the month ending on the 15th.

² Average number working during month.

PURCHASES FROM PUBLIC FUNDS ¹

Table 24 shows the value of material orders placed on construction projects financed by Federal funds in the fourth quarter of 1940. Material orders placed on construction projects operated by the Work Projects Administration, not included in this table because data were not available, will be included in the complete report for the fourth quarter to be published in the March pamphlet.

In the fourth quarter of 1940 on construction projects financed from regular Federal appropriations, orders were placed for materials valued at approximately \$401,358,000. Of this amount \$86,915,000 was expended for iron and steel products, \$180,204,000 for machinery, \$28,534,000 for cement and concrete products, and \$36,780,000 for forest products. Of the \$13,375,000 of material orders placed on the Public Works Administration program, \$4,118,000 was for iron and steel products, \$2,743,000 for machinery, \$1,453,000 for cement and concrete products, and \$824,000 for forest products.

Previous sections of this report have shown the number of workers employed at the site of construction projects financed from Federal funds. The direct employment, however, is only a partial picture, as the manufacture of the materials used on the projects also creates a large amount of employment.

Estimates have been made of the man-months of labor created in fabricating the materials used on the various programs (see table 3). The estimates include only the labor required in the fabrication of materials in the form in which it is to be used. No estimate is made of the labor required in producing the raw materials or in transporting them to the point of manufacture. In manufacturing structural steel, for example, the only labor included is that occurring in the fabricating mills; no estimate is made for the labor created in mining, smelting, and transporting the ore; nor for the labor in blast furnaces, the open hearth furnaces, and the blooming mills.

The information concerning man-months of labor created in fabricating materials is obtained by sending a questionnaire to each firm receiving an award for materials to be financed from Federal or State funds. The manufacturer is requested to make an estimate of the number of man-hours created in his plant in manufacturing the materials specified in the contract. For materials purchased directly by contractors the Bureau estimates the man-months of labor created. This estimate is based upon the findings of the 1937 Census of Manufacturers,

The value of material orders placed on all construction projects financed by Federal funds during the third quarter of 1940, is presented in table 25, by type of project.

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

TABLE 24.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1940*

Type of material	Projects				
	Public Works Administration ¹	U. S. H. A. low-rent housing	Reconstruction Finance Corporation ²	Regular Federal	Federal agency projects financed from W. P. A. funds ³
All materials.....	\$13,374,552	\$21,276,497	\$1,846,261	\$401,358,476	\$1,841,371
Textiles and their products.....	4,491	99,741	7,467	479,243	5,660
Awnings, tents, canvas, etc.....	1,191	3,135		209,546	1,320
Carpets and rugs.....					
Cordage and twine.....	743	3	263	68,354	258
Cotton products.....	6	10		409	184
Felt products.....	32	348		503	9
Jute products.....	276	265	14	2,893	
Linoleum and asphalted-felt-base floor covering.....	836	94,604	7,096	17,798	578
Sacks and bags, other than paper.....	508			719	111
Upholstering, filling, batting, padding, and wadding.....				27	
Waste and related products.....	123	246		4,436	325
Textiles and their products, n. e. c.....	776	1,130	94	174,558	2,875
Forest products.....	823,765	2,438,912	70,079	36,770,714	261,560
Cork products.....	23,713	62		18,574	385
Furniture and related products.....	189,628	69,521	13,524	1,692,391	3,948
Lumber and timber products, n. e. c.....	378,589	1,292,824	26,930	28,754,079	188,671
Planing-mill products.....	210,164	1,035,775	27,044	6,285,963	68,534
Window and door screens and weatherstrip.....	20,202	40,685	2,581	12,021	
Forest products, n. e. c.....	1,469	45		16,686	22
Chemicals and allied products.....	199,332	459,410	58,935	2,973,604	52,879
Ammunition and related products.....					
Compressed and liquefied gases.....	8,201	1,862	429	52,904	5,170
Explosives.....	68,020	842	207	985,010	4,827
Paints, pigments, and varnishes.....	112,006	446,300	6,127	1,077,478	40,395
Chemicals and allied products, n. e. c.....	11,105	10,406	52,172	858,212	2,487
Stone, clay, and glass products.....	3,763,124	5,950,866	135,516	57,448,426	362,062
Asbestos products, n. e. c.....	8,895	59,645		11,336	19
Brick, hollow tile, and other clay products, n. e. c.....	429,044	1,613,559	5,474	2,242,487	14,945
Cement.....	908,746	573,268	57,480	21,988,640	191,376
Concrete products.....	543,798	2,260,998	28,317	6,544,938	28,640
Crushed stone.....	84,039	2,604	5,903	8,648,793	18,800
Glass.....	151,630	95,895	4,622	435,613	30,161
Lime.....	2,896	104,844	5,580	4,852	409
Marble, granite, slate, and other stone, cut and shaped.....	461,614	101,350	117	1,568,962	16,009
Minerals and earths, ground or otherwise treated.....	43	740		133	
Sand and gravel.....	798,190	364,817	9,279	12,864,052	33,628
Steam and other packing, pipe and boiler covering, and gaskets.....	81,441	164,616	760	55,759	1
Tiling, floor and wall, and terrazzo.....	161,747	87,642	10,082	364,622	4,935
Wall plaster, wallboard, and building insulation.....	104,520	470,838	7,782	2,624,952	22,214
Stone, clay, and glass products, n. e. c.....	26,521	50,050	120	93,281	925
Iron and steel and their products, not including machinery.....	4,118,038	7,233,363	376,300	86,915,152	330,769
Bolts, nuts, washers, and rivets.....	31,103	3,007	1,989	1,289,253	9,072
Doors, shutters, window sash and frames, molding and trim, metal.....	469,888	907,805	13,395	3,724,722	6,269
Firearms.....					6
Forgings, iron and steel.....	51,121		4,750	3,717,135	4,083
Hardware, miscellaneous.....	198,303	415,638	9,606	2,028,294	49,701
Heating and ventilating equipment, except pipe.....	314,433	859,036	20,944	7,329,300	22,426

¹ Includes material orders placed on Public Works Administration projects financed by the Emergency Relief Appropriations Acts of 1935, 1936, and 1937, and P. W. A. A. 1938 funds. Data on low-rent housing projects financed from N. I. R. A. and E. R. A. A. 1935 funds are also included.

² Includes projects financed by RFC Mortgage Co.

³ Includes projects financed by transfer of W. P. A. funds to other Federal agencies under sec. 3, E. R. A. A. 1938, and sec. 11-A, E. R. A. A. 1939.

TABLE 24.—Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Fourth Quarter of 1940—Continued

Type of material	Projects				
	Public Works Administration	U. S. H. A. low-rent housing	Reconstruction Finance Corporation	Regular Federal	Federal agency projects financed from W. P. A. funds.
Iron and steel, etc.—Continued.					
Nails and spikes	\$23,387	\$6,219	\$1,423	\$645,595	\$6,540
Pipe and fittings, cast-iron	219,064	489,808	4,340	4,736,099	38,091
Pipe and fittings, wrought-iron and steel	195,076	379,827	111,682	6,549,754	40,318
Plumbing fixtures and supplies, except pipe	184,512	1,511,431	13,117	3,602,507	58,982
Rail fastenings, except spikes				3,232	
Rails, steel	7,931			68,976	
Springs, steel				344	
Steel, reinforcing	1,013,794	1,419,563	12,061	8,205,728	22,693
Steel, structural	720,860	720,052	94,444	18,732,883	27,019
Stoves and ranges, other than electric	7,290	119,006	587	5,727	
Switches, railway				21,363	
Tools, other than machine tools	47,498	10,227	2,333	2,128,176	15,679
Wire and wireworks products	83,368	92,978	7,248	3,363,855	21,064
Iron and steel and their products, n. e. c.	550,410	208,766	78,381	20,762,209	8,826
Nonferrous metals and their products.	224,675	559,163	216,592	5,097,442	18,794
Aluminum products	18,047	4,911		277,848	12
Copper products	65,600	1,462	170,606	2,943,092	2,887
Lead products	1,451	5,509	6	31,318	133
Sheet-metal products	116,330	251,113	45,973	1,288,898	15,427
Zinc products				245	
Nonferrous metals and their products, n. e. c.	23,247	206,168	7	556,041	335
Machinery, not including transportation equipment.	2,742,939	1,645,418	850,447	150,203,063	170,894
Electrical machinery, apparatus and supplies	920,780	7,245	173,558	32,473,328	15,789
Electrical wiring and fixtures	906,964	1,234,678	43,958	17,208,053	64,107
Elevators and elevator equipment	225,157	23,973	21,311	1,742,840	5,447
Engines, turbines, tractors, and water wheels	88,318	1,369	27,279	64,056,215	15,413
Machine tools	20,410	147	3,031	8,912,974	8,846
Meters (gas, water, etc.) and gas generators	3,018	5,956	14,520	4,541	
Pumps and pumping equipment	211,842	68,657	19,363	14,502,178	6,222
Radio apparatus and supplies	2			159,585	
Refrigerators and refrigerating and ice-making apparatus	14,034	164,936	30,997	323,944	
Machinery, n. e. c.	352,414	138,457	516,430	40,820,305	64,070
Transportation equipment, air, land, and water.	15,618	1,766	208	2,401,801	52,818
Aircraft					
Aircraft parts					
Boats, steel and wooden	6,041			200,788	
Carriages and wagons		122		245	902
Locomotives, other than steam				214,712	
Locomotives, steam					
Motorcycles and parts					
Motor vehicles, passenger	6,123			1,057,004	6,726
Motor vehicles, trucks	2,453	1,644		237,146	35,765
Railway cars, freight					
Railway cars, mail and express					
Railway cars, passenger					
Transportation equipment, n. e. c.	1,001		208	691,006	9,425
Miscellaneous	1,482,570	2,887,858	130,717	29,059,131	576,935
Belting, miscellaneous	2			2,938	25
Coal and coke	30,874	4,424	22	329,384	1,009
Creosote				1,585	43
Instruments, professional and scientific	903			130,882	45
Mattresses and bed springs				272	
Models and patterns		80		25,635	
Paper products	2,108	12,581	47	46,463	3,158
Paving materials; asphalt, tar, crushed slag, and mixtures	198,675	47,843	250	6,544,072	136,905
Petroleum products	335,615	104,214	10,273	7,212,154	50,073
Photographic apparatus and supplies	232	1,153		29,428	1,970
Roofing: Built-up and roll, asphalt shingles and roof coatings except paint	49,476	246,003	2,606	1,417,632	19,071
Rubber products	9,954	1,128	2,648	382,987	5,640
Theatrical scenery and stage equipment	29,744			1,590	
Window shades and fixtures	4,820	69,744		1,842	718
Other materials	820,167	2,400,688	114,871	12,932,258	358,278

TABLE 25.—*Value of Material Orders Placed on Construction Projects Financed by Federal Funds for the Third Quarter of 1940*

[Subject to revision]

Type of material	Total	Projects					
		Public Works Administration ¹	U. S. H. A. low-rent housing	Reconstruction Finance Corporation ²	Regular Federal	Federal agency projects financed from W. P. A. funds ³	Operated by W. P. A. ⁴
All materials.....	\$362,724,077	\$31,597,398	\$23,636,679	\$1,010,378	\$221,671,123	\$1,759,319	\$83,049,180
Textiles and their products.....	7,628,288	109,325	116,065	2,373	163,991	4,094	7,232,440
Cotton products.....	4,315,272	28	14	0	109	122	4,314,999
Textiles and their products, n. e. c.....	3,313,016	109,297	116,051	2,373	163,882	3,972	2,917,441
Forest products.....	21,730,102	3,548,479	2,638,794	33,278	7,917,284	188,231	7,404,036
Furniture and related products.....	3,822,715	2,515,369	92,556	894	927,446	10,729	275,721
Lumber and timber products, n. e. c.....	17,846,777	1,000,932	2,546,135	26,919	6,976,011	177,415	7,128,315
Forest products, n. e. c.....	60,610	32,178	53	5,465	22,827	87	0
Chemicals and allied products.....	4,367,419	324,955	386,233	8,044	1,336,960	39,764	2,271,463
Explosives.....	1,519,655	115,536	7,649	115	791,407	7,365	597,583
Paints, pigments, and varnishes.....	2,190,088	169,480	370,864	6,104	474,934	26,554	1,142,152
Chemicals and allied products, n. e. c.....	657,676	39,939	7,720	1,825	70,619	5,845	531,728
Stone, clay, and glass products.....	89,445,423	8,420,742	6,372,334	214,258	44,553,770	277,381	29,606,938
Brick, hollow tile, and other clay products.....	6,014,457	851,952	1,533,342	6,748	817,287	20,624	2,784,504
Cement.....	31,930,777	2,223,191	673,741	59,079	20,711,654	105,639	8,157,483
Concrete products.....	10,126,363	1,708,789	2,322,283	23,409	1,742,779	26,328	4,302,775
Crushed stone.....	13,406,852	748,482	88,319	5,205	6,491,429	22,899	6,050,518
Sand and gravel.....	20,319,631	1,573,609	345,883	8,517	12,428,233	58,473	5,904,816
Wall plaster, wall board, and building insulation.....	1,914,832	124,623	626,760	20,049	654,167	12,294	476,939
Stone, clay, and glass products, n. e. c.....	5,732,511	1,190,096	782,006	91,251	1,708,221	31,134	1,929,803
Iron and steel, and their products not including machinery.....	79,370,068	9,643,978	8,168,674	240,775	46,981,510	305,234	14,029,897
Hardware, miscellaneous.....	2,872,468	256,801	436,508	13,799	779,909	40,195	1,345,256
Pipe and fittings, cast iron.....	5,601,892	669,885	641,376	8,165	1,200,792	33,639	3,048,035
Plumbing, heating, ventilating equipment, except pipe.....	9,996,896	1,217,651	3,172,983	50,186	3,201,818	35,311	2,318,947
Structural and reinforcing steel.....	36,021,417	4,586,774	2,291,819	51,317	26,362,688	91,534	2,637,285
Tools, other than machine tools.....	1,597,322	82,936	11,749	4,469	988,428	14,355	495,885
Iron and steel and their products, n. e. c.....	23,280,073	2,829,931	1,614,239	112,839	14,447,875	90,200	4,184,999

Nonferrous metals and their products	4, 132, 448	533, 892	652, 928	203, 106	2, 368, 781	10, 772	362, 969
Machinery, not including transportation equipment	110, 747, 910	6, 561, 487	2, 381, 957	270, 172	98, 225, 428	201, 275	3, 107, 591
Electrical machinery, apparatus, and supplies	31, 380, 408	3, 702, 716	1, 183, 521	126, 414	24, 863, 437	36, 896	1, 467, 424
Machinery, n. e. c.	79, 367, 502	2, 858, 771	1, 198, 436	143, 758	73, 361, 991	164, 379	1, 640, 167
Transportation equipment, air, land, and water	1, 822, 213	236, 375	113	321	955, 057	65, 918	564, 429
Miscellaneous	43, 480, 206	2, 218, 165	2, 919, 581	38, 051	19, 168, 342	666, 650	18, 469, 417
Coal and coke	4, 691, 190	37, 304	962	11	4, 558, 301	3, 888	90, 724
Paving materials: Asphalt, tar, crushed slag, mixture	12, 213, 087	494, 478	68, 714	226	2, 729, 301	85, 647	8, 834, 721
Petroleum products	9, 247, 874	486, 697	132, 205	10, 014	5, 762, 988	58, 854	2, 797, 116
Roofing: Built-up and roll, asphalt shingles and roof coat- ings, except paint	946, 204	94, 750	319, 554	5, 826	231, 599	8, 946	285, 529
Rubber products	425, 791	66, 802	8, 542	2, 782	156, 323	7, 227	184, 115
Other materials	15, 956, 060	1, 038, 134	2, 380, 604	19, 192	5, 729, 830	502, 088	6, 277, 212

¹ Includes material orders placed on Public Works Administration projects financed by the Emergency Relief Appropriation Acts of 1935, 1936, and 1937, and P. W. A. A. 1938 funds. Data on low-rent housing projects financed from N. I. R. A. and E. R. A. A. 1935 funds are also included.

² Includes projects financed by RFC Mortgage Co.

³ Includes projects financed by transfer of W. P. A. funds to other Federal agencies under sec. 3, E. R. A. A. 1938, and sec. 11-A, E. R. A. A. 1939.

⁴ Does not include National Youth Administration projects.

The needs of the Work Projects Administration for motor vehicles, construction and other equipment, and miscellaneous services for use on work relief projects are supplied in part through the rental of equipment and the purchase of services. These rentals and services on projects operated by the Work Projects Administration for the third quarter of 1940, the second quarter of 1940, and the third quarter of 1939 are shown in table 26, by type of rental and service.

TABLE 26.—*Rentals and Services on Projects Operated by Work Projects Administration*
[Subject to revision]

Type of rental and service	Third quarter of 1940	Second quarter of 1940	Third quarter of 1939 ¹
All rentals and services.....	\$61,488,716	\$67,118,105	\$50,344,055
Motor vehicles.....	24,931,270	25,770,644	23,962,891
Teams and wagons.....	290,715	405,360	473,936
Construction equipment..	18,561,066	17,404,927	20,591,497
Other equipment.....	2,892,280	2,585,824	1,592,435
Other rentals and services.....	14,813,385	20,951,350	12,723,296

¹ Revised.

