

EMPLOYMENT and PAY ROLLS

**DETAILED REPORT
SEPT. 1947**

**United States Department of Labor
Bureau of Labor Statistics**

ESTIMATES OF MANUFACTURING EMPLOYMENT - NEW SERIES

Industries in the Food and Miscellaneous Industries Groups

In this detailed report the Bureau presents a new series of production-worker estimates for the individual industries comprising the food and miscellaneous industries groups. The new estimates, adjusted to 1945 bench-mark data from the Bureau of Employment Security of the Social Security Administration, correct the downward bias which has accumulated since 1939 and are, therefore, more representative of the true levels of employment.

Food Group - The estimates and indexes for all industries in this group have been adjusted. Because of the lapse of several years without any adjustment to levels other than the 1939 Census of Manufactures, some of the changes are rather large, the largest occurring in the canning and preserving industry. The series for the baking industry has been adjusted to new levels based on the Social Security Board industry definition. This differs from the former series based on the Bureau of Census definition in that it excludes many small establishments which under the Social Security Board definition are classified in retail trade.

Miscellaneous Industries Group - The estimates and indexes for all industries in this group have been adjusted. The changes in the industries, however, are relatively small.

This report shows the new production-worker employment estimates and indexes of employment and pay rolls for the months currently presented. A set of summary sheets presenting comparable data for the industries in the food and miscellaneous industries groups from January 1939 to date will be provided upon request.

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U. S. Department of Labor
Bureau of Labor Statistics
Employment and Occupational Outlook Branch
Employment Statistics Division

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Explanatory notes outlining briefly the concepts, methodology, and sources used in preparing data for this report appear in the appendix. See pages i - vii.

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Data for the 2 most recent months shown are subject to revision.

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Table 1. - Estimated Number of Wage and Salary Workers in
Nonagricultural Establishments, by Industry Division

(In thousands)

Industry division	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
TOTAL	43,033	42,600	42,201	41,848	41,466
Manufacturing	15,797	15,593	15,233	15,035	14,876
Mining	895	896	866	884	886
Contract construction	1,900	1,894	1,847	1,747	1,713
Transportation and public utilities	4,115	4,145	4,140	4,064	4,103
Trade	8,684	8,563	8,558	8,523	8,402
Finance	1,583	1,602	1,590	1,534	1,554
Service	4,634	4,619	4,686	4,456	4,430
Federal, State, and local government	5,425	5,288	5,281	5,605	5,502

See explanatory notes, sections A - H.

Table 2. - Estimated Number of Wage and Salary Workers
in Manufacturing Industries, by Major Industry Group

(In thousands)

Major industry group	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
ALL MANUFACTURING	15,797	15,593	15,233	15,035	14,876
<u>Durable goods</u>	7,880	7,792	7,691	7,590	7,486
Iron and steel and their products	1,865	1,854	1,826	1,776	1,751
Electrical machinery	741	731	729	734	713
Machinery, except electrical	1,531	1,518	1,491	1,434	1,411
Transportation equipment, except automobiles	531	520	517	590	607
Automobiles	982	953	970	969	925
Nonferrous metals and their products	462	457	452	477	471
Lumber and timber basic products	748	748	724	642	643
Furniture and finished lumber products	524	517	503	482	482
Stone, clay, and glass products	496	494	479	486	483
<u>Nondurable goods</u>	7,917	7,801	7,542	7,445	7,390
Textile-mill products and other fiber manufactures	1,306	1,287	1,273	1,310	1,296
Apparel and other finished textile products	1,309	1,282	1,196	1,193	1,170
Leather and leather products	406	401	390	397	395
Food	1,821	1,791	1,665	1,564	1,579
Tobacco manufactures	100	99	97	100	99
Paper and allied products	462	461	454	450	447
Printing, publishing, and allied industries	702	697	693	662	660
Chemicals and allied products	749	730	733	704	692
Products of petroleum and coal	233	234	235	224	223
Rubber products	269	268	265	281	274
Miscellaneous industries	560	551	541	560	555

See explanatory notes, sections A - H.

Table 3.—Federal Employment and Pay Rolls in All Areas and in Continental United States and Total Government Employment and Pay Rolls in Washington, D. C.

(In thousands)

Area and branch	Employment (as of first of month)			Pay rolls (total for month)		
	1947		Sept. 1946	1947		Sept. 1946
	Sept.	August		Sept.	August	
<u>Total (including areas outside United States)</u>						
Total Federal	2,020.9	2,067.2	2,517.9	\$501,172	\$485,984	\$551,286
Executive	1,980.1	2,026.1	2,475.0	491,654	476,612	542,388
Defense agencies	907.0	923.1	1,358.4	228,688	218,996	286,693
Post Office Department	425.5	442.3	424.8	96,051	96,145	94,329
Other agencies	647.6	660.7	691.8	166,915	161,471	161,366
Legislative	7.2	7.2	6.8	2,448	2,421	2,139
Judicial	3.4	3.4	3.1	1,402	1,259	1,106
Government corporations	30.2	30.5	33.0	5,668	5,692	5,653
<u>Continental United States</u>						
Total Federal	1,781.8	1,815.9	2,198.4	458,028	444,567	515,735
Executive	1,748.6	1,782.4	2,163.3	449,241	435,901	507,581
Defense agencies	704.6	708.7	1,074.4	193,855	185,563	258,164
Post Office Department	424.0	440.8	423.3	95,705	95,819	94,031
Other agencies	620.0	632.9	665.6	159,681	154,519	155,386
Legislative	7.2	7.2	6.8	2,448	2,421	2,139
Judicial	3.3	3.3	3.0	1,353	1,223	1,072
Government corporations	22.7	23.0	25.3	4,986	5,022	4,943
<u>Washington, D. C.</u>						
Total government	221.7	223.7	257.5	63,576	60,612	65,619
District of Columbia government	17.9	17.8	17.5	4,270	3,188	4,011
Federal	203.8	205.9	240.0	59,306	57,424	61,608
Executive	196.0	198.1	232.6	56,653	54,804	59,277
Defense agencies	64.6	65.1	86.3	18,031	17,560	21,118
Post Office Dept.	7.1	7.3	7.5	2,367	2,283	2,214
Other agencies	124.3	125.7	138.8	36,255	34,961	35,945
Legislative	7.2	7.2	6.8	2,448	2,421	2,139
Judicial	.6	.6	.6	205	198	192

Table 4.-- Personnel and Pay of the Military Branch of the Federal Government

(In thousands)

Personnel and pay	1947		September 1946	Average monthly personnel and total annual pay	
	September	August		1943	1939
Personnel, total as of first of month including those on active duty and those on terminal leave	1,557	1,575	2,474	8,944	345
Army	956	972	1,731	6,733	192
Navy	491	492	608	1,744	124
Marine Corps	91	92	113	311	19
Coast Guard	19	19	22	156	10
Men	1,539	1,556	2,438	8,833	<u>1/</u>
Women	18	19	36	111	<u>1/</u>
Pay, total	\$333,409	\$335,048	\$500,562	\$11,173,186	\$331,523
Army	196,994	193,910	297,131	8,143,833	155,482
Navy	114,957	117,032	170,990	2,408,736	143,238
Marine Corps	16,218	17,884	27,090	392,140	16,877
Coast Guard	5,240	6,222	5,351	228,477	15,926
Pay rolls	250,157	250,075	370,413	10,140,852	331,523
Mustering-out pay	9,632	10,498	90,570	-	-
Family allowances	23,586	24,016	37,572	1,032,334	-
Leave payments	50,034	50,459	2,007	-	-
Cash	6,054	4,831	1,984	-	-
Bonds	43,980	45,628	23	-	-

1/ Data not available.

Table 5. - Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State
(In thousands)

Region and State	1947			1946	
	Aug.	July	June	Aug.	July
New England	1,506	1,481	1,513	1,523	1,495
Maine	114	111	108	119	116
New Hampshire	80.7	77.6	79.3	79.2	77.2
Vermont	40.2	39.2	39.4	41.4	40.6
Massachusetts	720	707	725	741	728
Rhode Island	143	141	147	145	142
Connecticut	408	405	414	397	391
Middle Atlantic	4,099	3,994	4,074	4,121	4,033
New York *	1,871	1,802	1,842	1,911	1,855
New Jersey	736	720	745	743	733
Pennsylvania	1,492	1,472	1,487	1,467	1,445
East North Central	4,475	4,460	4,478	4,343	4,255
Ohio	1,238	1,232	1,244	1,205	1,172
Indiana	553	550	553	531	511
Illinois	1,238	1,229	1,238	1,186	1,166
Michigan	1,004	997	1,013	1,010	982
Wisconsin	442	452	430	411	424
West North Central	850	848	838	817	797
Minnesota	202	205	194	195	194
Iowa	149	147	146	143	136
Missouri	357	353	355	341	334
North Dakota	7.2	7.0	7.0	6.2	5.9
South Dakota	11.5	11.8	11.5	9.9	9.8
Nebraska	43.2	43.4	43.1	43.3	41.5
Kansas	80.0	80.7	81.0	78.1	76.1
South Atlantic	1,520	1,491	1,506	1,527	1,493
Delaware	48.4	45.2	45.4	47.9	45.4
Maryland	228	217	224	249	238
District of Columbia	17.3	17.4	17.2	16.4	16.1
Virginia	211	208	208	205	200
West Virginia	133	131	133	132	128
North Carolina	366	365	366	361	360
South Carolina	192	191	189	184	180
Georgia	247	240	246	257	252
Florida	76.8	76.0	77.1	74.3	73.9

Table 5. - Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State Continued
(In thousands)

Region and State	1947			1946	
	Aug.	July	June	Aug.	July
East South Central	692	680	684	669	657
Kentucky	126	122	124	127	125
Tennessee	251	246	245	245	240
Alabama	220	221	224	210	208
Mississippi	95.3	91.4	90.9	87.1	83.7
West South Central	613	601	603	567	558
Arkansas	74.0	71.0	71.5	67.8	65.6
Louisiana	143	141	139	128	132
Oklahoma	55.2	53.8	53.5	54.7	52.5
Texas	341	335	339	316	308
Mountain	154	157	150	151	149
Montana	18.2	18.4	17.8	16.7	16.5
Idaho	19.5	20.8	20.1	23.0	22.2
Wyoming	6.8	6.7	6.3	6.1	6.0
Colorado	56.5	55.9	54.6	54.5	52.6
New Mexico	10.2	10.1	9.9	10.6	10.5
Arizona	12.5	12.7	13.2	12.2	12.3
Utah *	26.4	29.1	24.9	24.8	25.9
Nevada	3.7	3.6	3.5	3.4	3.2
Pacific	1,066	997	987	1,043	998
Washington	185	176	179	176	176
Oregon	122	117	119	126	121
California	759	704	689	741	701

See explanatory notes, section I.

- * Estimates for manufacturing are revised because of adjustment to more recent benchmark data made available under the Federal Security Agency program. Not comparable with data previously shown.

Table 6. - Estimated Number of Production Workers in Manufacturing Industries

(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
ALL MANUFACTURING	12,833	12,638	12,294	12,244	12,161
Durable goods	6,481	6,398	6,307	6,249	6,160
Nondurable goods	6,352	6,240	5,987	5,995	5,941
<u>Durable Goods</u>					
IRON AND STEEL AND THEIR PRODUCTS	1,580	1,572	1,547	1,514	1,490
Blast furnaces, steel works, and rolling mills	500.0	502.9	498.1	480.1	480.0
Gray-iron and semisteel castings	83.2	84.1	83.7	82.1	81.6
Malleable-iron castings	26.5	26.4	25.1	24.4	24.1
Steel castings	49.1	48.6	47.6	50.7	50.2
Cast-iron pipe and fittings	20.6	20.5	20.2	18.7	16.9
Tin cans and other tinware	47.7	47.1	43.9	44.8	44.4
Wire drawn from purchased rods	30.1	30.5	30.3	29.8	29.1
Wirework	40.9	39.9	39.6	41.3	39.5
Cutlery and edge tools	23.5	23.1	21.3	25.9	25.7
Tools (except edge tools, machine tools, files, and saws)	24.3	24.1	23.7	26.4	25.6
Hardware	48.7	47.8	48.6	47.4	45.9
Plumbers' supplies	28.4	28.6	28.5	28.1	27.1
Stoves, oil burners, and heating equipment not elsewhere classified	67.2	64.4	61.7	59.4	56.8
Steam and hot-water heating apparatus and steam fittings	45.4	45.5	44.8	48.9	48.0
Stamped and enameled ware and galvanizing	85.2	83.2	81.4	81.5	79.0
Fabricated structural and ornamental metalwork	59.3	59.6	58.5	56.1	55.5
Metal doors, sash, frames, molding, and trim	10.4	10.3	9.5	10.2	9.8
Bolts, nuts, washers, and rivets	21.0	21.1	20.7	20.4	18.7
Forgings, iron and steel	26.9	26.9	26.6	26.2	26.3
Wrought pipe, welded and heavy-riveted	12.7	12.6	12.4	13.4	12.8
Screw-machine products and wood screws	26.1	26.2	26.7	28.5	27.7
Steel barrels, kegs, and drums	6.1	6.2	6.2	6.2	6.4
Firearms	13.7	13.6	14.3	14.2	14.0
ELECTRICAL MACHINERY	567	559	557	563	545
Electrical equipment	309.8	305.7	306.5	300.1	290.7
Radios and phonographs	82.5	80.3	77.6	85.2	82.8
Communication equipment	77.5	77.3	78.0	89.0	86.4

See explanatory notes, section A, C, and G.

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Table 6. - Estimated Number of Production Workers in Manufacturing Industries - Cont'd
(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
MACHINERY, EXCEPT ELECTRICAL	1,185	1,171	1,149	1,112	1,092
Machinery and machine-shop products	378.3	376.0	373.3	363.2	356.6
Engines and turbines	43.2	43.3	43.0	45.3	44.9
Tractors	56.4	55.1	56.3	52.0	52.8
Agricultural machinery, excluding tractors	51.3	50.5	49.0	41.2	40.7
Machine tools	51.7	51.9	50.1	62.0	61.3
Machine-tool accessories	42.1	42.5	42.1	50.6	49.1
Textile machinery	36.9	35.9	36.1	33.4	32.7
Pumps and pumping equipment	56.1	55.7	56.4	57.5	56.9
Typewriters	23.9	23.4	14.3	20.5	19.4
Cash registers, adding and calculating machines	41.6	40.5	37.5	34.6	33.2
Washing machines, wringers and driers, domestic	14.3	14.7	14.5	11.9	11.5
Sewing machines, domestic and industrial	11.9	9.4	11.9	10.1	9.7
Refrigerators and refrigeration equipment	78.1	77.8	76.4	60.2	60.5
TRANSPORTATION EQUIPMENT, EXCEPT AUTOMOBILES	409	397	395	455	468
Locomotives	24.8	24.3	23.8	27.1	26.8
Cars, electric- and steam-railroad	55.4	54.6	55.1	47.9	46.6
Aircraft and parts, excluding aircraft engines	130.6	130.7	129.3	139.5	134.2
Aircraft engines	26.5	26.7	26.8	27.6	27.5
Shipbuilding and boatbuilding	95.0	86.9	87.7	139.0	158.3
Motorcycles, bicycles, and parts	13.9	13.6	13.0	11.0	10.6
AUTOMOBILES	801	772	785	788	755
NONFERROUS METALS AND THEIR PRODUCTS	395	391	386	411	406
Smelting and refining, primary, of nonferrous metals	39.3	39.4	40.4	37.5	36.9
Alloying and rolling and drawing of nonferrous metals except aluminum	52.5	52.8	53.8	61.7	61.1
Clocks and watches	27.5	26.9	24.6	27.3	27.5
Jewelry (precious metals) and jewelers' findings	17.1	16.6	16.1	17.9	17.4
Silverware and plated ware	16.6	16.2	15.5	14.6	14.2
Lighting equipment 1/	30.0	30.0	31.0	30.6	30.1
Aluminum manufactures 1/	41.8	40.5	39.6	49.7	49.4
Sheet-metal work, not elsewhere classified	25.5	25.7	25.0	26.1	26.2

See explanatory notes, sections A, C, and G.

Table 6. - Estimated Number of Production Workers in Manufacturing Industries - Cont.
(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
LUMBER AND TIMBER BASIC PRODUCTS 2/	679	679	658	583	584
Sawmills and logging camps	549.7	551.5	531.3	468.5	472.5
Planing and plywood mills	129.7	127.6	126.5	114.3	111.6
FURNITURE AND FINISHED LUMBER PRODUCTS 2/	438	433	419	405	405
Mattresses and bedsprings	33.3	31.5	28.5	29.9	28.7
Furniture	233.1	230.3	223.9	216.5	217.3
Wooden boxes, other than cigar	35.6	35.5	35.1	33.3	33.4
Caskets and other morticians' goods	19.6	19.4	19.1	17.4	17.2
Wood preserving	18.3	18.9	18.8	16.6	16.4
Wood, turned and shaped	31.4	31.5	30.2	30.1	30.2
STONE, CLAY, AND GLASS PRODUCTS 2/	427	424	411	418	415
Glass and glassware	118.6	118.2	113.1	123.0	122.3
Glass products made from purchased glass	12.0	12.0	12.4	12.0	12.0
Cement	37.0	36.8	35.7	34.9	34.9
Brick, tile, and terra cotta	75.3	75.1	73.3	70.7	70.7
Pottery and related products	55.9	56.1	54.3	53.5	52.6
Gypsum	6.1	6.1	6.1	5.9	5.8
Wallboard, plaster (except gypsum), and mineral wool	12.2	11.8	11.5	10.8	10.9
Line	9.2	9.2	9.3	8.9	8.9
Marble, granite, slate, and other products	18.5	18.4	16.8	17.4	17.3
Abrasives	17.3	16.2	17.0	19.3	19.1
Asbestos products	21.0	20.7	19.5	20.5	20.1
<u>Nondurable Goods</u>					
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES	1,191	1,172	1,158	1,204	1,189
Cotton manufactures, except smallwares	449.7	445.7	444.7	455.8	452.3
Cotton smallwares	12.1	11.8	11.8	14.3	14.1
Silk and rayon goods	91.8	90.3	88.9	93.0	92.6
Woolen and worsted manufactures, except dyeing and finishing	151.6	146.5	142.3	159.7	155.8
Hosiery	112.8	111.2	109.2	113.8	114.1
Knitted cloth	9.5	9.4	9.0	11.2	11.2
Knitted outerwear and knitted gloves	25.2	24.0	23.3	30.4	29.7
Knitted underwear	39.5	39.1	37.9	34.9	35.2
Dyeing and finishing textiles, including woolen and worsted	63.5	62.2	61.4	64.1	63.8
Carpets and rugs, wool	29.2	28.8	28.4	24.6	24.2
Hats, fur-felt	11.3	11.4	11.0	11.3	9.0
Jute goods, except felts	2.6	2.6	3.6	3.8	3.7
Cordage and twine	13.1	13.2	13.2	15.2	14.9

See explanatory notes, sections A, C, and G.

Table 6. - Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS <u>2/</u>	1,149	1,122	1,040	1,049	1,030
Men's clothing, not elsewhere classified	299.4	294.7	278.2	266.6	265.6
Shirts, collars, and nightwear	77.2	75.1	71.7	65.0	65.1
Underwear and neckwear, men's	17.2	16.6	15.4	17.8	16.9
Work shirts	15.5	15.2	14.0	15.2	14.8
Women's clothing, not elsewhere classified	450.7	439.1	400.2	415.0	402.1
Corsets and allied garments	18.0	17.5	16.9	15.9	15.7
Millinery	23.7	23.6	20.5	24.6	23.7
Handkerchiefs	5.0	4.6	4.2	4.2	4.2
Curtains, drapories, and bedspreads	28.9	27.3	23.2	28.2	27.7
Housefurnishings, other than curtains, etc.	30.6	29.4	26.6	29.5	29.3
Textile bags	27.8	27.3	26.9	27.1	27.0
LEATHER AND LEATHER PRODUCTS <u>2/</u>	364	360	349	358	356
Leather	46.7	46.0	45.4	44.4	44.3
Boot and shoe cut stock and findings	19.3	19.2	18.8	20.1	20.7
Boots and shoes	225.1	223.4	216.8	219.3	217.3
Leather gloves and mittens	12.8	12.8	11.9	13.9	14.0
Trunks and suitcases	13.4	12.7	11.7	14.6	14.8
FOOD <u>2/</u>	1,376	1,344	1,223	1,175	1,184
Slaughtering and meat packing	182.0	182.9	182.3	103.9	160.4
Butter	35.8	37.8	38.8	36.6	37.8
Condensed and evaporated milk	21.2	22.7	23.5	20.7	21.6
Ice cream	31.1	32.8	33.4	27.3	29.0
Flour	39.4	39.6	39.4	37.2	36.6
Feeds, prepared	29.6	29.9	29.6	26.3	28.0
Cereal preparations	14.0	13.7	13.1	13.7	12.5
Baking	219.8	218.0	216.6	205.6	201.7
Sugar refining, cane	20.8	20.8	20.8	14.7	16.8
Sugar, beet	12.2	10.5	8.1	8.7	7.2
Confectionery	68.1	62.7	57.9	56.8	51.9
Beverages, nonalcoholic	39.1	39.7	35.5	28.3	30.1
Malt liquors	76.2	76.0	74.0	63.8	60.9
Canning and preserving	379.0	349.7	246.2	366.4	314.9
TOBACCO MANUFACTURES	86	85	84	87	86
Cigarettes	32.6	32.9	32.9	33.7	33.6
Cigars	40.3	39.3	37.9	40.0	38.7
Tobacco (chewing and smoking) and snuff	7.1	7.0	6.9	7.6	7.7

See explanatory notes, sections A, C, and G.

Table 6. - Estimated Number of Production Workers in Manufacturing Industries - Cont'
(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
PAPER AND ALLIED PRODUCTS <u>2/</u>	381	380	373	372	369
Paper and pulp	196.8	196.5	194.2	186.8	186.7
Paper goods, other	57.4	56.7	56.4	56.1	55.5
Envelopes	12.0	11.8	11.6	11.3	11.1
Paper bags	17.7	18.0	17.8	18.3	17.4
Paper boxes	96.0	95.6	92.6	98.2	97.8
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES <u>2/</u>	429	426	422	401	399
Newspapers and periodicals	144.4	143.0	142.2	131.7	131.1
Printing, book and job	177.5	175.7	176.4	170.1	168.6
Lithographing	32.5	32.6	31.5	31.6	31.1
Bookbinding	38.2	38.4	37.0	34.3	34.5
CHEMICALS AND ALLIED PRODUCTS	563	547	547	530	520
Paints, varnishes, and colors	36.5	36.2	35.9	36.0	35.9
Drugs, medicines, and insecticides	51.6	50.9	51.3	52.1	51.7
Perfumes and cosmetics	9.8	9.4	9.0	12.2	12.6
Soap	15.7	15.3	15.4	14.2	14.1
Rayon and allied products	58.8	58.0	58.0	57.4	57.3
Chemicals, not elsewhere classified	123.6	124.6	125.8	116.6	117.2
Explosives and safety fuses	13.8	13.8	12.8	12.8	12.6
Compressed and liquefied gases	6.2	6.3	6.2	5.7	5.9
Ammunition, small-arms	6.9	4.4	6.8	7.4	4.9
Fireworks	2.4	2.0	2.4	3.2	2.9
Cottonseed oil	15.2	10.9	9.7	13.0	10.8
Fertilizers	22.9	21.5	20.4	22.3	20.9
PRODUCTS OF PETROLEUM AND COAL	162	163	163	157	156
Petroleum refining	102.0	103.0	103.0	99.8	100.1
Coke and byproducts	27.2	27.1	27.1	25.9	25.8
Paving materials	2.4	2.3	1.9	2.3	2.2
Roofing materials	13.2	13.1	13.1	12.6	12.2

See explanatory notes, sections A, C, and G.

Table 6. - Estimated Number of Production Workers in Manufacturing Industries - Cont'd
(In thousands)

Industry group and industry	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
RUBBER PRODUCTS 2/	216	216	212	229	223
Rubber tires and inner tubes	113.4	117.5	115.1	122.6	118.0
Rubber boots and shoes	21.0	18.9	20.1	21.0	20.9
Rubber goods, other	81.5	79.2	76.8	85.2	83.7
MISCELLANEOUS INDUSTRIES 2/	435	425	416	433	429
Instruments (professional and scientific), and fire-control equipment	27.6	27.5	27.5	28.8	29.1
Photographic apparatus	38.2	38.3	38.3	35.0	34.8
Optical instruments and ophthalmic goods	27.5	27.6	27.9	29.2	29.1
Pianos, organs, and parts	15.2	14.6	14.9	13.0	12.9
Games, toys, and dolls	41.0	38.6	36.1	32.5	31.3
Buttons	11.6	11.4	10.7	14.6	14.5
Fire extinguishers	2.8	2.8	2.9	2.9	2.9

See explanatory notes, sections A, C, and G.

1/ Revisions have been made as follows in the data for earlier months:

Lighting equipment - May and June 1947 to 32.3 and 31.6.

Aluminum manufactures - June 1947 to 43.2

2/ Estimates for the individual industries comprising the major industry group have been adjusted to levels indicated by final 1945 data made available by the Bureau of Employment Security of the Federal Security Agency. Comparable series from January 1939 are available upon request. More recently adjusted data for the individual industries comprising the major industry group indicated below supersede data shown in publications dated prior to:

Major industry group	Mimeographed release	Monthly Labor Review
Paper and allied products	September 1947	October 1947
Rubber products	September 1947	October 1947
Food	November 1947	December 1947
Miscellaneous industries	November 1947	December 1947

Table 7. - Estimated Employment in
Selected Nonmanufacturing Industries
(In thousands)

Industry group and industry <u>1/</u>	1947			1946	
	Sept.	Aug.	July	Sept.	Aug.
MINING: <u>2/</u>					
Coal:					
Anthracite	*	67.5	65.2	68.1	67.9
Bituminous coal	331	328	304	335	337
Metal	77.9	79.0	78.6	73.7	72.8
Iron	29.7	29.8	29.8	27.7	28.1
Copper	24.3	24.2	24.3	21.5	21.2
Lead and zinc	13.9	14.8	14.6	14.9	13.8
Gold and silver	7.8	7.8	7.7	7.2	7.2
Miscellaneous	2.2	2.3	2.3	2.4	2.5
TRANSPORTATION AND PUBLIC UTILITIES:					
Class I steam railways <u>3/</u>	1,364	1,382	1,383	1,363	1,371
Street railways and busses <u>4/</u>	251	253	254	252	252
Telephone	607	616	614	575	575
Telegraph <u>5/</u>	37.6	37.8	38.2	42.2	42.1
Electric light and power	268	269	267	249	249
SERVICE:					
Hotels (year-round)	379	379	382	385	385
Power laundries <u>2/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>
Cleaning and dyeing <u>2/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>	<u>6/</u>
GOVERNMENT:					
Federal <u>7/</u>	1,761	1,796	1,828	2,179	2,230
State and local	3,664	3,492	3,453	3,426	3,272

See explanatory notes, section G.

* Not available.

- 1/ Includes all employees unless otherwise noted.
- 2/ Includes production and related workers only.
- 3/ Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railways include those with over \$1,000,000 annual revenue. Source: Interstate Commerce Commission.
- 4/ Includes private and municipal street railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.
- 5/ Includes all land line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.
- 6/ The change in definition from "wage earner" to "production worker" in the power laundries and cleaning and dyeing industries results in the omission of driver-salesmen. This causes a significant difference in the data. New series are being prepared.
- 7/ Continental United States only. Excludes fourth-class postmasters.

Table 8. - Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries
(1939 Average = 100)

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
ALL MANUFACTURING	156.7	154.3	150.1	149.5	337.2	323.5	314.2	290.3
Durable goods	179.5	177.2	174.7	173.1	372.8	357.5	350.1	323.3
Nondurable goods	138.7	136.2	130.7	130.9	302.4	290.4	279.1	258.1
<u>Durable Goods</u>								
IRON AND STEEL AND THEIR PRODUCTS	159.3	158.5	156.1	152.7	325.7	314.4	304.4	273.6
Blast furnaces, steel works, and rolling mills	128.7	129.5	128.2	123.6	252.9	250.4	235.3	206.3
Gray-iron and semisteel castings	142.3	143.9	143.3	140.5	321.9	303.3	313.7	291.7
Malleable-iron castings	146.8	146.3	139.1	135.1	339.4	312.5	314.9	287.5
Steel castings	163.1	161.5	158.1	168.5	326.4	313.2	315.1	297.5
Cast-iron pipe and fittings	125.0	124.0	122.2	113.4	292.7	281.5	292.3	239.9
Tin cans and other tinware	150.1	148.1	138.1	141.1	343.3	331.1	294.7	274.1
Wire drawn from purchased rods	137.1	138.6	137.7	135.7	256.2	251.5	238.1	231.8
Wirework	134.5	131.4	130.4	136.0	287.2	268.8	270.8	270.9
Cutlery and edge tools	152.2	149.5	138.4	167.7	355.9	329.6	311.1	364.6
Tools (except edge tools, machine tools, files, and saws)	158.9	157.5	154.5	172.2	343.6	325.9	315.0	340.8
Hardware	136.7	134.1	136.3	133.0	304.6	288.5	297.2	266.6
Plumbers' supplies	115.4	115.9	115.5	113.9	230.6	220.7	231.2	196.7
Stoves, oil burners, and heating equipment not elsewhere classified	145.6	139.6	133.7	128.8	313.8	280.9	274.9	247.5
Steam and hot-water heating apparatus and steam fittings	149.7	150.0	147.8	161.3	311.1	289.2	295.9	306.7
Stamped and enameled ware and galvanizing	153.4	149.8	146.5	146.7	344.6	327.6	318.6	289.3
Fabricated structural and ornamental metalwork	166.9	167.8	164.8	157.9	334.8	335.5	317.0	274.8
Metal doors, sash, frames, molding, and trim 1/	134.6	132.4	122.6	131.3	285.3	271.3	242.2	250.1
Bolts, nuts, washers, and rivets	146.7	147.7	144.4	142.9	290.8	291.3	281.5	246.2
Forgings, iron and steel	175.1	174.9	173.3	170.1	359.3	331.3	337.8	306.1
Wrought pipe, welded and heavy-riveted	151.6	150.7	148.1	159.9	296.9	291.3	297.7	279.9
Screw-machine products and wood screws	154.3	154.8	157.6	168.3	326.1	317.9	327.8	332.5
Steel barrels, kegs, and drums	100.5	101.5	102.2	102.7	257.6	251.6	251.6	214.5
Firearms	274.4	271.4	286.7	284.1	605.7	581.1	615.2	573.2
ELECTRICAL MACHINERY	218.9	215.6	215.0	217.3	442.2	420.3	422.3	397.2
Electrical equipment	171.4	169.1	169.6	166.0	344.4	330.4	333.0	297.7
Radios and phonographs	189.7	184.7	178.3	195.7	419.8	385.0	386.4	390.0
Communication equipment	241.2	240.8	243.0	277.0	459.3	438.5	437.0	504.9

See explanatory notes, sections A, C, F, and G.

Table 8. - Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries - Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
MACHINERY, EXCEPT ELECTRICAL	224.3	221.7	217.4	210.3	442.6	424.8	419.2	376.2
Machinery and machine-shop products	187.0	185.9	184.5	179.5	372.0	360.2	356.1	322.3
Engines and turbines	231.4	232.1	230.7	242.6	507.3	513.1	493.6	484.5
Tractors	180.5	176.2	180.0	166.4	316.4	301.4	311.2	254.1
Agricultural machinery, excluding tractors	184.5	181.6	176.3	148.1	387.3	370.1	361.5	269.8
Machine tools	141.2	141.6	136.8	169.2	254.2	250.8	239.9	285.5
Machine-tool accessories	167.5	169.0	167.3	201.0	293.5	280.3	282.3	336.0
Textile machinery	168.4	163.8	164.9	152.3	364.9	333.2	349.6	290.5
Pumps and pumping equipment	231.4	229.6	232.6	237.1	488.0	475.1	479.2	444.0
Typewriters <u>1/</u>	147.6	144.1	88.4	126.6	317.6	306.2	185.1	248.1
Cash registers, adding and calculating machines	211.2	206.0	190.7	175.8	436.4	400.7	374.4	331.8
Washing machines, wringers and driers, domestic	191.7	197.0	193.6	158.7	378.8	382.3	391.7	287.9
Sewing machines, domestic and industrial	152.1	119.3	151.4	128.3	343.9	251.7	327.8	243.1
Refrigerators and refrigeration equipment	222.2	221.2	217.4	171.2	421.3	404.1	422.1	293.3
TRANSPORTATION EQUIPMENT, EXCEPT AUTOMOBILES	257.4	250.0	248.9	286.8	501.5	482.9	483.0	524.1
Locomotives	384.0	375.5	368.0	419.4	865.5	809.9	760.3	846.8
Cars, electric- and steam-railroad	225.8	222.8	224.8	195.4	465.9	436.3	482.1	364.5
Aircraft and parts, excluding aircraft engines	329.1	329.3	326.0	351.6	624.4	637.6	622.4	663.9
Aircraft engines	298.5	299.9	301.1	310.5	501.8	486.7	485.1	507.8
Shipbuilding and boatbuilding	137.1	125.5	126.6	200.8	266.5	242.2	243.1	346.6
Motorcycles, bicycles, and parts	200.0	195.3	186.0	158.0	402.3	392.8	379.4	290.9
AUTOMOBILES	199.2	192.0	195.0	196.0	376.8	343.8	348.8	330.3
NONFERROUS METALS AND THEIR PRODUCTS	172.1	170.4	168.6	179.5	344.4	330.7	326.6	331.8
Smelting and refining, primary, of nonferrous metals	142.2	142.8	146.3	135.6	298.7	289.2	296.5	247.1
Alloying and rolling and drawing of nonferrous metals <u>except</u> aluminum	135.2	136.1	138.6	159.0	254.4	248.1	260.1	284.7
Clocks and watches	135.7	132.8	121.2	136.8	307.5	289.8	261.8	289.7
Jewelry (precious metals) and jewelers' findings	118.6	115.1	111.3	123.8	233.7	208.8	193.3	237.3
Silverware and plated ware	136.8	133.9	127.5	120.0	314.7	287.6	281.0	250.9
Lighting equipment <u>1/</u>	146.7	146.6	151.4	149.2	278.5	271.2	273.2	260.6
Aluminum manufactures <u>1/</u>	177.7	172.1	168.3	211.0	321.5	308.3	298.7	358.1
Sheet-metal work, not elsewhere classified	136.1	137.0	133.2	139.3	284.8	287.5	276.2	261.7

See explanatory notes, sections A, C, F, and G.

Table 8. - Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries - Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
LUMBER AND TIMBER BASIC PRODUCTS 2/	161.6	161.5	156.5	138.6	385.7	387.3	359.8	285.2
Sawmills and logging camps	175.3	175.8	169.4	149.4	425.8	430.4	397.4	309.8
Planing and plywood mills	163.9	161.3	160.0	144.4	370.3	362.9	345.1	280.8
FURNITURE AND FINISHED LUMBER PRODUCTS 2/	133.5	131.9	127.8	123.5	305.0	293.3	281.4	254.4
Mattresses and bedsprings	162.3	153.5	139.2	145.6	356.0	323.0	287.3	280.8
Furniture	131.0	129.4	125.9	121.7	297.9	284.7	274.4	249.9
Wooden boxes, other than cigar	125.7	125.4	123.8	117.6	305.3	305.4	301.8	257.4
Caskets and other morticians' goods	140.6	139.2	137.4	124.9	283.4	271.6	260.6	228.7
Wood preserving	145.5	150.6	149.4	131.9	394.7	408.0	392.7	312.7
Wood, turned and shaped	127.9	128.2	123.0	122.4	281.2	281.4	268.5	250.5
STONE, CLAY, AND GLASS PRODUCTS 2/	145.5	144.6	140.2	142.5	306.8	301.7	285.9	267.0
Glass and glassware	166.3	165.7	158.5	172.4	340.7	334.1	312.8	310.3
Glass products made from purchased glass	120.1	120.2	123.5	119.7	251.5	246.4	247.2	222.9
Cement	152.1	151.1	146.5	143.1	298.3	297.0	283.5	250.3
Brick, tile, and terra cotta	129.7	129.4	126.3	121.7	295.0	289.1	276.4	244.3
Pottery and related products	165.2	165.9	160.4	158.2	326.5	330.4	308.6	281.2
Gypsum	124.2	123.5	124.2	119.7	258.3	260.4	260.2	231.0
Wallboard, plaster (except gypsum), and mineral wool	149.8	145.3	141.3	133.1	358.6	353.9	333.6	284.7
Lime 1/	97.0	97.0	98.0	94.1	245.5	243.3	237.7	219.9
Marble, granite, slate, and other products	99.9	99.4	90.5	94.1	180.9	176.4	156.7	152.9
Abrasives	223.9	208.8	220.0	249.7	430.1	375.6	386.0	400.0
Asbestos products	132.2	130.1	122.7	129.0	304.2	306.8	293.2	273.7
<u>Nondurable Goods</u>								
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES	104.2	102.5	101.2	105.2	256.4	239.8	237.5	235.5
Cotton manufactures, except smallwares	113.6	112.6	112.3	115.1	302.2	291.4	288.7	281.7
Cotton smallwares	90.7	88.9	88.9	107.5	200.7	186.4	191.4	222.0
Silk and rayon goods	76.6	75.3	74.2	77.6	206.6	195.8	190.8	180.9
Woolen and worsted manufactures, except dyeing and finishing	101.6	98.2	95.4	107.0	254.9	221.9	231.1	242.7
Hosiery	70.9	69.9	68.7	71.6	151.5	144.4	135.3	143.7
Knitted cloth	87.1	86.2	82.0	102.2	189.9	186.7	176.5	216.1
Knitted outerwear and knitted gloves	89.4	85.5	83.0	108.0	199.4	182.9	172.7	234.0
Knitted underwear	102.6	101.4	98.2	90.6	250.8	236.0	229.7	199.4
Dyeing and finishing textiles including woolen and worsted	95.0	93.0	91.9	95.9	217.8	201.1	195.1	186.8
Carpets and rugs, wool	114.0	112.4	110.9	96.1	257.4	231.3	239.3	182.5
Hats, fur-felt	77.6	78.2	75.5	78.0	160.5	155.3	155.8	181.3
Jute goods except felts	72.0	73.5	101.3	105.7	153.7	152.2	218.4	237.4
Cordage and twine	108.2	109.4	109.0	125.5	242.7	240.4	237.5	266.2

See explanatory notes, sections A, C, F and G.

Table 8. Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries - Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS 2/	145.6	142.2	131.7	132.9	318.5	302.3	278.9	283.0
Men's clothing, not elsewhere classified 3/	130.4	128.3	121.1	116.1	284.9	264.8	260.0	242.7
Shirts, collars, and nightwear	104.4	101.6	96.9	87.9	243.2	225.5	219.3	190.6
Underwear and neckwear, men's 3/	101.4	97.9	91.0	105.1	256.6	236.3	230.8	261.4
Work shirts	109.6	107.8	99.1	107.8	263.0	256.3	241.4	235.1
Women's clothing, not elsewhere classified	157.5	153.4	139.8	145.0	334.2	322.6	283.1	320.1
Corsets and allied garments	95.8	93.4	90.1	84.6	203.1	192.3	187.4	166.2
Millinery	93.0	92.6	80.4	96.6	172.6	170.8	146.9	179.7
Handkerchiefs	98.3	90.6	82.9	82.9	239.4	210.6	196.7	178.7
Curtains draperies, and bedspreads	162.6	153.9	130.4	158.9	374.0	334.7	283.9	337.6
Housefurnishings, other than curtains etc.	274.0	263.5	238.2	264.0	604.6	573.5	496.7	555.2
Textile bags	220.1	216.5	213.0	214.9	458.8	443.6	438.2	396.0
LEATHER AND LEATHER PRODUCTS 2/	104.8	103.8	100.6	103.1	231.6	220.4	214.2	204.7
Leather	93.3	91.9	90.7	88.8	198.5	189.8	187.2	159.6
Boot and shoe cut stock and findings	96.6	96.3	94.4	100.8	190.9	189.8	182.4	182.4
Boots and shoes	97.5	96.7	93.9	95.0	221.5	209.9	204.8	195.2
Leather gloves and mittens	128.5	127.6	118.9	139.2	254.7	244.3	227.2	279.5
Trunks and suitcases	161.0	153.1	141.0	175.0	334.8	309.1	274.3	333.6
FOOD 2/	161.1	157.3	143.1	137.5	331.6	325.6	295.8	246.5
Slaughtering and meat packing	134.7	135.5	135.0	77.0	271.9	270.0	280.9	115.6
Butter	177.8	188.0	192.7	181.8	366.5	391.3	387.7	336.3
Condensed and evaporated milk	194.5	208.8	216.3	190.0	419.8	446.0	470.6	362.7
Ice cream	176.8	185.9	189.4	155.1	326.2	346.0	343.7	263.4
Flour	141.8	142.6	142.0	134.0	338.9	339.6	326.1	278.5
Feeds, prepared	171.2	173.1	171.4	152.2	382.9	364.1	366.8	291.7
Cereal preparations	168.0	163.5	156.5	163.7	337.5	361.2	329.9	302.2
Baking	115.5	114.5	113.7	108.0	223.2	218.4	218.0	193.5
Sugar refining, cane	131.3	131.2	130.9	92.7	281.7	284.2	275.0	147.5
Sugar, beet	104.8	90.9	69.7	74.7	220.6	189.0	131.3	148.0
Confectionery	122.3	112.4	103.9	101.9	270.5	232.8	211.4	198.5
Beverages, nonalcoholic	164.1	166.4	149.1	118.8	293.3	298.0	257.4	179.1
Malt liquors	188.4	187.9	182.8	157.6	370.3	365.1	349.6	256.3
Canning and preserving	252.1	232.7	163.8	243.8	676.8	653.7	401.8	624.7
TOBACCO MANUFACTURES	92.3	91.6	89.8	93.5	204.9	203.0	200.0	196.0
Cigarettes	118.7	120.0	120.1	122.9	243.7	248.5	253.7	226.7
Cigars	79.1	77.3	74.5	78.6	179.8	173.5	163.4	180.9
Tobacco (chewing and smoking) and snuff	77.4	76.8	74.9	82.8	167.5	164.2	164.6	150.7

See explanatory notes, sections A, C, F, and G.

Table 8. - Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries - Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
PAPER AND ALLIED PRODUCTS <u>2/</u>	143.5	143.0	140.7	140.0	308.5	300.6	298.7	259.8
Paper and pulp	142.9	142.6	140.9	135.6	315.7	311.0	309.6	253.3
Paper goods, other	152.1	150.3	149.5	148.8	309.3	292.7	297.2	271.3
Envelopes	137.4	136.0	132.7	129.2	273.7	258.8	250.7	225.2
Paper bags	159.2	161.6	160.5	165.0	333.9	337.6	338.6	312.8
Paper boxes	138.5	137.9	133.6	141.6	291.5	280.1	273.6	264.3
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES <u>2/</u>	130.7	129.8	128.8	122.3	245.0	235.5	233.6	203.1
Newspapers and periodicals	121.7	120.5	119.8	111.0	221.6	214.0	208.9	175.6
Printing, book and job	139.1	137.7	138.2	133.2	266.6	254.8	258.9	227.9
Lithographing	123.8	124.0	119.8	120.1	223.0	213.3	207.4	195.9
Bookbinding	148.3	148.9	143.6	133.1	324.6	313.5	299.2	266.2
CHEMICALS AND ALLIED PRODUCTS	195.2	189.7	189.8	184.0	395.1	380.4	378.7	329.1
Paints, varnishes, and colors	129.8	128.6	127.7	127.8	233.2	232.0	229.1	201.7
Drugs, medicines, and insecticides	188.3	185.6	187.2	190.0	374.9	362.5	347.6	316.8
Perfumes and cosmetics	94.8	90.3	87.1	118.0	175.4	163.6	159.3	195.2
Soap	115.9	112.8	113.1	104.5	252.0	233.4	223.3	173.2
Rayon and allied products	121.8	120.1	120.1	118.8	246.8	239.9	238.2	210.8
Chemicals, not elsewhere classified	177.6	179.2	180.8	167.6	336.2	336.8	341.8	289.6
Explosives and safety fuses	190.5	190.0	176.6	176.9	356.6	353.4	324.9	292.9
Compressed and liquefied gases	157.2	160.2	156.4	143.7	287.5	283.5	277.3	240.8
Ammunition, small-arms	161.3	102.6	159.4	174.1	376.3	204.2	355.7	339.3
Fireworks	210.8	175.2	205.3	272.5	568.7	441.6	528.1	698.3
Cottonseed oil	100.2	71.9	63.6	85.6	263.6	185.4	162.1	196.5
Fertilizers	121.8	114.6	108.6	118.7	335.1	304.6	288.0	297.4
PRODUCTS OF PETROLEUM AND COAL	153.4	154.1	153.7	147.8	302.4	297.2	295.6	257.3
Petroleum refining	140.0	141.5	141.4	137.0	266.4	262.2	265.4	232.7
Coke and byproducts	125.3	125.0	125.1	119.3	267.4	263.6	248.3	220.0
Paving materials	97.7	93.5	79.2	95.5	218.9	197.6	169.5	190.6
Roofing materials	163.9	162.7	163.1	156.6	369.3	363.7	357.7	298.6

See explanatory notes, sections A, C, F, and G.

Table 8. - Indexes of Production-Worker Employment and Pay Rolls
in Manufacturing Industries - Continued

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
RUBBER PRODUCTS <u>2/</u>	178.5	178.2	175.2	189.1	368.6	357.0	352.7	363.9
Rubber tires and inner tubes	209.1	216.6	212.3	226.0	398.9	397.0	393.8	400.2
Rubber boots and shoes	141.6	127.2	135.1	141.5	314.4	268.4	290.0	285.2
Rubber goods, other	157.1	152.8	148.0	164.3	335.6	318.9	304.9	327.6
MISCELLANEOUS INDUSTRIES <u>2/</u>	177.8	173.5	170.1	176.9	368.1	347.5	341.2	339.5
Instruments (professional and scientific), and fire-control equipment	243.9	242.7	243.1	254.5	464.9	457.9	453.3	445.8
Photographic apparatus	216.1	216.4	217.0	197.8	397.5	388.3	385.9	322.4
Optical instruments and ophthalmic goods	231.6	231.8	234.6	245.4	442.3	426.5	433.7	434.2
Pianos, organs, and parts	194.7	187.2	191.6	167.2	431.4	384.8	402.7	325.0
Games, toys, and dolls	214.4	202.1	188.8	170.1	482.2	431.4	410.1	350.8
Buttons	103.4	101.9	95.4	129.8	230.2	220.7	209.2	288.6
Fire extinguishers	277.6	277.3	284.9	286.1	558.9	583.7	600.0	558.7

See explanatory notes, sections A, C, F, and G.

- 1/ Revisions have been made as follows in the indexes for earlier months:
Metal doors, sash, frames, molding, and trim - June 1947 pay roll to 252.2.
Typewriters - June 1947 pay roll to 235.3.
Lighting equipment - May and June 1947 employment to 157.5 and 154.4; pay roll to 300.5 and 293.7.
Aluminum manufactures - June 1947 employment to 183.7.
Lime - May and June 1947 pay roll to 239.2 and 244.6.
- 2/ Indexes for the individual industries comprising the major industry group have been adjusted to levels indicated by final 1945 data made available by the Bureau of Employment Security of the Federal Security Agency. Comparable series from January 1939 are available upon request. More recently adjusted data for the individual industries comprising the major industry group indicated below supersede data shown in publications dated prior to:

Major industry group	Mimeographed release	Monthly Labor Review
Paper and allied products	September 1947	October 1947
Rubber products	September 1947	October 1947
Food	November 1947	December 1947
Miscellaneous industries	November 1947	December 1947

- 3/ The June 1947 pay-roll index shown in the August 1947 Detailed Report should have read 273.0 for Men's clothing, not elsewhere classified and 240.3 for Underwear and neckwear, men's.

Table 9. - Indexes of Employment and Pay Rolls in
Selected Nonmanufacturing Industries

(1939 Average = 100)

Industry group and industry	Employment indexes				Pay-roll indexes			
	1947		1946		1947		1946	
	Sept.	Aug.	July	Sept.	Sept.	Aug.	July	Sept.
MINING:								
Coal:								
Anthracite	3/	81.4	78.7	82.2	3/	216.6	177.8	194.0
Bituminous coal	89.2	88.4	82.1	90.5	270.2	264.4	192.9	234.9
Metal	88.3	89.5	89.1	83.5	179.0	178.3	171.9	147.0
Iron	147.3	148.3	148.0	138.1	298.7	300.7	295.4	253.3
Copper	101.8	101.7	101.8	90.0	223.2	217.0	209.6	163.1
Lead and zinc	89.6	95.1	93.8	95.6	203.6	207.8	198.0	188.0
Gold and silver	31.4	31.6	31.1	29.0	52.0	51.7	46.8	42.5
Miscellaneous	56.6	57.9	57.7	60.4	102.5	104.6	99.1	98.0
Quarrying and nonmetallic	105.4	106.3	106.0	102.5	258.5	259.6	251.2	227.9
Crude petroleum production <u>1/</u>	95.6	97.3	97.2	93.9	175.6	173.5	173.9	149.5
TRANSPORTATION AND PUBLIC UTILITIES:								
Class I steam railways <u>2/</u>	138.1	140.0	140.0	138.0	3/	3/	3/	3/
Street railways and busses	129.6	130.7	130.9	129.9	224.1	225.2	222.1	207.9
Telephone	191.1	193.8	193.3	181.0	309.6	306.2	302.2	265.0
Telegraph	99.8	100.5	101.5	112.0	211.8	213.5	215.2	177.3
Electric light and power	109.9	110.2	109.3	101.9	183.1	182.9	178.4	153.3
TRADE: <u>4/</u>								
Wholesale	113.3	112.2	111.1	109.4	203.3	198.2	196.5	182.8
Retail	112.3	109.3	110.2	109.8	202.5	197.7	198.5	180.8
Food	112.6	111.5	113.0	103.5	209.3	212.2	213.8	173.6
General merchandise	122.6	115.7	116.7	125.4	219.8	212.0	214.1	199.0
Apparel	113.4	103.4	106.8	116.7	203.4	183.4	192.0	197.8
Furniture and housefurnishings	87.5	85.8	86.0	81.5	159.8	155.4	155.8	139.1
Automotive	104.8	105.1	104.2	95.5	188.5	188.5	184.8	164.8
Lumber and building materials	124.6	123.1	121.4	113.8	232.5	229.0	218.8	190.0
SERVICE:								
Hotels (year-round) <u>5/</u>	117.4	117.6	118.3	119.5	222.6	221.0	222.0	209.5
Power laundries	109.6	110.2	112.8	109.9	208.2	203.9	210.3	188.7
Cleaning and dyeing	118.6	117.4	123.4	125.6	220.7	208.9	228.2	225.6

See footnotes, table 7, and explanatory notes, sections F and G.

1/ Does not include well drilling or rig building.2/ Source: Interstate Commerce Commission.3/ Not available.4/ Includes nonsupervisory workers and working supervisors only.5/ Money payments only; additional value of board, room, uniforms, and tips, not included.

EXPLANATORY NOTES

Sec. A. Revisions of Employment Estimates - The employment estimates shown in this report for the industry divisions (e.g., mining, manufacturing, etc.) and industry groups (e.g., iron and steel, electrical machinery, etc.) have been adjusted to levels indicated by final 1945 benchmark data and supersede data shown in mimeographed releases dated prior to April 1947 and in the Monthly Labor Review dated prior to May 1947.

Sec. B. Sources of Benchmark Data - The chief purpose of recent revisions, published in the February 1947 DETAILED REPORT, was to adjust the levels of employment estimates to 1945 benchmark data. In preparing estimates for private employment prior to 1939, the various industrial censuses taken by the Bureau of the Census were used as sources of benchmark data. Data obtained from unemployment compensation agencies and the Bureau of Old Age and Survivors Insurance are the main bases for 1945 benchmarks. Benchmarks for State and local government are based on data compiled by the Bureau of the Census, while most of the data on Federal Government employment is made available by the U. S. Civil Service Commission. The Interstate Commerce Commission is the source for railroads, and the U. S. Maritime Commission for water transportation.

Sec. C. Scope of Employment Revisions - Recent revisions also include a new type of estimate for employment in construction based upon establishment reports. This estimate is more consistent with the estimating procedure used for other industry divisions. In addition, federal force account construction employment has been transferred from the construction segment to government.

Each of the industry divisions was affected by the recent revisions. Adjustments have also been made in each of the 20 major groups comprising the manufacturing industry division. To be consistent with the estimates for these major industry groups, and more representative of the true level of employment, estimates for the individual manufacturing industries, formerly based on the 1939 Census of Manufactures, are now being revised. As these revisions are completed, they are published in this Report and indicated by appropriate footnotes. Since the revised employment estimates shown in this Report cover only the current months a set of summary sheets presenting comparable figures from January 1939 to date, by month, for each industry will be provided upon request.

Sec. D. How Employment Estimates Are Made - Estimates of changes in the level of employment are based on reports from a sample group of establishments, inasmuch as full coverage is prohibitively costly and time-consuming. In using a sample, it is essential that an accurate base be established from which estimates may be carried forward. This base or "benchmark" is either a complete count or an estimate with a satisfactory degree of accuracy. When a new benchmark becomes available, estimates prepared since the last benchmark are reviewed to determine if any adjustment of level is required. This is the basic principle of employment estimating used by the BLS. It yields a satisfactory compromise between a slow but highly accurate complete count on the one hand, and a rapid but less accurate sample count on the other.

Briefly, the Bureau of Labor Statistics computes employment estimates as follows: first, a benchmark or level of employment is determined; second, a sample of establishments is selected; and third, changes in employment indicated by this reporting sample are applied to the benchmark to determine the monthly estimates of

employment between benchmark periods. For example, if the latest complete data on employment for an industry were 40,200 in September 1945, and if the industry has a reporting sample of 13 establishments employing 23,200 workers in September and 23,800 in October, the October estimate would be prepared as follows:

$$40,200 \times \frac{23,800}{23,200} = 41,246$$

In general data showing month-to-month changes in employment reflect the fluctuations shown by establishments reporting to the Bureau of Labor Statistics. However, the usual estimating method is inadequate in the finance and service industries, which have a preponderance of small establishments. A special sampling procedure has been introduced, involving the scientific selection of a sample of cities and of a representative list of blocks in these cities. Data obtained from the establishments in these blocks yield substantially better estimates of month-to-month changes in employment in the service and finance industries than would be obtained by the use of the sampling procedure employed for other industries. For railroads and the Federal Government, complete reports of employment are available.

Why Revisions are Necessary - Because reports are not immediately available from new firms, they are frequently introduced into the Bureau of Labor Statistics sample after they have been in operation for some time. This lapse of time produces a rather consistent understatement which becomes larger from year to year. It is important, therefore, that estimates not be allowed to go uncorrected for too long a period. During the war period adjustment of many of the nonmanufacturing industry divisions was unavoidably postponed for several years. Consequently, the most recent revision corrects for the downward bias that had accumulated in the nonmanufacturing series since 1941. Revisions in some industry divisions have been carried back to 1939 in order to incorporate greater refinements in methodology and new source materials that have become available. For example, improved data on the small firm component of the trade and service industries, supplied by the Bureau of Old Age and Survivors Insurance, made possible refinements in these series back to 1939.

Sec. E. Comparability With Other Types of Employment Data - The Bureau of Labor Statistics employment estimates are based upon reports submitted by cooperating establishments and therefore differ from employment information obtained by household interviews, such as the Monthly Report of the Labor Force. The Bureau of Labor Statistics estimates of employment in nonagricultural establishments differ from the Monthly Report of the Labor Force total nonagricultural employment estimates in several important respects. For example: (1) The Bureau of Labor Statistics estimates cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the 15th of the month, in Federal establishments during the pay period ending just before the first of the month, and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once; (2) Proprietors, self-employed persons, domestic servants, and unpaid family workers are excluded.

Sec. F. Pay Roll Indexes - Cooperating establishments are instructed to report pay rolls of production or nonsupervisory workers prior to deduction for old age and unemployment insurance, withholding taxes, bonds, and union dues. Pay for sick leave, holidays, and vacations taken is included. Respondents are instructed to exclude pay for vacations not taken as well as cash estimates of any payments in kind. Bonuses, unless earned and paid regularly each pay period, are also excluded.

The methodology for obtaining pay roll estimates is similar to that for employment estimates. Sample changes showing monthly movements are used in projecting established benchmarks to secure current pay roll estimates. These pay roll estimates are converted into indexes, using the 1939 average as a base.

Sec. G. Source of Data - Employment and pay roll estimates are based on reports from cooperating establishments. Excluding the block-sample returns, the approximate number of establishments, and workers covered, for each of the industry divisions are shown below.

Approximate Coverage of BLS Employment
and Pay Rolls Sample

Industry Division	Number of Establishments	Employees or production workers	
		Number	Percent of Total
Manufacturing	33,000	7,500,000	60
Mining	2,700	354,000	40
Contract Construction	12,500	335,000	18
Public Utilities	7,000	832,000	75
Trade:			
Wholesale	11,400	326,000	20
Retail	45,000	1,300,000	25
Service:			
Hotels (year-round)	1,300	137,000	35
Power laundries and cleaning and dyeing	1,700	74,000	20

Sec. H. Coverage of Employment Estimates - The employment estimates shown in Tables 1, 2, and 5 cover all full- and part-time wage and salary workers who worked or received pay during the pay period ending nearest the 15th of the month. Proprietors, self-employed persons, domestic servants, and personnel of the armed forces are excluded. Production worker estimates as shown in Tables 6 and 8 are limited to working foremen and all nonsupervisory workers except administrative, office, and sales personnel.

Sec. I. State Estimates - State estimates are prepared in cooperation with various State Agencies, as indicated below. The estimates for manufacturing have been adjusted to recent data made available under the Federal Social Security program. Since some states have adjusted to more recent benchmark data than others, and because varying methods of computation are used, the total of the state estimates differs from the national total (see Table 1). Because of these recent revisions the state estimates for manufacturing are not consistent with the unrevised data previously shown for total employment in nonagricultural establishments, by state. Comparable series of manufacturing estimates for each state, January 1943 to date, and also for nonagricultural employment by state, through December 1946, are available upon request to the cooperating state agency or the appropriate Bureau of Labor Statistics regional office. Estimates of nonagricultural employment by state, which were regularly published in this report, have been discontinued. The last month for which such data were published is May 1947 (in the June Detailed Report).

Cooperating State Agencies

Arizona - Employment Security Commission, P. O. Box 111, Phoenix.
California - Division of Labor Statistics and Research, San Francisco 2.
Connecticut - Employment Security Division, Hartford 15.
Delaware - Federal Reserve Bank of Philadelphia, 925 Chestnut Street, Philadelphia 1.
Florida - Florida Industrial Commission, Tallahassee.
Georgia - Employment Security Administration, Atlanta 3.
Illinois - Dept. of Labor, Division of Statistics and Research, Chicago 6.
Indiana - Employment Security Division, Indianapolis 12.
Kansas - Kansas State Labor Department, Topeka.
Louisiana - Bureau of Business Research, College of Commerce, Louisiana State University, Baton Rouge 3.
Maryland - Dept. of Labor and Industry, Baltimore 2.
Massachusetts - Dept. of Labor and Industries, State House, Boston 33.
Michigan - Dept. of Labor and Industry, Lansing 13.
Minnesota - Division of Employment and Security, St. Paul 1.
Montana - Unemployment Compensation Commission of Montana, Helena.
Nevada - Employment Security Department, Carson City.
New Jersey - Dept. of Labor, Trenton 8.
New York - Dept. of Placement and Unemployment Insurance, 342 Madison Avenue, New York 17.
North Carolina - North Carolina Dept. of Labor, Raleigh.
Oklahoma - Oklahoma Employment Security Commission, American National Bldg., Oklahoma City 2.
Pennsylvania - Federal Reserve Bank of Philadelphia, 925 Chestnut Street, Philadelphia 1. (Manufacturing)
Dept. of Labor and Industry, Harrisburg. (Nonmanufacturing)
Rhode Island - Dept. of Labor, Division of Census and Statistics, Providence 2.
Texas - Bureau of Business Research, University of Texas, Austin 12.
Utah - Dept. of Employment Security, Salt Lake City 13.
Virginia - Division of Research and Statistics, State Dept. of Labor and Industry, Richmond 21.
Washington - Office of Unemployment Compensation and Placement, P.O.Box 367, Olympia.
Wisconsin - Industrial Commission of Wisconsin, Madison 3.
Missouri - Division of Employment Security, 1101 Capitol Avenue, Jefferson City.

BLS Regional Offices

New England - Regional Director, U. S. Bureau of Labor Statistics, Old South Bldg., 294 Washington St., Boston 8, Massachusetts (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)
North Atlantic - Regional Director, U. S. Bureau of Labor Statistics, 1000 Parcel Post Bldg., 341 Ninth Avenue, New York 1, New York (Delaware, Pennsylvania, New Jersey, New York)
North Central - Regional Director, U. S. Bureau of Labor Statistics, 312 National War Agencies Bldg., 226 W. Jackson Blvd., Chicago 3, Illinois (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota, Wisconsin)
Southern - Regional Director, U. S. Bureau of Labor Statistics, 6th Floor Silvey Bldg., 114 Marietta Street, N. W., Atlanta 3, Georgia (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas)
Pacific-Rocky Mountain - Regional Director, U. S. Bureau of Labor Statistics, 546 Federal Office Bldg., San Francisco 2, California (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming)

Technical advice and assistance on employment statistics in the states of Virginia, West Virginia, Maryland, and the District of Columbia will be given by the Bureau's Washington Office.

GLOSSARY

Continental United States - Covers only the 48 States and the District of Columbia.

Contract construction - Covers only firms engaged in the construction business on a contract basis for others. Force account construction workers, i.e., hired directly by and on the pay rolls of Federal, State, and local governments, public utilities, and private establishments, are excluded.

Defense Agencies - Covers the national military establishment, Maritime Commission, National Advisory Committee for Aeronautics, The Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Office of Selective Service Records, War Assets Administration, Office of Defense Transportation, Office of Scientific Research and Development, National Security Resources Board.

Family Allowances - Represents the Government's contribution; the amount contributed by the personnel is included under pay rolls.

Federal Government-Executive branch - Includes U. S. Navy Yards, Federal arsenals, and force-account construction. Fourth-class postmasters are included under the executive branch in table 3, but are excluded from the government data in tables 1 and 7. Employment shown here for the executive branch differs from data published by the U. S. Civil Service Commission in the following respects: (1) Substitute rural mail carriers are excluded here; (2) seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission are excluded here; (3) the Panama Railroad Company is shown here under Government corporations but is included under the executive branch by the Civil Service Commission as of the last day of the month, is here presented as of the first day of the next month.

Finance - Covers establishments operating in the fields of finance, insurance, and real estate; excludes the Federal Reserve District Banks and the mixed ownership banks of the Farm Credit Administration.

Government - Covers Federal, State, and local governmental establishments performing legislative, executive, and judicial functions, as well as all government-owned and operated establishments and institutions (arsenals, navy yards, hospitals, Federal Reserve banks, etc.) and government force-account construction. The data in tables 1 and 7 exclude fourth-class postmasters because they presumably have other major jobs.

Government corporations - Covers only three corporations: The Panama Railroad Company, the Federal Reserve banks, and the mixed-ownership banks of the Farm Credit Administration. All other corporations are included under the executive branch.

Indexes of production worker employment - Estimates of production worker employment expressed as a percentage of the average employment in 1939.

Indexes of production worker pay rolls - Estimates of production worker pay rolls expressed as a percentage of the average pay roll for 1939.

Leave payments - Payments were authorized by P. L. 704 of the 79th Congress and P. L. 254 of the 80th Congress to enlisted personnel who were discharged prior to September 1, 1946 for accrued and unused leave and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds represents face value; interest will be paid in addition to the face value at the time the bonds are cashed. Excludes payment of present personnel while on terminal leave which is included in the pay rolls.

Manufacturing - Covers only privately owned establishments; governmental manufacturing operations such as arsenals and navy yards are excluded.

Military pay rolls - Covers personnel on active duty or on terminal leave. Coast Guard pay rolls and Army pay rolls for 1943 represent actual expenditures. Other data represent estimated obligations based on an average monthly personnel count. Pay rolls for the Navy proper and Coast Guard include cash payments for clothing-allowance balances in January, April, July, and October.

Mining - Covers establishments engaged in the extraction from the earth of organic and inorganic minerals which occur in nature as solids, liquids, or gases; includes various contract services required in mining operations, such as removal of overburden, tunnelling and shafting, and the drilling of acidizing of oil wells; also includes ore dressing, beneficiating, and concentration.

Nonagricultural establishments - Governmental or private business establishments; (1) that are physically located within continental United States; and (2) whose principal activity can be classified under one of the following industry divisions--mining, contract construction, manufacturing, transportation and public utilities, wholesale and retail trade, finance, service, or government.

Pay rolls - Private pay rolls represent pay rolls of nonsupervisory employees and working supervisors, government pay rolls represent the total pay before deductions for old-age and unemployment insurance, group insurance, withholding tax, bonds, and union dues, but after deductions for damaged work. Includes pay for sick leave, holidays, and vacations taken. Private pay rolls exclude cash payments for vacations not taken, retroactive pay not earned during period reported, value of payments in kind, and bonuses, unless earned and paid regularly each pay period.

Production workers - Includes working foremen and all nonsupervisory workers (including lead men and trainees) engaged in fabricating, processing, assembling, inspection, receiving, storage, handling, packing, warehousing, shipping, maintenance, repair, janitorial, watchman services, product development, auxiliary production for plant's own use (e.g., power plant), and record-keeping and other services closely associated with the above production operations. Excludes supervisory employees (above the working foreman level) and their clerical staffs, routemen, salesmen, and other groups of nonproduction workers defined below under wage and salary workers.

Service - Covers establishments primarily engaged in rendering services to individuals and business firms. Excludes automobile repair services, government owned and operated hospitals, museums, etc., and domestic service.

Trade - Covers establishments engaged in wholesale trade, i.e., selling merchandise to retailers, and in retail trade, i.e., selling merchandise for personal or household consumption, and rendering services incidental to the sale of goods. Includes auto repair services.

Transportation and public utilities - Covers only privately owned and operated enterprises engaged in providing all types of transportation and related services; telephone, telegraph and other communication services; or providing electricity, gas, steam, water, or sanitary services. Government owned and operated establishments are included under government.

Wage and salary workers - In addition to production and related workers as defined above, includes workers engaged in the following activities: executive, purchasing, finance, accounting, legal, personnel (including cafeterias, medical, etc.), professional and technical activities, sales, sales-delivery, advertising, credit, collection, and in installation and servicing of own products, routine office functions, factory supervision (above the working foreman level), and other workers not included as production workers. Also includes employees on the establishment pay roll engaged in new construction and major additions or alterations to the plant who are utilized as a separate work force (force-account construction workers).

Wage earner - See production workers.

Washington, D. C. - Data for the executive branch of the federal Government also include areas in Maryland and Virginia which are within the metropolitan area, as defined by the Bureau of the Census.