# EMPLOYMENT and PAY ROLLS

DETAILED REPORT
DECEMBER 1948

United States Department of Labor
Bureau of Labor Statistics

Prepared by

Division of Employment and Occupational Outlook

Branch of Employment Statistics

Samuel Weiss, Chief

## EMPLOYMENT AND PAY ROLLS

# Detailed Report

# December 1948

TABLE	CONTENTS	PAGE
1.	Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division	2
2.	Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Major Industry Group	3
3.	Estimated Number of Wage and Salary Workers in Selected Nonmanufacturing Industries, by Major Industry Group	.4
4.	Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government	
5.	Employment and Pay Rolls in Washington, D. C Personnel and Pay of the Military Branch of the Federal	5
6.	Government Estimated Number of Wage and Salary Workers in Nonagricul-	6
	tural Establishments for Selected States, November 1948	7
7•	Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State, November 1948	8.
8.	Estimated Number of Froduction Workers in Manufacturing	10
9.	Industries Estimated Number of Employees in Selected Nonmanufacturing	
10.	IndustriesIndexes of Production-Worker Employment and Weekly Pay Rolls	16
	in Manufacturing Industries	17
11.	Indexes of Employment and Weekly Pay Rolls in Selected Nonmanufacturing Industries	23
	Explanatory Notes	i
	Glossary	771

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

\* \* \* \* \* \* \* \* \* \* \*

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

2.
TABLE 1: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division

To 3 a whom 3 dest and an	<del></del>	<u> </u>	1948	1947		
Industry division		December	November	October	December	November
T	OTAL	46,087	45,735	45,877	45,618	44,918
Manufacturing		16,278	16,455	16,597	16,354	16,256
Mining		939	938	941	925	923
Contract construction		2,078	2,162	2,206	1,978	2,046
Transportation and public utilities		4,067	4,066	<b>4,</b> 091	4,071	4,077
Trade		10,380	10,036	9,889	10,288	9,886
Finance		1,723	1,720	1,723	1,676	1,673
Service		4,628	4,644	4,641	4,688	4,670
Government		5,994	5,714	5,789	5,638	5,387

TABLE 2: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by Major Industry Group

Ma tara dadarahan manan		1948		1947		
Major industry group	December	November	October	December	November	
ALL MANUFACTURING	16,278	16,455	16,597	16,354	16 <b>,256</b>	
DURABLE GOODS	8,228	8 <b>,</b> 2 <b>9</b> 9	8,318	8,274	8,194	
Iron and steel and their products Electrical machinery Machinery, except electrical	1,936 730 1,561	1,952 735 1,563	1,955 731 1,569	1,922 773 1,589	1,908 772 1,569	
Transportation equipment, except automobiles Automobiles Nonferrous metals and their products Lumber and timber basic products Furniture and finished lumber	585 985 468 875	588 973 474 908	583 982 473	591 933 <b>482</b> 829	578 961 479 828	
products Stone, clay, and glass products	549 <b>5</b> 39	562 544	562 545	578 5 <b>2</b> 7	573 526	
NONDURABLE GOODS	8,050	8,156	8,279	8,080	8,062	
Textile-mill products and other fiber manufactures Apparel and other finished textile	1,357	1,368	1,371	1,409	1,391	
products Leather and leather products Food Tobacco manufactures Paper and allied products	1,324 409 1,787 100 491	1,338 408 1,840 103 493	1,353 421 1,931 103 491	1,305 446 1,735 102 484	1,277 442 1,769 104 479	
Printing, publishing, and allied industries. Chemicals and allied products Products of petroleum and coal Rubber products Miscellaneous industries	738 *188 240 246 570	734 790 242 249 591	735 789 240 248 597	732 778 238 261 590	726 777 239 259 599	

TABLE 3: Estimated Number of Wage and Salary Workers in Selected Normanufacturing Industries, by Major Industry Group

Ma tana disabinahan		1948		1947		
Major industry group	December	November	October	December	November	
MINING	939	938	941	925	923	
Anthracite	82	82	82	81	81	
Bituminous coal	423	421	422	421	417	
Metal	101.	99	103	100	100	
Quarrying and nonmetallic	93	95	96	94	96	
Crude petroleum and natural gas production 1/	240	241	. 238	229	229	
TRANSPORTATION AND PUBLIC UTILITIES	4,067	4,066	4,091	4,071	4,077	
Transportation	2,810	2,809	2,836	2,858	2,872	
Communication	740	740	740	719	713	
Other public utilities	517	517	515	494	492	
GOVERNMENT	5,994	5,714	5,789	5,638	5 <b>,38</b> 7	
Federal	2,156	1,856	1,875	1,985	1,751	
State and local	3,838	3,898	3,914	3,653	3,636	

<sup>1/</sup> Includes well drilling and rig building.

TABLE 4: Federal Civilian Employment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government Employment and Pay Rolls in Washington, D. C. 1/

		Employ			Pay rolls (total for month)				
Area and branch	(s	s of fire	st of mon			1			
		1948		1947		1948		1947	
	December	November	October	December	December	November	October	December	
All Areas									
TOTAL FEDERAL	2,375.2	2,083.6	2,076.0	2,229.1	\$622,697	\$546,167	\$533,834	\$531,452	
Executive	2,336.1	2,044.2	2,036.9	2,189.4	612,576	536,279	523,860	521,924	
Defense agencies	937.5	939.5	931.9	894.8	231,358	231,426	225,675	214,051	
Post Office Department	754.1	459.7	458.4	667.9	202,564	125,130	124,095	143,537	
Other agencies	644.5	645.0	646.6	626.7	178,654	179,723	174,090	164,336	
Legislative	7.3	7.4	7.4	7.0	2,722			1	
Judicial	3.5		•	ŧ ·	1			1,336	
Government corporations	28.3			29.2	5.931	5,786	5,864	5.730	
Continental United States									
TOTAL PEDERAL	2,176.3	1,876.5	1,868.9	2,005.6	582,475	506,385	491,289	491,727	
Executive	2,144.0	1,843.9	1,856.3	1,973.1	572,998	497,155	482,046	482,884	
Defense agencies	777.5	770.3	762.7	708.1	200,401	200,689	192,530	182,109	
Post Office Department	751.2	458.0	456.7	665.7	201,796	124,667	123,633	143,057	
Other agencies	615.3	615.6	616.9	599.3	170,801	171,799	165,883	157,718	
Legislative	7.3	7.4	7.4	7.0	2,722	2,683	2,656	2,462	
Judicial	3.4	3.5	3.4	3.4	1,428	1,379	1,413	1,30	
Government corporations	21.6	21.7	21.8	22.1	5.327	5,168	5,174	5,080	
Washington, D. C.									
TOTAL GOVERNMENT	241.4	236.5	234.6	224.4	74,374	73,135	70.755	64,111	
D. C. government	18.8	19.1	18.6	18.4	4,742	4,526	4,450	4,570	
Federal	222.6	217.4	216.0	206.0	69,632	68,609	66,305	59,541	
Executive	214.7	209.4	208.0	198.4	66,666	65,695	63,421	56,861	
Defense agencies	72.2	71.1	70.6	64.7	21,448	21,582	20,909	17,235	
Post Office Department	10.8	7.7	7.6		3,850		•	,	
Other agencies	131.7	130.6	129.8	123.5	41,368	41,364	39,828		
Legislative	7.3	7.4	7.4	7.0	2,722	2,683	2,656	2,462	
Judicial	.6	.6	•6	.6	244	231	228	218	

See the glossary for definitions.

<sup>2/</sup> Data for Central Intelligence Agency are excluded.

TABLE 5: Personnel and Pay of the Military Branch of the Federal Government 1/
(In thousands)

Dondonahlan	!	1948		1. 191	
Designation	December	November	October	December	November
PERSONNEL (as of first of month) Total	1,628	1,610	1,584.	1,463	1,490
By branch:			•		
Army Air Force Navy Marine Corps Coast Guard	662 410 449 85 22	647 410 446 85 21	636 406 438 84 21	2/ 911 2/ 445 87 20	
By sex:		*	1		1
Men Women	1,613	1,596 14	1,571	1,446 17	1,473
PAY (for entire month)		T-104			•
Total	\$297,037	\$299,787	\$294,843	\$300,257	\$309,705
By branch:			<b>!</b> ·		*
Army and Air Force Navy Marine Corps Coast Guard	189,237 88,592 14,317 4,891	191,206 89,234 14,555 4,792	183,593 91,927 14,667 4,657	183,983 97,645 14,427 4,202	186,912 102,562 16,046 4,184
By type of pay:			1		1
Pay rolls Mustering-out pay Family allowance Leave payments Cash Bonds	262,975 5,201 28,671 190 133 56	264,953 5,733 28,534 567 166 401	259,175 5,818 28,253 1,598 366 1,231	246,532 13,293 23,827 16,605 2,866 13,739	252,112 9,117 23,127 25,349 3,982 21,367

See the glossary for definitions.

<sup>1/</sup> Because of rounding, the individual figures may not add to group totals.

<sup>2/</sup> Separate figures for Army and Air Force not available, combined data shown under Army.

State		1.948		1947		
. 20 OO .	November	October	September	November .	October	
Arizona	156	156	154.	148	146	
California	3,086	3,129	3,160	3,071	3,086	
Connecticut	774	776	771	782	780	
Georgia	747	750	745	742	735	
Idaho	132	134	132	125	126	
Illinois	3,231	3,228	3,218	3.180	3;166	
Indiana	1,215	1,220	1,237	1,205	1,207	
Maine	264	269	275	268	268	
Maryland	723	719	720	689	, 681	
Massachusetts	1,726	1,732	1,735	1,739	1,724	
<b>Min</b> nesota	813	813	825	791	789	
Missouri	1,150	1,159	1,149	1,143	1,140	
<b>Mont</b> ana	142	143	11:3	137	138	
Nevada 1/	i 48	1 48	49	48	48	
New Jersey	1,584	1,594	1,604	1,580	1,573	
New Mexico	759	129	129	119	118	
New York	5,504	5,513	5,500	5,508	5,502	
Oklahoma	470	470	473	11111	441	
Pennsylvania.	3,669	3,668	3,660	3,619	3,604	
Rhode Island.	288	268	283	294	29 <b>3</b>	
<b>Ten</b> nessee	748	752	756	709	704	
Toxas	1,782	1,767	1,758	*1,686	1,675	
Utah	186	191	195	*179	*181	
Vermont 1/	. 94	95	<b>9</b> 5	95	96	
Washington:	676	685	. 688	667	673	
Visconsin	1,000	1,003	1,018	982	981	

See explanatory notes, sections H and I.

Other months have been revised as follows:
 Texas - December 1947 through June 1948 to 1,715, 1,677, 1,664, 1,670, 1,693, 1,702, and 1,725.
 Utah - December 1947 through August 1948 to 181, 173, 171, 173, 171, 180, 184, 189, and 189.

<sup>1/</sup> Does not include contract construction.

8.
TABLE 7: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State

Region and State		1948		1947		
TOO TON THE PORTO	Mcvenber	Octobor	September	November	October	
NEW ENGLAND:						
Meine 1/	111.2	113.7	117.9	117.4	116.9	
New Hampshire	80.4	82.1	82.1	83.9	82.9	
Vermont 1/	36.7	36.9	37.3	*39.5	39.3	
Massachusetts	721.4	727.9	731.3	753.2	741.	
Rhode Island	142.1	142.8	144.7	154.3	152.	
Connecticut 1/	396.5	397.0	397.1	*415.7	414.8	
MIDDLE ATLANTIC:	·					
New York	1,870.8	1,888.1	1,888.5	1,918.6	1,922.	
New Jersey	740.3	747.8	750.4	757.4	751.	
Pennsylvania	1,503.7		1,508.1	1,523.1	1,517.	
EAST NORTH CENTRAL:	<b>)</b> .				1	
Ohio	1,223.9	1,226.5	1,231.8	1.247.3	1,244.	
Indiana	545.8	551.6	569.4	558.7	561.0	
Illinois	1,242.7	1,243.3	1,243.8	1,266.3	1,257	
Michigan	996.8	1,002.0	1,004.9	1,019.0	1,021	
Wisconsin 1/	430.7	431.8	445.9	433.1	433	
WEST NORTH CENTRAL:						
Minnesota 1/	200.8	201.9	210.2	201.3	200	
Iowa 1/	153.8	153.8	153.9	153.9	151.	
Missouri 1/	347.2	349.8	347.3	352.7	351.	
North Dakota	6.9	7.0	6.8	6.8	6.	
South Dakota	12.2	11.9	11.6	11.5	11.4	
Nebraska	44.1	43.6	42.4	45.9	45.	
Kansas 1/	87.8	83.3	87.5	82.7	82.0	
SOUTH ATLANTIC:						
Delaware	45.3	46.3	48.9	45.8	45.	
Maryland	233.0	235.3	242.4	231.1	229.	
District of Columbia	17.0	16.9	17.0	17.4	17.	
Virginia	215.6	218.4	21.7.7	217.3	217.	
West Virginia	1.32.7	134.1	132.9	133.0	133.	
North Carolina	3€9.3	370.8	375.4	373.7	374.	
South Carolina	193.6	193.8		197.6	194.	
Georgia 1/	277.8		280.1	283.5	280.	
Florida I/	97.3	90.7	89.9	95.0	90.	

TABLE 7: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State - Continued

Douten and Chata		1948	1947		
Region and State	November	October	September	November	October
EAST SOUTH CENTRAL:			***		***
Kentucky	128.6	129.2	128.1	130.7	130.3
Tennessee 1/	250.5	256.3	256.3	254.3	254.1
Alabama 1/	228.7	229.1	227.1	230.8	227.9
Mississippi	87.0	87.2	87.4	95.5	94.1
WEST SOUTH CENTRAL:	Management of the Control of the Con				
Arkansas 1/	79.0	80.2	79•5	76.8	76.7
Louisiana 1/	152.6	153.6	155.9	152.8	149.2
Oklahoma 17	67.4	67.9	67.2	64.9	64.3
Texas	357.4	352.8	351.4	347.7	339.8
MOUNTAIN:			1		
Montana	18.6	18.8	18.1	18.7	19.1
Idaho 1/	23.4	26.0	24.8	21.2	22.4
Wyoming	7.2	7.4	6.8	7.2	7.1
Colorado	59.3	60.2	58.3	60.3	60.6
New Mexico $\underline{1}$	10.1	10.1	10.4	8.6	8.8
Arizona 1/	15.5	15.2	14.0	14.6	14.0
Utah 1/	30.7	31.6	32.8	27.2	29.4
Nevada 1/	3.4	3.4	3.5	3.5	3.5
PACIFIC:					
Washington	186.0	191.6	190.5	178.2	183.9
Oregon	113.1	118.8	121.5	112.2	117.2
California	735•9	768.0	801.7	717.7	736.4

See explanatory notes, sections H and I.

<sup>1/</sup> Series based on Standard Industrial Classification. Data for Kansas and Utah may not be strictly comparable with those published prior to the current report.

<sup>\*</sup> Other months have been revised as follows:

Connecticut - December 1947 to 417.8.

Vermont - December 1947 to 40.0.

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries (In thousands)

Industry group and industry		1948		19	47
Timestry Broth and Industry	Docember	November	Ogtober	December	November
ALL MANUFACTURING	13,055	13,233	13,375	13,263	13,176
DURABLE GOODS NONDURABLE GOODS	6,735 6,320	6,807 6,426	6,822 6,553	6,816 6,447	6,746 6,430
Durable goods					
IRON AND STEEL AND THEIR PRODUCTS 1	.1,638	1,654	1,657	1,633	1,619
Blast furnaces, steel works, and rolling mills Gray-iron and semisteel castings Malleable-iron castings Steel castings Cast-iron pipe and fittings Tin cans and other tinware Wire drawn from purchased rods Wirework Cutlery and edge tools Tools (except edge tools, machine tools, files, and saws) Hardware Plumbers' supplies Stoves, oil burners, and heating equipment, not elsewhere classified Steam and hot-water heating apparatus and steam fittings Stamped and enameled ware and galvanizing Fabricated structural and ornemental metalwork Metal doors, sash, frames, molding, and trim Bolts, nuts, washers, and rivets Forgings, iron and steel Wrought pipe, welded and heavy-	542.8 113.1 39.0 74.9 30.0 46.4 28.8 42.2 24.3 24.4 54.2 42.4 76.4 65.3 113.5 65.6 10.9 28.7 38.4		115.8 36.5 75.0 29.3 48.7 29.1 42.1 24.3 24.6 53.8 42.4 93.3 66.6 116.5 66.3 11.2 28.3	506.5 119.8 37.6 70.5 28.7 47.8 31.6 42.4 25.0 25.9 55.3 40.0 95.6 65.8 123.2 63.9 10.9 28.6 37.4	28.4
riveted  Screw-machine products and wood	19.5	19.7	19.9	19.6	18.9
screws Steel barrels, kegs, and drums Fireerms	35•3 7•9 22•4	35.5 7.8 22.4	35.5 7.9 22.1	35.8 8.2 19.7	8.0
ELECTRICAL MACHINERY 1/	552	557	<b>5</b> 53	596	595
Electrical equipment Radios and phonographs Communication equipment	363.4 97.2 91.5	95.9	367.1 93.1 92.4	393.4 104.8 98.2	39 <b>1.4</b> 106 <b>.3</b> 97 <b>.</b> 5

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Contic

		1948		1947		
Industry group and industry	December	November	October	December		
MACHINERY, EXCEPT ELECTRICAL 1/	1,202	1,204	1,209	1,235	1,218	
Machinery and machine-shop products	506.0	505.6	506.7	517.0	515.1	
Engines and turbines	52.6			54.5	53.0	
Tractors	61.6		59.8	60.3		
Agricultural machinery, excluding	00		)) <b>,</b> 0		, , , ,	
tractors	77.1	76.2	75•9	71.0	68.0	
Machine tools	47.3	47.5	47.6	51.3	51.1	
Machine-tool accessories		54.5		56.3		
	54.4					
Textile machinery	41.6			40.6	39.8	
Pumps and pumping equipment	69.4	69.1	68.9	75.1		
Typewriters	18.4	18.9	20.6	25.9	25.2	
Cash registers; adding, and					l	
calculating machines	43.8	44.1	44.2	45.2	44.1	
Washing machines, wringers, and			•		4	
driers, domestic	12.5	15.5	15.7	16.3	15.8	
Sewing machines, domestic and		1				
industrial	15.0	14.9	14.8	13.3	13.0	
Refrigerators and refrigeration			-			
equipment	79.3	79.5	81.0	81.5	80.1	
• • • • • • • • • • • • • • • • • • • •	, , , ,	1			****	
TRANSPORTATION EQUIPMENT, EXCEPT						
AUTOMOBILES	451	453	449	463	452	
ROTORIODILLID	7,7	7/3	777	403	7/2	
Locomotives	26.5	26.5	26.6	26.3	26.0	
Cars, electric- and steam-railroad		-	1 7	56.9	56 <b>.</b> 8	
	70.1	55•9	74•7	70.9	20.0	
Aircraft and parts, excluding	150 5	71:00	31.5 0	700.0	ann h	
aircraft engines	150.5	149.8	145.3	133.2	133.4	
Aircraft engines	28.5		27.5	25.9		
Shipbuilding and boatbuilding	92.7	94.5	97•3	125.7	117.6	
Motorcycles, bicycles, and parts	12.0	13.6	13.8	14.7	14.4	
			0-		. •	
AUTOMOBILES	782	777	782	785	766	
	i					
NONFERROUS METALS AND THEIR		1 -1	1			
PRODUCTS 1/	398	404	403	413	410	
Smelting and refining, primary, of						
nonferrous metals	41.2	41.4	41.2	40.0	39•7	
Alloying; and rolling and drawing		!			•	
of nonferrous metals, except					•	
aluminum	54.7	54.5	54.6	53.4	52.9	
Clocks and watches	27.0			28.6		
Jewelry (precious metals) and		•			•	
jewelers' findings	26.8	27.5	27.5	27.7	28.1	
Silverware and plated ware	27.7			27.1	_	
Lighting equipment	30.9			34.1		
Aluminum manufactures						
	40.6	40.9	40.1	44.8	43.6	
Sheet-metal work, not elsewhere	1 26 6	<b>777 3</b>	267 2	1000	1.0 6	
classified	36.6	37.1	37•3	40.9	40.6	

12.
TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Contv

(In thousands)

To Annaham and any and Annaham	1	1948		1947		
Industry group and industry	December	November	October	December	November	
LUMBER AND TIMBER BASIC PRODUCTS 1/	788	821	631	<b>7</b> 50	751	
Sawmills and logging camps Planing and plywood mills	635.2 152.9	667 <b>.</b> 2 154 <b>.</b> 1	67 <b>8.</b> 2 152 <b>.</b> 8	610.7 139.4	612.8 137.7	
FURNITURE AND FINISHED LUMBER PRODUCTS 1/	462	<b>1</b> 470	470	487	483	
Mattresses and bedsprings Furniture Wooden boxes, other than cigar Caskets and other morticians' goods Wood preserving Wood, turned and shaped	33.4 254.1 34.8 18.8 16.8 33.4	35.7 256.5 35.4 19.5 17.0 33.9	37.1 255.6 3 <sup>1</sup> 4.9 19.2 17.1 34.5	38.4 262.9 37.0 21.1 18.0 34.9	38.2 259.3 37.6 20.9 18.6 34.5	
STONE, CLAY, AND CLASS PRODUCTS 1/	1462	467	468	454	452	
Glass and glasswere Glass products made from	118.8	121.8	123.2	123.5	123.4	
purchased glass Cement Brick, tile, and terra cotta Pottery and related products Gypsum	14.7 37.0 83.1 61.6 7.5	14.7 37.2 83.5 61.5 7.8	14.4 36.9 83.5 61.0 7.9	14.6 35.5 77.9 58.9 7.6	14.6 35.5 77.2 58.3 7.6	
Wallboard, plaster (except gypsum), and mineral wool Lime Marble, granite, slate, and other	14.8 10.7	1/1.9 10.7	14.8 10.7	14.6 10.8	14.6 10.8	
products Abrasives Asbestos products	19.2 20.7 25.1	19.0 20.5 25.6	19.0 20.6 25.7	18.3 19.3 24.9	18.5 19.1 24.7	
Nondurable goods		7	•			
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES 1/	1,236	1,245	1,249	1,290	1,271	
Cotton manufactures, except smallwares Cotton smallwares Silk and rayon goods	507.5 13.1 120.8			523.2 14.3 116.2	516.9 13.9 114.8	
Woolen and worsted manufactures, except dyeing and finishing Hosiery Knitted cloth Knitted outerwear and knitted glove Knitted underwear	156.5 140.5 11.2 8 33.2 43.6	, 142.3	159.6 141.7 11.3 32.8 47.9	177.3 148.7 11.5 33.7 52.5	146.3	
Dyeing and finishing textiles, including woolen and worsted Carpets and rugs, wool Hats, fur-felt Jute goods, except felts Cordage and twine	92.5 40.7 11.7 4.3 14.9	12.0 4.3	91.5 40.8 11.5 4.1 14.9	94.0 38.0 13.8 3.1 16.5	3.0	

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd (In thousands)

To day where we are and day and the		1948		! 19	
Industry group and industry	December	November	Oc cober	December	. November
APPAREL AND OTHER FINISHED TEXTILE PRODUCTS	1,145	1,159	1,175	1,143	1,117
Men's clothing, not elsewhere classified Shirts, collars, and nightwear Underwear and neckwear, men's Work shirts	303.2 73.7 19.1 18.1	77.7 19.5	78.1 18.9	310.5 82.4 18.4 15.5	18.1
Women's clothing, not elsewhere classified Corsets and allied garments Millinery Handkerchiefs Curtains, draperies, and bedspreads Housefurnishings, other than curtains, etc.	485.3 19.3 23.8 5.5 25.6	19.2 22.1 5.5 27.1	19.3 25.8 5.3 27.4	470.5 19.6 23.5 5.1 32.2	19.4 21.6 5.2 32.1
Textile bags	30.3			30.6 28.6	30.0 28.4
LEATHER AND LEATHER PRODUCTS 1/	364	363	376	400	396
Leather Boot and shoe cut stock and finding Boots and shoes Leather gloves and mittens Trunks and suitcases	47.3 17.0 232.7 10.6 12.8	17.0 ; 229.5 : 12.4 :	17.6	50.3 19.8 255.4 13.0	19.8 251.1 13.2
FOOD <u>1</u> /	1,253	1,306	1,400	1,255	1,288
Slaughtering and meat packing Butter Condensed and evaporated milk Ice cream Flour Feeds, prepared Cereal preparations Baking Sugar refining, cane Sugar, beet Confectionery Beverages, nonalcoholic Malt liquors Canning and preserving	218.2 35.0 18.7 23.9 41.5 28.9 12.5 251.7 24.2 10.8 82.4 39.5 77.9 163.1	19.5 24.3 41.7 28.9 13.1 255.7 22.4 25.2 89.8 40.4 80.7	35.5 20.3 26.2 40.1 29.2 13.2 258.0 22.4 25.0 88.9 43.0 81.3	217.1 32.9 18.6 24.9 41.9 29.1 12.1 242.2 24.0 21.7 86.2 37.3 77.0 165.7	42.1 28.5 12.8 246.1
TOBACCO MANUFACTURES 1/	87	90	90	88	90
Cigarettes Cigars Tobacco (chewing and smoking)	34 <b>.1</b> 45 <b>.</b> 2	35.1 } 47.2	35 <b>.1</b> 46 <b>.</b> 5	34.2 45.6	34 <b>.0</b> 47 <b>.</b> 8
and snuff	7.8	7.8	7.9	8.3	8.2

14.
TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont. (In thousands)

Traditional manner and individual		1948		19	
Industry group and industry	December	November	October	December	Novomber
PAPER AND ALLIED PRODUCTS 1/	)+O1	403	401	398	394
Paper and pulp	207.0	206.6	206.0	202.8	200.7
Paper goods, other	63.5			63,8	63 3
Envelopes	13.2	13.2		12,4	
Paper bags	16.8	17.0		18.2	17.9
Paper boxes	99.9	101.5	99,8	99.6	99.0
PRINTING, PUBLISHING, AND ALLIED					
INDUSTRIES 1/	443	442	442	445	444
Newspapers and periodicals	152.3	151.0	150.7	145.6	145.1
Printing; book and job	152.3 188.7	187.8	188.8	191.4	190,6
Lithographing	31.3	31.4	31.4	32.9	
Bookbinding	34.5	35.1	34.9	38.3	,38.7
CHEMICALS AND ALLIED PRODUCTS 1/	59 <b>7</b>	599	600	592	589
Paints, varnishes, and colors	47.6	48.1.	48.7	48.4	48.0
Drugs, medicines, and insecticides	64.4		64.4	65.9	
Perfumes and cosmetics	12.3	12.9		12.9	
Soap	26,5			25.5	25.8
Rayon and allied products	64.8	63.9	63.9	63.5	63.1
Chemicals, not elsewhere	211.2	. 010 %		007.0	005 5
classified Explosives and safety fuses	27.4	210.7 27.4	210.0 27.7	207.0 25.3	
Compressed and liquefied gases	9,5	9.5		9.9	2
Ammunition, small-arms	7.2		7.4	7.4	7.2
Fireworks	2,4			2.8	
Cottonseed oil	25.7			24.4	
Fertilizers	28,7		28.8	30.7	
PRODUCTS OF PETROLEUM AND COAL 1/	165	167	162	165	165
Petroleum refining	113.3	113.7	107.6	112.5	112.3
Coke and byproducts	32.3	32.2		30.0	
Paving materials	2.7	2.8	2.9		
Roofing materials	15.2	17.2		18.3	18.5
		;			Ĭ.

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont'd

(In thousands)

Todayabara anana and dada dasa		1948		1947		
Industry group and industry	December	November	October	December	November	
RUBBER PRODUCTS 1/	196	199	198	515	210	
Rubber tires and inner tubes Rubber boots and shoes Rubber goods, other	89.6 23.5 82.6	23.2	22.9	101.9 22.5 87.7		
MISCELIANEOUS INDUSTRIES 1/	433	453	460	459	466	
Instruments (professional and scientific), and fire-control equipment	00.0	20.4	00 5	28.1	· · · · · ·	
Photographic apparatus Optical instruments and ophthalmic	29 <b>.</b> 9 39 <b>.</b> 7			39.2		
goods Pianos, organs, and parts	26.3 13.3	26 <b>.0</b> 13 <b>.</b> 5	•	28.0 17.6	•	
Games, toys, and dolls Buttons	37.8 13.2	46.5 13.1	49.4 13.1	38.5 13.4	12.7	
Fire extinguishers	2.8	2.9	2.9	2.7	2.7	

<sup>1/</sup> Estimates for the individual industries comprising the major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Comparable data from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

16. TABLE 9: Estimated Number of Employees in Selected Monmanufacturing Industries 1/ (In thousands)

	Ī	1948		: 1947		
Industry group and industry	December	November	: October	December	: November	
MINING: 2/						
Coal			: :		:	
Anthracite	77.0	77.0	76.6	76.5	76.2	
Bituminous coal	405	403	404	402	<b>399</b> ·	
Metal	90.4	88.7	92.0	89.8	89.4	
Iron	32.3	32.1		32.63	32.0	
Copper	24.5	23.9	27.0	26.6	26.1	
Lead and zinc	16.9	16.6		15.0		
Gold and silver	8.6	8.2	8.1	8.5	8.1	
Miscellaneous	8.2	7.9	7.9	7.9	7.8	
Quarrying and nonmetallic	83.4	85.3	86.6	83.9	86.4	
Crude petroleum and natural gas			1	!	į	
production 3/	129.6	130.4	129.9	126.3	1.26.4	
TRANSPORTATION AND PUBLIC UTILITIES:						
Class I steam railroads 4/	1,307	1,329	1,345	1,331	1,340	
Street railways and busses 5/	244	245	246	249	249	
Telephone	642	6115	642	620	614	
Telegraph 6/	33.9	34.2		36.7	36.6	
Electric light and power	282	282	281	269	<u>268</u>	
SERVICE:		r				
Hotels (year-round)	370	372	375	! ! 381	378	
Power laundries 2/	224	225	, 229	237	238	
Cleaning and dyeing 2/	86.3			91.0		
4	55.5	5,65	٠,• ١	1	;	

5/ Includes private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.

Unless otherwise noted, data include all employees.

Includes production and related workers only.

Does not include well drilling or rig building.

Includes all employees at middle of month. Excludes employees of switching and annual revenue. Source: Interstate Commerce Commission.

<sup>6/</sup> Includes all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

	, Trans	Loymen	t inde	Yes	Par	y-roll :	ndeve	3
Industry group and industry	1	1948	- 111/16:	1947	10	1948		1947
THOUSOLA BLOND SHOT THROUGHA	Dec.	Nov.	Oct.	Dec	Dec.	Nov.		Dec.
	1000.	14:24	000.	1000	1000	TAOA *	000.	Dec.
ALL MANUFACTURING	159.4	161.5	163.3	161.9	377.8	379.9	382.9	365.7
DURABLE GOODS	186.5	188.5	188.9	188.8	430.9	429.9	435.7	411.0
NONDURABLE GOODS					326.0		331.2	
						<b>J</b> , 13	JJ V	
Durable goods				İ	İ			
IRON AND STEEL AND THEIR	ŀ		`,	! !	1			i 5
PRODUCTS 1/	165.2	166.8	167.1	164.7	371.4	373.6	376.0	345.8
Plact funnaces stool works				,	31=0 1	31300	3, - 0 -	13.700
Blast furnaces, steel works, and rolling mills	139.7	138.5	137.7	130.4	306.1	304.7	305.0	i-257.8
Gray-iron and semisteel castings				192.5			436.1	
				195.5		-	512.2	
Malleable-iron castings	022 6	200.0	Jan 1	: エジノ・ノ : 210 8	525.2		523.2	
Steel castings.					471.2		445.7	JUNE O
Cast-iron pipe and fittings	1112	109.9	152 (	150 3	340.3	22h 7	351.6	
Tin cans and other tinware	1121 0	120.6	120.6	143.7	274.0	271 2	276.2	380 3
Wire drawn from purchased rods	1-31-0	120.0	128 1	143.4	334.7	221 6	333.2	200.5
Wirework					394.3	) JOE 8	392.1	386 3
Cutlery and edge tools	,	TOCOT	10101	TUESE	;	405.0	735.1	300.3
Tools (except edge tools, machine	1150.0	160.0	110.0	160 5	. 270 E	272 Q	276 2	281 0
tools, files, and saws)	129.3	T00.3	T20.0	109.5	372.5		376.3	362.0
Hardware.					370.8		363.1	
Plumbers' supplies	101.2	102.4	191.1	125.0	378.3	310.9	381.9	331.5
Stoves, oil burners, and				i .			. :	!
heating equipment, not	1	0 -	-0-0	201	0-0 1	1.00.0	1.1.0 1.	1.1.1. 7
elsewhere classified	155.3	178.3	199.8	194.6	350.4	400.0	448.4	444. (
Steam and hot-water heating	1			1		1.77 -	1.01. 0	1.00 1
apparatus and steam fittings	202.3	204.7	206.4	203.8	454.6	460.5	474.3	423.4
Stamped and enameled ware							100 6	1
and galvanizing	191.9	198.8	196.9	208.3	481.0	491.9	482.6	497.5
Fabricated structural and	1	_	- 04	!	1	146.4	1.00 1.	
ornamental metalwork	184.7	185.3	1.06.7	179.9	406.8	406.2	409.4	210.5
Metal doors, sash, frames,	·		-11 -		-1	al a m	-1.0.3	
molding; and trim	141.4	145.7	144.1	141.0	340.2	342.7	340.1	3'3.2
Bolts, nuts, washers, and rivets Forgings, iron and steel	188.4	186.3	185.6	187.4	445.3.	433.6	428. C	· 75.0
Forgings, iron and steel	1 234.2	233.2	228.1	228.3	548.5	544.8	533.€	506.9
Wrought pipe, welded and	1		/		t.om.o	-3 0	505 I	1.70 7
heavy-riveted.	1219.2	220.7	223.5	519.7°	497.2	515.8	202.1	4(2.1
Screw-machine products and			_	! !				
wood screws					447.5		453.0	442.9
Steel barrels, kegs, and drums	121.7	120.3	122.1	126.4	348.1	328.8	329.8	334.0
Firearms	421.3	421.3	414.9	369.8	1005.6	1018.0	998.7	835.0
ELECTRICAL MACHINERY 1/	,					479.2		
	1 .			;				
Electrical equipment	199.0	201.4	201.0	215.4	.444.1	447.8	445.4	447.1
Radios and phonographs	1221.0	218.1	211.7	238.2:	551.4	539.7	509.1	542.9
Communication equipment	281.9	<b>5</b> 88•0	284.7	302.7	561.3	587.6	591.6	604.6
	_	•			_			

18.
TABLE 10: Indoxes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	Emp		nt ind		Pa.	y-roll		es
Industry group and industry		1948		1947		<b>1</b> 9/18		1947
	Dec.	Nov.	Oct.	Dec.	Dec.	Nov.	Oct.	Dec.
MACHINERY, EXCEPT ELECTRICAL 1/	227.5	227.9	228.7	233.8	491.6	486.9	491.7	479.9
Machinery and machine-shop			-11	1	. م			
products	243.7				532.6	527.3	531.5	518.9
Engines and turbines	281.9							607.4
Tractors	197.0	194.6	191.2	192.8	369 <b>.</b> 6.	358.4	364.1	347.0
Agricultural machinery,	i i	_						
excluding tractors	270.1				613.7	592.4	597.9	522.7
Machine tools	129.3	1.29.7	130.0	140.2	248.0	248.1	250.3	262.2
Machine-tool accessories	210,6	211.1	211.9	218.1	395.7	387.1	391.8	397.7
Textile machinery	190.0	189.7	190.1	185.3				417.4
Pumps and pumping equipment	278.9					625.5		
Typewriters	113.2					271.1		
Cash registers; adding, and					4-2-1	~; v	-))••	500.0
calculating machines	282.5	224.1	224.8	220.4	hor o	487.0	1481 S	490.7
Washing machines, wringers,				1	777+L;	401.43	4010	450.1
and driers, domestic,	167.3	207.3	210.6	218.1	216 6	lizo o	1,81, 0	484.2
Sewing machines, domestic	ا ره ا حسا	-C-1-C		23.001	310.0	410.0	TUT. C	404.2
and industrial	[191.4]	IRO R	7886	1770 7	ا بادع	E01 0	103 6	200 0
Refrigerators and refrigeration	1		U.CO.U	; ; T { O • T	204.1	201.9	491.0	398.8
	lone 6	ine n	one le	007.0	1.00.0	1.00		16- 4
equipment	225.6	220.U	230.4	231.0	490.0	400.2	508.7	465.9
TRANSPORTATION EQUIPMENT,	į						_	
EXCEPT AUTOMOBILES	284.4	285.7	.282.9	291.6	635.5	611.8	613.3	600.2
	4 :			•	_			
Locomotives	410.1	409.6	410.7	406.2	1 USF F	olio s	ono li	000 s
Cars, electric- and steam-	1	) •	: 1 <b></b>	13.3		27507	ンベフ・ハ	900.3
railroad	228.6	27.8.	222 1	231 3	565.9	בו בכב	506 6	500 h
Aircraft and parts, excluding		I • · · ·			プログ・ブ;	プラン・マー	ب، نیمر	722.4
aircraft engines	379.3	277.L	366.2	225. A	820 0	820 7	7010	668.7
Aircraft engines	320.9	235 0	300,7	201 0	618 0	601 2	FOO 7	000.1
Shipbuilding and boatbuilding	133.9	126 6	340 5	181 C	010.9	601.3	222 · (	203.
Motorcycles, bicycles, and parts	171.6				200.0	262.4	597.5	3(0.5
	1 1	-	· -	-	323 • 1	460.5	4/4.3	448.2
AUTOMOBILES	194.4	193.0	194.4	195.2	455.6	436.5	451.3	427.7
NONFERROUS METALS AND THEIR	•		•	i		•		
PRODUCTS 1/	/ is	m/ 7	7000	200 -				_
	173.6	rlo•T	TAP*O	100.3	390.2	391.9	394.2	377.8
Smelting and refining, primary,					±	i	· ,	
of nor errous metals	149•1 [1	50.0	149.1	144.6	342.1	340.0	344.6	299.9
Alloying; and rolling and		•				:	1	
drawing, of nonferrous	ŗ							
metals, except aluminum	141.0	40.4	140.7	137.5	309.8	298.2	308.0	271.0
Clocks and watches	133.1 1	39.0	141.9	140.8	331.6	348.1	353.0	333 3
Jewelry (precious metals)	1				JJ~#~	J		ټ ورډر
and jewelers findings	185.3	90-3	190.6	191.6	402,3	107.20	307.0	ATE A
Silverware and plated ware	228.3	233.5	231.5	223.5		570 A	565 0	22 E
Lighting equipment	151.0	-Jン•ノ  55.	155 6	166 6	545.2 335.4	2120	200.0	ンシン・フ
Aluminum manufactures	172.5	73 6	170 6	100.0	257 =	360 0	340.01	343.U
Sheet-metal work, not elsewhere	لم روسوند	10.0	ニュマ・フ	±30.*∓ ;	357.5	500.2	222.	30441
classified	195.2 1	07.0	100.0	018 2	hee s	heo o	1.60	1.00 a
and the second s	エフノ ( 二	・ブログ	エフブ・ロー	210.3	455.1.	474.3	40(.4	4/0.2

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	Emr	ol ovmer	it inde	xes	Pay-roll indexes			
Industry group and industry		1948		1947		1948		1947
	Dec.		Oct.		Dec.		Oct.	
LUMBER AND TIMBER BASIC PRODUCTS 1/	,		<del></del>		468.8	_		
Sawmills and logging camps			216.2	ļ	505.7		,	
Planing and plywood mills			193.2				491.9	
FURNITURE AND FINISHED LUMBER PRODUCTS 1/	140,7	143.1	143.3	148.3	345.4	349.2	354.9	355•7
Mattresses and bedsprings Furniture Wooden boxes, other than cigar Caskets and other morticians!	1.42.8	144.2	180.9 143.6 123.3	147.8	354.4	356.7	414.3 358.1 325.0	356.2
goods	135.0	140.1	138.4	151.5	282.4	287.8	284.9	319.1
Wood preserving			136.0				383.3	
Wood, turned and shaped	136.1	138.0	140.4	142.1	331.1	328.3	338.7	325.2
STONE, CLAY, AND GLASS PRODUCTS 1/			159.4		366.9	366.9	372.1	335.7
Glass and glassware Glass products made from	166.5	170.6	172,6	173.1	385.3	384.0	395.8	367.6
purchased glass	147.0	147.3	143.8	146.0	350.7	344.6	329.0	329.7
Cement			151.5		_		316.1	
Brick, tile, and terra cotta			143.9				362.4	
Pottery and related products			130.4				399.8	
Gypsum Wallboard, plaster (except	121.2	151.6	160.7	エン4•0	370.5	301.1	397.1	333.3
gypsum), and mineral wool	181.0	183.6	182,6	180.2	F03-0	495.7	493.8	एएउ. ०
Lime			113.4				326.9	
Marble, granite, slate, and	,		:		3-30-		3	
other products			102.9		204.2	190.9	196.8	183.3
Abrasives			265.7				594.6	
Asbestos products	157.9	161.0	161.7	156.6	390.6	398.4	414.5	366.1
Nondurable goods	•				• •		1	
TEXTILE-MILL PRODUCTS AND OTHER FIBER MANUFACTURES 1/	103.0	108.9	109.2	112.7	291.9	291.9	291.2	302.0
Cotton manufactures, except	101 3	121 6	100 0	125.1	252 7	. 21,8 0	250 0	276
smallwares				101.8				
Cotton smallwares Silk and rayon goods	95.4	96.4	96.7	91.8	293.4	299.1	299.4	266.5
Woolen and worsted manufactures,							: '	
except dyeing and finishing	99.3	100.4	101.2	112.4	270.9	268.8	265.7	294.4
Hosiery	83.6	84.7	84.4		201.8	210.3	208.8	207.9
Knitted cloth	97.2	99•3	98.0	99.9	227.0	232.9	228.7	231.6
Knitted outerwear and knitted	w <b>0</b>				001.0	-CO C	مام 0	0-06
gloves	111.8	114.2	110.2	113.3	264.6	212.	249.0	229.0
Knitted underwear Dyeing and finishing, textiles,	شدو إ بيس			120.9	۱۰۰۰۰	213.0	C7±•C	ンニフ・1
including woolen and worsted	130.9	130.1	129.5	133.1	327.7	316.8	311.6	3207
Carpets and rugs, wool					389.8			
Hats, fur-felt				89.7	175.3	163.1	162.9	202.1
Jute goods, except felts	113.5	114.3	107.1	80.6	283.6	285.9	266.8	175.4
Cordage and twine			116.8					

20.
TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries - Continued

	Employment ind		Pay-roll	indexe	
Industry group and industry	յշևՑ	1 1947	1948		1947
	Dec. Nov. Oct.	Dec.	Dec. Nov.	Oct.	Dec.
APPAREL AND OTTER FINISHED TEXTILE PRODUCTS	145.0 146.9 148.8	144.8	327.4 335.4	325.0	327.3
Men's clothing, not elsewhere classified Shirts; collars, and nightwear Underwear and neckwear, men's Work shirts Women's clothing, not elsewhere classified Corsets and allied garments Millinery Handkerchiefs Curtains, draperies, and	132.1 134.1 139.0 99.7 105.1 105.6 112.4 114.8 111.3 128.4 133.2 133.5 169.5 170.6 170.8 102.7 102.5 103.0 93.1 86.7 100.9 107.8 108.2 104.5	3 108.8 5 109.8 3 164.4 104.4 9 92.0 4 101.1	231.9 235.8   167.5 138.8	256.0 309.9 352.4 351.0 233.1 193.1 289.3	281.3 304.0 248.2 355.9 230.5 157.4 251.2
bedspreads 2/ Housefurnishings, other than curtains, etc. Textile bags	144.3 152.4 154. 288.4 297.5 288. 240.6 236.1 234.	71274 <b>.3</b>	705.9 727.7	698.6	653.1
LEATHER AND LEATHER PRODUCTS 1/	104.3 104.5 108.3	115.3	234.3 223.3	236.8	259.6
Leather	94.6 92.8 95.1		210.9 202.0		1
Boot and shoe cut stock and findings Boots and shoes Leather gloves and mittens Trunks and suitcases	85.1 85.1 88.1 100.8 99.4 103.3 106.0 121.1 128.2 153.5 170.8 175.2	3 110.6 2 130.1	178.1 166.5 227.4 211.3 209.9 259.4 339.8 410.5	227.6	256.0 262.4
FOOD 1/.	146.6 152.9 163.	8 146.9	333.5 340.7	358.2	321:9
Slaughtering and meat packing Butter Condensed and evaporated milk Ice cream Flour Feeds, prepared Cereal preparations Baking Sugar refining, cane Sugar, beet Confectionery Beverages, nonalcoholic Malt liquors Canning and preserving	161.5 152.0 146. 174.0 172.1 176. 172.1 179.6 186. 135.7 137.8 148. 149.4 150.2 144. 167.5 167.3 169. 149.8 156.6 158. 132.2 134.3 135. 152.7 141.4 141. 93.0 217.0 215. 147.9 161.2 159. 165.7 169.7 180. 192.5 199.5 200. 108.5 129.9 192.	2 163.6 170.6 141.4 151.1 168.4 0 144.3 127.2 151.1 154.7 156.4 9 190.3 110.3	326.8 342.3 279.5 280.8 318.4 285.3 194.2 528.9 347.0 388.7 284.7 287.1 359.5 377.4 280.0 313.7	384.7 435.6 291.2 355.2 405.8 341.6 286.4 455.8 376.4 298.6 371.8	342.2 364.0 258.5 340.0 381.4 306.3 251.3 298.2 408.9 357.6 264.5 339.7 278.2
TOBACCO MANUFACTURES 1/	93.3 96.5 95.5	9 94.4	217.9 223.5	224.3	219.8
Cigarettes Cigars Tobacco (chewing and smoking) and shuff	124.2 127.9 128. 80.9 84.5 83. 78.0 77.2 78.	2 124.5	269.2 264.4 192.1 207.4	279.0 197.2	267.9 196.7

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manulacturing Industries - Continued

Industry group and industry			at inde	Pay-roll indexes				
Industry group and industry		1948		1947	;	1948		1947
	Dec.	Nov.	Oct.	Dec.	Dec.	Nov.	Oct.	Dec.
PAPER AND ALLIED PRODUCTS 1/	151.1	151.7	151.0	149.9	356.5	362.2	357.4	334.0
Paper and pulp	150.2	150.0	149.5	147.2	357.9	364.7	359.1	332.5
Paper goods, other	1.68.2	168.6	168.4	169.1		392.8		
Envelopes	151.0	151.2	148.0	142.6		318,4		
Paper bags			160.1			362.4		
Paper boxes			144.0			344.5		
PRINTING, PUBLISHING, AND ALLIED		· !		• •		•		
INDUSTRIES 1/	135.2	134.7	134.8	135.7	280.6	275.4	273.6	263.1
Newspapers and periodicals			127.0			253.3		
Printing; book and job	147.8	147.1	147.9	150.0	316.0	307.9	305.4	297.8
Lithographing	119.3	119.7	119.7	125.3	233.3	234.5	235.5	237.
Bookbinding	133.8	136.0	135.3	148.8	310.6	315.1	309.7	326.6
CHEMICALS AND ALLIED PRODUCTS 1/	207.0	207.8	208.1	205.4	462.3	461.9	460.1	424.]
Paints, varnishes, and colors	168.2	170.2	172.1	171.3	325.5	329.9	338.4	315.8
Drugs, medicines, and						:	:	1
insecticides	233.9	235.4	234.1	239.2	511.9	512.4	506.9	488.5
Perfumes and cosmetics	118.0	124.1	122.7	123.6	249.0	261.9	252.2	240.
Soap	173.5	173.9	178.4	167.4		405.3		
Rayon and allied products			132.3			300.1		
Chemicals, not elsewhere							:	
classified			300.3		639.7	637.5	628.6	580.8
Explosives and safety fuses			379.3		746.9	749.1	763.8	651.5
Compressed and liquefied gases			247.9		483.8	491.0	488.5	459.6
Ammunition, small-arms	167.7	171.5	173.7	172.7	395.2	403.7	409.4	411.9
Fireworks	208.0	220.6	227.4	243.5		544.2		
Cottonseed oil			179.0			555.4		
Fertilizers			152.9			415.3		
PRODUCTS OF PETROLEUM AND COAL 1/	155.4	157.7	152.7	155.5	346.4	354.9	344.8	313.
Petroleum refining	154.8	155.3	146.9	153.7	338.2	343.9	324.7	300.1
Coke and byproducts	148.7	148.2	147.8	138.3	353.3	346.7	340.5	294.8
Paving materials	108.8	113.6	117.2	109.4	259.6	253.3	276 3	224
	,	,	. ——   • •		ーノノマツ	・一ノン・コ	· • • • • • • • • • • • • • • • • • • •	535.

22.

TABLE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manui'acturing Industries - Continued

	Dmj	ртоумы	ne ind	exes .	Pay-roll indexe			
Industry group and industry	1	1948		1947	1948			1947
	Dec.	liov.	Oct.	Dec.	Dec.	Nov.	Oct.	Dec.
RUBEER PRODUCTS 1/	161.8	164.5	163.5	175.3	332.7	341.9	345.5	373.6
Rubber tires and inner tubes Rubber boots and shoes Rubber goods, other	1158.0	156.2	-154.0	151.4	299.6 388.2 370.0	377.2	369.0	367.1
miscellaneous industries 1/	177.0	184.9	187.8	187.5	405.0	420.8	422.6	405.1
Instruments (professional and scientific), and fire-control equipment	264.0	265.0	261.0	248.1	573 <b>.</b> 6	571.9	555.5	499.2
Photographic apparatus Optical instruments and	224.3	224,6	224.5	221.8	456.4	456.7	450.2	421.1
ophthalmic goods Pianos, organs, and parts Gemes, toys, and dolls Buttons Fire extinguishers	170.8 198.0 117.8	173.7 243.9 116.6	178.2 258.7	226.3 201.3 119.1	455.7 381.2 470.8 285.9 635.1	389.5 633.2 273.6	387.6 651.1 275.4	513.4 469.5 280.8

<sup>1/</sup> See footnote 1, table 8.

<sup>2/</sup> Curtains, draperies, and bedspreads - September 1948 pay roll revised to 379.9.

TABLE 11: Indexes of Employment and Weekly Pay Rolls in Selected Nonmanufacturing Industries

(1939 Average = 100)

	Emp.	loymen	t inde		Pay-roll indexes			
Industry group and industry	7	1948		1947		1948		1947
	Dec.	Nov.	Oct.	Dec.	Dec.	Nov.	Oct.	Dec.
MINING:	İ						•	
Coal								
Anthracite				91.5				
Bituminous coal	109.0	108.3	108.8	108.3	353.3	343.1	358.5	345.8
Metal				97.0				
Iron	152.7	152.1	155.4	148.0	358.0	355.0	371.6	301.
Copper				106.6				
Lead and zinc				95.8				
Gold and silver				32.5				
Miscellaneous				187.2				
Quarrying and nonmetallic	121.8	124.6	126.5	122.6	321.2	329.5	345.2	295
Crude petroleum and natural gas								
production	113.2	114.0	113.5	110.4	235.7	235•3	230.7	203.2
TRANSPORTATION AND PUBLIC UTILITIES:							- 1457-1-2687-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-1467-1-14	
Class I steam railroads 1/	132.3	134.6	136.2	134.8	2/	2/	2/	2/
Street railways and busses 3/	125.0	126.2	126.9	128.6	232 1	231.2	235.7	226
Telephone	202.2	202.1	201.0	195.0	330.7	340.7	338.8	313
Telegraph	90.0	00.7	01.6	97.6	212.6	215.3	217.L	207
Electric light and power	115.6	115.5	115.1	110.3	206.4	205.8	204.5	185.
TRADE: 4/								
Wholesale	117.8	118.3	118.1	117.1	224.4	224.2	222.5	213.0
Retail	129.0	119.4	116.0	130.2	250.4	228.4	223.5	237.
Food	114.6	113.8	113.8	117.4	234.8	229.6	227.4	221.
General merchandise	177.1	146.4	135.3	175.5	334.8	270.3	252.7	314.
Apparel	135.0	122.8	119.4	136.7	254.7	226.5	222.2	248.
Furniture and housefurnishings	97.6	93.8	92.2	97.4	201.0	182.5	184.3	192.
Automotive	113.7	111.7	110.0	109.9	224.7	219.0	215.6	204
Lumber and building materials	123.9	126.6	127.8	126.1	251.0	254.7	261.3	238.
SERVICE:					11.1			
Hotels (year-round) 5/	114.6	115.2	116.2	118.1	237.0	237 0	228 7	222
Power laundries	114 4	11L 8	116.7	120.9	227 7	206.0	227 6	223 4
Cleaning and dyeing				156.5				
answering them who made	A-TU-4	エノマ・ブ	+73+1	エンロ・ブ	C71+3	C07.3	200.0	-7C.

See footnotes, table 9, and explanatory notes, sections C, F, and G.

<sup>1/</sup> Source: Interstate Commerce Commission.

<sup>2/</sup> Not available.

August and September 1948 pay roll revised to 235.2 and 233.4. Includes all nonsupervisory employees and working supervisors.

<sup>5/</sup> Money payments only; additional value of board, room, uniforms, and tips, not included.

## EXPLANATORY NOTES

- Sec. A. Scope of Employment Adjustments The employment estimates shown in this report for the industry divisions (e.g., manufacturing, mining, etc.) and industry groups (e.g., iron and steel, electrical machinery, etc.) have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1945 bench-mark levels, thereby providing consistent series.
- Sec. B. Sources of Bench-Mark 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 bench-mark data. Data obtained from the Federal Security Agency are the main bases for 1946 bench marks. Bench marks 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. Adjustments of Production-Worker Estimates Data for the manufacturing major industry groups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series. Estimates for the individual manufacturing industries, formerly adjusted to data through 1945, are now being adjusted to 1946 bench-mark levels. As these adjustments are completed, they are published in this report and indicated by appropriate footnotes. In the nonmanufacturing industries, the entire series of mining industries have been adjusted to 1946 bench-mark levels.

Since the data shown in this report cover only the current months, a set of summary sheets for each industry presenting comparable figures from January 1939 to date, by months, will be provided upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

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 "bench mark" is either a complete count or an estimate with a satisfactory degree of accuracy. When a new bench mark becomes available, estimates

prepared since the last bench mark 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 comprovise 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 bench mark 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 bench mark to determine the monthly estimates of employment between bench-mark 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 estimates would be prepared as follows:

$$40,200 \times \frac{23,800}{23,200} = 41,240$$

In general, then, the month-to-month changes in employment reflect the fluctuations shown by establishments reporting to the Bureau of Labor Statistics.

Why Adjustments Are Necessary - Because reports are not immediately a allable from new firms, they are frequently introduced into the BLS 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. The most recent adjustments correct for the downward bias that had accumulated in the non-manufacturing series beginning January 1945 and in the manufacturing series beginning January 1946. Adjustments in some industry divisions were made in order to incorporate greater refinements in methodology and new source materials that have become available.

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 BIS estimates of employment in nonagricultural establishmen's differ from the Monthly Report of the Labor Force total
nor agricultural employment estimates in several important
respects.

For example: (1) The BLS estimates cover all full- and parttime 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, selfemployed 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 bench rarks 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. The approximate number of establishments, and workers covered, for each industry division is as follows:

Approximate Coverage of BLS Employment and Pay-Roll Sample

•	Number of estab-		es or production vorkers
*	lishments	: Number	: Percent of total
Manufacturing	34,300	7,542,000	56
Mining	2,700	407,000	52
Contract construction	12,500	480,000	55
Public utilities	7,500	933,000	78
Trade:			• -
Wholesale	12,800	360,000	20
Retail	37,900	1,097,000	25
Service:			/
Hotels (year-round) Power laundries and	1,200	131,000	35
cleaning and dyeing	1,600	67,000	21

Sec. H. Coverage of Employment Estimates - The employment estimates shown in tables 1, 2, 3, 6, and 7 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. The estimates and indexes shown in tables 8 and 10 refer to production and related workers as defined in the glossary, page ix.

Sec. I. State Estimates - State estimates are prepared in cooperation with various State Agencies as indicated on page v. 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 bench-mark data than others, and because varying methods of computation are used, the total of the State estimates differs from the national total (see tables 1 and 2). Because of these recent revisions the State estimates for manufacturing are not consistent with the unrevised data shown prior to June 1947 for total employment in nonagricultural establishments, by State. A number of States also make available more detailed industry data and information for earlier periods which may be secured directly upon request to the appropriate State Agency. Estimates of nonagricultural employment, by State, for those States which are now publishing such estimates are shown in table 6 and are consistent with the manufacturing estimates in table 7. As nonagricultural estimates for additional States become available, they will be shown in table 6.

The following publications are available upon request from the BIS Regional Offices or the Bureau's Washington Office:

Nonagricultural Employment, by State, 1943-1947; Employment in Manufacturing Industries, by State, 1943-1946; Estimates of Total Employment in Manufacturing Industries by State, 1947.

### COOPERATING STATE AGENCIES

Alabama - Dept. of Industrial Relations, Montgomery 5. Arizona - Unemployment Compensation Div., Employment Security Commission, Phoenix. Arkansas - Employment Security Div., Dept. of Labor, Little Rock. California - Div. of Labor Statistics and Research, Dept. of Industrial Relations, San Francisco 3. Connecticut - Employment Security Div., Dept. of Labor and Factory Inspection, Hartford 15. Delaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa. Florida - Unemployment Compensation Div., Industrial Commission, Tallahassee. Georgia - Employment Security Agency, Dept. of Labor, Atlanta 3. Idaho - Employment Security Agency, Industrial Accident Board, Boise. Illinois - Dept. of Labor, Chicago 1. Indiana - Employment Security Div., Indianapolis 4. Iowa - Employment Security Commission, Des Moines 8. Kansas - State Labor Dept., Topeka. Kentucky - Dept. of Economic Security, Frankfort. Louisiana - Div. of Employment Security, Dept. of Labor, Baton Rouge 4. Maine - Unemployment Compensation Commission, Augusta. Maryland - Dept. of Employment Security, Baltimore 2. Massachusetts - Div. of Statistics, Dept. of Labor and Industries, Boston 10. Michigan - Dept. of Labor and Industry, Lansing 13. Minnesota - Div. of Employment and Security, Dept. of Social Security, St. Paul 1. Missouri - Div. of Employment Security, Dept. of Labor and Industrial Relations, Jefferson City. Montana -- Unemployment Compensation Commission, Helena. Nebraska - Div. of Placement and Unemployment Insurance, Dept. of Labor, Lincoln 1. Nevada - Employment Security Dept., Carson City. New Hampshire - Unemployment Compensation Div., Bureau of Labor Concord. New Jersey - Dept. of Labor, Trenton 8. New Mexico - Employment Security Commission, Albuquerque. New York - Div. of Placement and Unemployment Insurance, Dept. of Labor, New York 17. North Carolina - Dept. of Labor, Raleigh. Oklahoma - Employment Security Commission, Oklahoma City 2. Pennsylvania - Federal Reserve Bank of Philadelphia, Philadelphia 1 (mfg.); Bureau of Research and Information, Dept. of Labor and Industry, Harrisburg (nonmfg.) Rhode Island - Div. of Census and Information, Dept. of Labor, Providence 2. Tennessee - Dept. of Employment Security, Nashville 3. Texas - Bureau of Business Research, University of Texas, Austin 12. Utah - Dept. of Employment Security, Industrial Commission, Salt Lake City 13. Vermont - Unemployment Compensation Commission, Montpelier. Virginia - Div. of Research and Statistics, Dept. of Labor and Industry, Richmond 21. Washington - Employment Security Dept., Olympia.

Wisconsin - Statistical Dept., Industrial Commission, Madison 3.

Wyoming - Employment Security Commission, Casper.

#### PLS REGIONAL OFFICES

- New England Regional Director, U. S. Bureau of Labor Statistics, Old South Bldg., 294 Washington St., Boston 33, Massachusetts (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont).
- North Atlantic Regional Director, U. S. Bureau of Labor Statistics, Room 1000, 341 Ninth Avenue, New York 1, New York (Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania).
- Southern Regional Director, U. S. Bureau of Labor Statistics, 1020 Grant Bldg., Forsyth & Walton Streets, Atlanta 3, Georgia (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia).
- North Central Regional Director, U. S. Bureau of Labor Statistics,

  Room 312, 226 W. Jackson Blvd., Chicago 6, Illinois (Illinois,
  Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri,
  Nebraska, North Dakota, Chio, South Dakota, West Virginia,
  Wisconsin).
- Pacific-Rocky Mountain Regional Director, U. S. Bureau of Labor Statistics, 550 Federal Office Bldg., Fulton and Leavenworth Streets, San Francisco 2, California (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Crogon, Utah, Washington, Wyoming).

## 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 government, public utilities, and private establishments, are excluded.
- Defense Agencies Covers civilian employees of the National Military

  Establishment, Maritime Commission, National Advisory Committee for
  Aeronautics, The Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Selective Service System,
  War Assets Administration, Office of Defense Transportation,
  National Security Resources Board, National Security Council.
- 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 4,
  but are excluded from the government data shown in tables 1 and 3.

Employment shown here for the executive branch differs from data published by the U. S. Civil Service Commission in the following respects: (1) Employment collected and published 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; (2) substitute rural mail carriers are excluded; (3) employment in December of each year includes the additional postal employees necessitated by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission are excluded; (5) the Fanama Railroad Company is shown here under Government corporations but is included under the executive branch by the Civil Service Commission.

- 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 covernment-owned and operated establishments and institutions (arsenals, navy yards, hospitals,
  etc.), government corporations, and government force-account
  construction. The data shown in tables 1 and 3 exclude fourthclass 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 weekly pay rolls Estimates of production-worker weekly pay rolls expressed as a percentage of the average weekly pay roll for 1939.
- Leave payments Payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 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 is paid in addition when bonds are cashed. Lump-sum payments for terminal leave, which were authorized by Public Law 350 of the 80th Congress, and were started October 1947, are excluded here and included under pay rolls.

- Manufacturing Covers only privately owned establishments; governmental manufacturing operations such as arsenals and navy yards are excluded.
- Military personnel Represents persons on active duty as of the first of the month. Reserve personnel are excluded if on inactive duty or if on active duty for a brief training or emergency period.
- Military pay rolls Represent estimated pay roll obligations based on an average monthly personnel count, plus lump-sum payments for terminal leave. Pay rolls for the Navy 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 or 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 manufacturing, mining, contract construction, transportation and public utilities, trade, finance, service, or government.
- Pay rolls Private pay rolls represent weekly pay rolls of both full- and part-time production and related workers (or nonsupervisory employees and working supervisors) who worked or received pay for any part of the pay period ending nearest the 15th of the month, 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. Excludes 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. In coal mining portal-to-portal pay is included.

Federal civilian pay rolls are for all employees before deductions for income tax, retirement, and bonds, and cover the working days in the calendar month.

- Production and related 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, products 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 sales 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 service. 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, salesdelivery, 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.