# EMPLIUYMETT and PAY RIILL.LS 

## DETAILED REPORT NOUEMBER 1948

United States Department of Labor Bureau of Labor Statistics

Prepared by
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Samuel Weiss. Chiet Buroan of Labor Statiatics

## EMPLOYMINT A解 PAY ROILS

Detailed Report
November 1948
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| Iata for the 2 most recent nionths |
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| shown are subfect to revision |
| Explang.tory notes outinnting briefly the |
| concepts, methodology, and sources used |
| in preparing data for this report appear |
| in the appendix. See pages 1 - ix. |

2. 

TABIE 1: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments, by Industry Division
(In thousands)

| Industry division | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Novomber | October | September | November | October |
| TOTAL | 45,741 | 45,890 | 45,889 | 44,918 | 44,758 |
| Manufacturing | 16,449 | 16,598 | 16,697 | 16,256 | 16,209 |
| Mining | 940 | 941 | 948 | 923 | 922 |
| Contract construction | 2,161 | 2,206 | 2,239 | 2,046 | 2,099 |
| Trensportation and public utilities | 4,066 | 4,090 | 4,092 | 4,077 | 4,097 |
| Trade | 10,035 | 9,889 | 9,733 | 9,886 | 9,684 |
| Finance | 1.720 | 1,723. | 1,732 | 1,673 | 1,671 |
| Service | 4,656 | 4,654 | 4,647 | 4,670 | 4,662 |
| Government | 5,714 | 5,789 | 5,801 | 5,387 | 5,414 |

See explanatory notes, sections A - H, and the glossary for definitions.

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

| Major industry group | 12 B |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Noramer | october | September | November | October |
| ALL MANUFACTURING | 16,449 | 16,598 | 16,697 | 16,256 | 16,209 |
| DURABIE GOODS | 8,301 | 8,319 | 8,294 | 8,194 | 8,126 |
| Iron and steel and their products | 1,952 | 1,955 | 1,945 | 1,908 | 1,896 |
| Electrical machinery | 736 | 731 | 725 | 772 | 763 |
| Machinery, except electrical | 1,560 | 1,569 | 1,569 | 1,569 | 1,565 |
| Transportation equipment, except automobiles | 588 | 583 | 572 | 578 | 552 |
| Automobiles | 978 | 983 | 985 | 961 | 964 |
| Nonferrous metals and their products | 474 | 473 | 469 | 479 | 472 |
| Lumber and timber basic products | 907 | 918 | 930 | 828 | 827 |
| Furniture and finished lumber products | 562 544 | 562 | 558 | 573 | 565 |
| Stone, clay, and glas | 544 | 545 | 541 | 526 | 522 |
| NONDURABLE GOODS | 8,148 | 8,279 | 8,403 | 8,062 | 8,083 |
| Textile-mill produots and other fiber manufactures | 1,367 | 1,371 | 1,384 | 1,391 | 1,368 |
| Apparel and other finished textile products. | 1,335 | 1,353 | 1,348 | 1,277 | 1,287 |
| Leather and leather products | 408 | 421 | 425 | 442 | 438 |
| Food | 1,833 | 1,931 | 2,069 | 1,769 | 1,833 |
| Tobacco manufactures | 103 | 1.03 | 101 | 104 | 103 |
| Paper and allied products | 493 | 491 | 487 | 479 | 476 |
| Printing, publishing, and allied induatrios | 735 | 735 | 725 | 726 | 720 |
| Chemicals and allied products | 786 | 789 | 785 | 777 | 773 |
| Products of petroleum and coal | 248 | 240 | 245 | 239 | 237 |
| Rubber products | 250 | 248 | 246 | $259{ }^{*}$ | 257 |
| Miscellaneous industries | 590 | 597 | 588 | 599 | 591 |

See explanatory notes, sections A-H, and the glossary for definitions.
4.

TABLE 3: Estimated Number of Wage and Salary Woricors in Selected Normanufactioring Induatries, by Major Industry Group
(In thourands)

| Major induetry srour | 195 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ITnvonter | October | Stetember | November | October |
| MINING | 940 | 941 | 9.48 | 923 | 922 |
| Anthracite | 82 | 82 | 82 | 81 | 81 |
| Bitumineus conl | 421 | 422 | 426 | 417 | 415 |
| Metal | 103 | 103 | 100 | 100 | 99 |
| Quarrying and nonmotallic | 95 | 96 | 98 | 96 | 97 |
| Crude petroleum and natural eas production I/ | 239 | 238 | 242 | 229 | 230 |
| transfortation and public UIILITIES | 4,066 | 4,090 | 4,092 | 4,077 | 4,097 |
| Transportation | 2,809 | 2,835 | 2,832 | 2,872 | 2,899 |
| Communication | 740 | 740 | 742 | 713 | 707 |
| Other public utilities | 517 | 515 | 519 | 492 | 491 |
| GOVERPMENT | 5,724 | 5,789 | 5,801 | 5,387 | 5,414 |
| Federal. | i, 856 | 1,875 | 1,873 | 1,751 | 1,744 |
| State and local | 3,858 | 3,914 | 3,928 | 3,636 | 3,670 |

Soe explanatory notes, sections A - H, and the glossary for definitions.
If Includes well drililing and rig building:

TABLE 4: Federal Civilian Empioyment and Pay Rolls in All Areas and in Continental United States, and Total Civilian Government Employment and Pay Rolls in Washington, D. C. i/
(In thousands)


See the glossary for definitions.
1/ Data for Central Intelligence Agency are excluded.
6.

TABIE 5: Personnel and Pey of the Military Branch of the Federal Government $1 /$
(In thousands)


See the glossery for definitions.
1/ Because of rounding, the individual figures may not add to group totals.
2/ Separate figuree for Army and Alr Force not available, combined data shown under Army .

TABLF 6: Estimated Number of Wage and Salery Workers In Honagricultural Establishments for Selected States
(In thousands)

| State | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | October | September | Angrom | Octiones | September |
| Arizona | 156 | 2.54 | 153 | 146 | 145 |
| California | 3,129 | 3,160 | 3,143 | 3,086 | 3,083 |
| Comnecticut | 776 | 771 | 761 | * 780 | - 771 |
| Georgia | 750 | 745 | 742 | 735 | 738 |
| Idaho | 134 | 132 | 122 | 126 | 127 |
| Illinois | 3,228 | 3,218 | 3,195 | 3,166 | 3,142 |
| Indiana. | 1,222 | 1,237 | 1,203 | 1,207 | 1,222 |
| Maine | 269 | 275 | 280 | 268 | 272 |
| Maryland | 719 | 720 | 717 | 681 | 678 |
| Messachusetts | 1,732 | 1,735 | 1,726 | *1,724 | 1,709 |
| Mirmesota | 813 | 825 | 823 | . 789 | 798 |
| Missouri | 1,158 | 1,149 | 1,146 | i,140 | 1,129 |
| Montana | 143 | 143 | 142 | 138 | 137 |
| . Nevada I/ | 48 | 49 | 50 | 48 | 49 |
| New Jersey | 1,594 | 1,604 | 1,599 | 1,573 | 1,574 |
| New Mexico | 129 | 129 | 128 | 118 | 120 |
| New York | 5,513 | 5,500 | 5,461 | 5,502 | 5,461 |
| Pennsylvania | 3,669 | 3,660 | 3,627 | 3,604 | 3,573 |
| Rhode Island | 288 | 288 | 285 | 293 | 286 |
| Tennessee | 752 | 756 | 754 | 704 | 704 |
| Texas | 1,771 | 1,758 | 1,746 | 1,675 | 1,665 |
| Utah | 188 | 189 | 178 | 179 | 184 |
| Vermont 1/ | 94 | 95 | 96 | -96 |  |
| Washingtion | 685 | 688 | 677 | * 673 | * 674 |
| Wisconsin | 1,003 | 1,018 | 1,007 | . 981 | 998 |

See explanatory notes, sections H and I.
1/ Does not include contract construction.

* Other months have been revised as follows:

Connecticut - November 1947 through July 1948 to $782,792,770,766,773,773$, 768,766 , and 762.
Massachusetta - November 1947 through February 1948 to 1,739, 1,773, 1,711, and 1,706.
Washington - November 1947 through January 1948 to 667,668 , and 651.
8.

TABLE 7: Estimated Number of Wage and Salary Workers in Manufacturing Industries, by State
(In thousands)

| Region and State | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | October | Septerber | August | October | September |
| NEW EIIGIAND: |  |  |  |  |  |
| Maine 1/ | 113.7 | 117.9 | 120.2 | 116.9 | 119.6 |
| New Hampshire | 82.1 | 82.1 | 83.6 | 82.9 | 82.1 |
| Vermont 1/ | 36.7 | 37.3 | 37.9 | 39.3 | 39.2 |
| Masseachusetts | 727.9 | - 731.3 | 725.6 | 741.6 | 732.5 |
| Rhode Island | 142.8 | 144.7 | 144.1 | 152.9 | 148.1 |
| Connecticut 1/ | 397.0 | 397.1 | 392.1 | 414.8 | 409.2 |
| MIDDLE ATIANTIC: |  |  |  |  |  |
| New York | 1,888.1 | 1,888.5 | 1,869.6 | 1,922.8 | 1,900.1 |
| New Jersey | 747.3 | 750.4 | 743.9 | 751.4 | 749.2 |
| Pennsylvania | 1,508.6 | 1,508.1 | 1,498.0 | 1,517.9 | 1,504.5 |
| EAST MORTH CEMIRAL: |  |  |  |  |  |
| Ohio | 1,225.4 | 1,230.6 | 1,224.5 | 1,244.7 | 1,243.8 |
| Indiana | 551.6 | 569.4 | 542.7 | 561.0 | 580.0 |
| Illinois | 1,243.3 | 1,243.8 | 1,231.0 | 1,257.0 | 1,249.0 |
| Michigan | 1,002.0 | 1,004.9 | 987.8 | 1,021.8 | 1,023.3 |
| Wisconsin 1/ | 431.8 | 445.9 | 434.5 | 433.3 | $1,452.0$ |
| WEST HORTS CEYMTRAL: |  |  |  |  |  |
| Minnesota 1/ | 201.9 | 210.8 | 210.0 | 200.2 | 210.6 |
| Iowa 1/ | 153.8 | 153.9 | 153.0 | 151.3 | 152.3 |
| Missouri 1/ | 349.8 | 347.3 | 349.1 | 351.9 | 348.7 |
| North Dakota | 7.0 | 6.8 | 6.9 | 6.7 | 6.7 |
| South Dakota | 11.9 | 11.6 | 11.7 | 11.4 | 11.3 |
| Nebraska | 43.6 | 42.4 | 43.1 | 45.1 | 43.1 |
| Kansas | 85.3 | 84.7 | 84.5 | 79.8 | 79.4 |
| SOUTH ATLAMTIC: |  |  |  |  |  |
| Delaware | 46.3 | 48.9 | 48.2 | * 45.8 | 48.2 |
| Maryland | 235.3 | 242.4 | 239.2 | 229.3 | 232.4 |
| District of Columbla | 16.9 | 17.0 | 16.7 | 17.5 | 17.5 |
| Virginia | 218.4 | 217.7 | 214.5 | - 217.0 | 214.5 |
| West Virginia | 134.1 | 132.9 | 133.7 | 133.4 | 132.8 |
| North Carolina | 370.8 | 375.4 | 378.9 | 374.1 | 368.1 |
| South Carolina | 193.8 | 194.3 | 196.9 | 194.8 | 192.3 |
| Georgia 1// | 280.0 | 880.1 | 280.7 | 280.3 | 281.6 |
| Florida I/ | 90.7 | 89.9 | 88.2 | 90.4 | 88.6 |

TABLE 7: Estimated Number of Wage end Salary Workers in Manufacturing Industries, by State - Continued
(In thousands)

| Region and State | 1248 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | October | September | August | Octobor | Soptember |
| EAST SOUIH CENTRAL: |  |  |  |  |  |
| Kontucky | 129.2 | 128.1 | 127.4 | 130.3 | 128.2 |
| Tennessee 1/ | 256.3 | 256.3 | 258.9 | 254.1 | 252.6 |
| Alabama 15 | 229.1 | 227.1 | 228.3 | 227.9 | 225.4 |
| Mississippi | 87.2 | 87.4 | 90.6 | 94.1 | 95.0 |
| WEST SOUTH CENIRAL: |  |  |  |  |  |
| Arkansas 1/ | 80.2 | 79.5 | 77.6 | 76.7 | 81.2 |
| Louisiana $1 /$ | 153.9 | 155.9 | 155.9 | 149.2 | 149.5 |
| Oklahoma 17 | 67.8 | 67.2 | 66.9 | 64.3 | 64.1 |
| Texas | 352.4 | 351.4 | 353.6 | 339.8 | 337.9 |
| MOUNTAIN: |  |  |  |  |  |
| Montana | 18.8 | 18.1 | 18.0 | 19.1 | 18.1 |
| Idaho 1/ | 26.0 | 24.8 | 20.1 | 22.4 | 22.6 |
| Wyoming | 7.4 | 6.8 | 6.8 | 7.1 | 6.8 |
| Colorado | 60.2 | 58.3 | 56.9 | 60.6 | 57.9 |
| New Mexico 1/ | 10.1 | 10.4 | 10.5 | 8.8 | 9.1 |
| Arizona 1/ | 15.2 | 14.0 | 15.2 | 14.0 | 13.8 |
| Utah | 31.6 | 31.1 | 27.4 | 29.4 | 30.1 |
| Nevada 1/. | 3.4 | 3.5 | 3.6 | 3.5 | 3.4 |
| PACIFIC: |  |  |  |  |  |
| Weshington | 191.6. | 190.5 | 183.1 | 183.9 | 186.7 |
| Oregon | 118.7 | 121.5 | 121.2 | 117.2 | 122.2 |
| California | 767.6 | 801.7 | 771.6 | 736.4 | 744.8 |

See explanatory notes, sections H and I.

1) Series based on Standurd Industrial Classification.
*. Other months have been revised as follows:
Delaware - November 1947 to 45.8.
VIrginia - November and December 1947 to 217.3 and 215.1.
10. 

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | November | October | September | November | October |
| ALL MAMUFACTURING | 13,234 | 13,378 | 13,488 | 13,176 | 13,143 |
| DURABLE COODS NONDURABIE GOODS | $\begin{aligned} & 6,809 \\ & 6,425 \end{aligned}$ | 6,824 6,554 | 6,803 6,685 | 6,746 6,430 | $\begin{aligned} & 6,681 \\ & 6,462 \end{aligned}$ |
| Durable goods |  |  |  |  |  |
| IRON AND STHEL AND THETIR PRODUCIS 1 d | 1,654 | 1,657 | 1,648 | 1,619 | 1,609 |
| Blast furnaces, steel works, and rolling mills | 538.2 | 535.0 | 535.1 | 505.6 | 505.1 |
| Gray-iron and semisteel castings | 115.2 | 115.6 | 114.9 | 118.9 | 118.9 |
| Malleable-iron castings | 38.6 | 38.5 | 38.6 | 36.7 | 36.1 |
| Steel castings, | 75.1 | 75.0 | 74.7 | 69.9 | 69.6 |
| Caist-iron plpe and fittings | 29.9 | 29.3 | 29.4 | 28.3 | 28.1 |
| Tin cans and other tinware | 47.0 | 48.7 | 50.1 | 47.1 | 47.6 |
| Wire drawn from purchased rods | 28.7 | 29.1 | 28.6 | 31.2 | 31.6 |
| Wirework | 42.1 | 42.1 | 42.8 | 40.5 | 40.6 |
| Cutlery and edge tools | 25.0 | 24.3 | 23.9 | 24.8 | 24.5 |
| Tools (except edge tools, machine tools, files, and saws) | 24.5 | 24.6 | 24.7 | 25.4 | 25.0 |
| Hardware | 54.2 | 53.9 | 53.5 | 53.8 | 52.9 |
| Plumbers' supplies | 42.6 | 42.4 | 41.3 | 39.6 | 38.7 |
| Stoves, oil burners, and heating equipment; not elsewhere classified | 87.6 | 93.3 | 92.0 | 96.2 | 95.7 |
| Steam and hót-wator heating apparatus and steam fittings | 66.1 | 66.6 | 65.3 | 65.0 | 64.9 |
| Stamped and onameled ware and ealvanizing | 117.6 | 116.5 | 114.3 | 122.5 | 121.2 |
| Fabricated'structural and ornamentar motalwork | . 65.8 | 66.3 | 65.0 | 63.6 | 62.9 |
| Metal doore, sash, frames, molding, and trim | 11.3 | 11.2 | 11.0 | 10.7 | 10.5 |
| Bolts, nuts, weshers, and rivets | 28.4 | 28.3 | 28.1 | 28.4 | 27.8 |
| Forgings, iron and steel | 38.2 | 37.4 | 36.9 | 36.8 | 36.7 |
| Wrought pipe, welded and heavyriveted | 19.7 | 19.9 | 19.8 | 18.9 | 18.4 |
| Screw-machine products and wood screws | 35.5 | 35.5 | 35.0 | 35.5 | 35.4 |
| Steel barrels, kegs, and drums | 7.7 | 7.9 | 8.0 | 8.0 | 8.0 |
| Firearms | 22.4 | 22.1 | 21.7 | 19.3 | 19.0 |
| ELECTRICAL MACHINERY 1/ | 557 | 553. | 548 | 595 | 588 |
| mlectrical equipment | 367.9 | 367.1 | 368.6 | 391.4 | 388.0 |
| Radios and phonographs | 95.9 | 93.1 | 89.7 | 106.3 | 104.3 |
| Communication equipment | 93.5 | 92.4 | 89.7 | 97.5 | 95.6 |

See explanatory notes, sections C, D, and G, and the glossary for definitions.

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yovember | October | September | November | October |
| MACHINERY, EXCEPT EIECTRICAL 1/ | 1,204 | 1,209 | 1,208 | 1,218 | 1,214 |
| Machinery and machine-shop products | 505.6 | 506.7 | 509.0 | 515.1 | 516.6 |
| Engines and turbines | 52.5 | 52.1 | 50.5 | 53.0 | 53.3 |
| Tractors | 60.9 | 59.8 | 59.2 | 58.6 | 58.0 |
| Agricultural machinery, excluding tractors | 76.2 | 75.9 | 72.8 | 68.0 | 67.5 |
| Machine tools: | 47.5 | 47.6 | 48.0 | 51.1 | 52.1 |
| Machine-tool accessories | 54.5 | 54.7 | 55.3 | 55.8 | 55.6 |
| Textile machinery | 41.4 | 41.6 | 41.8 | 39.8 | 39.3 |
| Pumps and pumping equipment | 69.1 | 68.9 | 69.1 | 74.3 | 74.2 |
| Typewriters | 18.9 | 20.6 | 21.0 | 25.2 | 24.8 |
| Cash registers; adding, and calculating machines | 44.1 | 44.2 | 44.9 | 44.1 | 43.0 |
| Washing machines, wringers, and driers, domestic | 15.5 | 15.7 | 15.7 | 15.8 | 15.3 |
| Sewing machines, domestic and industrial | 14.9 | 14.8 | 14.6 | 13.0 | 12.6 |
| Refrigerators and refrigeration equipment | 79.5 | 81.0 | 81.7 | 80.1 | 79.7 |
| TRANSPORTATION EQUIPMENT, EXCEPT AUTOMOBILES | 453 | 449 | 439 | 452 | 427 |
| Locomotives | 26.5 | 26.6 | 26.5 | 26.0 | 25.9 |
| Cars, electric- and steam-railroad | 56.1 | 54.5 | 54.5 | 56.8 | 55.2 |
| Aircraft and parts, excluding aircraft engines | 149.8 | 145.3 | 138.5 | 133.4 | 133.9 |
| Aircraft engines | 28.0 | 27.5 | 26.7 | 25.9 | 26.2 |
| Shipbuilding and boatbuilding | 94.5 | 97.3 | 97.5 | 117.6 | 100.2 |
| Motorcycles, bicycles, and parts | 13.6 | 13.8 | 13.3 | 14.4 | 14.1 |
| AUTOMOBILES | 779 | 784 | 788 | 766 | 764 |
| NONFERROUS METALS AND THEIR PRODUCTS 1/ | 404 | 403 | 399 | 410 | 404 |
| Smelting and refining, primary, of nonferrous metals | 41.4 | 41.2 | 40.2 | 39.7 | 39.7 |
| Alloying; and rolling and drawing of nonferrous metals, except aluminum | 54.5 | 54.6 | 54.3 | 52.9 | 53.0 |
| Clocks and watches | 28.2 | 28.8 | 28.6 | 28.4 | 28.1 |
| Jewelry (precious metals) and jewelers' findings | 27.5 | 27.5 | 27.1 | 28.1 | 27.5 |
| Silverware and plated ware | 28.3 | 28.1 | 27.7 | 26.5 | 26.1 |
| Lighting equipment | 31.8 | 31.9 | 32.2 | 34.3 | 34.9 |
| Aluminum manufactures | 40.8 | 40.2 | 38.5 | 43.6 | 43.1 |
| Sheet-metal work, not elsewhere classified | 37.1 | 37.3 | 37.0 | 40.6 | 40.1 |

See explanatory notes, sections C, D, and G, and the glossary for definitions.

TABIIH 8: Estimated Vumber of Production Worisers in Menufacturing Industries - Contid.
(In thousanda)

| Industry eroup and industry | 7943 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LUMBER AND TIMBER EASIC RROXVCTS I/ | 821 | 831 | 843 | 751 | 751 |
| Sawmille and logeing cermps | 667.2 | 678.2 | 691. ${ }^{\text {d }}$ | 612.8 | 616.3 |
| Planing and. plywobd rills | 154.1 | 152.8 | 152.1 | 137.7 | 134.5 |
| FURNITURE AND FINTOIFD LURBER PRODUCTS 1/. | 470 | 470 | 466 | 483 | 475 |
| Mettressea and bodsprings | 35.7 | 37.1 | 36, 8 | 33.2 | 37.2 |
| Furnitura | 256.5 | 255.6 | 252.5 | 259.3 | 253.8 |
| Wooden boxes, other then cigar | 35.4 | 35.0 | 34.4 | 37.6 | 38.3 |
| Caskets and other morticiana goods | 29.5 | 19.2 | 19.5 | 20.9 | 20.7 |
| Wood preserving | 27.0 | 17.1 | 17.3 | 18.6 | 19.0 |
| Wooi, turned end shrned. | 33.9 | 34.5 | 34.3 | 34.5 | 33.6 |
| STONL, CLAY, ARD GLASS PRODUCTS If | 467 | 468 | 464 | 452 | 449 |
| Glase and glaeswere | 121.8 | $223 . ?$ | 122.9 | 123.4 | 122.7 |
| Glase producte nede from purchased glass | 34.7 | 14.4 | 13.9 | 14.6 | 14.3 |
| Cement | 37.2 | 36.9 | 36.2 | 35.5 | 35.4 |
| Brick, tile, and torra cotta | 83.5 | 83.5 | 83.6 | 77.2 | 76.8 |
| Pottery and relatea produeta | 61.5 | 61.0 | 60.3 | 53.3 | 57.0 |
| Gypsum | 7.8 | 7.9 | 7.8 | 7.6 | 7.4 |
| Wallboard, plester (except ejpsum), and mineral wool | 14.9 10.7 | 14.8 | 14.7 10.8 | 14.5 10.3 | 14.3 10.6 |
| Marble, granite, slate, and other products | 10.7 | 10.7 | 10.0 13.9 | 10.3 | 10.6 18.4 |
| Abrasives . | 20.5 | 20.6 | 20.5 | 19.1 | 19.3 |
| Asbestos products | 25.6 | 25.7 | 24.9 | 2 H .7 | 24.9 |
| Nondurable gouds |  |  |  |  |  |
| TEXTILIR-MILL PROXUCTS AID CIHER FIBER MATUFACIURIS I/ | 1,24.5 | 1,249 | 1,261 | 1,271 | 1,249 |
| Cotton manufacture:s, weept emillwaros | 508.9 | 511.4 | 516.9 | 516.9 | 508.2 |
| Cotton amallwares | 13.3 | 13.4 | 13.4 | 13.9 | 13.7 |
| Silk and rayon goods | 122.0 | 122.4 | 122.1 | 114.8 | 113.4 |
| Woolen and worsted manueactures, excopt dyoing and intishirg | 158.2 | 159.6 | 165.8 | 174.2 | 170.9 |
| Hosiory | 142.3 | 141.7 | 141.7 | 146.3 | 143.1 |
| Knitted cloth | 11.5 | 11.3 | 11.1 | 11.5 | 11.2 |
| Knitted outervear and knitted gloves | - 33.9 | 32.8 | 31.8 | 33.7 | 33.0 |
| Knitted unierwear | 46.0 | 47.9 | 49.1 | 51.4 | 50.4 |
| Dyetng: end finisining textiles, including woolen and worsted | 91.9 | 91.5 | 91.1 | 92.2 | 91.4 |
| Carpets end ruge, viool | 40.7 | 40.8 | 40.7 | 36.9 | 36.1 |
| Hata, fur-felt | 12.0 | 11.5 | 12.5 | 13.6 | 13.6 |
| Jute goods, excent felts | 4.3 | 4.1 | 4.0 | 3.0 | 3.0 |
| Cordage and twino | 15.1 | 14.9 | 15.3 | 16.1 | 15.4 |

See explenatory notos, sections C, D, and G, and the elooacyy for deflnitions.
(In thousands)

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | November: | October | September | November | October: |
| APPAREL AND OTHER FINISHED TEXTILE FRODUCTS | 1,159 | 1,175 | 1,173 | 1,117 | 1,127 |
| Men's clothing, not elsewhere classified | 308.0 | 319.2 | 320.4 | 309.2 | 306.9 |
| Shirts, collars, and nightwear | 77.7 | 78.1 | 77.4 | 81.1 | 79.3 |
| Underwear and necinvear, men's | 19.4 | 18.8 | 18.1 | 18.1 | 17.3 |
| Work shirts | 18.8 | 18.9 | 18.2 | 15.5 | 15.8 |
| Women's clothing, not elsewhere classifiod | 488.3 | 488.8 | 490.3 | 452.1 | 462.3 |
| Corsets and allied earments | 19.4 | 19.3 | 19.0 | 19.4 | 18.8 |
| Millinery | 22.2 | 25.7 | 24.8 | 21.6 | 25.2 |
| Handkerchiefs | 5.5 | 5.3 | 5.0 | 5.2 | $5: 1$ |
| Curtains, draperies, and bedspreads | 27.1 | 27.4 | 27.9 | 32.1 | 30.9 |
| Housefurnishings, other than curtains, etc. | 33.0 | 32.1 | 31.4 | 30.0 | 31.6 |
| Textile bags | 29.9 | 29.7 | 29.2 | 28.4 | 28.2 |
| IEATHER AND LPATEER PRODUCIS I/ | 363 | 376 | 379 | 396 | 393 |
| Leather | 46.4 | 47.7 | 48.0 | 50.2 | 50.2 |
| Boot and shoe cut stock and findings | ( 17.0 | 17.6 | 17.9 | 19.8 | 19.6 |
| Boots and shoes | 229.5 | 238.5 | 241.0 | 251.1 | 248.8 |
| Leather gloves and mittens | 12.3 | 12.8 | 13.0 | 13.2 | 13.1 |
| Trunks and suitcases | 14.2 | 14.6 | 14.3 | 14.8 | 14.4 |
| FOOD $1 /$ | 1,306 | 1,400 | 1,537 | 1,268 | 1,353 |
| Slaughtering and meat packing | 205.3 | 197.7 | 195.2 | 203.9 | 194.2 |
| Butter | 34.6 | 35.5 | 36.6 | 33.9 | 34.8 |
| Condensed and evaporated mflk | 19.5 | 20.3 | 21.1 | 19.5 | 20.5 |
| Ice cream | 24.3 | 26.2 | 29.6 | 26.3 | 27.8 |
| Flour | 41.7 | 40.1 | 41.5 | 42.1 | 42.0 |
| Feeds, prepated | 28.9 | 29.2 | 29.3 | 28.5 | 28.9 |
| Cereal preparations | 13.1 | 13.2 | 13.2 | 12.8 | 12.8 |
| Baking | 255.7 | 258.0 | 253.2 | 246.1 | 245.4 |
| Sugar refining, cane | 22.5 | 22.4 | 25.0 | 24.8 | 24.3 |
| Sugar, beet | 24.5 | 24.3 | 10.6 | 27.4 | 27.6 |
| Confoctionery $2 /$ | 89.7 | 88.9 | 81.1 | 87.0 | 83.5 |
| Beverages, nonalcoholic | 40.4 | 43.0 | 46.6 | 38.2 | 39.7 |
| Malt liquors | 80.7 | 81.3 | 86.0 | 80.6 | 81.8 |
| Canning and preserving | 196.9 | 291.7 | 444.4 | 190.1 | 265.2 |
| TOBACCO MANUFACIURES i/ | 90 | 90 | 88 | 90 | 89 |
| Cigarettes | 35.1 |  | 34.9 | 34.0 | 33.4 |
| Cigars | 47.2 | 46.5 | 44.9 | 47.8 | 47.0 |
| Tobaceo (chowing and amoking) and snuff | 7.8 | 7.9 | 7.8 | 8.2 | 8.2 |

See explanatory notes, sections C, D, and G, and the glossary for definitions.
14.

TABLE 8: Estimated Number of Froduction Workers in Monufacturing Industries - Contrd.
(In thoueands)

| Induetry group and induetry | 1048 |  |  | 1247 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inowemer | Octicober | Septeuber | November | Octobar |
| PAPER AND ALITED PRODUCSS 1/ | 433 | 401 | 398 | 394 | 392 |
| Paper and pulp | 206.6 | 206.0 | 206.7 | 200.7 | 200.2 |
| Paper goods, other | 63.6 | 63.5 | 62.7 | 63.3 | 63.0 |
| Envelopos | 13.0 | 12.8 | 12.6 | 12.4 | 12.2 |
| Pajer bags | 17.0 | 17. 3 | 17.8 | 17.9 | 17.9 |
| Paper boxes | 101.5 | 99.8 | 97.0 | 99.0 | 98.1 |
| PRINITIG, FUBLISHITMG, ARD ALLIIED ImDUSIRIES 1/ | 442 | 442 | 436 | 444 | 441 |
| Newspepers and periodicals | 151.0 | 150.7 | 149.4 | 145.1 | 144.6 |
| Printing; book and job | 187.8 | 188.8 | 185.4 | 190.6 | 189.3 |
| Lithosciaphing | 31.4 | 31.4 | 31.1 | 33.0 | 32.6 |
| Bookibinding | 35.1 | 34.9 | 34.4 | 38.7 | 38.5 |
| CEPMICALS ARD ALLITED PRODUCTS 1/ | 597 | 600 | 597 | 589 | 586 |
| Paints, varnishes, and colors | 48.1 | 48.7 | 48.6 | 48.0 | 47.6 |
| Drugs, medicines, and insecticides | 64.8 | 64.4 | 64.2 | 66.4 | 67.1 |
| Perfumes end cosmetics | 12.9 | 12.8 | 12.5 | 13.9 | 13.5 |
| Soap | 26.5 | 27.2 | 27.0 | 25.8 | 25.3 |
| Rayon and allied producta | 63.9 | 63.9 | 63.7 | 63.1 | 62.9 |
| Chemicals, not elsewhere classified | 209.6 | 210.0 | 210.9 | 205.5 | 204.3 |
| Explosives and saioty fuses | 27.4 | 27.7 | 27.6 | 24.8 | 24.1 |
| Compressed and liquefied gases | 9.5 | 9.9 | 9.8 | 9.7 | 9.7 |
| Aumunition, emall-arms | 7.4 | 7.4 | 7.5 | 7.2 | 7.2 |
| Fineworks | -2.6 | 2.6 | 2.8 | 2.9 | 2.9 |
| Cottonsead oil | 26.5 | 25.6 | 23.4 | 24.5 | 24.9 |
| Fertilizers | 28.7 | 28.8 | 28.7 | 29.2 | 29.3 |
| PRODUCIS OF PETROLEUM AND COAL $1 /$. | 168 | 163 | 168 | 165 | 165 |
| Petroleum refining | 115.0 | 108.4 | 114.0 | 112.3 | 112.4 |
| Colro and byproducts | 32.2 | 32.1 | 32.4 | 30.0 | 29.6 |
| Paving materials | 2.8 | 2.9 | 2.9 | 3.4 | 3.4 |
| Roofine materials | 17.2 | 28.1 | 18.0 | 18.5 | 18.4 |

See explenatory netos, sections $C, D$, and $G$, and the giossary for definitions.

TABLE 8: Estimated Number of Production Workers in Manufacturing Industries - Cont ${ }^{1}$ d. (In thousands)

| Industry group and Industry | 1948 |  |  | 1247 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | November | October | September | November | October |
| RUBBER PRODUCTS 1/ | 199 | 198 | 197 | 210 | 208 |
| Rubber tires and inner tubes | 91.2 | 90.0 | 91.4 | 102.4 | 102.0 |
| Rubber boots and shoes | 23.2 | 22.9 | 22.5 | 22.0 | 21.7 |
| Rubber goods, other | 84.5 | 84.7 | 82.9 | 86.1 | 84.0 |
| MISCELLANEOUS INDUSITRIES 1/ | 453 | 460 | 451 | 466 | 459 |
| Instruments (professional and scientific), and fire-control equipment | 30.0 | 29.5 | 29.0 | 27.8 | 28.0 |
| Photographic apparatus | 39.7 | 39.7 | 39.7 | 38.8 | 38.7 |
| Optical instruments and ophthalmic goods 2/ | 26.1 | 26.4 | 26.1 | 27.6 | 27.5 |
| Planos, organs, and parts | 13.5 | 13.9 | 13.5 | 17.8 | 17.4 |
| Games, toys, and dolls | 47.1 | 50.0 | 48.1 | 43.4 | 42.3 |
| Buttons | 13.1 | 13.1 | 13.0 | 12.7 | 12.1 |
| Fire extinguishers | 2.9 | 2.9 | 2.8 | 2.7 | 2.8 |

See explanatory notes, sections C, D, and G, and the glossary for definitions.
$1 /$ Estinates 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.

More recently adjusted data for the individual industries comprising the major industry groups listed below supersede data shown in publications dated prior to:
Major Industry group... : Mimeographed release:- Monthly Labor Review

Iron and steel and their
products
Stone, clay, and glass products

December 1948
December 1948

January 1949
January 1949

2/ Data for earlier months in 1948 have been revised as follows: Confectionery - June through August to 64.5, 63.0, and 71.6. Optical instruments and ophthainic goods - August to 26.0 .
16.

CABIE 9: Estinated Iumber of Emplojees in Solected Nonmanufacturing Industries 1/
(In thousands)

| Industry group and industry | J.948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | November | October | Septembor | November | October |
| MINING: $2 /$ |  |  |  |  |  |
| Conl |  |  |  |  |  |
| Anthrecite | 77.0 | 76.6 | 77.5 | 76.2 | 76.2 |
| Bituminous coal. | 403 | 404 | 408 | 399 | 397 |
| Metal | 88.0 | 92.0 | 89.4 | 89.4 | 88.7 |
| Iron | 32.1 | - 32.8 | 33.4 | 32.0 | 32.4 |
| Copper | 23.1 | 27.0 | 26.9 | 26.1 | 25.8 |
| Lond and zinc | 16.6 | 16.2 | 13.0 | 15.4 | 14.9 |
| Goia and aityer | 8.2 | 8.1 | 8.2 | 8.1 | 8.0 |
| Misceilaneous | 7.9 | 7.9 | 7.9 | 7.8 | 7.6 |
| Quarrying and nonmetallic | 85.3 | - 86.6 | 87.8 | 86.4 | 87.3 |
| Crude petroleưa and natioral gas production $3 /$. | 130.4 | 129.9 | 133.2 | 126.4 | 127.1 |
| TRANSPORIATTOM AND PUBLIC UTILITIES: |  |  |  |  |  |
| Class I steam railroads 4/ | 1,329 | 1,345 | 1,350 | 1,340 | 1,357 |
| Street railways and buasos 5/' | 245 | 246 | 248 | 219 | 249 |
| Telephone | 642 | 642 | 643 | 614 | 609 |
| Telegraph 6/ | 34.2 | 34.5 | 34.7 | 36.6 | 36.9 |
| Electric light and power | 282 | 281 | 284 | 268 | 267 |
| SERVICE: |  |  |  |  |  |
| Hotels (year-round) | 371 | 375 | 373 | 378 | 380 |
| Power laundries 2/ | 225 | 229 | 238. | 238 | cılı |
| Cleaning and cyeting a/ | 87.5 | 89.4 | 88.7 | 92.7 | 95.6 |

See explanatony notes, sections C, D, and G, and the glossary for definitions.
1/ Unleas otherwise noted, data include all employees.
2/ Includes production and related workers only.
3/ Does not include well drilling or ric building.
4/ Inclucee all exployees at iniddle of rionth. Excluces employees of switching and terminal compenies. Class I steam railroads include thrse with over $\$ 1,000,000$ annual revenue. Source: 'Interstete Cormorce Cominsion.
5/ Includes private and municipal street-railwey conpanies and affiliated, subsidiary, or successer trolley-bus and motor-bue compenies.
6/ Incluçes all land-line erployees except those compensated on a compission basis. Exclucies general and divisional headquarters personnel, trainees in school, and messengers.

| Industry group and industry | Fruployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 | 1948 |  |  | 1947 |
|  | Nov. | Oot. | Sépt. | Nov. | Nov. | Oct. | Sept. | Nov. |
| ALL MANUFACTURING | 161.5 | 163.3 | 164.6 | 160.8 | 378.1 | 382.1 | 382.2 | 353.4 |
| IURABIT COODS | 188.6 | 189.0 | 188.4 | 186.8 | 428.3 | 434.1 | 423.7 | 395.0 |
| NONDUKABLE GOODS | 140.3 | 143.1 | 145.9 | 140.4 | 329.1 | 331.2 | 341.6 | 312.8 |
| Durable goods |  |  |  |  |  |  |  |  |
| IRON AND STIEL AND THEIR PRODUCTS I/ | 166.8 | 167.1 | 166.2 | 163.3 | 373.6 | 376.0 | 365.0 | 335.1 |
| Blast furnaces, steel works, and rolling mills | 138.5 | 137.7 | 137.7 | 130.2 | 304.7 | 305.0 | 300.3 | 255.1 |
| Gray-iron and semisteel castings | 185.1 | 285.8 | 184.7 | 191.2 | 429.2 | 437.9 | 433.3 | 419.9 |
| Malleable-iron castings | 200.8 | 200.3 | 200.8 | 191.1 | 505.7 | 512.2 | 493.1 | 459.6 |
| Steel castings | 234.2 | 234.1 | 233.1 | 218.0 | 528.0 | 523.2 | 504.4 | 451.7 |
| Cast-iron pipe and fittings | 169.9 | 166.3 | 1.67 .0 | 160.6 | 470.9 | 445.7 | 437.1 | 381.4 |
| In cans and other tinware | 148.0 | 153.2 | 157.7 | 148.3 | 334.7 | 351.6 | 391.7 | 320.7 |
| Wire drawn from purchased rods | 130.5 | 132.3 | 130.3 | 141.8 | 269.7 | 274.1 | 263.8 | 270.1 |
| Wirework | 138.4 | 138.4 | 140.8 | 133.2 | 331.6 | 333.2 | 322.5 | 297.4 |
| Cutiery and edge tools | 162.1 | 157.7 | 154.9 | 161.0 | 405.8 | 392.1 | 374.9 | 384.1 |
| Tools (except edge tools, machine tools, files, and saws) | 160.3 | 160.8 | 161.6 | 166.1 | 373.8 | 376.3 | 366.3 | 363.0 |
| Hardware | 152.1 | 151.2 | 150.0 | 150.8 | 363.9 | 359.7 | 349.2 | 345.7 |
| Plumbers' supplies | 162.4 | 161.7 | 157.2 | 150.9 | 376.9 | 381.9 | 338.7 | 324.1 |
| Stoves, oil burners, and heating equipment, not elsewhere classified | 178.3 | 189.8 | 187.2 | 195.8 | 400.0 | 448.4 | 426.7 | 425.4 |
| Steam and hot-water heating apparatus and steam fittings | 204.7 | 206.4 | 202.3 | 201.2 | 466.4 | 476.4 | 447.6 | 441.1 |
| Stamped and enameled ware and galvanizing | 198.8 | 195.9 | 193.1 | 207.0 | 491.9 | 482.6 | 453.7 | 477.1 |
| Fabricated structural and ornamental metalwork | 185.3 | 186.7 | 183.0 | 179.0 | 406.2 | 409.4 | 371.9 | 368.6 |
| Metal doors, sash, frames, molding, and trim | 145.7 | 144.1 | 142.1 | 138.3 | 342.7 | 340.1 | 340.4 | 298.1 |
| Bolts, nuts, washers, and rivets | 186.3 | 185.6 | 184.6 | 186.5 | 433.6 | 428.0 | 415.5 | 391.5 |
| Forgings, iron and steel | 233.2 | 228.1 | 225.1 | 225.0 | 544.8 | 533.6 | 513.4 | 484.8 |
| Wrought pipe, welded and heavy-riveted | 220.7 | 223.6 | 222.2 | 212.5 | 515.8 | 505.1 | 487.1 | 443.1 |
| Screw-machine products and wood screws | 196.8 | 196.8 | 194.3 | 196.8 | 445.2 | 453.0 | 433.1 | 421.7 |
| Steel barrels, kegs; and drums | 119.5 | 121.5 | 124.2 | 123.5 | 324.3 | 326.4 | 306.9 | 308.6 |
| Firearma. | 421.3 | 414.9 | 406.4 | 361. 6 | 1018.0 | 998.7 | 963.1 | 796.1 |
| ELECIRICAL MACHINERY I/ | 215.1 | 213.4 | 211.5 | 229.7 | 479.2 | 474.4 | 465.4 | 471.9 |
| Electrical equipment | 201.4 | 201.0 | 201.8 | 214.3 | 447.8 | 445.4 | 442.2 | 436.3 |
| Radios and phonographs | 218.1 | 211.7 | 203.8 | 241.7 | 539.7 | 509.1 | 489.4 | 539.6 |
| Communication equipment | 288.0 | 284.7 | 276 | 300.3 | 587.6 | 591.6 | [57.3 | 597.8 |

See explanatory notes, sections C, F, and G, and the glossary for definitions.

TABLE 10: Indexes of Production-Woriser Faployment and Weokly Pay Rolls in Manufacturing Irductries - Continued

| Industry groun and industry | Finployment ind |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 |  | 1948 |  | 1947 |
|  | Nov. | Oct. | Sent: | Hov: | Hov. | Oct. | Scpt. | Nov. |
| MACHINERY; EXCEPT ELECITICAL 1/ | 2.27 .9 | 228.7 | 228.7 | 230.5 | 9 | 491.7 | 484.0 | 459.6 |
| Machinery and machine-shop products |  | 244.0 |  |  |  |  |  |  |
| Engines and turbines | 281.2 | 279.1 | 270.8 | 283.9 | 620.1 | 622.1 | 581.9 | 601.9 |
| Tractors | 194.6 | 191.2 | 189.4 | 187.5 | 358.4 | 364.1 | 360.5 | 336.9 |
| Agricultural machinery, excluding tractors | 267.1 | 266.1 | 255.2 | 238.4 | 592.4 | 597.9 | 577.1 | 482.5 |
| Machine tools | 129.7 | 130.0 | 131.2 | 139.5 | 248.1 | 250.3 | 248.3 | 253.3 |
| Mechine-tool accessories | 211.1 | 211.9 | 214.0 | 21.6.2 | 387.1 | 391.8 | 391.0 | 380.2 |
| Toxtile machinery | 188.9 | 189.7 | 100.7 | 181.9 | 450.4 | 457.5 | 458.9 | 396.3 |
| Puraps and pumping equipment | 277.6 | 276.8 | 278.0 | 293.9 | 625.5 | 620.1 | 615.0 | 624.6 |
| Typewriters | 3.15 .6 | 1.25 .8 | 129.8 | 155.5 | 271.1 | 255.0 | 286.8 | 358.2 |
| Cash registers; adding, and calculating machines | [24.1] | 22 | 228.1 | ?24.1 |  | 481.3 | 492.3 | 463.5 |
| Washing nachines, wringers, and driers, domestic | 207. | 210 | 210.3 | 211.2 | 470.0 | 4.2 | 460.6 | 449.7 |
| Sewing machines, domestic and industrial | 189.8, | 188.6 | 186.4 | 165.7 | 501.9 | 491 | 478.8 | 382.1 |
| Refrigerators and refrigercition equipment | 226.0 | 230.4 | 232.3 | 227.7 | 486.2 | 508.7 | 493.3 | 434.3 |
| TRANSPORTATION EQUIP |  |  |  |  |  |  |  |  |
| EXCEPT AUTOMOBILES | 285.7 | 282. | 276.3 | 284.6 | 611.8 | 613.3 | 581.8 | 555.1 |
| Locomotives | 40 | 42 | 409.0 | 402.0 | 2.5 | 909 | 48.4 | 863.1 |
| Cors, electric- and steamrailroad | 228.9 | 223.1 | 222.2 | 231.4 | 533.9 | 526 |  | 503.5 |
| Airciaft and parts, excluding aircreft engines | 377.4 | 366.2 | 349.2 | 336.2 | 830.7 | 794. | 746.1 | 653.8 |
| Aircraft engines | 315.0 | 309.0 | 300.1 | 291.0 | 1601.3 | 599. | 770.0 | 479.2 |
| Shipbuilding and boatbuilding | 136.5 | 140.5 | 140.8 | 169.9 | 262.4 | 291.2 | 83.1 | 316.6 |
| Motorcycles, bicycles, and parts | 194.6 | 197.4 | 190.3 | 207.0 | 468.2 | 474.3 | 424.5 | 441.3 |
| AUTOMOBIIES | 193.6 | 194.9 | 295.9 | 190.4 | 425.5 | 439.9 | 425.9 | 395.6 |
| NONFERROUS MEIATS AND THEIR PRODUCIS 1/. | 176.1 | 176.0 | 173.9 | 178.8 |  |  |  |  |
| Smelting and refininc, primary, of nonferrous metals. | 150.0 | 149.1 | 145.5 | 143.7 | 340.0 | 344.6 | 342.4 | 300.3 |
| Alloying; and rolling and. drawing of nonferrous metals, except aluminum | 140.4 | $\left[\begin{array}{c}14.1 \\ 140.7\end{array}\right.$ | 140.0 | 143.7 136.3 | 298.2 | 308.0 | 342.4 307.0 | . 7 |
| Clocks and watches | 139.0 | 141.9 | 141.1 | 139.9 | 348.1 | 353.0 | 348.6 | 330.5 |
| Jewelry (precious netals) and jewelers! findings | J.90.3 | 190.6 | 187.7 | 194.6 | 407.3 | 397.0 | 83.8 | 403.6 |
| Silverware and plated ware | 233.5 | 231.5 | 228.5 | 218.8 | 572.0 | 565.0 | 555 | 507.4 |
| Lighting equipment | 155.2 | 155.6 | 157.3 | 167.3 | 343.1 | 340.0 | 345.6 | 333.9 |
| Aluminum manufactures | 173.1 | 170.6 | 163.5 | 185.4 | 355.7 | 352.5 | 325.8 | 351.7 |
| Sheet-metal work, not elsewhere classified |  |  |  |  | 355.7 | 352.5 |  | 454.0 |

See explanatory notes, sections $C, F$, and $G$, and the glossary for definitions.

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

| Industry group and industry | Friployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2948 |  | 1947 |  | 1948 |  | 1947 |
|  | Nov. | Oct. | Sept | Not. | Nov. | Dct. | Sept | Not: |
| LUMBER AND TIMBER BASIC PRODUCTS 1/ | 195 | 197 | 200 | 178.5 | 49 | 519. | 523.3 | 429.1 |
| Sawnills and logging camps | 21.2 | 216.2 | 220.4 | 195.4 | 549.7 | 575 | . 4 | 476.2 |
| Planing and plywood mills | 194.9 | 193.2 | 192.3 | 174.1 | 486.4 | 491. | 78.6 | 400.9 |
| FURNITURE AND FINISHEN LUMBER |  |  |  |  |  |  |  |  |
| PRODUCTS 1/ | 143.1 | 143.3 | 142.0 | 147.3 | 349.2 | 354.9 | . 5 | 3.0 |
| Mattresses and bedsprings |  | -80.9 | 179.5 | 186.2 | 371.2 | 414.3 | 5 | 396.6 |
| Furniture | 2.44 .2 | 143.6 | 141.0 | 145.7 | 356.7 |  |  | 34.0 |
| Wooden boxes, other than cigar | 125.1 | 123.6 | 121.5 | 132.7 | 316.3 | 322. | 315.7 | 321.4 |
| Caskets and other norticians. goods | 140.1 | 138.4 | 1240.1 | 1150.6 | 287.8 | 284.9 | 289.7 | 305.8 |
| Wood preserving | 235.5 | 136.0 | 137.9 | 127.8 | 378.3 | 383.3 | 379.3 | 375.8 |
| Wood, turned and shaped | 138.0 | 140.4 | 139.7 | 140.6 | 328.3 | 338.7 | 323.8 | 309.5 |
| STONE, CLAY, AND GIASS PRODUCTS 1/ | 15 | 159 | 15 | 154.0 | 366.9 | 372.1 | 361.2 | 331.2 |
|  | 170. | 172 | 172 | 17 | 384.0 | 395.3 | 383.2 | 367.0 |
| Glass products made iromi purchased glass |  | 1143.8 |  |  |  | 329.0 | 10.9 | 312.0 |
| Cement | 153.0 | 1.51 .5 | 148.5 | 145.6 | 315.2 | 316.1 | 310.4 | 283.5 |
| Brick, tile, and terra cotta | 8.43 .9 | 1143.9 | 144.0 | 133.2 | 356.5 | 362.4 | 353.5 | 302.3 |
| Pottery and related products | 1281.7 | 180. | 128.3 | 212.2 | 407.5 | 399.8 | 374.0 | 356.5 |
| Gypsum | 157.6 | 160. | 1258 | 153.4 | 387.7 | 397.1 | 386.5 | 329.5 |
| Wellboard, plaster (except gypsum), and minerai wool |  | 182.6 | 181 | 180.2 | 495 | 49 | 491.8 | 444.1 |
| Lime | 112.6 | 113.4 | 114.1 |  | 322.3 | 326.9 | 323.8 | 299.1 |
| Marble, granite, slate, and other products | 102. | 102.9 | 1102.1 | 100.1 | 190.9 |  | 194.2 |  |
| Abrasives | 264.6 | 265.7 | 264.6 | 247.4 | 583.3 | 594.6 | 588.5 | 484.3 |
| Asbestos proal | 161.0 | 161.7 | 157.0 | 155.3 | 396.4 | 414.5 | 402.7 | 363.2 |
| Nondurable goods |  |  |  |  |  |  |  |  |
| TEXTILE-MILLL PRODUCTS AND OIHER |  |  |  |  |  |  |  |  |
| FIBER MANUFACTURES 1/ | 208.9 | 109.2 | 110.3 | 111.1 | 291.9 | 291. | 295.5 | 288.2 |
| Cotton manufactures, except smallwares | 121.6 | 1.22 .2 | 123.6 | 123.6 | 348.9 | 350.0 | 354.9 | 362.1 |
| Cotton smallwares | 94.2 | 95.1 | 95.4 | 98.6 | 222.1 | 222.5 | 228.7 | 215.1 |
| Silk and rayon goods | 96.4 | 96.7 | 96.5 | 90.7 | 299. |  | 301.3 | 254.1 |
| Woolen and worsted manufactures, except dyeing and finishing | 100.3 | 101.2 | 105.2 | 110.5 | 267.5 | 255.7 | 286.1 | 276.6 |
| Hoslery | 84.7 | 84.4 | 84.3 | 87.1 | 210.3 | 208.8 | 201.1 | 200.2 |
| Knitted cloth | 99.3 | 98.0 | 95.9 | 99.4 | 232.9 | 228.7 | 219.7 | 221.7 |
| Knitted outerwoar and knitted gloves | 1214.2 | 110.2 | 107.1 | 113.3 | 272. | 249. | 250.5 | 261.0 |
| Knitted underwear | 113.0 | 117.7 | 120.6 | 126.2 | 271.5 | 291.2 | 297.3 | 317.3 |
| Dyeing and finlshing textiles, including woolen and worsted | 130.1 | 129.5 | 129.0 | 130.5 | 316.8 | 311.6 | 310.7 | 300.5 |
| Carpets and rugs, wool | 150.7 | 150.9 | 150.6 | 136.5 | 393.5 | 393.2 | 387.5 | 319.6 |
| Hats, fur-felt | 78.4 | 74.6 | 81.4 | 88.5 | 163.1 | 162.9 | 180.9 | 181.9 |
| Jute goods, except felts | 114.3 | 107.1 | 124.5 | 79.4 | 285.9 | 266.8 | 248.4 | 170.1 |
| Cordage and twine | 117.8 | 116.8 | 1119.5 | 125.7 | 291.5 | 284.7 | 283. | 300.6 |

See explanatory notes, sections C, F, and G, and the elossary for definitions.

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

| Industry group and industry | Fmphovient indexes |  |  |  | Pay-roll inderes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1948 |  | 1047 |  | 1.948 |  | 191:7 |
|  | Tov. | Oet. | Eent. | Nov. | Nov. | oct. | Sept. | Nov. |
| APPAREL AND OTHER FTNISHED TEXTILEE PRODUCTS | 12 | 81 | 148.6 | 141.5 | 335.4 | 325.0 | 48.1 | 304.8 |
| Men's clothing, not elsewhere classified | 1234.1 | 139.01 | 139.5 | 134.7 | 300.1 | 302.4 | 324.7 | 301.5 |
| Shirts; collars, and nightwear | 105.1 | 105.61 | 104.7 | 109.7 | 258.8 | 256.0 | 254.0 | 266.0 |
| Underwear and neckwear, men's | 114.5 | 11.011 | 107.0 | 106.5 | 336.4 | 310.6 | 301.3 | 292.9 |
| Work chirts | 133.2 | 133.51 | 129.1. | 109.4 | 339.5 | 352.4 | 341.4 | 253.1 |
| Wonen's clothing, not elsewhere classified | 170.6 | 170.811 | 171.3 | 158.0 | 379.8 | 351.0 | 390.2 | 319.3 |
| Carcets and allied garnents | 203.6 | 103.0 | 101.5 | 103.3 | 239.1 | 233.1 | 225.3 | 226.8 |
| Millinery | 86.9 | 100.8 | 97.0 | 84.7 | 138.1 | 192.8 | 201.5 | 123.6 |
| Handrerchiefs | 108.2 | 104.4 | 98.8 | 102.2 | 303.2 | 289.3 | 259.4 | 260.4 |
| Curtains, drapories, and bodspreads | 152.8 | 154.0 | 157.3 | 180.9 | 345.2 | 346.5 | 356.5 | 422.2 |
| Housefurnishings, other then curtains, etc. |  | 287.6 | 281.0 | 268.7 | 725.2 | 696.8 | 634.9 | 590.1 |
| Textile bags | 236.8 | 235.2 | 231.7 | 225.3 | 550.2 | 555.0 | 549.5 | 484.8 |
| LEATHIR AND LEATHER PRODUCIS 1/ | 204.5 | 308.31 | 109.3 | 114.1 | 223.3 | 236.8 | 245.1 | 252.5 |
| Leather | 92.8 | 95.4 | 96.0 | 100.3 | 202.0 | 206.3 | 206.5 | 213.8 |
| Boot and shoe cut stock and findings |  | 88.1 | 89.8 | 99.0 | 166.5 | 175.3 | 185.2 | 190.3 |
| Bocts and shoes | 99.4 | 103.3 | 104.4 | 108.7 | 211.3 | 227.6 | 238.7 | 246.7 |
| Leather eloves and nittens | 123.5 | 128.2 | 229.9 | 131.8 | 256.5 | 266.8 | 274.5 | 264.1 |
| Truniss and suitcases | 170.5 | 174.81 | 171.8 | 177.9 | 406.4 | 397.3 | 393.3 | 406.0 |
| FOOD 1/ | 152.9 | 163.8 | 179.9 | 150,7 | 340.7 | 358.2 | 389.8 | 323.5 |
| Slaughtering and meat peckings | 152.0 | 146.41 | 144.5 | 151.0 | 336.2 | 305.4 | 303.5 | 337.6 |
| Butter | 172.1 | 176.21 | 181.7 | 168.2 | 379.0 | 384.7 | 397.8 | 346.0 |
| Condensed and evaporatad rilk | 179.6 | 186.3 | 104.3 | 179.7 | 424.4 | 435.5 | 473.7 | 377.8 |
| Ice cream | 137.8 | 148.61 | 167.9 | 149.1 | 273.9 | 291.2 | 333.5 | 269.9 |
| Flowr | 150.2 | 144.5 | 1.49 .4 | 151.6 | 351.9 | 355.2 | 360.7 | 357.0 |
| Feeds, prepered | 167.3 | 169.11 | 170.0 | 125.3 | 405.9 | 405.8 | 415.4 | 346.9 |
| Cereal preparations | 156.8 | 158.011 | 157.6 | 153.7 | 342.3 | 341.6 | 326.0 | 313.7 |
| Baking | 134.3 | 135.51 | 133.0 | 129.3 | 280.8 | 286.6 | 282.6 | 249.4 |
| Sugar refining, cane | 241.5 | 141.01 | 157.4 | 156.5 | 282.2 | 286.4 | 348.2 | 350.8 |
| Sugar, beet | 211.0 | 209.2 | 91.0 | 235.9 | 496.5 | 433.3 | 207.7 | 540.7 |
| Confoctionory 2/ | 161,1 | 159.51 | 145.6 | 156.1 | 387.9 | 376.4 | 345.7 | 355.6 |
| Beverages, nonalcholic | 169.7 | 180.51 | 195.4 | 160.2 | 287.1 | 298.6 | 340.9 | 267.3 |
| Malt liquors ${ }^{\text {a }}$ | 1.99 .5 | 200.9 | 212.6 | 199.3 | 377.4 | 371.8 | 4.27 .2 | 359.3 |
| Canning and preserving | 131.0 | 194.1 | 295.7 | 126.5 | 31.7 .9 | 544.3 | 835.0 | 293.7 |
| TOBACCO MANTIFACIURES 1/ | 96.5 | 95.9 | 93.9 | 96.5 | 223.5 | 224.3 | 21.4 .8 | 216.3 |
| Cigarettea |  | 128.2 | 127.3 | 124.0 | 264.4 | 279.0 | 268.1 | 253.3 |
| Cigars | 84.5 | 83.2 | 80.5 | 85.5 | 207.4 | 197.2 | 187.4 | 201.7 |
| Tobacco (chewing and smoking) and snuff | 77.2 | 78.6 | 77.7 | 81.3 | 173.1\| | $\left[\begin{array}{l}180.7\end{array}\right.$ | 176.1 | 169.0 |

See explanatory notes, sections C, F, and G, and the glossary for definitions.

TABLE 10: Indexes of Production-Horker Replogment and Weokly Pay Rolls in Manufacturing Induatries . Continuod

| Industry group and industry | Enploymant indexas |  |  |  | Pey-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1043 |  | 1247 |  | 1348 |  | 3.94 |
|  | Hov. | Oct. | Sept | Hote | Nov. | 6ot. | Sort | Nov. |
| PAPER AND ALLIHD PRODUCLS $1 /$ | 2.51 .7 | 151.0 | 149.8 | 148.6 | 362.2 | 357.4 | 355.0 | 325.9 |
| Paper and pulp | 150.0 | 149.5 | 250.0 | 145.7 | 364.7 | 359.1 | 362.9 | 325.0 |
| Paper goods, other | 168.6 | 168.4 | 166.1 | 167.9 | 392.8 | 381.2 | 372.3 | 352.7 |
| Invelopes | 149.5 | 146.9 | 145.2 | 142.5 | 31.5 .6 | 305.3 | 290.3 | 281.5 |
| Paper bass | 152.8 | 160.1 | 159.9 | 161.3 | 362.4 | 391.4 | 390.2 | 347.4 |
| Paper boxes | 1.46 .3 | $144 . \mathrm{C}$ | 139.9 | 142.7 | 344.5 | 342.1 | 328.0 | 314.5 |
| FRINYING, PUBLISEITG, AND AILIED IMDUSIRIES I/ | 134.7 | 134.8 | 133.0 | 135.4 | 275.4 | 273.6 | 273.6 | 257.2 |
| Newspapers and periodicals | 127.2 | 127.0 | 125.9 | 122.2 | 253.3 | 252.2 | 253.6 | 224.0 |
| Printing; book and job | 147.1 | 147.9 | 145.3 | 149.3 | 307.9 | 305.4 | 304.8 | 292.5 |
| Lithographing | 119.7 | 119.7 | 218.5 | 125.8 | 234.5 | 235.5 | 233.1 | 236.1 |
| mookbinding | 136.0 | 135.3 | 133.7 | 1250.3 | 315.1 | 309.7 | 307.8 | 325.1 |
| CHmmicals and andind products I/ | 207.1 | 208.1 | 207.1 | 204.5 | 460.2 | 450.1 | 462.5 | 416.4 |
| Paints, Parnishes, and colors | 270.2 | 172.1 | 172.0 | 169.9 | 329.9 | 338.4 | 339.3 | 313.1 |
| Drugs, medicines, and insecticides | 235.4 | 634.1 | 233.2 | 241.3 | 512.4 | 506.9 | 491.1 | 489.9 |
| Porfumes and cosmetics | 124.1. | 122.7 | 119.7 | 133.1 | 261.9 | 252.? | 243.0 | 265.3 |
| Soap | 173.9 | 178.4 | 177.2 | 168.9 | 405.3 | 412.2 | 400.7 | 371.0 |
| Rayon and allied procucts | 1732.3 | 132.3 | 137.0 | 1230.5 | 300.1 | 296.7 | 297.5 | 260,5 |
| Chomicals, not elsewhere classified | 299.9 | 300.3 | 301.6 | 294.0 | 634.0 | 628.6 | 641.6 | 566.0 |
| Explosives and naiety fuces | 375.4 | 379.3 | 379.2 | 339.7 | 749.1 | 763.8 | 796.0 | 645.6 |
| Compressed and Ifquefied gases | 239.2 | 24.70 | 247.0 | 244.9 | 491.0 | 488.5 | 513.9 | 458.0 |
| Ammation, small-arms | 271.5 | 173.7 | 174.2 | 168.7 | 403.7 | 409.4 | 4.21 .2 | 398.0 |
| Fliseworks | 2.20 .6 | 1227 | 243.3 | 249.0 | 544.2 | 552.7 | 621.0 | 711.6 |
| Cottonseod oil | 173.5 | 174.6 | 153.3 | 1160.5 | 537.6 | 541.9 | 459.3 | 448.7 |
| Fertilizers | 152.4 | 152.9 | 152.3 | 155.1 | 415.3 | 430.8 | 436.1 | 397.2 |
| PRODUCNS OF PETROLEUM AND COAL $1 /$ | 158.9 | 153.6 | 159.1 | 156.1 | 352.7 | 344.1 | 345.6 | 309.5 |
| Petroloum refining | 257.0 | 1488.1 | 155.7 | 153.4 | 341.0 | 323.6 | 326.1 | 295.9 |
| Coke and byproducts | 148.2 | 147.8 | 149.2 | 138.2 | 346.7 | 349.5 | 353.2 | ¢92.7 |
| Paving materiala | 113.6 | 117.2 | 118.0 | 138.1 | 253.3 | 276.3 | 279.1 | 263.8 |
| Foofing materlais | 212.8 | 223.3 | と2c. 7 | 228.0 | 517.5 | 577.7 | 558.3 | 526.4 |

See explanatory notes, gections C, F, and G, and the glossary for definitione,

TABIE 10: Indexes of Producticn-Worker Employmont and Weekly Pay Rolls in Manufac. tuxing Iudustries - Continued


See explanatory notes, sections C, F, and G, and the glossary for definitions.
1/ See footnote 1, tabie 8.
2/ Indexes for earlier months in 1948 have been revised as follows:

Confectionery - June through August employment to 115.8 , 113.0 , and
128.5; June and July pay roll to 261.8 and 255.4. Optical instruments and ophthaimic goods - Auglast emplogment to 218.3; pay roll to 439.6. Inductries
(1939 Average $=100$ )

| Induetisy eroup and industry | EL Orment intcros |  |  |  | Fayaroll indoxes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | -20 -15 |  | -1977 |  | - 1948 |  | - | $\frac{1947}{107}$ |
|  | D.0V | Ot. | Sept. | Hov. | 170V. 0 | oct. | Sopt. |  |
| MENITMG: |  |  |  |  |  |  |  |  |
| Coal |  |  |  |  |  |  |  |  |
| Antiracite | 92.1 | 91.7 | 92.7 | 91.2 | 227.3 | 260.4 | 247.3 | 224.4 |
| Bituminous coal | 108.3 | 108.8 | 109.7 | 207.4 | 343.1 | 358, 5 | 355.1 | 327.4 |
| Motal | 95.0 | 99.3 | 95.5 | 96.5 | 215.2 | 224.9 | 211.2 | 194.8 |
| Iron | 252.1 | 155.4 | 153.2 | 151.3 | 355.0 | 371.6 | 361.0 | 310.2 |
| Copper | 92.6 | 107.9 | 107.7 | 104.4 | 226.4 | 255,6 | 247.6 | 224.7 |
| Lead and zina | 101.9 | 99.8 | 79.8 | 94.8 | 265.4 | 252.7 | 199.2 | 220.6 |
| Gold and silver | 31.6 | 30.9 | 31.4 | 31.3 | 56.6 | 56.4 | 54.1 | 53.7 |
| Miscellaneous | 183.4 | 188.6 | 183.9 | 185.7 | 401.4 | 405.0 | 406.7 | 346.7 |
| Quarrsing and nonmetallic | 224.6 | 126.5 | 128.3 | 126.2 | 329.5 | 345.2 | 342.4 | 305.7 |
| Crude potroleum and natural gas production | 134.0 | 113.5 | 116.4 | 210.5 | 235.3 | 230.7 | 235.6 | 211.0 |
| TRANSPORTATION ABD FUBLIC UUILIMIES: |  |  |  |  |  |  |  |  |
| Class I steam railroads i/ | 234.6 | 136.2 | 136.7 | 135.7 | $2 /$ | $2 /$ | $22 /$ | 21 |
| Street railweys and busses | 126,2 | 126.9 | 127.9 | 128.7 | 237.4 | 242.0 | 239.7 | 223.6 |
| Tolephone | 202.1 | 201.9 | 202.3 | 793.3 | 349.0 | 338.2 | 335.4 | 321.5 |
| Telegraph | 90.7 | 91.6 | 92.3 | 97.2 | 215.3 | 217.4 | 220.4 | 206.6 |
| Electric light and power | 215.5 | 115.2 | 116.2 | 109.7 | 205.8 | 204.5 | 204.3 | 187.6 |
| TRADE: 3/ |  |  |  |  |  |  |  |  |
| Wholesale | 218.3 | 118.1 | 117.1 | h16.5 | 224.2 | 222.5 | 220.8 | 213.6 |
| Retall | 219.4 | 1116.0 | 113.4 | 119.8 | 228.4 | 223.5 | 219.4 | 216.5 |
| Food | 173.8 | 113.8 | 112.0 | 116.1 | 229.6 | 227.4 | 226.0 | 220.0 |
| General merchandise | 246.4 | 135.3 | 127.2 | 243.6 | 270.3 | 252.7 | 238.3 | 251.1 |
| Apparel | 422.8 | 119.4 | 113.9 | 124.0 | 226.5 | 222.2 | 210.8 | 222.7 |
| Furniture and housefurnishings | 93.8 | 92.2 | 91.6 | 92.4 | 182.5 | 184.3 | 179.9 | 177.3 |
| Automotive | 211.7 | 110.0 | 110.1 | 107.6 | 219.0 | 215.6 | 217.0 | 198.6 |
| Luaber and building materials | 2. 6.6 | 127.8 | 128.0 | 126.4 | 254.7 | 261.3 | 258.3 | 233.5 |
| SERTVICE: |  |  |  |  |  |  |  |  |
| Hotols (year-round) 4/ | 125.2 | 116.2 | 115.7 | 127.1 | 237.4 | 238.7 | 235.3 | 228.6 |
| Power laundries | 114.8 | 116.7 | 118.4 | 121.3 | 226.9 | 227.6 | 232.9 | 226.8 |
| Cleaning and dyeing | 150.5 | 153.7 | 152.5 | 159.4 | 289.3 | 300.0 | 296.8 | 293.7 |

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

[^0]Sec. A. Scope of Employment Fievisions - The employment estimates shown in this report for ine industry divisions (e.8., 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 1946 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 Buroau of the Census were used as scurces 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 govemment are bascd on data compiled by the Bureau of the Census, while most of the data on Federal Governmont employment is made available by the U. S. Civil Service Commission. The Interstate Commerce Comission is the source for railroads, and the U. S. Maritine Comaission for water transportation.

Sec. C. Revisions of Production-Wnrker Estimates - Data for the manufacturing major industry eroups have been adjusted to levels indicated by Federal Security Agency data through 1946 and have been carried forward from 1946 berci-mark levels, thereby providing consistent series. Estimates for the individual manufacturing industries, formerly adjusted to data through 2945, are now being adjusted to 1946 bench-mark levels. As these revisions 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 roport 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 eeries 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, inasuich as full coverage is prohibitively costly and time-consuring. In using a sample, it is essential that an accurate bsse 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 marir becomes available, estimates prepared since the last bench mark are revjewed to determine if any adjustment of level is roquired. This is the besic principle of employment estimeting used by the BLS. It rielus a satiafactory compromise between a slow but heeniy accirate romplete count on the one hand, and a rapid but less accurate sampa cunt in the other.

Iriefly, the Bureau of Labor Statistics computes omployment estimies as follows: first, a bench mark or level of employment is determined; second, a sample of establishments is selected; and third, changes in emplosment indicated by this reporting sample are applied to the bench mark to cietermine the monthly estimates of employment between bench-mark periods. For example, if the latest compiete diata on employment for an industry were 40,200 in September 1945, and if the iniustry 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 show by establishments reporting to the Bureau of Labor Statistics.

Why Revisions Are Necessafy - Beceuse reports are not immediately available from new firms, they are frequentiy 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 yoar. It is iraportant, therefore, that estimates not be allowed to go unccrrected for too long a period. The most recent revisions correct for the downard bias that had accumulated in the nonmanufacturing series beginning January 1945 and in the manufacturing series beginning danuary 1946. Revisions in some industry divisions were made in order to incorporate greater refinements in methodology and new source materials that have become avallable.

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 tie Labor Force. The BIS 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 BLS estimaten cover all full- and part-time wage and salary worker's in private nenegricultural establishnents who worked or received pay during tien pay period ending nearest the l5th of the month; in Federal establishments during the pay period ending just before the first of the month; and in State and local goverurent during the pay period ending on or just before the last or the month. Persons who worked in more than one establishment during the reporting period would be counted more then once; (2) Proprietors, self-employed perions, 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 insurence, withholding taxes, bonds, and union dues. Pay for sicis leave, holidays, and vacations taken is inciuded. 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 eatimates. Sample changes showing monthly movements are used in projecting established bench marks 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 Date - Fmployment and pay-roll estimates are based on reports fram cooperating establislments. The approximate number of establisiments, and workers covered, for each industry division is as follows:

Approximate Coverage of BLS Employment and. Pay-Roll Sample

| Industry division | : Number <br> : of estab- <br> : Iishments | Employees or production workers |  |
| :---: | :---: | :---: | :---: |
|  |  | Number | : Percent of total |
| Manufacturing | 34,300 | 7,542,000 | 56 |
| Mining | 2,700 | 707,000 | 52 |
| Contract construction | 12,-j00 | 480,000 | 22 |
| 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) | 1,200 | 131,000 | 35 |
| Powe: laundries and cleaning and dyeing | 1,600 | 67,000 | 21 |

Sec. H. Coverage of Hmplovment Estimatcs - The empioyment estimates shown in tahles 1,$2 ; 3 ; 6$, $\operatorname{and} 7$ cover ali fulland part-tire wafge and salery wonkers who worked or raceived pay during the pay peilod ending nearest the 15 th of the month. Proprietors, self-employed persons, donestic servants, and perconinel. of the armed forces are excluded. The estimates and indexes ehown in tables 8 and 10 refer to production and related workers es defined in the glossary, page ix.

Sec. I. State Estimatea - State estimates are prepared in cooperation with various Steto Agencies as indicated on page v. The estimates for manufasturing have been adjusted to recent data made available under the Federal Social Security program. Since some States have adjusted to more recent bench-mark date then others, and because varying methcds of somputation are used, the total of the State estimaten differs from the national total (aee tables 1 and 2). Because of tinese recent revialons the state eatimatos for manufacturing ars not consiatent with the unrevised data shown prior to June 1947 for total cmployment in nonagricultural ostablishments; by State. A numbor of statea also made available more detailed industry datia and informetion zor eailler periods which may be secured directly upon request to the appropriate State Agency. Estimates of nonagricirltural employment, by state, for those States which are now publishirg such estimates are shown in table 6 and are consistont with the manufacturing estimates in table 7. As nonagricultural estimajes for additional States become available, they will bo shom in table 6.

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

Nonagriculturel Employment, by State, 1943-1947; Employment in Manufactiring Industries, by State, 1943-1946; Fstimates of Total Fmployment in Mamfacturing Industries by Steto; 1947.

Alabean - Dept. of Industrial Relations, Montogomery 5.
Arizona - Unemployment Compensation Div., Employment Security Comniesion, Phcenix.
Arkansas - Enaplosment Sficurity Div., Dept. or Labor, Littie Rocic.
California - Div. of Labor Statistica and Research, Dept. of Industrial Relations, San Francisco 3.
Connecticut - Empioyment Secuidty Div., Dept. of Labor and Factory Inrpection, Heriford. 15.
Dolaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
Fiorida - Unemployment Compensation Div., Industrial Comission; Tellahassee.
Georgla - Employment Security Agoncy, Dept. of Labor, Atlanta 3.
Idaho - Employment Security Agency, Industrial Accident Board, Boiso.
Illinois - Dept. of Labor, Chicagc 1.
Indiana - Employment Security Div., Indianapolis 4.
Iowa - Empioyment Security Comission, Des Moines 8.
Kansae - State Labor Dept., Topeka.
Kentixcky - Dept. of Economic Security, Frankfort.
Inuisiana - DIV. of Employmont Security, Dept. of Labor, Baton Rouge 4.
Meine - Unemployment Compensation Comaission, Aluguata.
Maryiand - Dept. of Employment Security, Baltimore 2.
Massachueetts - Div. of Statictice, Dept. of Labor and Industriea, Boston 10.
Mchigan - 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 Coumiesion, Helena.
Nebresisa - Div. of Placement and Unemployment Insuranoe, Dept. of Labor, Lincoln 1.
Nevada - Employment Security Dept., Carson City.
New fiampshire - Unemployment Compenzation Div., Bureau of Labor, Concord.
New Jersey - Dept. of Labor, Trenton 8.
New Mexico - Employment Security Commiesion, Albuqueraue.
New York - Div. of Placement and Unemployment Insurance, Dept. of Labor: New York 17.
North Carolina - Dept. of Labor, Raleigh.
Oklahoma - Amployment Security Coumission, Oklahoma City 2.
Pennsylvania - Federal Reserve Bani 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, Industriai Cormileaion, Salt Lake City 13.
Vermont - Unempioyment Compensation Comaission, Montpelier.
Virginia - Div, of Research and Statisties, Dept. of Labor and Industry, Richmond 21.
Washington - Emplowment Security Dept., Olympia.
Wiaconsin - Statistical Dept., Induetrial Commission, Madison 3. Wyoming - Employment Security Comsuisaion, Casper.

New England - Regional Director, U. S. Bureau of Labor Statistics, old South Bldg., 294 Washington St., Boston 33, Massachusetts (Connecticut, Maine, Massachusetts, New Iampshire, 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 6, Illinois (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigen, Minnesota, Missouri, Nebrasika, Ohio, North Dakota, South Dakota, Wisconsin).
Southern - Regional Director, U. S. Bureau of Labor Statistics, 6th Floor Silvey Bldg., 114 Merietta 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 Blde., San Francisco 2, California (Arizona, California, Colorado, Idabo, 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.

## GLOGSARY

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

Contract construction - Covers only firms ongaged 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 Comission, Selective Service System, War Assets Administration, Ofrice 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 bratich differa from data published by the U. S. Civil Service Cobmisidim. in the following respects: (1) Employment collected and published by the Civil Service Comaisaion as of the last day of the month, is here procenwed as of the first day of the next month; (2) substitute rurei mill cerifers are cxcluded; (3) employment in December of each rec: traindes the additional postal eaployees necessitated by the Chetatma aeason, excluad from pubilshed Civil Service Comiceton tigures etarting 2042; (4) seaman and trainees who are hirod and paid by prifate steanship companies having contracts with the Maretime Comisaion are excluded; (5) the Panama Railroad Company is shown here under Govornment corporations but is included under the exocutive bianch by the Civil Service Comntsaion.

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

Government - Covers Federal, State, and locel govermental establishments performing legislative, executive, and judicial functions, as well as all government-owned and cparated eatablishments and institutions (arsencis, nevy yards, hospitais, etc.), goverment corporations, and governmont foice-account construction. The date shown in tables 1 and 3 excluce rourth-class postimasters because they presumably have other major jobs.

Government corparations - Cevers only three corporations; The Panama Railroad Compeny, the Fedoral Reserve banks, and the mixod-ownership basiks of the Farm Credit Administration. All other corporations are included under the executive brench.

Indexes of production-worker emplayment - Estinates of productionworker employment expressod as a parcentage of the average employment in 1939.

Indexes of production-worker weekly pay rolls - Eetimates of pro-duction-worker weelily pey rolls expressed as a percencage of the average weekly pay roll for 3.939 .

Leave parments - Payments.were authorized by Public Law 704 of the 79 th Congress and were continued by Public Law 254 of the 80 th Congress to enlisted personnel who were discharged prior to September 1, 19.46 for accrued and unused leave and to officers and enlisted persomel then on active duty for leave accrued in excess of 60 days. Value of bonds represente face value; intoreat is paid in addition when bonds are cashed. Iamp-sum paymonts for terminal leave, which were authorized by Pubilc Law 350 of the 80th Consress, 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 moath. Reserve personnel are excluded if on inactive duty or if on active duty for a brief training or emergency period.

Military pay Folls - Represent ectimated 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 noture 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, beneilciating, and concentration.

Nonagricultural establishments - Covernmental or private busineas 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 15 th 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 - Inciudes working foremen and all nonsupervisory worlsers (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 recordkeeping and other services closely associated with the above production operations. Excludes supervisory emplojees (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 ongaged in wholesale trade, 1.e., seling merchandise to retailers, and in retail trede, 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 utilitios - Covers only privately owned and operated entorprises engaged in providing all types of transportation and related seryices; telephone, telegraph, and other comunication 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, 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 altergtions 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.


[^0]:    1/Source: Interotate Comierce Comisaion.
    2/ Not available.
    3/ Includes all nonsupervisory emplojees and working supervisars.
    4/ Money payments only; additional value of board, room, uniforne, and tipe, not Included.

