# EMPLIUYMENT and PAY RILLLS 

## DETAILED REPORT AUCUST 1948

United States Department of Labor Bureau of Labor Statistics

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In this Detailed Report the Bureau presents a new series of productionworker estimates for the individual industries comprising the major industry groups listed below. The new estimates have been adjusted to Federal Security Agency date through 1946 and have been carried forward from 1946 bench-mark levels, thereby providing consistent series.

Only the industries indicated below were affected; comparison of the remaining industries, in the groups specified, with 1946 bench-mark levels indicated that no adjustment was necessary.

Electrical machinery:
Electrical equipment
Nonferrous metals and their products: Sheet-metal work, not elsewhere classified

Furniture and finished lumber products:
Mattresses and bedsprings
Furniture
Wooden boxes, other than cigar Caskets and other morticians' goods Wood preserving Wood, turned and shaped

Chemicals and allied products:
Paints, varnishes, and colors Chemicals, not elsewhere classified Explosives and safety fuses Fertilizers

Miscellaneous induatries:
No industries affected
This report shows the new production-worker employment estimates and indexes of employment and weekly pay rolls for the months currently presented. A set of summary sheets presenting comparable data from January 1939, to date, for the industries in these groups will be provided upon request to the Bureau of Labor Statistics. Such requests shwild specify the series desired.

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# EMPLOYMENT AND PAY ROLIS 

Detailed Report
August 1948
Explanatory notes outlining briefly the
concepte, methodology, and sources used
in preparing data for this report appear
in the appendix. See pages 1-ix.
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| Data for the 2 most recent months |
| :--- |
| shown are subject to revision |

2. 

TABLE 1: Estimated Number of Wage and Salary Workors in Nonagricultural Establish: mentis, by. Industry Division
(In thousends)

| Industry division | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alugust | July | June | August | July |
| TOTAL | 45,487 | 45.078 | 45,009 | 44,125 | 43,686 |
| Manufacturing | 16.4.41 | 3.6,158 | 16,115 | 15,962 | 15.580 |
| Mining | 9.50 | 221 | 950 | 923 | 890 |
| Contract construction | 2,257 | 2,:19 | 2,173 | 2,096. | 2,043 |
| Trensportation and public utilities | 4,137 | 4,136 | 4,205 | 4,163 | 4,155 |
| Trade | 9,659 | 9.646 | 9,670 | 9356 | 9,316 |
| Finance | 1,761 | 1.754 | 1,726 | 1,688 | 1.675 |
| Service | 4,622 | 4,645 | 4,663 | 4,619 | 4,686 |
| Government | 5,650 | 5,599 | 5,607 | 5,318 | 5.341 |

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 Induetry Group
(In thousands)

| Major induatry group | 1248 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Augubt | July | June | August | July |
| AIL MANUFACTURING | 16,451 | 16,158 | 16,115 | 15,962 | 15,580 |
| DURABIE GOODS | 8,188 | 8,153 | 8,122 | 7,987 | 7,874 |
| Iron and steel and their products | 1,929 | 1,897 | 1,904 | 1,884 | 1,854 |
| Electrical machinery | 717 | 714 | 726 | 745 | 742 |
| Machinery, except electrical | 1,555 | 1,560 | 1,577 | 1,552 | 1,519 |
| Transportation equipment, except automobiles | 543 | 561 | 562 | 530 | 527 |
| Automobiles | 958 | 983 | 918 | 926 | 941 |
| Nonferrous metals and their products | 466 | 457 | 469 | 463 | 462 |
| Lumber and timber basic products | 930 | 912 | 881 | 821. | 793 |
| Furniture and finished lumber products | 551 | 542 | 550 | 549 | 534 |
| Stone, clay, and glass products | 533 | 527 | 535. | 517 | 502 |
| NONDURABLE GOODS | 8,263 | 8,005 | 7,993 | 7,975 | 7,706 |
| Textile-mill products and other eiber menufactures | 1,397 | 1,364 | 1,418 | 1,320 | 1,305 |
| Apparel and other finished textile products | 1,334 | 1,235 | 1,263 | 1,222 | 1,141 |
| Leather and leather products | 1, 431 | 1422 | 1,419 | 429 | , 417 |
| Food | 1,965 | 1,900 | 1,786 | 1,922. | 1,785 |
| Tobacco manufactures | 99 | 96 | 98 | 99 | 97 |
| Paper and allied products | 478 | 476 | 477 | 469 | 462 |
| Printing; publishing, and allied industries | 718 | 716 | 719 | 710 | 706 |
| Chemicals and aliled products | 773 | 751 | 762 | 750. | 752 |
| Products of petroleum and coal | 247 | 247 | 245 | 238 | 237 |
| Rubber products | 244 | 240 | 243 | 252 | 250 |
| Miscellaneous industries | 577 | 558 | 563 | 564 | 554 |

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

TABLE 3: Estimated Number of Wage and Salary Workers in Selected Nonmanufacturing Industries, by Major Industry Group
(In thousands)

| Major industry group | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | August | July |
| MINITVG | 950 | 921 | 950 | 923 | 890 |
| Anthracite | 83 | 81 | 82 | 82 | 79 |
| Bịtuminous coal | 425 | 395 | 426 | 408 | 379 |
| Metal | 99 | 102 | 104 | 102 | 101 |
| Quarrying and nonmetallic | 97 | 97 | 97 | 99 | 98 |
| Crude petroleum and natural gas production 1/ | 246 | 246 | 241 | 232 | 233 |
| TRANSPORTATION AND PUBLIC UTIITTTES | 4,137 | 4,136 | 4,105 | 4,163 | 4,155 |
| Transportation | 2,867 | 2,873 | 2,860 | 2,946 | 2,943 |
| Communication | 747 | 745 | 734 | 722 | 721 |
| Other public utilities | 523 | 518 | 511 | 495 | 491 |
| GOVERIMENT | 5,650 | 5,599 | 5,607 | 5,318 | 5,341 |
| Federal | 1,855 | 1,833 | 1,804 | 1,795 | 1,828 |
| State and local | 3,795 | 3,766 | 3,803 | 3,523 | 3,513 |

See explanatory notes, sections A-H and the glossary for definitions.
1/ Includes well drilling and rig building.

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

| Area and branch | $\begin{gathered} \text { Empioyment } \\ \text { (as of fizsi of nonth) } \end{gathered}$ |  |  |  | ```Pay rolls (totial ror motith)``` |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 | 298 |  |  | 1947 |
|  | August | July | June | August | August | Juy | June | Augist |
| Totai (ingiuding areas     <br> outside thited States)     |  |  |  |  |  |  |  |  |
| TOTAL FEDERAL | 2,094:6 | 2,084.3 | 2,053.9 | 2,067.2 | \$557,317 | \$528,437 | \$505,345 | \$464,076 |
| Executive | 2,055.4 | 2,044.7 | 2,014.5 | 2,026.1 | 547,285 | 5:8,639 | 495',792 | 454,723 |
| Defense agencies | 924.6 | 919.8 | 916,9 | 923.1 | 236,960 | 223,968 | 225,440 | 199,247 |
| Post Offise Dept. | 475.4 | 471.2 | 458.2 | 442.3 | 123, 336 | 121, 677 | 102,6\%3 | 96,145 |
| Other agencies | 654.4 | 653.7 | 639.4 | 660.7 | 187,187 | 172,994 | 167.699 | 1259.331 |
| Legisilative | 7.3 | 7.3 | 7.3 | 7.2 | 2,695. | 2,600 | 2,536 | 2,421 |
| Judicial | 3.5 | 3.5 | 3.5 | 3.4 | 1,390 | 1,301 | 1,279 | 1,259 |
| Government corporations | 28.4 | 28.8 | 28.6 | 30.5 | 5.943 | 5,897 | 5.738 | 5,673 |
| Cortinental <br> United Stsies |  |  |  |  |  |  |  |  |
| TOTAL FEDERAL | 1,875.1 | 1,858.2 | 1,823.9 | 1,815.9 | 514.343 | 487,057 | 461,406 | 423,545 |
| Executive | 1,842.5 | 1,825.6 | 1,791.5 | 1,782.4 | 505,131 | 478,016 | 452,529 | 414,898 |
| Defense agencies | 742.9 | 732.2 | 724.7 | 708.7 | 203,510 | 191,686 | 189,974 | 166,681 |
| Post Office Dept. | 474.8 | 469.7 | 456.6 | 440.8 | 122,721 | 121,263 | 102,306 | 95,819 |
| Other agencies | 624.8: | 623.7 | $6 \pm 0.2$ | 632.9 | 178,900 | 165,067 | 160, 249 | 152,398 |
| Legislative | 7.3 | 7.3 | 7.3 | 7.2 | 2,695 | -2,600 | 2,536 | 2,421 |
| Judicial | 3.4 | 3.4 | 3.4 | 3.3 | 1.351 | 1,263 | 1,242 | 1,223 |
| Government corporations | 21.9 | 21.9 | 21.7 | 23.0 | 5.266 | 5.178 | 5,099 | 5.003 |
| Washington, D. C. |  |  |  |  |  |  |  |  |
| TOTAL GOVERNMENT | 234.2 | 233.3 | 229.5 | 223.7 | 71,817 | 67,206 | 66,658 | 58,624 |
| D. C. government | 13.8 | 19.3 | 18.8 | 17.8 | 3,468 | 3.459 | 4,561 | 3,187 |
| Federal | 215.4 | 214.0 | 210.7 | 205.9 | 68,349 | 63,747 | 62,097 | 55,437 |
| Executive | 207.5 | 206.1 | 202.8 | 198.1 | 65,426 | 60,931 | 59,350 | 52,817 |
| Defense agencies | 70.2 | 69.0 | 67.6 | 65.1 | 21,465 | 20,235 | 19,250 | 15,705 |
| Post Office Dept. | 7.5 | 7.5 | 7.4 | 7.3 | 2,722 | 2,651 | 2,300 | 2,283 |
| Other agencies | 129.8 | 129.6 | 127.8 | 125.7 | 41,239 | 38,045 | 37,800 | 34,829 |
| Legislative | 7.3 | 7.3 | 7.3 | 7.2 | 2,695 | $2,600$ | 2.536 | 2,421 |
| Judicial | .6 | . 6 | . 6 | . 6 | 228 | 216 | 211 | 199 |

See the glossary for definitions.
1/ Data for Central Intelligence Agency are excluded starting August 1947 for employment and July 1947 for pay rolls.
6.

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

| Personnel and pay | 1948 |  |  | 1247 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aucrust | Ju'y | June | August | July |
| PERSONNEL, TOTAL.......... | 1,514 | 1,1463 | 1,439 | 1,575 | 1,592 |
|  | 2/978 | 2/940 | 2/ 930 | 973 | 990 |
| nevy. . . . . . . .......... | 430 | 420 | - 407 | 492 | 490 |
| Morine Corve.......... | 86 | 84 | 82 | 92 | 93 |
| Coast Guard............ | 21 | 20 | 20 | 19 | 19 |
| Men. <br> Wicmen. | 1,501 14 | 1,449 14 | 1,423 16 | 1,556 19 | 1,571 20 |
| PAY, TOTAL................. | \$278,165 | \$276,655 | \$277,368 | \$334,129 | \$339,128 |
|  |  |  |  |  |  |
| Army and Air Force... | 171,556 | :167,870 | 173,956 | 192,505 | 200,676 |
| Navy. . . . . . ........... | 87,715 | - 90,203 | 85,522 | 117,518 | 115,734 |
| Marine Corps.......... | 14,335 | 13,884 | - 13,551 | 17,884 | 16,212 |
| Coast Guasd........... | 4,560 | 4,699 | - 4,339. | 6,222 | 6,506 |
| By. type of pay: |  |  |  |  |  |
| Pay rolls............... | .244,547 | 246,422 | 243,239 | 248,670 | 259,172 |
| Mustering-out pay..... | 3,886 | 2,581 | 5,756 | 10,438 | 12,670 |
| Family allowances.... | 27,756 | 26,353 | $\vdots 26,476$ | 24,502 | 25,036 |
| Leare pajments........ | 1,976 | 1,299 | ; 1,898 | 50,459 | $42,250$ |
| Cash................. | 416 | 301 | - 495 | 4,831 | 3,718 |
| Bends................. | 1,560 | 998 | -1,403 | 45,628 | 38,532 |

See the glossary for definitionc.
1/ Becausc of rounding, the indfvidual figures do not necessarily add to group totala 2/ Air Force personnel, 384,000 in June, 388,000 in July, and 400,000 in August 1948.

TABLE 6: Estimated Number of Wage and Salary Workers in Nonagricultural Establishments for Selected. States
(In thousands)

| State | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | July | June | Meytit | July | June |
| Arizona | 154 | 155 | 154 | 144 | 144 |
| Comnecticut | 761 | 765 | 767 | 764 | . 769 |
| Illinois | 3,185 | 3,174 | 3,126 | 3,113 | 3,122 |
| Indiana | 1,207 | 1,209 | 1,197 | 1,184 | 1,193 |
| Maine | 276 | 270 | 259 | 265 | 257 |
| Marylend | 708 | 707 | 698 | 658 | 665 |
| Massachusettes | 1,715 | 1,731 | 1,720 | 1,674 | 1,696 |
| Minnesota | 813 | 803 | 782 | 783 | 770 |
| Montana | 141 | 138 | 136 | 137 | 135 |
| Nevada 1/ | 50 | 49 | 48 | 50 | 49 |
| New Jersey | 1,590 | 1,593 | 1,576 | 1,543 | 1,567 |
| New Mexico I/ | 109 | 108 | 107 | 102 | 103 |
| New York | 5,405 | 5,416 | 5,385 | 5,338 | 5,381 |
| Pennsylvania | 3,584 | 3,606 | 3,577 | 3,509 | 3,530 |
| Rhode Island | 286 | 287 | 287 | 278 | 285 |
| Texas | 1,734 | 1,724 | 1,702 | 1,652 | 1,651 |
| Utah | 179 | 176 | 177 | 176 | 171 |
| Vermont $1 /$. | 95 | 96 | 95 | 94 | 95 |
| Washington | 674 | 655 | 641 | 657 | 664 |
| Wisconsin | 1,016 | 993 | 977 | 1,001 | 966 |

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

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

| Region and State | 1348 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | July | June | May | July | June. |
| VEW ENGIAMD: |  |  |  |  |  |
| Maine I/ | 116.5 | 115.2 | 108.2 | 112.9 | 108.2 |
| New Hanmshire | 82.1 | 82.7 | 81.6 | 77.6 | 79.3 |
| Vermont 1/ | 37.0 | 37.8 | 37.8 | 37.2 | 38.4 |
| Messachusetts | 711.1 | 726.1 | 723.4 | 707.2 | 724.7 |
| Rhode Island | 144.8 | 146.5 | 147.0 | 141.4 | 147.0 |
| Connecticut 1/ | 393.3 | 396.5 | 401.1 | 403.3 | 410.4 |
| IIDDLE ATLANPIC: |  |  |  |  |  |
| New York | 1,816.5 | 1,831. 7 | 1,829.0 | 1,801.9 | 1,841.6 |
| New Jersey | 732.1 | 741.8 | 740.7 | 719.6 | .745.a |
| Pennsylvania | 1,476.1 | 1,492.4 | 1,487.3 | 1,471.1 | 1,487.2 |
| CAST NORTH CENTRAL: |  |  |  |  |  |
| Ohio | 1,215.7 | 1,228.2 | 1,221.3 | 1,232.0 | 1,244.5 |
| Indiana | 544.0 | 546.4 | 541.9 | 550.0 | 553.6 |
| milinoia | 1,227.4 | 1,228.7 | 1;203.5 | 1,228.6 | 1,238.3 |
| Michigan | 996.8 | 962.7 | 998.5 | 997.0 | 1,013.1 |
| Wisconsin 1/ | 447.9 | 429.7 | 420.0 | 461.5 | 427.9 |
| WEST NORTH CENIRAL: |  |  |  |  |  |
| Minnesota 1/ | 206.6 | 203.3 | 190.9 | 205.6 | 194.5 |
| Iawa 1/ | 152.1 | 149.8 | 135.1 | 149.8 | 148.6 |
| Missouri 1/ | 345.7 | 343.9 | 339.3 | 343.5 | 345.4 |
| North Dakota | 7.0 | 7.1 | 6.7 | * 6.8 | 6.8 |
| South Dakota | 11.8 | 11.9 | 11.3 | 21.8 | 11.5 |
| Nebraska | 43.6 | 43.0 | 36.1 | 43.4 | 43.1 |
| Kansas | 83.9 | 84.5 | 77.0 | 80.7 | 81.0 |
| SOUTH ATIANHIC: |  |  |  |  |  |
| Delaware | 46.6 | 46.6 | 45.8 | 45.2 | 45.4 |
| Maryland | 232.8 | 229.4 | 228.5 | 217.4 | 224.3 |
| District of Columbia | 17.2 | 17.1 | 17.2 | 17.4 | 17:2 |
| Virginia | 210.9 | 211.1 | 210.8 | 208.2 | 207.9 |
| West Virginia | 133.3 | 133.9 | 132.4 | 131.0 | 132.6 |
| North Carolina | 362.9 | 381.7 | 381.4 | 365.2 | 366.0 |
| South Carolina | 195.8 | 200.5 | 199.3 | 191.5 | 188.9 |
| Georgia $1 /$ | 274.3 | 275.7 | 273.8 | 262.5 | 263.7 |
| Florida 1/ | 88.0 | 90.0 | 93.2 | 85.7 | 88.2 |

9. 

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

| Region and State. | 746 |  |  | 1247 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jug | +20 | May | Juy | June |
| EAST SOITH CEINIRAT; |  |  |  |  |  |
| Kentucky | 126.8 | 127.0 | 125.9 | 122.4 | 123.6 |
| Tennemee | 249.5 | 250.7 | 250.8 | 246.2 | 245.2 |
| Alciena I/ | 229.8 | 22.8 .3 | 228.0 | 219.6 | 221.1 |
| Misctise | 91.3 | 89.5 | 88.1 | 91.4 | 90.9 |
| WEST SCIUTM CENRRAL: |  |  |  |  |  |
| Arkansas 1/ | 76.5 | 76.6 | 75.1 | 75.1 | 74.2 |
| Louisiana 1/ | 148.2 | 149.4 | 146.0 | 143.3 | 145.7 |
| Oklahoma 17 | 66.7 | 68.9 | 65.2 | 62.9 | 62.6 |
| Texas | 350.7 | 354.8 | 341.7 | 335.1 | 339.3 |
| MOUNTAIN: |  |  |  |  |  |
| Montana | 28.1 | 17.7 | 17.1 | 18.4 | 17.8 |
| Idano 1/ | 20.6 | 18.8 | 18.1 | 22.9 | 22.3 |
| Wyoming | 6.8 | 6.8 | 6.5 | 6.7 | 6.3 |
| Colorado | 56.5 | 56.3 | 53.3 | 55.9 | 54.6 |
| New Mexico 1/ | 10.4 | 10.0 | 9.3 | 9.1 | 9.1 |
| Arizona 1/ | 15.7 | 16.0 | 15.7 | 14.0 | 14.8 |
| Utah | 28.7 | 26.0 | 24.2 | 29.1 | 24.9 |
| Nevada 1/ | 3.4 | 3.4 | 3.3 | 3.4 | 3.3 |
| PACIFIC: |  |  |  |  |  |
| Washington | 179.9 | 163.4 | 152.4 | 176.5 | 179.3 |
| Oregon | 117.3 | 112.8 | 110.7 | 116.6 | 119.1 |
| California | 741.3 | 713.0 | 696.3 | 704.0 | 689.3 |

See explanatory notes, sections H and $I$.
1/ Series based on Standard Industrial Classification. Data for Georgia; Idaho, and Iouisiena may not be strictly comparable with those published prior to the current report.

* Revised.

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | August | July |
| ALI MAITUFACTURING | 13,233 | 12,974 | 12,959 | 12,928 | 12,562 |
| DURABLTE GOODS | 6,700 | 6,669 | 6,662 | 6,555 | 6,452 |
| ITOMDURABIE GOODS | 6,533 | 6,305 | 6,297 | 6,373 | 6,110 |
| Durable goods |  |  |  |  |  |
| IRON AND STEEL AND THEIR PRODUCTS | 1,631 | 1,601 | 1,610 | 1,597 | 1,569 |
| Blast furnaces, steel works, and rolling mills | 534.9 | 526.5 | 523.0 | 508.6 | $503.0^{\circ}$ |
| Gray-iron and semisteel castings | 106.4 | 104.7 | 108.8 | 113.6 | 113.0 |
| Malleable-iron castings | 37.3 | 36.1 | 37.9 | 35.4 | 33.7 |
| Steel castings | 69.4 | 68.2 | 69.6 | 65.5 | 64.0 |
| Cast-iron pipe and Pittings | 29.5 | 28.9 | 28.9 | 27.5 | 27.1 |
| Tin cans and other tinware | 49.0 | 47.3 | 44.7 | 47.6 | 44.3 |
| Wire drawn from purchased rods | 28.3 | 28.0 | 28.7 | 30:8 | 30.6 |
| Wirework | 42.3 | 41.8 | 40.2 | 40.3 | 39.0 |
| Cutlery and edge tools | 22.5 | 21.8 | 22.1 | 23.3 | 21.5 |
| Tools (except edge tools, machine tools, files, and saws) | 24.5 | 24.6 | 25.1 | 24.4 | 23.9 |
| Hardware | 50.1 | 49.3 | 49.8 | 48.3 | 49.1 |
| Plumbers' supplies | 40.3 | 38.8 | 40.3 | 38.5 | 38.3 |
| Stoves, oil burners, and heating equipment, not elsewhere classified | 84.0 | 77.6 | 78.7 | 86.4 | 82.7 |
| Steam and hot-water heating apparatus and steam fittings | 60.4 | 57.0 | 60.5 | 61.3 | 60.3 |
| stamped and enameled ware and galvanizing | 109.0 | 110.1 | 111.0 | 111.9 | 109.2 |
| Fabricated structural and ornamental metalwork | 60.9 | 59.3 | 59.6 | 60.3 | 59.1 |
| Metal doors, sash, frames, molding, and trim | 10.8 | 10.4 | 10.4 | 10.1 | 9.6 |
| Bolts, nuts, washers, and rivets | 27.9 | 28.1 | 28.5 | 28.4 | 27.7 |
| Forgings, iron and steel | 35.2 | 35.1 | 34.9 | 36.2 | 35.9 |
| Wrought pipe, welded and heavyriveted | 19.7 | 19.8 | 20.1 | 17.7 | 17.3 |
| Screw-machine products and wood screws | 34.8 | 35.2 | 35.9 | 35.4 | 36.0 |
| Steel barrels, kegs, and drums | 8.1 | 7.9 | 7.9 | 8.3 | 8.4 |
| Firearms | 21.3 | 21.5 | 21.4 | 18.3 | 19.3 |
| ELECTRICAL MACHINERY 1/ | 538 | 535 | 547 | 569 | 567 |
| Flectrical equipment | 363.9 | 362.3 | 367.7 | 379.0 | 379.9 |
| Radios and phonographs | 86.9 | 85.9 | 89.0 | 96.8 | 93.3 |
| Communication equipment | 87.5 | 87.0 | 90.3 | 93.3 | 94.0 |

See explanatory notes, sections C, D, and G, and the glossary for definitions.
11.

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | Auguati | July |
|  | 1,193 | 1,199. | 1,217 | 1,198 | 1,171 |
| Machinery and machine-shop products | 483.8 | 487.5 | 493.2 | 495.1 | 490.8 |
| Eingines and turbines | 51.4 | 52.3 | 52.1 | 53.5 | 53.1 |
| Tractors | 58.8 | 60.0 | 60.4 | 55.7 | 56.8 |
| Agricultural machinery, axcluding tractors | 72.5 | 74.8 | 76.3 | 66.4 | 64.4 |
| Machine tools | 47.8 | 46.8 | 47.0 | 52.5 | 50.6 |
| Machine-tool accessories | 55.1 | 51.8 | 55.4 | 56.4 | 55.4 |
| Textile machinery | 42.1 | 41.3 | 42.0 | 36.4 | 36.4 |
| Pumps and pumping equipment | 65.7 | 66.3 | 67.7 | 73.3 | 74.1 |
| Typewriters | 22.1 | 22.8 | 23.7 | 23.6 | 14.5 |
| Cash registers; adding, and calculating machines | 44.7 | 45.2 | 45.8 | 41.0 | 37.9 |
| Washing machines, wringers, and driers, domestic | 1.5 .6 | 15.6 | 16.4 | 15.1 | 14.6 |
| Sewing machines, domestic and industrial | 14.3 | 14.1 | 14.0 | 12.1 | 12.0 |
| Reirigerators and refrigeration equipment | 83.1 | 84.2 | 84.8 | 78.6 | 77.2 |
| TTRANSPORTATION EQUIPMENT, EXCEIT AUTOMOBIIES | 415 | 430 | 434 | 405 | 403 |
| Locomotives | 17.2 | 26.4 | 26.3 | 24.4 | 23.8 |
| Cars, electric- and steam-railroad | 54.6 | 54.5 | 55.0 | 54.6 | 55.1 |
| Aircraft and parts, excluding aircraft engines | 133.5 | 230.3 | 127.6 | 130.7 | 129.3 |
| Aircraft engines | 21.6 | 25.6 | 25.9 | 26.7 | 26.8 |
| Shipbuilding and boatbuilding | 100.3 | 103.7 | 108.9 | 87.1 | 87.7 |
| Motorcycles, blcycles, and parts | 11.6 | 10.8 | 12.4 | 13.6 | 13.0 |
| AUTOMOBILES | 762 | 786 | 739 | 741 | 753 |
| NONHERROUS METALS ARD THEIR PRODUCTS 1 | / 395 | 388 | 399 | 396 | 393 |
| Smelting and refining, primary, of nonferrous metals | 41.4 | 41.9 | 42.0 | 39.9 | 40.8 |
| Alloying; and rolling and drewing of nonferrous metals, except aluminum | 52.6 | 51.9 | 52.6 | 53.4 | 54.3 |
| Clocks and watches | 27.5 | 25.9 | 28.3 | 27.2 | 24.8 |
| Jewelry (precious metels) and jewelers' findings | 26.3 | 25.8 | 26.3 | 25.6 | 24.7 |
| Silverware and plated ware | 27.7 | 26.5 | 27.4 | 25.0 | 23.7 |
| Lighting equipment | 31.1 | 30.2 | 30.9 | 35.3 | 36.4 |
| Aluminum manufactures | 39.4 | 39.1 | 42.3 | 41.0 | 40.0 |
| Sheet-metal work, not elsewhere classified | 37.5 | 37.0 | 36.4 | 38.7 | 38.5 |

See explanatory notes, sections $C, D$, and $G$; and the glossary for definitions.
12.

TABLF 8: Estimated Numbor of Frocuction Workers in Manufacturing Inaustries - Cont'd (In thousancs)


See explanatory notes, sections $C, D_{y}$ and $G$, and the glossary for definitions.
(In thousanda)

| Industry group and Industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | August: | July |
| APPAREL AND OTHER FIINISHED ITEXIIIE PRODUCTS | 1,160 | 1,070 | 1,095 | 1,071 | 992 |
| Men's clothing, not-elsewhere classified | 318.2 | 296.5 | 314.4 | 294.7 | 278.2 |
| Shirts, collars, and nightwear | 78.6 | 75.8 | 80.0 | 75.1 | 71.7 |
| Underwear and neckwear, men's | 17.8 | 16.7 | 18.2 | 16.6 | 15.4 |
| Work shirts | 18.6 | 18.5 | 18.6 | 15.6 | 14.0 |
| Women's clothing, not elsewhere classified | 480.7 | 437.0 | 435.4 | 440.4 | 400.2 |
| Corsets and alliod garments | 18.2 | 17.0 | 18.1 | 17.5 | 16.9 |
| Millinery | 24.9 | 22.0 | 20.0 | 23.6 | 20.5 |
| Handkerchiefs | 4.8 | 4.0 | 4.9 | 4.6 | 4.2 |
| Curtains, draperies, and bedspreads | 29.2 | 25.1 | 26.4 | 27.3 | 23.2 |
| Housefurnishings, other than curtains, etc. | 30.2 | 28.1 | 27.9 | 29.4 | 26.6 |
| Textile bags | 28.9 | 28.1 | 27.1 | 27.3 | 26.9 |
| LEATHER AND LEATHER PRODUCTS 1/ | 384 | 376 | 373 | 385 | 373 |
| Leather | 47.7 | 47.2 | 47.9 | 49.1 | 48.4 |
| Boot and shoe cut stock and findings | 18.1 | 17.7 | 17.8 | 19.2 | 18.8 |
| Boots and shoes | 245.7 | 240.2 | 236.6 | 245.7 | 237.8 |
| Leather gloves and mittens | 13.2 | 12.8 | 12.9 | 12.7 | 11.9 |
| Trunks and suitcases | 13.8 | 13.3 | 13.3 | 12.7 | 11.7 |
| FOOD | 1,414 | 1,362 | 1,257 | 1;442 | 1,311 |
| Slaughtering and meat packing | 183.1 | 187.5 | 186.1 | 182.9 | 182.3 |
| Butter | 37.9 | 39.3 | 40.5 | 37.8 | 38.8 |
| Condensed and evaporated milk | 21.7 | 22.4 | 23.0 | 22.7 | 23.5 |
| Ice .cream | 31.6 | 32.6 | 31.6 | 3 3. 8 | 33.4 |
| Flour | 39.4 | 39.8 | 38.6 | 35.3 | 39.4 |
| Feeds, prepared | 29.3 | 29.1 | 28.7 | 29.9 | 29.6 |
| Cereal preparations | 13.7 | 13.8 | 13.0 | 1 l ¢. 2 | 13.1 |
| Baking | 227.0 | 226.3 | 224.6 | 210.0 | 216,6 |
| Sugar refining, cane | 20.9 | 21.4 | 18.3 | co. 8 | 20.8 |
| Sugar, bcet | 8.5 | 7.2 | 7.0 | 10.5 | 8.1 |
| Confectionery | 63.7 | 56.0 | 57.8 | 62.8 | 57.9 |
| Beveragus, nònalcoholic | 43.9 | 44.6 | 41.0 | 39.7 | 35.5 |
| Malt liquors | 78.9 | 79.3 | 74.8 | 76.0 | 74.0 |
| Canning and proserving | 292.5 | 246.2 | 167.9 | 349.7 | 246.2 |
| TOBACCO MANUFACTURES 1/ | 86 | 83 | 85 | 85 | 84 |
| Cigarettes | 34.5 | 33.6 | 23.3 | 32.9 | 32.9 |
| Cigare | 44.1 | 41.7 | 43.6 | 44.5 | 43.0 |
| Tobacco (cihewing and smoking) and snuff | 7.8 | 7.6 | 7.7 | 8.0 | 7.8 |

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

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | August | July |
| PAPER AND ALIIED PRODUCTS 1/ | 391 | 388 | 390 | 387 | 380 |
| Paper and pulp | 206.7 | 205.8 | 204.2 | 199.8 | 197.3 |
| Paper goods, other | 58.7 | 60.5 | 61.7 | 60.6 | 60.2 |
| Envelopes | 12.4 | 12.3 | 12.5 | 11.8 | 11.6 |
| Paper bags | 17.7 | 17.4 | 17.5 | 18.0 | 17.8 |
| Paper boxes | 94.8 | 90.9 | 92.8 | 95.6 | 92.6 |
| PRINTING, PUBLISHING, AND ALLIED INDUSTRIES 1/ | 432 | 430 | 433 | 434 | 430 |
| Newspapers and periodicals | 147.7 | 146.8 | 146.9 | 143.0 | 143.2 |
| Printing; book and job | 183.1 | 183.0 | 184.4 | 184.3 | 184.3 |
| Lithographing | 31.2 | 31.2 | 31.1 | 32.6 | 31.5 |
| Bookbinding | 34.5 | 33.4 | 35.1 | 38.3 | 37.0 |
| CHEMICALS AND ALLIED PRODUCTS 1/ | 586 | 567 | 574 | 563 | 562 |
| Paints, varnishes, and colors | 49.7 | 49.1 | 49.1 | 46.7 | 46.2 |
| Drugs, medicines, and insecticides | 63.9 | 63.4 | 63.6 | 66.2 | 66.7 |
| Perfumes and cosmetics | 12.4 | 10.9 | 10.9 | 12.1 | 11.7 |
| Soapp | 25.2 | 24.0 | 23.7 | 23.9 | 24.0 |
| Rayon and allied products | 64.9 | 64.4 | 64.3 | 61.1 | 61.0 |
| Chemicals, not elsewhere classified | 211.2 | 202.0 | 207.6 | 205.7 | 207.5 |
| Explosives and safety fuses | 27.8 | 27.4 | 26.7 | 23.3 | 21.4 |
| Compressed and liquefied gases | 10.1 | 10.0 | 10.1 | 10.1 | 9.8 |
| Ammunition, small-arms | 7.5 | 7.7 | 7.8 | 4.4 | 6.9 |
| Fireworks | 2.8 | 2.2 | 2.5 | 2.1 | 2.4 |
| Cottonseed oil | 14.3 | 12.5 | 12.7 | 13.1 | 11.6 |
| Fertilizers | 26.9 | 25.5 | 27.2 | 27.5 | 26.0 |
| PRODUCTS OF PETROLEUM AND COAL I/ | 170 | 170 | 170 | 166 | 165 |
| Petroleum refining | 115.9 | 117.0 | 116.6 | 114.5 | 114.3 |
| Coke and byproducts | 32.2 | 31.8 | 31.7 | 29.2 | 29.0 |
| Paving materials | 2.7 | 2.6 | 2.6 | 3.3 | 2.8 |
| Roofing materials | 17.8 | 17.4 | 17.7 | 18.2 | 18.2 |

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

TABLF 8: Estmated Inmber of Production Workers in Manufacturing Industries - Cont'd
(In thousands)

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Auguet | July | June | August | Juzy |
| RUBBER PRODUCTS ${ }^{\text {i/ }}$ | 195 | 191 | 195 | 203 | 200 |
| Rubber tires and inner tubes | 91.5 | 90.9 | 91.9 | 104.7 | 102.9 |
| Rubber boots and shoes | 22.0 | 20.7 | 21.8 | 18.9 | 20.1 |
| Rubber goods, other | 81.0 | 79.2 | 81.7 | 79.6 | 76.8 |
| MISCELIANEOUS INDUSIRIES 1/ | 442 | 425 | 430 | 435 | 426 |
| Instruments (professional and scientific), and fire-control equipment | 28.1: | 28.0 | 27.7 | 27.5 | 27.5 |
| Photographic apparatus | 39:7 | 39.0 | 38.3 | 38.3 | 38.3 |
| Optical instruments and ophthalmic goods | 24.8 | 23.9 | 25.6 | 27.6 | 27.9 |
| Planos, organs, and parts | 3.8 | 12.8 | 13.5 | 14.6 | 14.9 |
| Games, toys, and dolls | 44.8 | 41.9 | 41.1 | 38.2 | 36.1 |
| Buttans | 23.0 | 12.5 | 12.9 | 11.4 | 10.7 |
| Fire extinguishers | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 |

See explanatory notes, sections C, D, end G, and the glossary for definitions.
1/ Estimates for the individual industrles comprising the major induetry groups have been adjusted to levels indicated by Foderal Security Agency data through 1946 and have been carried forward from 1946 bench-maris levels, thereby providing consistent series. Comparabie data from January 1939 aro availabie 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 | : |
| :--- | :--- | :--- |
| Lumbenthiy Labor Review |  |  |
| Leather and limber basic products | September 1948 | October 1948 |
| Paper and allied products | September 1948 | October 1948 |
| Printing, publishing, and allied | September 1948 | October 1948 |
| Industries |  |  |
| Products of petroleum and coal | September 1948 | October 1948 |
| Rubber products | September 1948 | October 1948 |
| Electrical machinery | September 1948 | October 1948 |
| Nonferrous metals and their products | October 1948 | October 1948 |
| Furniture and finished lumber products | October 1948 | November 1948 |
| Chemicals and allied products | October 1948 | November 1948 |
| M1scellaneous industries | October 1948 | November 1948 |
|  |  |  |

16. 

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | August | July | June | August | July |
| MINING: ${ }^{\text {// }}$ |  |  |  |  |  |
| Coal: |  |  |  |  |  |
| Anthracite | 77.6 | 76.1 | 77.4 | 76.7 | 74.2 |
| Bituminous coal | 407 | 378 | 407 | 390. | 363 |
| Metal | 88.4 | 91.7 | 92.8 | 91.0 | 90.6 |
| Iron | 33.8 | 33.7 | 33.7 | 32.7 | 32.6 |
| Copper | 26.6 | 26.6 | 26.7 | 25.7 | 25.7 |
| Lead and zinc | 12.0 | 15.0 | 16.2 | 16.5 | 16.3 |
| Gold and silver | 8.1 | 8.3 | 8.3 | 8.3 | 8.1 |
| Miscellaneous | 8.0 | 8.0 | 7.9 | 7.9 | 7.9 |
| Quarrying and nonmetallic | 87.4 | 86.8 | 86.8 | 88.9 | 88.6 |
| Crude petroleum and natural gas production 3/ | 137.1 | 136.6 | 133.5 | 131.0 | 130.8 |
| TRANSPORTATION AND PUBLIC UTILITIES: |  |  |  |  |  |
| Class I steam railroads 4/ | 1,354 | 1,361 | 1,352 | 1,381 | 1,383 |
| Street rallways and busses 5/. | 247 | 246 | 249 | 253 | 254 |
| Telephone ; | 647 | 644 | 633 | 616 | 614. |
| Telegraph 6/ | 35.1 | 36.0 | 36.1 | 37.8 | 38.2 |
| Electric light and power | 286 | 283 | 279 | 269 | 267 |
| SERVICE: |  |  |  |  |  |
| Hotels (year-round) | 370 | 375. | 379 | 379 | 382 |
| Power laundries 2/ | 233 | 239 | 238 | 245. | 250 |
| Cleaning and dyeing 2/. | 89.7 | 92.6 | 94.7 | 93.1 | 97.7 |

See explanatory notes, sections C, D, and $G$, and the glossary for definitions.
1/ Unless otherwise noted, includes all nonsupervisory employees and working supervisors.
2/ Includes production and related workers only.
3/ Does not include well drilling or rig building.
4/ Includes all employees at midale of month. Excludes employees of siwitching and Terminal companies. Class I steam railroads include those with over $\$ 1,000,000$.
annual revenue. Source: Interstate Commerce Commission.
5/ Includes private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies.
6/ Includes all land-line employees except those compensated on a commission basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

TABLE 10: Indexes of Production-Viorker Employment and Weekly Pay Rolls in Manufacturing Industries
(1939 Average $=100$ )

| Industry group and industry | Emplorment indexes |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ALU MANUFACIURIIVG | 161.5 | 158.4 | 158.2 | 157.8 | 374.6 | 360.0 | 359.0 | 331 |
| DURABLE: GCODS |  | 18 |  | 181.5 | 418.7 | 403.1 | 401.3 | 366.8 |
| NONDURABIE GOODS | 142.6 | 137.6 | 137.5 | 139.1 | 331.4 | 317.9 | 317.6 | 297.0 |
| Durable goods |  |  |  |  |  |  |  |  |
| IRON AND STEEL AND THEIR PRODUCTS |  | 161.4 | 162.4 | 161.0 | 361.1 | 336.9 | 340.5 | 316.8 |
| Blast furnaces, steel works, ani rolling mills |  |  | 134.6 | 130.9 | 29.3 | 269.9 | 268.4 |  |
| Gray-iros ma semisteel castings | 171.0 | 168.3 | 174.8 | 182.6 | 394.3 | 377.8 | 400.1 | 384.1 |
| Mailsable-iron castings | 194.3 | 188.0 | 197.0 | 184.4 | 1478.0 | 448.8 | 4x8.1 | 392.1 |
| Stoei castings | 216.4 | 21.2 .6 | 21.7 | 204. 5 | 473.0 | 440.5 | $1+69.5$ | 396.9 |
| Cast-irca nipe and fittings | 167.5 | 164.5 | 104.5 | 1.56. | 432.0 | 414.3 | 422.0 | 352.5 |
| Tin cane and other tinware | 1254.1 | 148.8 | 240.8 | $1+9$ | 364.3 | 353.2 | 370.8 | 334.9 |
| Wire drawn from purchased rods | 128.9 | 127.5 | 130.7 | 140.2 | 202.1 | 242.8 | 243.3 | 254.3 |
| Wisework | 139.3 | 137.6 | 132.4 | 132.5 | 326.0 | 315.1 | 295.7 | 271.6 |
| Cuthery and edge tools | 1245.8 | 141.2 | 143.6 | 151.2 | 358.7 | 335.7 | 343.6 | 333.3 |
|  |  |  |  |  |  |  |  |  |
| Hamoware | 140.6 | 158.3 | 139.7 | 135.6 | 327.7 | 303.8 | 318.6 | 291.8 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Steam and hot-water heating apparatus and steam fittings | 187.1 | 176.4 | 187.4 | 189.8 | 423.2 | 397.2 | 409.5 | 365.8 |
| Stamped and enameled ware and galvanizing | 184.2 | 186.1 | 187.6 | 18 | 9 | 428.9 | 439.3 | 415.0 |
| Fabricated structural and ornamental metalwork | 27 | 1 | 167.9 | 169.6 | 364.8 | 329.0 | 345.2 | 339.3 |
| Metal doors, sash, frames, molding, and trim | 1339.5 | 134.2 | 1133.7 | 130.6 | 324.7 | 292.9 | 309.1 | 266.4 |
| Bolts, nats, washers, and rivets | 1.82 .8 | 184.5 | 187.3 | 186.6 | 423.9 | 401.0 | 1412.8 | 367.3 |
| Forginge, iron and stoel | 215.2 | 214.5 | 213.3 | 221.0 | 475.0 | 449.6 | 1454.1 | 419.0 |
| Wrought pipe, welded and heavy-riveted | 220.7 |  | 225.1 |  | 494 | 473.0 | 467.3 | 388.7 |
| Screw-machine products and wood screws | 193.0 | 195.3 | 199.1 | 196.3 | 427.0 | 426.8 | . 9 | 402.6 |
| Steel barrels, kegs, and drums | 125.6 | 122.4 | 121.7 | 128.4 | 337.4 | 301.4 | 313.3 | 317.6 |
| Firearms | 1400.3 | 403.0 | 1402:6 | 343.3 | 926.1 | 952.7 | 945.9 | 734.8 |
| ELECTRICAL MACEINERY 1/ | 207.7 | 206.6 | 211.3 | 219.6 | 454.8 | 436.3 | 440.0 | 428.1 |
| Electrical equipment | 199.2 | 198.3 | 201.3 | 207.5 | 434.7 | 418.3 | 419.2 | 405.2 |
| Radios and phonographs | 197.6 | 195.3 | 202.3 | 220.0 | 468.9 | 456.9 | 458.6 | 459.7 |
| Communication equipment | 269.5 | 268.1 | 278.2 | 287.3 | 550.6 | 513.4 | 534.8 | 523.8 |

See explanatory notes, sections C, F, and G, and the glossary for definitions.
18.

TABLE 10: Indexes of Production-Woricer Fnployment anci Weokly Pay Rolls in Manufscturing Industries - Continuod

| Industry group and industry | Fnployment indexes |  |  |  | Pay-roli Indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 |  | 1948 |  | 1947 |
|  | August | July | June | August | August | July | June | August |
| MACHITERY, EXCEET ELECTIRICAL | 225.8 | 226.9 | 230.4 | 226.8 | 477.8 | 469.5 | 480.7 | 434.5 |
| Machinery and machine-shop mroducts | 233.0 |  | 237. 5 | 238.4 | 500.9 | 489.3 | 500.7 | 462.1 |
| fingines and turbines | 275.8 | 280.6 | 2'79.5 | 287.0 | 598.2 | 584.5 | 601.4 | 597.2 |
| Tractors | 188.1 | 191.8 | 193.0 | 178.0 | 356.1 | 366.4 | 355.5 | 306.5 |
| Agricultural machinery, excluding tractors | 254.0 | 262.2 | E67. 4 | 232.8 | 558.3 | 573.3 | 595.4 | 471.5 |
| Machine tools | 130.5 | 127.7 | 128.4 | 143.2 | 249.3 | 238.7 | 242.9 | 253.6 |
| Machine-tool accessories | 213.2 | 200. 4 | 214.5 | 218.5 | 400.1 | 361.1 | 383.5 | 362:9 |
| Textile machinery | 192.1 | 188.6 | 191.6 | 166.1 | 460.0 | 437.9 | 459.1 | 330.2 |
| Pumps and pumping equipment | 264.1 | 266.5 | P72.3 | 294.7 | 585.1 | 585.2 | 596.5 | 609.6 |
| Typewriters | 136.3 | 140.8 | 145.9 | 145.8 | 297.5 | 318.7 | 325.2 | 309.6 |
| Caeh registers; adding, and calculating machines | 22 | 229.5 | 232.9 | 208.3 | 494.6 | 506.2 | 505.9 | 405.2 |
| Washirg machines, wringers, and driers, domestic | 208.3 | ?09.5 | 220.0 | 202.2 | 468.4 | 438.5 | 480.9 | 393.3 |
| Sewing machines, domestic and industirial | 183.0 | 179. | 178.6 | 153.7 | 488.2 | 458.5 | 444.2 | 323.2 |
| Refricsrators and refrigeration equipment | 236.3 | 9 | 241.3 | 223.7 | 490.1 | 485.2 | 508.9 | 408.7 |
| TRANSPORTATION EQUIPMENT, EXCEFPT AUTOMOBTIES |  | 0.6 | 273.7 | 255.0 | 547.7 | 552.4 | 561.2 | 492.4 |
| Locomotives | 265.6 | 407.4 | 406.5 | 377.2 | 599.4 | 907.3 | 913.7 | 811.9 |
| Cars, electric- and steamrailroad | 222.8 | 222. | 224.4 | 22.8 | 516.9 | 467.9 | 492.5 | 436.3 |
| Aircraft and parts, excluding aircraft engines | 336.4 | 328 | 321.5 | 329.3 | 698.4 | 661.1 | 649.2 | 637.6 |
| Alrcraft encines | 243.2 | 287.4 | 290.8 | 299.9 | 453.7 | 533.1 | 517.5 | 486.7 |
| Shipbuilaing and boatbuilding | 14.4 .8 | 114.9.8 | 157.2 | 125.8 | 291.6 | 305.3 | 321.7 | 241.8 |
| Motorcycles, bicycles, and parts | 166.1 | 154.7 | 177.5 | 195.3 | 372.2 | 300.2 | 345.7 | 392.8 |
| AUTOMOBILES | 189.4 | 5 | 113.6 | 184.1 | 422.1 | 428.4 | 385.7 | 345.1 |
| WONFERRCUS METALS AND THEIR PRODUCTS 1/ | 172.4 | 169.2 | 173.9 | 172.8 | 379.3 | 360.6 | 368.2 | 335.3 |
| Smelting and refining, primary, of nonferrous metals | 150.0 | 151.7 | 151.8 | 144.4 | 1345.7 | 338.6 | 329.7 | 292.4 |
| Alloying; and rolling and drawing of nonferrous metals, except aluminum | 135.5 | 133.7 | 135.5 | 137.6 | 295.6 | 284.3 | 278.3 | 250.9 |
| Clocks and watches | 135.3 | 127.8 | 139.5 | 134.2 | 334.9 | 304.5 | 332.2 | 293.1 |
| Jewelry (precious metals) and jewelers' findings | 182.3 | 178.4 | 182.1 | 177.0 | 365 | 945.7 | 372.5 | 293.1 321.2 |
| Silverware and plated ware | 228.0 | 218.3 | 225.5 | 205.7 | 528.2 | 481.8 | 527.4 | 441.7 |
| Lighting equipment | 152.0 | 147.6 | 150.8 | 172.3 | 330.1 | 317.0 | 305.9 | 31.8 .5 |
| Aluminum manufactures | 167.2 | 166.0 | 179.5 | 174.0 | 331.8 | 315.6 | 338.5 | 311.8 |
| Sheet-metal work, not elsewhere classified | 200.2 | 197.2 | 193.9 | 206.2 | 459.9 | 438.4 | 438.1 | 431.2 |

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

| Industry group and industry | Bmployment indexes |  | Pay-roll indexes |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1948 | 1947 | 1948 - | 1947 |
|  | AugustiJuly june | Auguat | August July June | August |
| LUMLER ARD TIMBER BASIC PRCDUCIS $3 /$ | 200.8 1196.9 1190.0 | 177.3 | 15388502-9 | 429.7 |
| Sawmills and logeing camps 2/ | $220.7 \mid 217.2$ 208.7 | 195.9 | 604.6 ! 563.3 [543.3 | 485.2 |
| Planint and plywood mills | 192.0 186.6 1184.2 | 165.4 | $485.6: 456.3$ [ 456.1 | 376.5 |
| FURNITURE AND FINISHED LIMBER PRODUCTS $1 /$ | 13 | 140.1 | 339.71320 .4326 .0 | 311.6 |
| Mattress | 171.7161 .9116 | 16 | 9 | 342.8 |
| Furnitiure | 139.7 I 137.4139 .4 | 137.4 | 337.3 [17.7 7325 | 302.2 |
| Wooden boxes, other than cigar | 123.6125 .6125 .6 | 133.3 | 334.1 ; 318.6 [325.7 | 323.4 |
| Caskets and other morticians' goods | 6139 | 147.7 | 287.8 :273.4 283.4 | 288.3 |
| Wood preserving | 140.7 : 137.7133 .6 | 159.6 | 377.0 :373.5:358.1 | 429.0 |
| Wood', turned and shaped. | 142.5137 .8144 .0 | 136.1 | 339.0 :318.3 322.8 | 298.7 |
| STORE, CLAY, AND GLASS FRODUCTS | 157.01153 .2 156.0 | 151.2 | 359.4 335.5 [347.1 | 315.5 |
| Glass and glassware | 162.11155 .61163 .2 | 165.7 | $356.6: 316.8: 348.5$ | 334.1 |
| Glass products made from purchased glass | 120.4 124.4 123.2 | 120.2 | $\vdots$  <br> 272.7 $\vdots 58.8$ <br> 267.7  | 246.4 |
| Coment | 156.1:156.4 1544.5 | 151.1 | 331.9 :328.7 323 | 297.0 |
| Brick, tile, and torra cotta | 140.11137 .5138 .0 | 129.4 | 349.2 :335.1 1329 | 289.1 |
| Pottery and related products | 172.7164 .4170 .2 | 165.9 | 374.8336 .6 :355.2 | 330.4: |
| Gypsum | 135.8 136.4 1314.0 | 123.5 | 331.4 [ 307.5 :306.1 | 260.4 |
| Wallboard, plaster (except gypsum), and mineral woold | 156.8 :156.7 154.9 | 145.3 | $420.3{ }^{\text {! }} 42$ |  |
| Lime |  | 97.0 |  |  |
| Marble, granite, slate, and other products | $101.7: 101.0 \text { 99.6 }$ | 99.4 | 192.0 :184.9 185.9 | 176.4 |
| 'Abrasives | 232.51237 .2 230.4 | 208.8 | 492.21488 .41502. | 375.6 |
| Asbestos products Nondurable goods | 136.9131 .61136 .7 | 129.9 | $343.0: 327.5$ [334.5 | 301.7 |
| TEXITILEMTIL FRODUCTS AND O |  |  |  |  |
| FIBER MANUFACIUURS | 111.4108 .7113 .2 | 105.1 | 298.0 :285.4 304.6 | 246.2 |
| Cotton manufactures, except smiallwares | $124.4121,6 \mid 126.1$ | 118.1 | 356.5 :341.3 3 : 365.9 |  |
| Cotton smallwares | 95.9: 95.1 199.4 | 93.3 | 226.7 226.0 2388 | 195.4 |
| Silk and rayon goods | 89.1: 85.4:89.0 | 80.2 | 274.0257 .1 1271.5 | 208.5 |
| Woolen and worsted manufactures, except dyeing and finishing | 107.4:106.0 110.3 | 103.3 | 297.1 294.9311 .5 |  |
| Hosiery . | 79.4: 74.8:80.5 | 76.3 | 188.3 .171.1 185.6 | 158.6 |
| Knitted eloth | 97.0 ${ }^{\circ} 96.5 \vdots 96.8$ | 94.2 | 229.0 . 223.9 :223.2 | 204.1 |
| Knitted outerwear and knitted gloves | $.98 .9194 .6: 103.6$ | 94.0 | 226.6 212.0 242. | 200.6 |
| Knitted underwear | $114.2114 .4: 118.1$ | 110.5 | $290.8283 .4 ; 301.8$ | 258.0 |
| Dyeing and finishing textiles, including woolen and worsted | $120.5: 119.6: 122.5$ | 114.9 | $287.1{ }^{\text {i } 278.4}{ }^{\text {2 }} 297.8$ | 248.7 |
| Carpets and ruge, wool . | 137.5 :137.4:137.6 | 119.7 | 354.2 : 342.1 . 345.4 | 246.3 |
| Hats, fur-felt | 86.4.80.0 87.0 | 86.3 | $199.8174 .3: 197.4$ | 171.4 |
| Jute goods, except felts | 114.0:112.3i114.2 | 78.1 | 281.5 '272.4 277.5 | 162.0 |
| Coxdage and twine | 120.4 123.7; 127.0 | 116.5 | 285.7 :287.6 306.5 | 256.0 |

See explanatory notes, sections C, F, and G, and the glosgary for definitione.

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

| Industry group and industry | Employment indexes |  | Pay-roll indexes |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1948 | 1947 | 1948 - | i1947 |
|  | August: July : June | August | August July June A | August |
| APPAREL AND OIHER FINISHETD |  |  |  |  |
| TEXTILE PRODUCTS | 146.9 : 135.6 : 138.6 | 135.6 | 343.4 :303.6:303.6 | 288.4 |
| Men's clothing, not elsewhere classified | 138.6:129.1 136.9 | 8.3 | 323.5 294.1:312 |  |
| Shirts, collars, and nightwear | 106.3 :102. 5108.2 | 101.6 | 256.2246 .6258 .5 | 225.5 |
| Underwear and neckwear, men's | 105.1 98.5.107.4 | 97.9 | $293.8 \quad 269.6 ; 289.1$ | 240.7 |
| Work shirts | 131.4 : 131.3 :131.8 | 110.7 | $334.8 \quad 326.4333 .91$ | 1263.6 |
| Women's clothing, not elsewhere classified | 167.9152 .7152 .1 | 153.9 | 381.7 :326.6:310.7 | 323.1 |
| Corsets and allied garments | 97.1:90.8.96.5 | 1.93.4 | 213.1 '197.8 210.8 | 194.7 |
| Millinery | $97.6: 86.4 .78 .2$ | 92.6 | 198.7164 .7132 .0 | 171.2 |
| Handkerchiefs | 93.6:77.7:96.6 | 90.6 | 236.2 .181.3:231.0 | 210.6 |
| Curtains, draperies, and bedspreads | 164.4 141.6.148.5 | 153.9 | 392.0 :317.6 335.1 | 334.7 |
| Housefurnishings, other than curtains, etc. | 270.9 251.4 249.9 | 263.5 | 632.3 :573.0:587.3 | 573.5 |
| Textile bags | 229.2 222.9 214.8 | 216.5 | 521.9 498.3:471.1 | 443.6 |
| LEATHER AND LEATHER PRODUCTS 1/ | 110.7108 .3107 .4 | 111.1 | $249.0 \quad 236.9233 .4$ | 235.8 |
| Leather | 95.3.94.3 95.7 | 98.1 | 207.3 203.6'205.2 | 202.5 |
| Boot and shoe cat stock and findings | 90.7 ; 88.6 88.9 | 96.3 | 189.5178 .6179 .9 | 189.8 |
| Boots and shoes | 106.4104 .0102 .5 | 106. 4 | $244.0 \quad 231.1225 .3$ | 230.9 |
| Leather gloves and mittens | 132.1127 .8 128.8 | 126.8 | 285.4 -267.4.273.6 | 242.3 |
| Trunks and suitcases | 166.0-159.6.159.3 | 153.1 | 376.2 .339.5:339.5 | 1309.1 |
| FOOD | 165.5159 .4147 .1 | 168.8 | 350.2 351.4.328.3 | 349.9 |
| Slaughtering and meat pacling | 135.6138 .8137 .8 | 135.5 | $275.4 \quad 296.9: 306.9$ | 270.c |
| Butter | $188.2195 .4 \cdot 201.2$ | 188.0 | 415.0 :429.5:429.8 | 391. 3 |
| Condensed and evaporated milk | 199.8:205.9 211.2 | 208.8 | 488.5 :506.3 520.3 | ! 446.0 |
| Ice cream | 179.2184 .9179 .1 | 185.9 | $345.5 \quad 363.2: 341.5$ | 346.C |
| Flour | 141.8.143.4 139.1 | 141.6 | $343.5 \quad 343.5: 317.3$ | 336.1 |
| Feeds, prepared | 169.4168 .5 . 166.5 | 173.1 | 401.7 -397.2:391.7 | 7 364.1 |
| Cereal preparations | $164.3164 .5 \cdot 155.2$ | 169.7 | 344.2 . $374.8: 353.7$ | 1361.2 |
| Baking | 119.2118 .9118 .0 | 114.5 | 247.4 :247.6:245.4 | 218.4 |
| Sugar refining, cane | 131.7134 .6 .115 .4 | 131.2 | $303.6 \quad 313.7$ 244.7 | 7284.2 |
| Sugar, beet | 73.3: 62.060 .2 | 90.2 | 146.9 -128.0.123.0 | 186.7 |
| Confectionery 2/ | 114.4100 .5103 .7 | 112.8 | 268.2 :229.0:235.1 | 233.4 |
| Beverages, nonalcoholic | 184.2187 .0 '172.2 | 166.4 | 309.3 :343.3:304.2 | 298.0 |
| Malt liquors | 195.0-196.1-185.0 | 187.9 | 376.9 引391.8.351.0 | 365.1 |
| Canning and preserving | 194.6:163.8.111.7 | 232.7 | 471.2. 421.2 282.9 | 653.7 |
| TOBACCO MANUFACTURES 1/ | 92.5888 .8 - 90.6 | 91.6 | 218.3 205.5:205.8 | 203.0 |
| Cigarettes | 125.8 122.4 121.2 | 120.0 | 288.3 270.0:263.1 | 248.5 |
| Cigars | $\begin{array}{llll}78.9 & 74.7 & 78.1\end{array}$ | 79.8 | 180.9171 .1 .175 .8 | 179.4 |
| Tobacco (chewing and smoking) and snuff | $77.2 \begin{array}{lll}75.6 & 76.1\end{array}$ | 79.3 | 173.3 164.1.166.7 | 169.9 |

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

| Industry group and industry | Employment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1947 | 1948 |  |  | $\frac{11947}{\text { August }}$ |
|  | August | July | June | August | August | Jüly | June |  |
| PAPER AND ALLIED PRODUCIS 1/ | 147.4 | 146.1 | 46.9 | 145.7 | 349.6 | 341.7 | 337.8 | 307.2 |
| Paper and pulp | 150.0 | 1149.4 | 148.2 | 145.0 | 363.6 | 3357.7 | 347.7 | 317.3 |
| Paper goods, other | 1.55 .5 | 160.2 | 163.6 | 160.8 | 347.4 | 355.3 | 358.4 | 313.8 |
| Envelopes | 141.9 | 140.9 | 144.0 | 136.0 | 288.2 | 272.9 | 284.0 | 258.8 |
| Paper baga | 159.2 | 156.3 | 157.8 | 161.6 | 392.7 | 380.0 | 364.4 | 337.6 |
| Paper boxes | 136.7 | 131.0 | 133.9 | 137.9 | 318.6 | 294.9 | 304.8 | 280.1 |
| PRINIIIVG, PUBLISHING, AND ALITIED INDUSIRIES 1/ | 131.8 | 131.1 | 132.3 | 132.3 | 264.8 | 260.1 | 264.9 | 240.0 |
| Newspapers and pericicals | 124.4 | 1123.7 | 123.8 | 120.5 | 240.6 | 235.5 | 238.1 | 214.0 |
| Printing; book and. job | 143.5 | 143.4 | 144.5 | 144.4 | 297.6 | 296.0 | 299.3 | 267.3 |
| Lithographing | 119:0 | 1118.9 | 118.3 | 124.0 | 232.8 | 223.5 | 230.3 | 215.7 |
| Bookbinding | 134.0 | 129.5 | 136.3 | 148.7 | 304.2 | 290.1 | 310.0 | 311.9 |
| CHEMICALS AND ALLIED PRODUCIS 1/ | 203.3 | 196.6 | 199.2 | 195.3 | 450.6 | 432.7 | 434.9 | 390.2 |
| Paints, varnishes, and colors | 175.7 | 173.6 | 173.6 | 165.1 | 345.1 | 343.0 | 335.6 | 297.6 |
| Drugs, medicines, and insecticides | 232.1 | 230.2 | 1.1 | 240.5 | 485.3 | 480.6 | 486.7 | 469.7 |
| Perfumes and cosmetics | 118.9 | 104.8 | 105.0 | 116.5 | 238.7 | 205.5 | 213.7 | 211.2 |
| Soap | 1.65 .3 | 157.6 | 155.4 | 157.0 | 368.5 | 344.3 | 343.1 | 325.0 |
| Rayon and allied products | 134.3 | 133.2 | 133.0 | 126.4 | 302.7 | 289.6 | 280.2 | 252.2 |
| Chemicals, not elsewhere classified | 302.1 | 288.9 | 296.9 | 294.2 | 629.1 | 600.4 | 613.6 | 552.0 |
| Explosives and safety fuses | 380.7 | 376.1 | 365.7 | 319.7 | 798.3 | 760.2 | 737.6 | 594.5 |
| Compressed and liquefied gases | 253.1 | -252.1 | 254.2 | 253.2 | 512.0 | 518.2 | 505.4 | 448.1 |
| Ammunition, small-arms | 173.9 | 1180.2 | 181.5 | 103.8 | 403.1 | [420.8 | 411.2 | 206.5 |
| Fireworks | 238.0 | 190.2 | 212.2 | 177.5 | 640.1 | 507.0 | 572.5 | 447.7 |
| Cottonseed oil | 93.8 | 82.0 | 83.0 | 85.9 | 261.7 | 230.1 | 228.3 | 221.6 |
| Fertilizers | 142.7 | 135.6 | 144.4 | 1246.1 | 410.1 | 396.7 | 414.5 | 388.2 |
| PRODUCTS OF PETROLEUM AND COAL 1/ | 160.3 | 160.7 | 160.3 | 157.0 | 358.2 | 353.4 | 342.2 | 302.1 |
| Petroleum refining | 158.3 | 159.8 | $159.2$ | 156.3 | 345.5 | 344.9 | $330.8$ | $289.4$ |
| Coke and byproducts | 148.4 | 146.7 | 145.9 | 234.7 | 348.0 | 329.5 | 330.1 | 285.6 |
| Paving materials | 111.8 | 107.7 | 1207.1 | 133.9 | 258.9 | 246 | 235.0 | 273.2 |
| Roofing materials | 219.4 | 215.5 | 218.2 | 224.9 | 548.7 | 531.9 | 523.3 | 502.5 |

See explanatory notes, sections C, F, and G, and the glossary for definitions.
22.

TABIE 10: Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufactwring Industries ~ Continued

| Industry group and industry | Fmployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | -1948 |  |  | 1947 | 1948 |  |  | $\frac{1947}{\text { Augu立 }}$ |
|  | August: | July | June | Angust | August | July | June |  |
| RUBBER PRODUCTS 1/ | 160.9 | 157.7 | 161.6 | 167.9 | 347.2 | 329.7 | 330.2 | 337.6 |
| Rubber tires and inner tubes | 168.7 | 167.6 | 169.4 | 293.0 | 341.0 | 329.8 | 322.0 | 355.5 |
| Rubber boots and shoes | 148.3 | 139.4 | 146.9 | 127.2 | 344.1 | 321.7 | 329.7 | 268.4 |
| Rubber goods, other | 156.3 | 152.7 | 157.5 | 153.5 | 358.3 | 331.9 | 343.7 | 321.5 |
| MISCELLANEOUS INDUSTRIES 1/ | 180.1 | 173.9 | 175.7 | 177.7 | 397.4 | 374.2 | 386.7 | 355.9 |
| Instrumenta (professional and scientific), and fire-contrcl equipment | 248.7 | 247.4 | 244.5 | 243.4 | 508.3 | 487.2 | 491.0 | 460.3 |
| Photographic apparatus 2/ | 224.5 | 220.9 | 216.6 | 216.5 | 444.1 | 443.8 | 438.8 | 385.1 |
| Optical instruments and ophthalmic goods | 208.8 | 201.0 | 215.6 | 231.8 | 415.2 | 393.2 | 421.6 | 426\%5 |
| Pianos, organs, and parts | $17 \%$ | 164.0 | 173.7 | 187.2 | 374.3 | 339.8 | 362.7 | 384.8 |
| Games, toys, and dolls | 234.2 | 219.3 | 214.8 | 200.1 | 557.8 | 513.1 | 510.6 | 426.2 |
| Buttons | 116.2 | 111.2 | 114.8 | 101.9 | 275.3 | 254.0 | P271.7 | 220.7 |
| Fire extinguishers | 1269.1 | 271.8 | 270.6 | 277.3 | 566.7 | 573.0 | 595.6 | 583.7 |

See explanatory notes, sections C, F, and G, and the glossary for definitions.
1/ See footnote 1, table 8.
2f Revisions have been mede as follows in the pay-roll indexes for May 1948:
Sawills and logging camps - 496.8.
Confectionery - 213.9.
Photographic apparatus - 409.7. Industries

$$
\text { (1939 Average }=100 \text { ) }
$$

| Industry group and industry | Employment indexes |  |  |  | Paj-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 - |  |  | 1947 | 1948 |  |  | 1947 |
|  | August | July | June | August | Auguat | July | Whune | Ausuat |
| MINIIVG: |  |  |  |  |  |  |  |  |
| Coal: |  |  |  |  |  |  |  |  |
| Antiracite | 92.8 | 91.1 | 92.6 | 91.7 | 259.4 | 192.7 | 246.0 | 244.0 |
| Bituminous coal | 109.5 | 101.7 | 109.6 | 105.0 | 366.8 | 293.8 | 344.2 | 314.7 |
| Metal | 95.5 | 99.1 | 100.2 | 98.3 | 209.8 | 202. 2 | 208.2 | 193.3 |
| Iron | 159.9 | 159.6 | 159.6 | 154.6 | 355.6 | 333.1 | 345.0 | 313.0 |
| Copper | 106.5 | 106.6 | 106.9 | 102.8 | 255.3 | 242.4 | 232.9 | 219.0 |
| Lead and zinc | 74.0 | 92.2 | 99.7 | 101.4 | 189.1 | 193.2 | 238.1 | 220.5 |
| Gcid and silver | 30.9 | 32.0 | 31.9 | 31.8 | 54.2 | 55.2 | 54.2 | 52.1 |
| Miscellanecus | 190.0 | 191.3 | 188.6 | 188.3 | 387.5 | 383.0 | 360.7 | 345.0 |
| Quarrying and nonmetallic | 127.7 | 126.7 | 126.8 | 129.8 | 340.7 | 322.3 | 321.7 | 317.2 |
| Crude petroleum and natural gas production | 119.8 | 119.4 | 116.7 | 114.5 | 251.0 | 240.8 | 227.1 | 204.0 |
| TRANSPORTATION AND PUBLIC UTILITTIES |  |  |  |  |  |  |  |  |
| Class I steam rallroads I/ | 137.1 | 137.9 | 136.9 | 139.8 | 2/ | 21. | 2/ | $2 /$ |
| Street railways and busses | 127.5 | 127.2 | 128.3 | 130.7 | 235.2 | 232.2 | 231.2 | 225.2 |
| Telephone | 203.7 | 202.8 | 199.4 | 193.8 | 331.3 | 336.1 | 327.1 | 306.2 |
| Telegraph | 93.3 | 95.7 | 96.0 | 100.5 | 225.5 | 233.2 | 228.5 | 213.5 |
| Electric light and power | 117.1 | 115.8 | 114.1 | 110.2 | 204.9 | 202.8 | 196.4 | 182.9 |
| TRADE: 3/ |  |  |  |  |  |  |  |  |
| Wholesale | 117.0 | 116.2 | 115.3 | 112.2 | 220.6 | 215.3 | 211.8 | 198.2 |
| Retail. | 111.2 | 112.0 | 113.6 | 110.0 | 218.1 | 218.3 | 218.3 | 197.6 |
| Food | 112.3 | 113.8 | 115.5 | 114.7 | 229.0 | 232.9 | 231.9 | 212.2 |
| General merchandise | 120.6 | 121.3 | 124.8 | 215.7 | 231.2 | 233.6 | 236.5 | 212.0 |
| Apparel. | 105.1 | 108.0 | 115.4 | 103.4 | 195.5 | 202.1 | 214.3 | 182.9 |
| Furniture and housefurnishings | 90.2 | 90.5 | 91.2 | 85.9 | 178.5 | 176.7 | 179.6 | 155.1 |
| Automotive | 111.1 | 109.8 | 108.4 | 105.1 | 219.6 | 213.4 | 209.6 | 188.5 |
| Lumber and building materials | 129.6 | 128.2 | 126.3 | 123.1 | 264.6 | 257.3 | 252.8 | 229.0 |
| SERVICE: |  |  |  |  |  |  |  |  |
| Hotels (yearwround) 4/ | 114.6 | 116.2 | 117.6 | 117.6 | 233.9 | 234.4 | 236.3 | 221.0 |
| Power laundries | 119.0 | 122.1 | 121.5 | 125.0 | 228.1 | 240.6 | 238.3 | 231.3 |
| Cleaning and dyeing | 154.2 | 159.2 | 162.9 | 160.1 | 286.9 | 308.0 | 324.8 | 285.0 |

See footnotes, table 9, and explanatory notes, sections $C, F$, and $G$.
1/ Source: Interatate Commerce Comission.
$\overline{2} /$ Not available.
3/ Includes all nonsupervisory employees and working supervisors.
4/ Money payments only; additional value of board, room, uniforms, and tips, not Included.

Sec. A. Scope of Employment Revisions - The employment estimates shown in this repert 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 1946 bench-mark levele, 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 mariks. Bench marks for State and local gevernment 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 Comission. The Interstate Comerce Commseion is the source for railroads, and the U. S. Maritime Commission for water transportation.

Sec. C. Revisions 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 2946 bench-mark levels. As these revisions are completed, they are published in this report and indicated by appropriate footnotes. In the nommaniacturing industries, the entire series of mining industries have been ad justed to 1946 bench-maris 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 Statiatics. Such requests should specify the series desired.

Sec. D. How Fmployment, 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 essontial that an accurate base be established from which estinetes 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, estimatea prepared since the lest bench mark are reviewed to determine if any adjustment of level is required. This is the basic principal of employment estimating used by the BIS. It yields a satisfactory compromise between a slow but highly accurate complete count on the one hand, and a rapid but less accurate sample count on the other.

Briefly, the Bureau of Labor Statistics computes employment estimates as follows: first, a bench mark or level of employment is determined; second, a sample of establishments is selected; and third, changes in employmont 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 induetry were 40,200 In September 1045, and if the industry has a reporting sample of 13 establishments employing 23,200 workers in September and 23,800 in October, the October estimate would be prepared as follows:

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

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

Why Revisions Are Necessary - Because reports are not immediately available from new firms, they are frequently introduced into the 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 allcwed to go uncorrected for too long a period. The most recent revisions correct for the downward bias that had accumulated in the nonmanufacturing serlas beginning Jenuary 1945 and in the manuiacturing series becinning January 1946. Revisions in some industry divisions were made in order to incorporate greater refinements in methcdology and new ec: source materials that have become available.

Sec. E. Comparability With Other Twpes of Employment Data - The Bureau of Iabor Statistics employment estimates are based upon reports submitted by ccoperating establishments and therefore differ irom employment information obtained by household interviews, such as the Monthly Report of the Labor Force. The BIS estimates of employment in nonagricultural establishments differ from the Monthly Report of the Labor Force total nonagricultural employment estimates in severel important respects. For example: (1) The BLS estimates cover all fulland part-time wage and salary workers in private nonegricultural establishments who worked or recelved 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) Froprietors, self-employed persons, domestio servants, and unpaid family workers are excluded.

Sec. F. Pay-Roil 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. Respondente are instructed to exclude pay for vacations not taken as well as eash estimatos of any payments in kind. Bonuses, unless eamed 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 marks to secure current. pay-roll estinatee. These payroll estimates are converted into indexes, using the 1939 average as a base.

Sec. G. Source of Data - Hrployment and pay-roll est1mates are based on reports from cooperating establishmenta. Excluding about 9,000 block-sample returns, the approximate number of establishments, and workers covered, for each of the induatry divisions are as follows:

Approximate Coverage of BUS Employment and Pay-Roll Sumple

| Industry Division : | : Number | Imployees | or production orkers $\qquad$ |
| :---: | :---: | :---: | :---: |
|  | : Lishmen | Number | : Percent of total |
| Manufacturing | 34,200 | 7,503,000 | 59 |
| lining | 2,500 | 351,000 | 53 |
| Contract construction | 14,000 | 492,000 | 25 |
| Public utilities | 7,200 | 912,000 | 77 |
| Trade: |  |  |  |
| Wholesale | 12,400 | 343,000 | 19 |
| Retail | 35,000 | 935,000 | 22 |
| Service: |  |  |  |
| Hotels (yecr-round) | 1,200 | 133,000 | 35 |
| Power laundries and cleaning and dyeing | 1,600 | 68,000 | 21 |

Sec. H. Coverage of Emponvent Estimates - The omployment estimates shown in jables $1,2,3,6$, and 7 cover all fulland part-time wage and sataity woriers who worked or received pay during the pay period ending neerest the $15^{t h}$ of the month. Proprietors, self-exployec poreons, domestic servents, and personnel of the armed forces are excluded. The ostimates and indexes show in tables 8 and 10 refer to production and related workers as defined in the glossary, page vili.

Sec. I. State Estimates - State estimates are prepared in cooperation with various State Agencies es iridicated on page: $v$. The estimates for menufacturing have been adjusted to recent data made available under the Federal Social Security progran. Since some States have adjusted to more recent benchmark data than others, and because varying nethods of computation are used, the total of the State estinates differs from the national total (see tables 1 and 2). Because of these recent revisions the State estinates for ianufacturing are not consistent with the umrevised data shown prior to Jwne 1947 for total empioyment in nonagricultural establishments, by State. A number of States 0 lso meke available nore detailed industry data and information for earlier periods which may be secured directly upon request to the appropriate State Agency. Estinates of nonagricultural employment, by State, for those States which are now publishing such estimates are sinown in table 6. These totels 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 ELS Regional Offices or the Bureau's Washington Office:

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

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 Statistios and Research, Dept. of Induatrial Relations, San Francisco 3.
Connecticut - Imployment Security Div., Dept, of Labor and Factory Inspection, Hartford 15.
Delaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
Florida - Unemployment Ccmpensation 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 - Bmployment Security Commission, Des Moines 8.
Kansas - State Labor Dept., Topeka.
Louisiana - Div. of Bmployment Security, Dept. of Labor, Baton Rouge 4.
Maine - Unemployment Compensation Commission, Augusta.
Maryland - Dept. of Labor and Industry, Baltimore 2.
Massachusetts - Div. of Statistice, Dept. of Labor and Industries, Boston 10.
Michigan - Dept. of Labor and Indugtry, Lansing 13.
Minnesota - Div. of Employment and Eecurity, 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 Jersey - Dept. of Labor, Trenton 8.
New Mexico - Employment Security Comission, 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 (Manufacturing); Bureau of Research and Information, Dept. of Labor and Industry, Harrisburg (Nonmanufacturing).
Rhode Island - Div. of Census and Information, Dept. of Labor, Providence 2.
Tennessee - Dept. of Hmployment 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 Comission, 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.

Kew Ingland - Regional Director, U. S. Bureau of Labor Statistics, $01 .{ }^{\text {S South Bldg., } 294}$ Washington St., Boston 33, Massachusetts (Connecticut, Niaine, Massachusetts, New Hampshire, Rhode Island, Vermont).
North Atlantic - Reginnal Director, U. S. Bureau of Labor Statistics, 1000 Parcei Poet Blde., 341 Ninth Avenue, Dew York 1, New York (Delaware, Fennsylvania, New Jersey, Now York).
North Central - Regional Director, U. S. Bureau of Labor Statistics, 312 National War Azencies Bldy., 226 W. Jackson Blvd., Chicago 6, Illinois (Illinois, Indiana, Icwa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakote, South Dakota, Wisconsin).
Southern - Regional Director, U. S. Bureau of Labor Statistics, 6th Floor Silvey Bldg., 114 Marietta Street, N. W., Atlanta 3, Georgia (Alabama, Ariansas, Fiorida, Georeia, Louibiana, Mississippi, North Carollna, Oklahonn, South Ceroiina, Tennescee, Texas).
Facific-Rocky Mountail - Regicnal Director, U. S. Bureau of Labor Statietics, 546 Federal Office Bide., San Francisco 2, California (Arizona, California, Colorado, Idaho, Montena, Nevada, New Mexico, Oregon, Utal:; WasliEngtion, Wyowing).

Technicel aivico and afsistance on employment statistics in the states of Virginia; Weat Virginis, Maryland, and the District of Columbia will be given by the Birenu's Warhington Office.

## GLOSSARY

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

Contract constuption - Covers only firms engaged in the construction business on a contract basis for othera. Force-account construction workers, i.e., hired directly by and on the pay rolls of Federal, State, and local sovernment, public atilities; and privato establishments, are exc?uded.

Defense Agencies - Covers civilian employees of the National Military Establishment, Maritime Commission, National Advieory Committee for Aeronautics, The Panaria Canal. Philippine Alien Property Administration, Philippine War Damage Commiscion, Office of Selective Service Records, War fssets Administretion, Office of Defense Transportation, Office of Scientific.Research and Development, National Security Resources Bosrd.

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

Federal Government-Ixecutive branch - Includes U. S. Nevy 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.

Bmploynent shown here for the executive brench differs from data published by the U. S. Civil Seavice Comaission in the following respects: (1) Waploymont 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 mouth; (2) substitute rural mail carriers are excluded; (3) employmont in December of eech year includes the additional postal employees necessitated by the Christmas season, oxcluded from published Civil Service Camission Pigures starting 1942; (4) seamen and trainees who are hired and paid by private ateamehip companies having contracts with the Maritine Comission are excluded; (5) the Panama Railroad Company is shom here under Govemment corporations but is included under the executive branch by the Civil Service Commisaion.

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

Government - Covers Federol, State, and local governmentel establishmenta performing legisiative, executive, and judicial functions, as well as all govermment-owned and operated establishments and institutions (arsenals, navy yards, hospitals, etc.), government corporations, and government force-account construction. The data shown in table 1 exclude fourth-class postmasters because they presumably havo other major jobe.

Goyernment corporations - Covere 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 undor the executive branch.

Indexes of production-worker employment - Estimates of productionWorker employment expressed as a percentage of the average employment in" 3939.

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

Leave paymentis - Peyments were authorized by Public Law 704 of the 79 th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel who were discharged prior to September i, 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. Iump-sum peyments 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 arsenalis and nevy yards are excluded.

Military personnel and pay rolls - Data are for personnel on active dity. Reserve personnel are excluded if on inactive duty or if on active duty for a brief training or emergency period. Personnel is as of the first of the month and pay nolls are for the entire month. Through October 1, 1947, diacharged officer personnel were included until the end oi their teminal-leave period; discharged enlisted persoinel were inclisded from October 1, 1946 through October 1, 1947 only. After October 1, 1947, lump-sum terminal-leave payments at time of discharge (authorized by Public Lew 350 of the 80 th Congress) were made.

Coast Guard pay rolls for all periods and Army pay rolls through April 3947 represent actual expenditures. Other pay roils represent estimated obligations besed on an average monthly personnel count. 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, tunielling and shafting, and the drilling or aciaizing of oil weils; also includes ore dressing, beneficiating, and conceniration.

Nonagricultural estabIishments - Governmentai or private business estallishmenta; (1) that are physically located within cont,inental Unitta States; and (2) whose principai activity can be classified undsr ole of the following industry aiviafons - manifacturing, miniig, contract construction, trancportation and public utilities, trade, finance, service, or government.

Par rolls - Private pay rolls represent weekly pay rolls of both full- and pert-time production and related workers (or nonsupervisory employeee and working supervieors) who worked or received pay for any part of the pey 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 decuctions for damaged work. Includes pay for sick leave, holidoys, anc vacations taikon. Excludes cesh 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 mining industries further deductions are made forexplosives or other supplies furnished by the company. In coal mining portal-to-portal pay is included. Federal civilian pay rolls are for all employrees before deductions for income tax, retirement, and bonds.

Production and related workers - Includes working foremen and all nonsupervisory workers (including lead men snd trainees) engaged in fabricating, processing, sesembing, inspection, receiving, storage,
handiing, packing, warehoueing, shipping, maintenance, repair, janitorial, watchman services, products development, auxilliary production for plent's own use (e.g., power plent), and recordkeeping 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 mroups 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.

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

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

Wage end salary workers - In addition to production and related workers as defined above, includes workers engaged in the following activities: executive, purchasing, finance, dccounting, 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 establishnent 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.

