# EMPLIUYMETT and PAY RILLLS 

## DETAILED REPORT MAY <br> 1948

United States Department of Labor Bureau of Labor Statistics

Prepared by
Division of Employment and Occupational Outlook
Branch of Employment Statistics
Samuel Weiss, Chiet

## Industries in the Tobecco Manufactures Group

In this detailed report the Bureaid presents a new serles of production-worker estimates for the individual industries comprising the tobacco manufactures group. The new estimates, adjusted to bench-mark data through 1946 made available by the Federal Security Agency, correct the downward bias which has accumulated since 1939 and are, therefore, more representative of the true levels of exployment.

Despite the lapse of several years without any adjustment to levels other than the 1939 Census of Manufactures, only two of the industries (cigars and tobacco (chewing and amoking) and snuff) required adjustment. The cigarette industry was not affected; however, minor revisions have been incorporated.

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

# EMPLOYMENI ARTD EAY ROILS <br> Detailed Report 

May 1948

| Explenatory notes outining briefly the concepte, methodology, and sourcos used in proparing cata for this ropont appear in the appendix. <br> See peges i - vill. |
| :---: |
|  |  |
|  |  |

1. Estimated Number of Wage and Salary Workers in Nomazricul- tural Establishments, by Industry Division. ..... 2
2. Eatimated Nrabor of Hage ana Selary Wcrikers in Manufacturing Industries, by Maior Fhastry Group. ..... 3
3. Estimated Number of Wege and Salary Vorikers in Selected Nonmanufecturing Industries, by Major Industry Group ..... 4
4. Federal mployment and Pay Rolis in All Areas and in Continental United States, and Total Government Fmployment and Pay Rolls in Washington, D. C. ..... 5
5. Personnel and Pay of the Militery Eranch of the Federal Government ..... 6
6. Estimated Number of Wege and Salary Workers in Nonagricul- toral Establishments for Selected States, April 1.548. ..... 7
7. Estimated Number of Wage and Salary Worisers in Manufacturing Industries, by State, April 1948 ..... 8
8. Estimated Number of Production Workers in Manufacturing Industries ..... 10
9. Estimated Number of Employees in Seloctod Nonmanufacturing Induetries ..... 16
10. Indexes of Production-Worker Employment and Weekly Pay Rolls in Manufacturing Industries ..... 17
11. Indexes of Employment and Weekly Pay Rolle in Selected Nonmanufacturing Industries. ..... 23
Explanatory Notes ..... 1
Glossary ..... V
12. 

Table 1. - Estimated Number of Wage and Salary Workers in Nonagricultural Establiehments, by Industry Division 1/
(In thousands)

| Industry division | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar | Mey | Apr. |
| TOTAL | 44,609 | 44,298 | 44,600 | 43,345 | 43,221 |
| Monufacturing | 15,893 | 15,945 | 16,269 | 15,569 | 15,750 |
| Mining | 933 | 820 | 924 | 910 | 881 |
| Contract construction | 2,049 | 1,933 | 1,805 | 1,865 | 1,798 |
| Transportation and public utilities | 4,041 | 3,977 | 4,032 | 3,981 | 3,845 |
| Trade | 9,615 | 9,574 | 9,598 | 9,277 | 9,255 |
| Finance | 1,716 | 1,704 | 1,697 | 1,643 | 1,636 |
| Service | 4,738 | 4,768 | 4,729 | 4,590 | 4,552 |
| Government | 5,624 | 5,577 | 5,546 | 5,510 | 5,504 |

See explanatory notes, sections A - H.
1/ Estimates have been adjusted to levels indicated by data through 1946 made available by the Federal Security Agency and are not comparable with data shown in mimeographed releases dated prior to June 1548 or the Monthly Labor Review dated prior to July 1948. Comparabie data from January 1939 are available upon request to the Bureau of Labor Statistics.
(In thoueands)

| Major industry group | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar. | May | Apr. |
| ALE Manumacturima | 15,893 | 15,945 | 16,269 | 15,569 | 15,750 |
| Durable goods | 8,113 | 8,159 | 8,258 | 7,962 | 8,068 |
| Iron and steel and their products | 1,893 | 1,896 | 1,929 | 1-861 | 1,875 |
| mlectrical machinery | 727 | 742 | 756 | 731 | 745 |
| Machinery, except electrical | 1,574 | 1,562 | 1;587 | 1,561 | 1,565 |
| Trensportation equipment, except automobiles | 563 | 589 | 589 | 598 | 612 |
| Automobiles | 263 | 979 | 985 | 899 | 957 |
| Nonferrous metsls and their products | 467 | 475 | 482 | 486 | 498 |
| Lumber and timber basic products | 846 | 829 | 827 | 780 | 750 |
| Furniture and finished lumber producte | 549 | 561 | 576 | 537 | 546 |
| Stone, clay, and glase products | 531 | 526 | 527 | 509 | 520 |
| Nondurable goods | 7,780 | 7,786 | 8,011 | 7,607 | 7,682 |
| Textile-mill products and other fiber mathufactures | 2,416 | 1,425 | 1,435 | 1,342 | 1,368 |
| Apparel and other finished textile products <br> Leather and leather products | 1,247 | 1,268 | 1,334 1,442 | 1,137 | 1,167 424 |
| Leather and leather products | 406 | 418 | , 442 | 411 | 424 |
| Food | 1,609 | 1,562 | 1,655 | 1.,622 | 1,609 |
| Tobacco manufactures | 97 | 99 | 100 | 96 | 95 |
| Paper and allied products | 476 | 476 | 480 | 470 | 473 |
| Printing, publishing, and allied industries | 720 | 718 | 722 |  |  |
| Chemicals and allied products | 759 | 767 | 773 | 761 | 764 |
| Products of petroleun and coal | 242 | 238 | 238 | 232 | 227 |
| Rubber products | 243 | 246 | 253 | 262 | 274 |
| Miscollaneous industries | 565 | 569 | 579 | 571 | 579 |

ס̄ee explanatory notes, section A - H.
1/ Estimates have been adjusted to levels indicated by data through 1946 made Evaileble by the Federal Seourity Agency and are not comparable with date shown in umpographed releases dated prior to June 1948 or the Monthly Labor Review dated priof to July 1948. Comparable date from January 1939 are available upon request to tise Bureau of Labor Statistics.
4.

Table 3. - Eatimated Number of Wage and Salary Workers in Selected Nommanfacturing Industries, by Major Iddustry Group
(In thousands)

| Major industry group | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar. | May | Apr. |
| Mining 1/ | 933 | 820 | 924 | 910 | 881 |
| Anthracite | 81 | 82 | 82 | 81 | 80 |
| Bituminous coal | 420 | 309 | 419 | 407 | 383 |
| Metal | 102 | 102 | 102 | 102 | 102 |
| Querrying and nommetallic | 96 | 95 | 90 | 97 | 96 |
| Crude petroleum and natural gas production 2/ | 234 | 232 | 231 | 223 | 220 |
| Transportation and public utilities 1/ | 4,041 | 3,977 | 4,032 | 3,981 | 3,845 |
| Transportation | 2,808 | 2,747 | 2,808 | 2,901 | 2,880 |
| Communication | 731 | 731 | 728 | 605 | 495 |
| Other public utilities | 502 | 499 | 496 | 475 | 470 |
| Government | 5,624 | 5,577 | 5,546 | 5,510 | 5,504 |
| Federal - | 1,788 | 1,771 | 1,758 | 1,905 | 1,924 |
| State and local | 3,836 | 3,006 | 3,788 | 3,605 | 3,580 |

See explanatory notes, section A - H.
1/ Estimates have been adjusted to levels indicated by data through 1946 made available by the Federal Security Agency and are not comparable with data publiahed in mimeographed releases dated prior to June 1948 or the Monthly Labor Retiew dated prior to July 1948. Comperable data from Jenuary 1939 are avallable upon request to the Bureau of Labor Statistica.

2/ Includes well drilling and rig building.

Table 4. - Federal Civilian mployment and Pay Rojls in All Areas and in Continental Onited Scates, and Total civilian Govermert Employment and Pay Rolis in Washington, D. G. 1/
(In thousands)

| Area and branch | $\begin{gathered} \text { Employment } \\ \text { (as of first of month) } \end{gathered}$ |  |  |  | Pay rolis(total for month) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  | 1947 |  | 1948 |  | -1947 |  |
|  | May | April | May | Average | May | April | May | Average |
| Total (including areas outside United States) |  |  |  |  |  |  |  |  |
| Sotal Federal | 2,038.9 | 2,080.8 | 2,293.0 | 2,149.2 | 464,214 | 477.580 | 514.057 | 497,173 |
| Brecutive | 1,999.2 | 1,981.0 | 2,151.2 | 2,108.0 | 454.930 | 468,100 | 504,747 | 487.778 |
| Defense agencies | 910.0 | 903.8 | 1,028.0 | 989.7 | 196.720 | 204,606 | 235,118 | 220.574 |
| Post office Dept. | 455.7 | 449.3 | 435.4 | 451.0 | 101,473 | 100,894 | 95.256 | 100,421 |
| Other agencies | 633.5 | 627.9 | 687.8 | 667.3 | 156,737 | 162,600 | 274,373 | 166,783 |
| Legislative | 7.2 | 7.2 | 7.2 | 7.1 | 2,469 | 2,480 | 2,439 | 2,423 |
| Judicial | 3.5 | 3.5 | 3.1 | 3.2 | 1,20\% | 1,322 | 1,181 | 1.224 |
| Government corporations | 29.0 | 29.1 | 31.5 | 30.9 | 5,608 | 5;678 | 5,690 | 5.748 |
| Continental United States |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total Federal | 1,808.7 | 1,791.8 | 1,924.5 | 1,889.9 | 428,027 | 439,652 | 469,774 | 455,302 |
| Executive | 1,776.1 | 1,759.1 | 1,890.9 | 1,856.5 | 419,377 | 430,845 | 461,165 | 446,598 |
| Defense agencies | 727.2 | 711.0 | 796.1 | 766.9 | 168,052 | 174,409 | 198,395 | 186,200 |
| Post Office Dept. | 454.1 | 447.7 | 434.0 | 449.5 | 101,117 | 100.543 | 94,936 | 200,078 |
| Other agencies | 604.8 | 600.4 | 660.8 | 640.1 | 150,208 | 155,893 | 167,834 | 160,320 |
| Legislative | 7.2 | 7.2 | 7.2 | 7.1 | 2,469. | 2,480 | 2,439 | 2,423 |
| Judicial | 3.4 | 3.4 | 3.0 | 3.1 | 1,175 | 1,288 | 1,145 | 1,188 |
| Government corporations | 22.0 | 22.1 | 23.4 | 23.2 | 5.006 | 5,039 | 5,025 | 5,093 |
| Washington, D. C. |  |  |  |  |  |  |  |  |
| Total government | 228.6 | 227.6 | 241.0 | 233.6 | 60.518 | 62,985 | 66,834 | 63.815 |
| District of Colambia government | 18.5 | 18.6 | 18.0 | 18.1 | 4,392 | 4,495 | 4,250 | 4,121 |
| Federal | 210.1 | 209.0 | 223.0 | 215.5 | 56,126 | 58,490 | 62,584 | 59,694 |
| Executive | 202.3 | 201.2 | 215.2 | 207.8 | 53,457 | 55,799 | 59,944 | 57,067 |
| Defense agencies | 67.3 | 66.6 | 73.3 | 69.8 | 25,647 | 26,324 | 19,295 | 18,111 |
| Post Office Dept. | 7.4 | 7.4 | 7.4 | 7.6 | 2,282 | 2,277 | 2,019 | 2,463 |
| Other agencies | 127.6 | 127.2 | 234.5 | 130.4 | 35,521 | 37.198 | 38,630 | 36,493 |
| Legislative | 7.2 | 7.2 | 7.2 | 7.1 | 2,469 | 2,480 | 2,439 | 2,423 |
| Judicial | .6 | . 6 | . 6 | . 6 | 200 | 211 | 201 | 204 |

1 Data for Central Intelligence Agency are excluded starting August 1947 for employment and July 1947 for pay rolls.

See slossary for definitions.
6.

Table 5. - Parsomisl and Pay of the Military Brench of the Federel Government
(In thousands)

| Personnel and pay | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar. | May | Annual averase |
| Porsonnel, total............ | 1,406 | 1,404 | 1,409 | 1,703 | 1,670 |
| Army and Air Force..... | 1/916 | 1/906 | 1/909 | 1,082 | 1,059 |
| Navy. . . . . . . . . . . . . . . . | 390 | 399 | 400 | 501 | 493 |
| Marine Corps............ | 80 | 79 | 80 | 99 | 97 |
| Coast Guard. . . . . . . . . . | 20 | 20 | 20 | 21. | 20 |
| Men. . . . . . . . . . . . . . . . . . | 1,390 | 1,388 | 1,393 | 1,680 | 1,649 |
| Women. . . . . . . . . . . . . . . | 16 | 16 | 16 | 23 | 21 |
| Pay, total................... | \$278,995 | \$285, 210 | \$285, 011 | \$369,947 | \$445,866 |
| By branch: |  |  |  |  |  |
| Army and Air Force..... | 176,651 | 172,859 | 175,697 | 232,480 | 288,469 |
| Navy..................... | 84,136 | 93,351 | 90,459 | 213,983 | 130,158 |
| Marine Corps. . . . . . . . . | 14,001 | 14,131 | 14,233 | 17,540 | 19,951 |
| Coact Guard. | 4,207 | 4,869 | 4,622 | 5,944 | 7,288 |
| By type of pay: |  |  |  |  |  |
| Pay rolls............... | 242,292 | 247,452 | 242,969 | 263,701 | 218,078 |
| Mustering-out pay...... | 9,085 | 9,751 | 13,050 | 15,022 | 14,751 |
| Family allowances...... | 25,736 | 25,414 | 24,997 | 25,814 | 25,685 |
| Leave payments. . . . . . . . | 1,88? | 2,593 | 3,995 | 65,410 | 127,352 |
| Cash................... | 486 | 639 | 905 | 6,293 | 104,240 |
| Bonds. . . . . . . . . . . . . . | 1,396 | 1,954 | 3.090 | 59,117 | 116,928 |

1/ Air Force personnel, 365,000 in Merch, 368,000 in April, and 375,000 in May 1940 See Glossary for definitions.

Table 6. - Eatimated Number of Wage and Salary Workers in Nonagricultural Establishments for Selected States
(In thousends)

| State | 7.748 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Apr. | Mar. | Feb. | Apr. | Mar. |
| Connecticut | 772 | 772 | 765 | 768 | 768 |
| Illinois | 3,110 | 3,144 | 3,151 | 3,094 | 3,095 |
| Indiana | 1,183 | 1,189 | 1,176 | 1,182 | 1,176 |
| Maryland | 686 | 685 | 676 | 658 | 667 |
| Massachusetts | 1,701 | 1,711 | 1,707 | 1,695 | 1,702 |
| Minnesota | 767 | 761 | 763 | 748 | 747 |
| Montana | 135 | 133 | 132 | 131 | 129 |
| Nevada 1/ | 56 | 56 | 55 | 54 | 54 |
| New Jerseg | 1,567 | 1,563 | 1,553 | 1,541 | 1,572 |
| New York | 5,371 | 5,400 | 5,375 | 5,335 | 5,385 |
| Pennsylvania | 3,524 | 3,582 | 3,545 | 3,506 | 3,506 |
| Rhode Island | 288 | 289 | 288 | 286 | *288 |
| Texas | 1,685 | 1,663 | 1,659 | 1,611 | 1,610 |
| Utah | 166 | 170 | 169 | 166 | 162 |
| Vermont 1/ | 98 | 98 | 98 | 99 | 99 |
| Washington | 659 | 653 | 649 | *654 | *652 |
| Wisconsin | 972 | 974 | 972 | 946 | 946 |

See explanatory notes, sections $E$ and $I$.

* Revised.

If Data not comparable with those previously published as estimates of employment for contract construction have ncr been included.
8.

Table 7. - Estimated Number of Wage and Salary Workers in Manufacturing Industries, by state
(in thousands)

| Region and state | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Avr. | Mar. | Feb. | Apr. | Mar. |
| New England: |  |  |  |  |  |
| Maine | 105.1 | 111.9 | 112.2 | 108.6 | 115.3 |
| New Hampohire | 82.6 | 84.4 | 85.6 | 81.1 | 83.0 |
| Vermont $1 / 2 /$ | 38.1 | 38.7 | 38.8 | 40.6 | *41.5 |
| Massachusetts | 729.2 | 745.6 | 746.0 | 749.9 | 763.5 |
| Rhode Island | 149.9 | 153.6 | 154.5 | 150.6 | 153.8 |
| Connecticut 1/ | 406.4 | 412.5 | 412.1 | 419.9 | 423.9 |
| Middle Atlantic: |  |  |  |  |  |
| New York | 1,850.4 | 1,902.6 | 1,906.4 | 1;893.4 | 1,934.5 |
| New Jersey | 744.9 | 753.7 | 757.8 | 738.5 | 768.6 |
| Pennsylvania | 1,495.9 | 1,512.2 | 1,510.9 | 1,507.8 | 1,511.8 |
|  |  |  |  |  |  |
| Ohio | 1,230.5 | 1,244.0 | 1,243.9 | 1,254.6 | 1,255.4 |
| Indiana | 539.7 | 552.8 | 553.4 | 554.4 | 555.8 |
| Illinois | 1,198.0 | 1,253.5 | 1,267.0 | 1,248.2 | 1,249.4 |
| Michigen | 1,002. 7 | 1,010.9 | 970.7 | *1,035.4 | 1,046.7 |
| Wisconsin 1/ | 426.3 | 432.5 | 434.2 | 427.1 | . 427.9 |
| West North Central: |  |  |  |  |  |
| Minnesota | 188.0 | 197.3 | 198.3 | 195.1 | 197.8 |
| Iowa | 132.1 | 148.8 | 150.5 | 146.6: | 147.0 |
| Missouri | 355.8 | 361.4 | 363.5 | 355.9 | 355.8 |
| North Dakota | 6.4 | 6.3 | 6.4 | 6.5 | 6.5 |
| South Dakota | 11.3 | 11.0 | 11.1 | 11.5 | 11.3 |
| Nebraska | 34.9 | 42.4 | 43.0 | 41.9 | 42.8 |
| Kansas | 73.3 | 77.6 | 78.3 | 79.3 | 77.8 |
| South Atlantic: |  |  |  |  |  |
| Delaware | 46.5 | 46.5 | 45.9 | 44.9 | 45.0 |
| Maryland | 228.2 | 228.9 | 228.5 | 230.7 | 236.2 |
| District of Columbia | 17.4 | 17.1 | 16.8 | 17.2 | 17.1 |
| Virginia | 212.5 | 213.7 | 213.5 | 209.2 | 210.1 |
| West Virginia | 131.9 | 130.9 | 130.3 | 133.0 | 131.9 |
| North Carolina | 382.6 | 385.8 | 380.4 | *372.9 | 376.0 |
| South Carolina | 199.3 | 200.5 | 196.9 | 189.7 | 189.8 |
| Georgia | 252.4 | 257.3 | 258.5 | 253.9 | 254.0 |
| Florida 1/ | 96.5 | 99.4 | 98.9 | 94.9 | 99.5 |
|  |  |  |  |  |  |

Table 7. - Estimated Number of Wage and Salary Workers in Manufacturines Indurivites, by Etate - Conijnued
(In thousands)

| Region and State | 1548 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Apr. | Merr. | Feb. | $A D_{1}$ | Mar. |
| East South Central: |  |  |  |  |  |
| Kentucky | 128.2 | 129.5 | 129.4 | *130.7 | 129.1 |
| Tennessee | 851.5 | 252.8 | 252.8 | 249.2 | 249.9 |
| Alabama 1/ | 227.3 | 231.8 | 231.1 | 225. 2 | 226.3 |
| Mississippi | 88.6 | 90.0 | 90.5 | 90.4 | 92.1 |
| West Scuth Centioal: |  |  |  |  |  |
| Arkansas | 75.1 | 75.4 | 75.4 | 72.7 | 67.9 |
| Louisiana | 139.1 | 137.2 | 137.0 | 135.2 | 133.2 |
| Oklahoma | 56.3 | 55.0 | 55.0 | 54.1 | 54.3 |
| Texas | 338.7 | 337.1 | 340.2 | 325.9 | 324.8 |
| Mountain: |  |  |  |  |  |
| Montana | 17.1 | 17.2 | 17.3 | 16.6 | 16.4 |
| Idaho | 17.9 | 17.8 | 18.2 | 18.4 | 18.4 |
| Wyoming | 6.3 | 6.2 | 6.1 | 5.9 | 5.8 |
| Colorado | 55.4 | 55.5 | 55.1 | 54.1 | 53.6 |
| New Mexico 1/ | 8.9 | 8.3 | 8.7 | 9.3 | 9.0 |
| Arizona 1/ | 15.9 | 15.4 | 15.0 | 14.5 | 14.1 |
| Utah | 22.6 | 23.9 | 23.9 | 23.5 | 23.0 |
| Nevada 1/ | 3.3 | 3.3 | 3.3 | 3.4 | 3.2 |
| Pacific: |  |  |  |  |  |
| Washington | 175.3 | 173.7 | 173.0 | *170.4 | 169.2 |
| Oregon | 110.2 | 110.2 | 109.2 | *115.5 | 114.4 |
| California | 695.1 | 700.4 | 703.1 | *690.6 | 692.6 |

See explanatory notes, sections H.and I.

* Revised.

1/ New series based on 1945 Standard Industrial Classification. These series are not strictly comparable with data for Connecticut, Vermont, and Wisconsin published prior to the February 1948 report; for Arizona prior to the March 1948 report; for Nevada and New Mexico prior to the April 1948 report; and for Alabema and Florida, prior to the current report.
2/ Earlier months in 1947 have been revised as follows:
Vermont - January and February to 42.3 and 42.2.

Table 8, - Estimated Number of Production Worlers in Manufacturing Industries (In thousands)


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

Table 8. - Eetimated Number of Production Workers in Manufacturing Industries-Cont'd (In thousands-

| Industiry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mer. | May | Apr. |
| MACHINERY, EXXCEFT ELECTRICAL I/ | 1,207 | 1,202 | 1,232 | 1,216 | 1,220 |
| Machinery and machine-shop products | 489.6 | 495.0 | 500.1 | 503.1 | 505.5 |
| Engines and turbines | 53.5 | 53.9 | 54.7 | 54.7 | 55.1 |
| Tractors | 56.3 | 44.8 | 62.2 | 55.9 | 55.3 |
| Agricultural machinery, excluding tractors | 75.2 | 76.2 | 75.9 | 65.9 | 64.8 |
| Machine tools | 47.5 | 47.7 | 49.2 | 55.5 | 57.5 |
| Machine-tool accessories | 55.4 | 55.5 | 55.9 | 60.5 | 62.6 |
| Textile machinery | 41.4 | 41.2 | 41.1 | 38.7 | 38.0 |
| Pumps and pumping equipment | 69.3 | 69.9 | 71.3 | 77.3 | 78.0 |
| Typerriters | 23.8 | 24.1 | 24.9 | 24.0 | 23.5 |
| Cach registers; adding, and celeulating mechines | 45.6 | 46.3 | 46.1 | 41.0 | 40.7 |
| Washing machincs, wringere, and driers, domestic | 16.0 | 16.2 | 16.3 | 14.6 | 14.3 |
| Sowing machines, domestic and industrial | 13.9 | 13.8 | 13.7 | 10.6 | 11.6 |
| Refriçerators and refrigeration equipment | 82.6 | 79.7 | 81.0 | 74.8 | 73.3 |
| TRAISPORTATION EQUTPMENT, EXCEPT AUTOMOBILES 1/ | 438 | 462 | 46.5 | 473 | 486 |
| Locomotives | 26.4 | 26.6 | 26.6 | 23.8 | 25.1 |
| Cars, electric- and stenm-railroad | 53.9 | 53.9 | 54.4 | 55.2 | 55.6 |
| Aircraft and parts, excluding aircraft engines | 125.1 | 137.3 | 136.1 | 138.2 | 141.9 |
| Aircraft engines | 25.1 | 24.8 | 24.6 | 27.0 | 28.1 |
| Shipbuilding and boatbuilding | 116.1 | 122.5 | 125.8 | 140.3 | 143.9 |
| Motorcycles, bicycles, and parts | 12.9 | 14.4 | 1.4 .8 | 12.8 | 12.8 |
| AUTOMOBILES 1/ | 759 | 772 | 784 | 720 | 774 |
| NONTERROUS METALS AND THEIR PRODUCTS I/ | 398 | 406 | 413 | 418 | 430 |
| Smelting and refining, primery, of nonferrous metols | 41.4 | 41.0 | 40.8 | 39.8 | 41.0 |
| Alloying; and rolling and drewing of nonferrous metals, except aluminum | 52.6 | 53.7 | 54.6 | 60.2 | 62.0 |
| Clocks and wotches | 28.2 | 28.5 : | 28.8 | 27.8 | 28.2 |
| Jewelry (precious metals) and jewelers' findings | 26.3 | 27.1 | 27.6 | 25.6 | 26.3 |
| Silverware and plated ware | 27.2 | 27.5 | 27.5 | 24.2 | 24.2 |
| Lighting equipment | 30.2 | 31.3 | 33.1 | 37.7 | 37.8 |
| Aluminum menufactures | 42.7 | 44.2 | 45.2 | 46.5 | 49.2 |
| Sheet-metal work, not elsewhere classified | 35.2 | 36.0 | 36.8 | 38.0 | 38.8 |

See explanatory notes, sections A, C, and G.
12.

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

| Industry group and industry | 1043 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May". | Apr. | Mas. | May | Apr. |
| LUMBER AND TIMBER BASIC PHODUCTS I/ | TES | 751 | 749 | 710 | 682 |
| Savmills and logging camps | 549.2 | 536.5 | 536.6 | 523.8 | 502.8 |
| Plening and plywood mills, | 136.2 | 135.3 | 135.3 | 126.1 | 124.7 |
| FURNITURE AND FINISBED LINBER -PRODUCTS I/ | 458 | 470 | 485 | 450 | 458 |
| Mattresses and bedsprings | 37.2 | 32.7 | 34.6 | 29.3 | 29.7 |
| Furniture | 233.3 | 239.7 | 246.9 | 225.9 | 229.2 |
| Woodon boxes, other than cigar | 32.5 | 33.8 | 34.6 | 36.3 | 36.5 |
| Caskets and other morticians. goods | 18.6 | 19.0 | 19.6 | 19.3 | 19.6 |
| Wood preserving | 15.5 | 15.1 | 15.6 | 18.2 | 18.2 |
| Wood, turned and shaped | 32.1 | 32.8 | 33.5 | 30.5 | 33.5 |
| STONE, CLAY, AND GLASS PRODUCTS I/ | 454 | 451 | 452 | 437 | 447 |
| Glass and glaseware | 117.5 | 117.9 | 117.8 | 122.1 | 122.8 |
| Glass products made from purchased glass | 12.2 | 12.4 | 12.5 | 12.8 | 13.3 |
| Cement | 37.1 | 36.6 | 36.4 | 29.7 | 35.4 |
| Brick, tile, and terra cotta | 77.7 | 76.1. | 75.5 | 72.1 | 72.3 |
| Pottery and related products | 57.1 | 56.6 | 57.6 | 56.0 | 56.2 |
| Gypsum | 6.5 | 6.6 | 6.6 | 5.7 | 5.9 |
| Wallboard, plaater (except gypsum), and mineral wool | 12.5 | 12.4 | 12.4 | 11.0 | 10.8 |
| Lime | 9.5 | 9.6 | 9.5 | 9.4 | 9.2 |
| Marble, granite, slate, and other producte | 18.2 | 17.9 | 18.4 | 16.6 | 17.8 |
| Abrasives | 17.5 | 17.5 | 17.5 | 19.4 | 19.6 |
| Asbestos products: | 21.8 | 21.9 | 22.0 | 20.9 | 21.0 |
| Nondurable goods |  |  |  |  |  |
| TEXIITE-MIILI PRODUCTS AND OTHER FIBER MANUEACTURES 1/ | 1,293 | 1,301 | 1,312 | 1,226 | 1,253 |
| Cotton manuiactures, except smallwares | 524.7 | 526,4 | 529.4 | 509.0 | 516.8 |
| Cotton smallwares | 14.4 | 14.6 | 14.9 | 1.4 .6 | 15.0 |
| Silk and rayon goods | 111.8 | 111.7 | 111.6 | 103.1 | 105.4 |
| Woolen and worsted manufactures, except dyeing and finishing | 173.2 | 275.0 | 178.3 | 164.3 | 169.9 |
| Hosiery | 136.6 | 139.2 | 141.2 | 128.8 | 134.8 |
| Knitted cloth | 11.5 | 11.8 | 11.7 | 10.7 | 11.3 |
| Knitted outerwear and knitted gloves | 31.4 | 31.0 | 31.6 | 29.6 | 31.6 |
| Knitted underwear | 48.6 | 50.0 | 50.3 | 43.2 | 43.6 |
| Dyeing and finishing textiles, including woolen and worsted | 87.5 | 88.3 | 88.5 | 84.2 | 85.1 |
| Carpets and rugs, wool | 36.9 | 36.6 | 36.6 | 31.7 | 31.4 |
| Hats, fur-felt | 12.9 | 12.7 | 13.7 | 12.7 | 11.9 |
| Jute goods, except felts | 4.2 | 4.3 | 4.1 | 4.3 | 4.3 |
| Cordage and twine | 16.4 | 16.7 | 17.1 | 15.8. | 16.2 |

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

Table 8. - Estimated Number of Production Workers in Manufacturing Industries-Cont'd

> (In thousande)

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ning | Apr. | Mar. | May | Apr. |
| APPAREL AND OTHER FINISHED TEMTILE PRODUCTS $1 /$ | 1,082 | 1,103 | 1,165 | 390 | 1,018 |
| Men's clothing, not eleewhere clecsified | 309.8 | 310.0 | 314.5 | 280.5 | 283.5 |
| Shirts, collrirs, and nightwear | 81.2 | 82.0 | 82.2 | 73.2 | 73.3 |
| Underwear and neckweai, reen'a | 18.4 | 18.7 | 19.0 | 1.7 .4 | 18.0 |
| Work shirts | 18.2 | 1.7 .9 | 1.7 .5 | 15.3 | 15.7 |
| Women's clothing, not elsewhere clessified | 427.6 | 440.0 | 481.7 | 389.3 | 407.5 |
| Corsets and allled garments | 18.5 | 19.2 | 19.9 | 17.7 | 17.0 |
| Millinery | 20.3 | 63.4 | 27.6 | 20.3 | 22.0 |
| Hendkerchiefs | 5.0 | 5.1 | 5.1. | 4.7 | 4.8 |
| Curtaine, draperies, and bedspreads | 26.0 | 28.0 | 30.6 | 22.2 | 22.3 |
| Housefurnishings, other than curtains, etc. | 27.7 | 29.0 | 30.4 | 29.3 | 29.0 |
| Textile bcge | 26.8 | 26.8 | 27.3 | c7.8 | 28.3 |
| Imather and Imatier Proiuctis j/ | 360 | 372 | 306 | 368 | 381 |
| Leather | 44.1 | 4.4 .3 | 4.5 .8 | 45.9 | 46.3 |
| Boot and shoe cut stock and findines | 17.3 | 1.7 .7 | 18.9 | 18.3 | 19.4 |
| Boots and shoes | 204.2 | 212.9 | 229.5 | 212.6 | 220.7 |
| Leather gloves and mittens | 12.3 | 12.2 | 12.5 | 12.0 | 12.3 |
| Trunks and suitcases | 23.1 | 13.3 | 13.9 | 12.1 | 13.2 |
| FOOD 1/ | 1,086 | 1,047 | 1,149 | 1,152 | 1,142 |
| Slaugintering and meat packing | 115.7 | 99.7 | 180.9 | 172.9 | 167.8 |
| Butter | 37.4 | 35.3 | 32.8 | 37.4 | 35.5 |
| Consensed and evaporated milk | 21.6 | 20.5 | 19.3 | 22.4 | 21.4 |
| Ice cream | 29.2 | 27.1 | 2.4 .4 | 30.0 | 27.6 |
| Flour | 37.2 | 37.4 | 37.8 | 36.9 | 38.5 |
| Feeds, prepared | 27.8 | 8.6 .6 | 26.3 | 27.5 | 28.0 |
| Cereal preparations | 12.8 | 12.2 | 12.1 | 11.9 | 13.1 |
| Baking | 21.9 .7 | 217.5 | 21.9 .7 | 211.4 | 212.2 |
| Sugar refining, cane | 17.6 | 17.3 | 19.6 | 19.7 | 19.0 |
| Sugar, beet | 6.5 | 5.4 | 5.6 | 6.5 | 5.5 |
| Confectionery | 55.7 | 60.7 | 65.9 | 62.0 | 64.2 |
| Beverages, nonalcoholic | 38.5 | 36.1 | 34.2 | 30.0 | 28.5 |
| Malt ligquors | 66.3 | 69.8 | 67.6 | 66.9 | 64.9 |
| Canning and preserving | 136.8 | 126.7 | 122.1 | 135.7 | 135.4 |
| TOBACCO MANUFACTURES I/ | 84 | 86 | 87 | 83 | 82 |
| Cigarettes | 33.1 | 33.2 | 33.2 | 32.9 | 32.8 |
| Cigars | 43.7 | 45.2 | 46.2 | 42.4 | 41.4 |
| Tobacco (chewing and smoking and snuff) | 7.6 | 7.7 | 7.8 | 7.7 | 7.4 |

See explanatory notes, sections A, C, and G.
14.

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

| Industry group and industry | 1948 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Mar. | May | Apr. |
| PAPER AND ALLIED PRODUCTS 1/ | 389 | 389. | 393 | 388 | 391 |
| Paper and pulp | 201.1 | 200.2 | 200.4 | 193.2 | 192.3 |
| Paper godds, other | 56.9 | 56.8 | 57.3 | 57.9 | 58.1 |
| Envelopes | 12.7 | 12.7 | 12.7 | 12.0 | 12.0 |
| Paper bags | 17.6 | 18.0 | 18.2 | 18.7 | 19.4 |
| Paper boxes | 91.2 | 92.7 | 95.2 | 98.2 | 101.6 |
| PRINTING, PUBLISHTNG, AND ALITERD INDUSTRIES 1/ | 433 | 432 | 435 | 430 | 429 |
| Newspapers and periodicals | 146.6 | 145.4 | 144.8 | 141.2 | 139.9 |
| Printing; book and job | 176.3 | 175.3 | 177.5 | 175.1 | 176.3 |
| Lithographing | 30.9 | 31.3 | 31.4 | 32.7 | 32.7 |
| Bookbinding | 35.1 | 36.0 | 37.2 | 37.4 | 37.3 |
| CHEMICALS AND ALLIED PRODUCIS 1/ | 572 | 580 | 587 | 575 | 579 |
| Paints, varnishes, and colors | 50.7 | 50.1 | 50.7 | 50.3 | 50.2 |
| Drugs, medicines; and insecticides | 63.7 | 64.2 | 65.2 | 69.0 | 69.6 |
| Perfumes and cosmetics | 11.0 | 11.2 | 11.6 | 11.9 | 12.4 |
| Soap | 21.7 | 21.8 | 24.9 | 23.7 | 23.7 |
| Rayon and allied products | 63.4 | 63.5 | 63.7 | 61.3 | 60.9 |
| Chemicals, not elsewhere classified | 195.6 | 198.0 | 196.3 | 196.4 | 195.8 |
| Explosives and safety fuses | 22.2 | 22.1 | 22.4 | 21.2 | 21.2 |
| Compressed and liquefied gases | 10.0 | 10.0 | 9.9 | 9.6 | 9.4 |
| Ammunition, small-arms | 7.8 | 7.8 | 7.8 | 7.0 | 6.8 |
| Fireworke | 2.5 | 2.4 | 2.4 | 3.0 | 2.8 |
| Cottonseed oil | 13.6 | 15.2 | 27.6 | 13.1 | 15.5 |
| Fertilizers | 29.4 | 33.4 | 34.7 | 29.7 | 31.8 |
| PRODUCTS OF PETROLEUM AND COAL 1/ | 167 | 164 | 165 | 161 | 157 |
| Petroleum refining | 111.9 | 110.9 | 110.8 | 108.8 | 105.7 |
| Coke and byproducts | 31.2 | 29.8 | 30.7 | 28.4 | 27.9 |
| Paving materials | 2.2 | 2.1 | 1.8 | 2.7 | 2.6 |
| Roofing materials | 17.2 | 17.4 | 17.4 | 17.4 | 17.0 |
|  |  |  |  |  |  |

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

Teble 8. - Estimated Number of Production Worikgers in Menufacturing Industrios-Cont'd.

> (In thousands)

| Industry eroup and industiry | 1948 |  |  | 1247 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Api ${ }^{\text {+ }}$ | Mai'. | May | AxF. |
| RUBBER PRODUCTS 1/ | 195 | 198 | 204 | 211 | 222 |
| Rubber tires and inner tubes | 103.3 | 104.6 | 108.8 | 119.3 | 123.1 |
| Rubber boots and shoes | 21.8 | 22.1 | 22.6 | 22.8 | 23.5 |
| Rubber goods, other | 81.9 | 84.0 | 85.7 | 81.0 | 37.3 |
| MISCHELANEOUS INDUSTRIES 1/ | 432 | 436 | 144 | 441 | 449 |
| Instiruments (professional and scientific), and fire-control oquipment | 27.5 | 27.6 | 27.7 | 27.6 | 28.3 |
| Photngraphic apparatus | 37.8 | 38.4 | 38.8 | 36.7 | 36.2 |
| Optioal instuments and ophthalmic gocds | 26.7 | 27.0 | 27.2 | 29.4 | 2.9 .7 |
| Planos, organs, and parts | 13.7 | 13.3 | 14.8 | 15.1 | 25.1 |
| Games, toys, and dolls | 40.2 | 40.3 | 33.5 | 33.9 | 33.7 |
| Buttons | 12.8 | 13.3 | 13.8 | 12.3 | 12.9 |
| Fire extinguishers | 2.7 | 2.7 | 2.6 | 2.9 | 3.0 |

See explanatory notes, sections A, C, and G.
1/ Data for the major industry groups have been adjusted to levels indicated by data through 1946 made available by the Federal Security Agency and are not comparable with those shown in mimeographed releaces dated prior to June 1948 or the Monthly Labor Review dated prior to July 1948. In the transportation equipment except automobiles group, the Individual industry data ars adjusted to 1.939 Consus of Manufactures levels. In the tobacco manufactures group, the individual industry data are adjusted to levels incifated by data through lo4 made avaílable by the Tederal Security Agency and are not comparable with data published in mimeographed releases dated prior to July 1948 or the Monthly Labor Feview dated prior to August 1948; the romaining industries are adjusted to data through 1945. Comparable data for all series from January 1939 are available upon request to the Bureau of Labor Statistics. Such requests should specify the series desired.

Table 9. - Estimated Number of Employoes in Selected Nonmanufaoturing Industries 1/
(In thousands)

| Industry group and industry | 1048 |  |  | 1947 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | May | Apr. | Man, | May | Apr. |
| MINING: 2/ $3 /$ |  |  |  |  |  |
| Coal: |  |  |  |  |  |
| Anthracite | 76.4 | 76.9 | 77.4 | 36.4 | $\begin{aligned} & 75.6 \\ & 367 \end{aligned}$ |
| Bituminous coal | 402. | 296 91.6 | 401 91.4 | 389 90.8 | 367 |
| Metal | 90.9 | 91.6 | 91.4 | 31.7 | 31.1 |
| Iron | 32.5 | 32.3 | 31.5 | 31.7 25.3 | 25.6 |
| Copper | 26.1 | 26.8 16.4 | 26.9 16.3 | 25.3 17.8 | 25.6 18.1 |
| Lead and zinc 4/ | 16.5 8.1 | 16.4 8.5 | 16.3 8.7 | 17.8 8.2 | 18.1 8.4 |
| Gold and silver | 8.1 7.7 | 8.7 7.7 | 7.9 | 7.8 | 7.9 |
| Quarrying and nommetallic | 86.0 | 84.9 | 80.9 | 87.2 | 86.3 |
| Crude petroleum and natural gas production 5/ | 129.6 | 128.2 | 127.1 | 125.6 | 124.7 |
| TRANSPORTATION AND PUBLIC UTILITITES |  |  |  |  |  |
| Class I steam railroads 6/ | 1,321 | 1,260 | 1,316 | 1,365 | 1,345 |
| Street railways and busses 7/ | 249. | 249 | 249 | 253 | 254 |
| Telephone | 631 | 631 | 627 | 506 | 404 |
| Telegraph $8 /$ | 36.3 | 36.9 | 36.9 | 38.7 | 39.3 |
| Electric light and power | 274 | 273 | $2 \% 1$ | 258 | 256 |
| SERVICE: |  |  |  |  |  |
| Hotels (year-round) | 377 | 377 | 375 | 382 | 379 |
| Power laundries 2/ | 233 | 232 | 231 | 245 | 242 |
| Cleaning and dyeing 2/ | 93.4 | 92.5 | 90.0 | 97.4 | 95.4 |

See explanatory notes, section $G$.
1/ Includes all employees unless otherwise noted.
2/ Includes production and related workers only.
3/ Rstimates have been adjusted to levels indicated by data through 1946 made available by the Federal Security Agency. Only the bituminous coal industry was affeoted by this adjustment. Comparable data for all industries from January 1939 are available upon request to the Bureau of Labor Statistics.
4/ February 1948 revised to 16.3.
5/ Does not include well drilling or rif building.
6/ Includes all employees at middle of month. Excludes employees of switching and terminal companies. Class I steam railroads include those with over $\$ 1,000,000$ annual revenue. Source: Interstate Commerce Conmission.
7/ Includes private and municipal street-railway companies and affiliated, subsidiary, or successor trolley-bus and motor-bus companies,
8/ Includes all land-ifne employees except those compensated on a commisaion basis. Excludes general and divisional headquarters personnel, trainees in school, and messengers.

Table 10. - Indexes of Production-Worker Fmployment and Weekly Pay Rolls in Manufacturing industisies (1939 Average $=100$ )

| Industry eroup and industry | Fimployment indexes |  |  |  | Pay-ioll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 | 1948 |  |  | 1947 |
|  | May | Apr. | Mar. | May | May | Apr. | Mar. | May |
| ALL MANUFACTURING 1/ | 155.3 | 156.1 | 160.3 | 153.8 | 345.9 | 346.7 | 358.4 | 319.3 |
| Durable goocs 1/ | 183.6 | 185.0 | 188.1 | 182.0 | 389.5 | 392.7 | 402.0 | 3.63 .0 |
| Nondurable good̄s 1/ | 133.0 | 133.3 | 138.4 | 131.5 | 303.2 | 301.8 | 315.7 | 276.6 |
| Durabie goods |  |  |  |  |  |  |  |  |
| IRON AND STEEE AND THEIR PRODUCTS $1 / 161.4$ |  | 161.7 | 164.8 | 159.6 | 334.4 | 329.6 | 340.8 | 310.2 |
| Blast furnaces, steel works, and rolling mills | 133.3 | 131.8 | 132.9 | 127.3 | 265.4 | 253.0 | -660.9 | 237.9 |
| Gray-iron and semisteel castings | 172.2 | 177.9 | 183.0 | 185.6 | 374.3 | 394.6 | 1421.7 | 410.4 |
| Malleable-iron castings | 194.2 | 193.6 | 197.0 | 180.2 | 460.3 | 453.0 | 469.7 | 408.5 |
| Steel castings | 213.6 | 21.1 | 216.3 | 207.2 | 454.2 | 1453.2 | 456.8 | 399.6 |
| Cest-iron pipe and fittings | 154.0 | 156.1 | 160.8 | 156.2 | 373.9 | 360.5 | 385.2 | 391.0 |
| Tin cans and other tinware | 134.9 | 132.4 | 140.0 | 132.6 | 286.1 | 274.9 | 289.8 | 252.2 |
| Wire drawn from purchased rods | 134.0 | 137.1 | 139.4 | 120.4 | 249.8 | 255.3 | 269.1 | 220.8 |
| Wirework | 135.2 | 1137.9 | 1342.9 | 129.9 | 298.2 | 1302.0 | 316.4 | 257.3 |
| Cutlery and edge tools | 149.9 | 153.8 | 125.9 | 167.0 | 357.8 | 364.6 | 370.6 | 373.0 |
| Tools (except edce tools, machine tools, files, and saws) | 164.7 | 166.7 | 167.9 | 162.7 | 366.6 | 372.4 | 378.4 | 342.4 |
| Hardware | 145.5 | 148.6 | 152.5 | 141.5 | 325.8 | 342.2 | 355.1 | 308.4 |
| Plumbers' supplies | 149.8 | 150.3 | 153.2 | 153.5 | 324.0 | 322.2 | 329.0 | 289.3 |
| Stoves, oil burners, and heating equipment not elsewhere classified | 161.7 |  | 9.1 |  |  |  |  |  |
| Steam and hot-water hea |  |  |  |  |  |  |  |  |
| apparatus and steam fittings | 188.2 |  | 194.2 | 201.5 | 406.0 | 393.8 | 416.5 | 393.9 |
| Stamped and enameled ware and galvanizing | 187.4 |  |  |  |  |  |  | . 8 |
| Fabricated structural and ornamental metalwork | 169 |  |  | 167.3 | 34 |  | 343.4 | 417.8 317.4 |
| Metal doors, sash, frames, molding, and trim |  |  |  |  |  |  |  |  |
| Bolts, nuts, washers, and rivets | 187.8 | 189. | 190.0 | 189.1 | 408. | 416.7 | 422.4 | 380.7 |
| Forginga, iron and steel | 214.2 | 223.9 | 228.8 | 219.3 | 443. | 467.6 | 487.5 | 436.1 |
| Wrought pipe, welded and heavy-riveted | 211.0 |  | 215.5 | 201.9 |  |  | 455.3 | 380.0 |
| Screw-machine products and wood screws | 202.1 | 204.4 | 203.9 | 209.1 | 445. | 452.0 | 456.5 | 436.3 |
| Steel barrels, kegs, and drume | 117.7 | 11 | 1.21 .9 | 131.1 | 302.6 | 298.1 | 302.0 | 316.1 |
| Firearms | 397.9 | 39 | 390.0 | 356.3 | 915 | 906.0 | 911.3 | 761.2 |
| ELECSRICAL MACHINVERY 1/ | 211.6 | 217. | 222.9 | 217.7 | 431. | 444.3 | 459.1 | 414.4 |
| Electrical equiprient | 195. | 199.8 | 203.5 | 202.4 | 398 | 408.1 | 419.6 | 389.6 |
| Radios and phonographs | 204.6 | 212.2 | 221.9 | 233.6 | 451.4 | 468.5 | 488.4 | 491.1 |
| Communication equipment | 277.3 | 289.3 | 1297.4 | 2.50 .4 | 530.0 | 551.2 | 578.6 | 415.6 |

See explanatory notes, sections A, C, F, and G. in Nimutacturing Industries - Continued

| Industry group and industry | lmployment inderes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 | 1948 |  |  | 1947 |
|  | May | Apr. | Mar. | May | May | Apr. | Mar. | May |
| MACHINERY, EXCEPM ETECIRICAL 1/ | 228.5 | 227.4 | 233.1 | 230.? | 466.4 | 463 | 475.2 | 437.7 |
| Machinery and machine-shop products | 235.8 | 238.8 | 240.9 | 242.3 | 491.0 | 493.6 | 496.4 | 463.4 |
| Engines and turioines | 286.7 | 289.1 | 293.3 | 293.1 | 617.6 | 611.7 | 632.3 | 587.1 |
| Tractors | 180.1 | 143.4 | 198.8 | 178.9 | 285.2 | 248.9 | 353.8 | 304.9 |
| Agricultural machiner excluding tractcrs | 263.7 | 267.0 | 266.1 | 230.9 | 571.2 | 571.9 | 576.8 | 440.8 |
| Machine tools. | 129.7 | 130.4 | 134.5 | 151.5 | 240.7 | 240.2 | 249.2 | 265.4 |
| Machine-tool accessories | 214.4 | 21.4 .8 | 216.6 | 234.4 | 389.9 | 392.6 | 388.9 | 398.1 |
| Texille machinery | 188.8 | 188.3 | 187.6 | 176.6 | 439.4 | 436.0 | 437.8 | 366.2 |
| Pumpe and pumping equipment | 278.7 | 280.9 | 286.8 | 310.9 | 610.3 | 610.0 | 617.7 | 627.0 |
| Typewriters | 147.0 | 148.7 | 153.5 | 147.8 | 325.0 | 336.8 | 347.5 | 311.3 |
| Cash registers; adding, and calculating machines | 231.8 | 235: | 234.2 | 208.4 | 489 |  | 9.9 | 420.2 |
| Washing machines, wringers, and driers, domestic | 214.6 | 227.0 | 218.4 | 195.3 |  |  | . 0 | 395.4 |
| Sewing machines, domestic and industrial | 17 |  |  | 135.4 | 428 |  | 4.5 | 282.1 |
| Refrigerators and refrigeration equipment | 235.0 | 22 | 230.4 | 212.9 | 47 |  | 7 | 397.3 |
| TRANSPORTATION EQUIPMENT EXCEPT AUTOMOBILIES 1/ | 276.0 | 290 | 292.7 | 299.3 | 56 | 601 | 600.4 | 572.1 |
| Locomotives | 407.7 | 410.5 | 411.3 | 367.4 | 916 | 928. | 908.6 | 757.0 |
| Cars, electric- and steamrailroad | 219.6 | 219 | 221.8 | 224.9 | 4 | 483 | 490.3 | 465.2 |
| Aircraft and parts, excluding aircraft engines |  | 346.0 | 342.9 | 348.4 | 634. | 695.2 | 675.9 | 639.2 |
| Aircraft engines | 232.4 | 278.4 | 276.9 | 303.4 | 493.5 | 481.0 | 473.9 | 477.0 |
| Shipbuilding and boatbuilding | 167.6 | 176.8 | 181.6 | 202.7 | 345.7 | 373.6 | 383.7 | 395.6 |
| Motorcycłes, bicycles, and parts | 185.2 | 206.0 | 211.7 | 183.6 | 370. | 418.2 | 426.6 | 363.1 |
| AUTOMOBIIES If | 188.6 | 191.9 | 195.0 | 179.1 | 35 | 886 | 396.5 | 335.0 |
| NONFERROUS METALS AND THEIR PRODUCTS 1/ | 173.7 | 176.9 | 180.0 | 182.5 | 363.4 | 368.3 | 377.1 | 354.8 |
| Smelting and refining, primary, of nonferrous metals | 149.8 | 148.4 | 147.8 | 144.2 | 321.6 | 314.1 | 307.2 | 287.4 |
| Alloying; and rolling and drawing of nonferrous metals, except aluminum |  |  |  |  |  |  |  |  |
| metals, except aluminum | 135.6 139.1 | 14 | 140.6 | 133.0 | 326. | 271.7 | 339.1 | $\begin{aligned} & 285.4 \\ & 298.1 \end{aligned}$ |
| Jewelry (precious metals) and jewelers' findings | 182.3 |  |  |  |  |  |  |  |
| Silverware and plated ware | 224.2 | 226.8 | 22.5 | 199.9 | 522.4 | 29.4 | 543.3 | 438.7 |
| Lighting equipment | 147.7 | 152.7 | 161.7 | 184.3 | 303.5 | 308.3 | 328.4 | 351.4 |
| Aluminum manufactures | 181.5 | 187.7 | 192.1 | 197.4 | 347.0 | 356.8 | 362.0 | 350.5 |
| Sheet-metal work, not elsewhere classified | 187.8 | 192.0 | 196.4 | 202.9 | 413.2 | 417.8 | 433.0 | 415.8 |
|  |  |  |  |  |  |  |  |  |

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

| Industry eroup and Industry | Employment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1948 |  |  | 1947 | 1948 |  |  | 1947 |
|  | May | Apr. | Mar. | May | May | Apr. | Mar. | May |
| LUMBER AND TTMBER BASIC PRODUCTS 1/ | 482.8 | 178.7 | 178.3 | 168.8 | 452.6 | 425 | 427.6 | 383.3 |
| Sawmills and logging camps | 175.1 | 171.1 | 171.1 | 167.0 | 435.5 | 405.2 | 412.4 | 384.7 |
| Planing and plywood mills | 172.1 | 171.1 | 171.1 | 159.4 | 421.0 | 412.9 | 403.8 | 350.5 |
| FURNITURE AND FINISHED LUMBER PRODUCTS 1/ | 239.7 | 143.4 | 147.8 | 137.3 | 325.6 | 333.0 | 349.2 | 302.1 |
| Mattresses and bedsprings | 152.0 | 159.4 | 168.8 | 145.2 | 316.2 | 336.4 | 363.2 | 282.0 |
| Furniture | 231.1 | 134.7 | 138.8 | 127.0 | 307.2 | 314.6 | 330.9 | 278.9 |
| Wooden boxes, other than cigar | 514.8 | 119.3 | 122.2 | 128.3 | 281. 5 | 286.4 | 300.1 | 304 |
| Caskets and other morticians' goods |  | . 4 | 140.6 |  |  |  |  |  |
| Wood preserving | 123.1 | 120.5 | 124.3 | 144.7 | 333.5 | 316.1 | 310.5 | 387.6 |
| Wood, turned and shaped | 130.5 | 133.4 | 136.2 | 124.3 | 303.9 | 310.4 | 317.4 | 274.9 |
| STONE, CLAY, AND GLASS PRODUCIS I/ | 254.7 | 153.7 | 153.9 | 148.9 | 343.4 | 337.9 | 336.6 | 299.5 |
| Glass and gl | 1264.7 | 165.2 | 165.2 | 171.1 | 352.5 | 355.3 | 358.2 | 333.0 |
| Glass products made from purchased gless | 222.2 | 123.4 | 124.8 | 127.6 | 264. | 259 | 267.6 | 259.4 |
| Cement 2/ | 452.2 | 150.5 | 149.4 | 141.8 | 314.3 | 297.2 | 287.3 | 202.5 |
| Brick, Eile, and terra cotta | 233.8 | 131.1 | 130.1 | 124.3 | 320.8 | 305.6 | 297.1 | 276.4 |
| Pottery and related products | 168.9 | 167.2 | 170.2 | 165.6 | 351.1 | 348.7 | 352.9 | 323.8 |
| Gypsum | 132.3 | 132.8 | 134.3 | 115.2 | 304.8 | 298.6 | 285.4 | 228.4 |
| Wallboard, plaster (except gypsum), and mineral wool | 153.6 | 153.5 | 153.1 | 135. | 393.7 | 396.4 |  |  |
| Lime | 100.8 | 101.6 | 100.0 | 99.3 | 273.3 | 273.3 | 262.1 | 239.2 |
| Marble, granite, slate, and other products | 2 | 96.6 | 99.3 | 89.5 | 182.7 | 176.6 | 179.3 | 158.7 |
| Abrasives | 226.0 | 226.3 | 226.4 | 250.4 | 490.6 | 474.9 | 1487.0 | 440.6 |
| Asbestos produc | 237.1 | 137.5 | 138.2 | 131.3 | 329.9 | 328.9 | 327.0 | 299.8 |
| Nondurable goods |  |  |  |  |  |  |  |  |
| THEXIILE-MIIL PRODUCTS AND OTHER FIBER MANUFACTURES I/ | 213.0 | 113.7 | 114.7 | 107.2 | 303.8 | 307.1 | 315.6 | 254.5 |
| Cotton manufactures, exoept smallwares | 125.4 | 125.8 | 126.6 | 121.7 | 369.7 | 374.7 | 385.1 | 317.3 |
| Cotton smallwares | 102.3 | 103.6 | 105.8 | 103.6 | 238.3 | 243.0 | 249.1 | 222.1 |
| Silk and rayon goods | 88.3 | 88.2 | 88.1 | 81.5 | 268.6 | 267.4 | 267.8 | 212.9 |
| Woolen and worsted manufactures, except dyeing and finishing | 109.9 | 111.0 | 113.1 | 104.2 | 307.9 | 308.6 | 322.1 | 252.6 |
| Hosiery | 81.3 | 82.8 | 84.1 | 76.7 | 183.6 | 189.2 | 197.6 | 152.6 |
| Knitted cloth | 99.4 | 101.9 | 101.4 | 93.2 | 223.1 | 237.1 | 243.3 | 196.7 |
| Knitted outerwear and knitted gloves | 205.8 | 104.4 | 106.4 | 99.7 | 247.6 | 242.8 | 249.9 | 213.1 |
| Knitted underwear | 219.3 | 122.7 | 123.5 | 106.2 | 303.4 | 320.3 | 323.7 | 252.9 |
| Dyeing and finishing textiles, including woolen and worsted | 123.9 | 125.0 | 125.2 | 119.2 | 299.0 | 305.6 | 308.8 | 260.3 |
| Carpets and rugs, wool | 136.4 | 135.4 | 135.5 | 117.3 | 332.8 | 324.2 | 327.9 | 245.7 |
| Hats, fur-felt | 884.2 | 82.7 | 89.3 | 82.9 | 184.6 | 176.4 | 197.5 | 168.7 |
| Jute goods, except felts | 112.0 | 112.8 | 109.3 | 113.3 | 272.2 | 275.9 | 264.2 | 271.8 |
| Cordage and twine | 128.7 | 130.9 | 134.1 | 123.7 | 305.0 | 311.4 | 330.4 | 271. 3 |

See explanatory notes, seotions $A, C, F$, and $G$.

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

| Industry group and industry | Employment Indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1948 |  | 1947 |  | 1948 |  | 1947 |
|  | May | Apr. | Mar. | May | May | Apr. | Mar. | May |
| APPAREL AND OTHER FINISHED THEXIILE PRODUCTS $1 /$ |  | 139.8 | 147.5 | 125.4 |  | 06 | 43.2 | 259.8 |
| Men's clothing, not elsewhere classified | 134. | 135.0 | 137.0 | 122.2 | 311.5 | 317 | 324.8 | 270.5 |
| Shirts, collars, nightwear | 109.8 | 110.9 | 111.2 | 98.9 | 268.1 | 274.6 | 279.7 | 228.8 |
| Underwear and neckwear, men's | 108.6 | 110.4 | 112.0 | 102.4 | 296.6 | 297.5 | 313.7 | 249.9 |
| Work shirts | 129.2 | 126.4 | 123.8 | 108.2 | 325.8 | 316.1 | '305.6 | 253.6 |
| Women's clothing, not elsewhere classified | 149.4 | 153.7 | 168.3 | 136.0 | 299.3 | 307.1 | :376.4 | 260.3 |
| Corsets and allied garments | 98.8 | 102.4 | 106.1 | 94.2 | 213.0 | 229.1 | 241.6 | 198.0 |
| Millinery 2/ | 79.5 | 91.8 | 108.3 | 79.3 | 126.8 | 171. | 212.5 | 119.2 |
| Hendkerchiefs | 99.2 | 99.8 | 99.6 | 93.1 | 239.1 | 251.5 | 259.4 | 221.7 |
| Curtains, draperies, and bedspreads | 150.6 | 157.7 | 172.1 | 124.7 | 338.5 | 348 | 397.0 | 257.4 |
| Housefurnishings, other than curtains, etc. | 248.0 | 259.8 | 272 | 262.0 | 535.3 | 584.6 | 609.2 | 560.8 |
| Textile bags | 212.8 | 212.4 | 216.9 | 220.6 | 464.8 | 1 | 449.3 | 427.8 |
| LEATHER AND LEATHER PRODUCTS $1 /$ | 103.7 | 10 | 1114.1 | 106.1 | 216.5 | 227.1 | 251.7 | 220.9 |
| Leather | 88.2 | 88.5 | 91.6 | 91.6 | 186.8 | 184.1 | 192.1 | 183.7 |
| Boot and shoe cut stock and findings | 86.5 | 88.7 | 94.7 | 91.7 | 168.9 | 173. | 187.9 | 170.0 |
| Boots and shoes | 88.5 | 92.2 | 99.4 | 92.1 | 183.7 | 198.1 | 225.6 | 197.0 |
| Leather gloves and mittens | 123.5 | 121.9 | 125.4 | 120.4 | 257.0 | :241.3 | 252.8 | 223.4 |
| Trunks and suitcases | 157.9 | 160.1 | 166.4 | 145.8 | 338.3 | 347.2 | 364.1 | 281.6 |
| FCOD 1/ | 127.1 | 12 | 134.5 | 134.8 | 278.4 | 266.5 | 285.8 | 270.4 |
| Slaughtering and meat packing | 85.7 | 73 | 134.0 | 128.0 | 202.2 | 178.4 | 276.6 | 249.4 |
| Butter | 186.0 | 175.3 | 162.8 | 185.9 | 386.9 | 362.0 | 330.3 | 365.6 |
| Condensed and evaporated milk | 198.3 | 188.3 | 177.2 | 205.7 | 1477.9 | 438.1 | 403.0 | 440.9 |
| Ice cream | 166.0 | 153.9 | 138.5 | 170.6 | \|311. 3 | 286.4 | 261.3 | 295.9 |
| Flour | 133.9 | 134.7 | 136.0 | 133.0 | 296.4 | 286.8 | 275.8 | 274.8 |
| Feeds, prepared | 160.7 | 153.9 | 152.0 | 159.1 | 363.8 | 337.1 | 329.6 | \|326.7 |
| Cereal preparations | 152.6 | 146.4 | 144.7 | 142.3 | 333.6 | 313.0 | 297.8 | 277.5 |
| Baking | 115.4 | 114.3 | 115.4 | 111.0 | 235.1 | 227.6 | 227.1 | 208.4 |
| Sugar refining, cane | 111.0 | 109.2 | 123.2 | 123.9 | 230.9 | 229.3 | 248.4 | 229.4 |
| Sugar, beet | 55.8 | 46.9 | 48.4 | 56.0 | 114.2 | 96.7 | 98.9 | 99.6 |
| Confectionery | 100.0 | 109.0 | 118.3 | 111.2 | 210.6 | 241.2 | 260.1 | 232.0 |
| Beverages, nonalcoholic | 161.7 | 151.3 | 143.6 | 125.8 | 277.0 | 257.9 | 241.0 | 203.9 |
| Malt liquors | 163.9 | 172.4 | 167.0 | 165.4 | 299.9 | 316.0 | 293.0 | 287.8 |
| Canning and preserving | 91.0 | 84.3 | 81.2 | 90.3 | 232.7 | 216.9 | 204.6 | 217.8 |
| TOBACCO MANUFACTURES 1/ | 90.5 | 92.4 | 93.4 | 88.4 | 201.3 | 205.7 | 204.6 | 182.8 |
| Cigarettes | 120.7. | 121.1 | 121.1 | 119.8 | 253.1 | 254.3 | 246.5 | 220.9 |
| Cigars | 78.3 | 81.0 | 82.7 | 76.0 | 175.1 | 182.7 | 186.6 | 169.1 |
| Tobacco (chewing and smoking) and snuff | 75.9 | 77.0 | 77.3 | 76.5 | 161.8 | 161.6 | 159.6 | 129.8 |

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

Table 10. - Indexes of Froduction-Worker Pmployment and Weekly Pay Rolls in Manufactuxing Industries - Continued

| Industry group and industry | Fmployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.948 |  | 1947 |  | 1948 |  | 1947 |
|  | May | Apr. |  | May | May | Apr. | Mar. | May |
| PAPER AND ALITED PRODUCTS if | 146.4 | 146.8 | 148.0 | 146.1 | 331.9 | 325.7 | 330.8 | 296.3 |
| Paper and pulp | 146.0 | 145.3 | 145.5 | 140.3 | 338.9 | 327.7 | 330.0 | 289.4 |
| Paper goods, other | 150.7 | 150.4 | 152.0 | 153.4 | 328.2 | 324.4 | 327.8 | 306.8 |
| Envelopes | 145.5 | 145.6 | 145.7 | 137.6 | 282.9 | 282.1 | 283.7 | 262.9 |
| Paper bags | 158.2 | 162.3 | 164.1 | 168.1 | 354.8 | 365.3 | 373.7 | 338.4 |
| Paper boxes | 131.6 | 133.7 | 137.3 | 141.6 | 289.9 | 292.5 | 305.4 | 282.9 |
| PRINIING, PUBLISHING, AND ALLIED INDUSTRIES 1/ | 132.2 | 131.8 | 132.8 | 131.0 | 262.6 | 259.5 | 258.5 | 238.6 |
| Newspapers and periodicals | 123.5 | 122.5 | 122.0 | 119.0 | 236.6 | 235.0 | 229.2 | 209.3 |
| Printing; book and job | 138.1 | 137.4 | 139.1 | 137.2 | 283.9 | 278.6 | 280.0 | 255.4 |
| Lithographing | 117.5 | 119.0 | 119.5 | 124.6 | 223.9 | 221. 4 | 227.2 | 216.1 |
| Bookbinding | 136.4 | 139.5 | 144.5 | 145.3 | 302.9 | 304.4 | 313.4 | 320.2 |
| CHEMICALS AND ALITHED PRODUCTS 1/ | 198.4 | 201. 4 | 203.6 | 199,5 | 422.5 | 422:4 | 485,1 | 389.1 |
| Paints, varnishes, and colors | 179.4 | 177.1 | 179.4 | 178.0 | 343.9 | 329.4 | 332.9 | 313.6 |
| Drugs, medicines, and insecticides | 231.2 | 233.2 | 236.9 | 250.4 | 480.6 | 477.4 | 487.6 | 461.9 |
| Perfumes and cosmetics | 105.2 | 107.6 | 111.2 | 114.4 | 209.7 | 215.1 | 222.0 | 212.7 |
| Soap | 142.2 | 142.9 | 153.1 | 155.6 | 322.9 | 321.8 | 359.0 | 301.1 |
| Rayon and allied products | 131.2 | 131.4 | 131.8 | 126.8 | 275.1 | 274.6 | 271.9 | 249.6 |
| Chemicals, not elsewhere classified | 279.8 | 283.2 | 280.8 | 280.9 | 563.2 | 564.8 | 558.6 | 520.9 |
| Explosives and safety fuses | 304.7 | 303.7 | 306.8 | 291.0 | 592.0 | 561.5 | 585.0 | 506.5 |
| Compressed and liquefied gases | 250.9 | 252.4 | 250.1 | 241.8 | 491.7 | 483.7 | 473.6 | 419.4 |
| Ammunition, small-arms | 181.6 | 182.5 | 182.8 | 162.6 | 404.1 | 398.8 | 396.8 | 353.5 |
| Fireworks | 218.9 | 209.3 | 203.9 | 552.0 | 588.0 | 566.0 | 625.8 | 691.8 |
| Cottonseed oil | 89.1 | 99.5 | 115.0 | 86.0 | 245.9 | 270.2 | 316.4 | 219.6 |
| Fertilizers | 156.1 | 177.4 | 184.4 | 157.8 | 428.3 | 482.9 | 492.3 | 422.6 |
| PRODUCTS OF PETROLEUM AND COAL 1/ | 157.3 | 154.9 | 155.4 | 151.9 | 334.2 | 316.7 | 320.0 | 280.6 |
| Petroleum refining | 152.8 | 151.5 | 151.3 | 148.6 | 316.1 | 301.3 | 299.3 | 262.5 |
| Coke and byproducts 2/ | 143.6 | 137.3 | 141.4 | 131.1 | 321.9 | 288.5 | 314.6 | 271.8 |
| Paving materials - | 91.4 | 87.4 | 75.3 | 110.2 | 214.5 | 198.2 | 163.4 | 209.0 |
| Roofing materials | 213.0 | 214.6 | 215.3 | 214.3 | 507.9 | 495.6 | 502.7 | 463.6 |

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

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

| Industry group and industry | Fmployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 184.8 |  |  | 1947 |  | 1948 |  | 1947 |
|  | Moy | Api. | Mai. | May | May | Apr. | Mar. | May |
| RUBBER PRODUCES $1 /$ | 160.8 | 163.8 | 168.9 | 174.6 | 320.9 | 312.8 | 320.6 | 347.5 |
| Rubber tires and inner tubes | 190.4 | 192.9 | 200.7 | 220.0 | 345.5 | 323.6 | 330.2 | 399.3 |
| Rubber boots and shoes | 146.8 | 149.0 | 152.4 | 153.6 | 329.1 | 333.9 | 347.0 | 331.2 |
| Rubber goods, other | 158.0 | 161.9 | 165.3 | 156.3 | 338.7 | 347.1 | 356.2 | 325.5 |
| MISCELIANECUS INTUSTRIES $1 /$ | 176.6 | 178.4 | 182.6 | 180.3 | 384.2 | 382.6 | 394.0 | 364.6 |
| Instruments (professional and scientific), and fire-control equipment | 242.8 | 244.1 | 244.6 | 244.4 | 492.6 | 494.2 | 489.3 | 441.2 |
| Photographic apparatus | 214.1 | 217.1 | 219.8 | 207.6 | 431.0 | 416.2 | 422.3 | 383.0 |
| Optical instruments and ophthalmic goods | 224.1 | 226.9 | 229.1 | 247.1 | 426.7 | 438.1 | 444.8 | 461.0 |
| Pianos, organs, and parts | 17.5 .2 | 170.5 | 139.7 | 193.5 | 367.8 | 357.9 | 396.0 | 418.5 |
| Games, toys, and dolls | 210.3 | 210.7 | 201.2 | 177.3 | 496.7 | 487.6 | 463.7 | 386.1 |
| Buttons | 124.2 | 116.3 | 122.6 | 109.1 | 269.4 | 269.4 | 284.3 | 234.7 |
| Fire extinguishers | 260.9 | 266.8 | 258.6 | 283.4 | 563.4 | 575.5 | 541.0 | 552.1 |

See explanatory notes, sections $A, C, F$, and $G$.
See footnote 1, table 8.
2/ Revisions have been made as follows in the indexes for earlier months:
Cement - February 1948 pay roll to 282.8.
M+17inery - February 1948 pay roll to 236.0 .
Coke and byproducts - January and February 1948 pay roll to 309.8 and 312.3.

Table 11. - Indexes of Rmployment and Weekly Pay Rolls in Selsoted Nonmanufacturing Industries
(1939 Average $=100$ )

| Industry group and industry | Proployment indexes |  |  |  | Pay-roll indexes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1948 |  | 1947 |  | 1948 |  | 1947 |
|  | May | Apr. | Mar. | May | May | Apr. | Mar. | May |
| MINING: 1/ |  |  |  |  |  |  |  |  |
| Coal: |  |  |  |  |  |  |  |  |
| Anthracite | 91.4 | 91.9 | 92.6 | 91.4 | 246.2 | 195.4 | 255.9 | 210.2 |
| Bituminous coal | 108.2 | 79.5 | 108.0 | 104.7 | 341.4 | 166.4 | 342.0 | 290.3 |
| Metal | 98.2 | 98.9 | 98.7: | : 98.1 | 204.0 | 200.9 | 201.3 | 186.3 |
| Iron | 154.0 | 152.8 | 149.4 | 1.50 .0 | 332.1 | 315.6 | 313.8 | 296.4 |
| Copper | 104.7 | 107.2 | 107.9 : | 101.3 | 230.0 | 232.6 | 234.8 | 203.8 |
| Lead and zinc 2/ | 101.2 | 200.8 | 100.2 | 109.7 | 236.6 | 236.3 | 232.8 | 236.9 |
| Gold and silver | 31.3 | 32.5 | 33.3 | 31.6 | 54.6 | 55.2 | 56.7 | 49.7 |
| Miscellaneous | 182.9 | 182.8 | 189.1 | 185.6 | 352.5 | 343.1 | 349.2 | 319.1 |
| Quarrying and nonmetallic | 225.6 | 124.0 | 118.2 | 1.27 .4 | 329.7 | 311.7 | 287.3 | 295.5 |
| Crude petroleum and natural gas production | 123.3 | 112.0 | 1111.1 | 109.8 | 228.7 | 218.4 | 213.2 | 192.2 |
| TRANSPORTATION AND PUBLIC UIILITTIE |  |  |  |  |  |  |  |  |
| Class I steam railroads 3/ | 333.7 | 127.5 | 133.3 | 133.8 | 4/ | 4/ | 4/ | 4/ |
| Street railways and busses | 128.5 | 128.3 | 128.7 | 130.7 | 228.1 | 227.1 | $23 \overline{2} .6$ | 220.0 |
| Telephone | 298.6 | 198.5 | 1197.4 | 159.2 | 330.5 | 322.5 | 314.7 | 202.9 |
| Telegraph | 96.3 | 97.9 | 98.2 | 102.8 | 231.1 | 224:8 | 213.0 | 226.9 |
| Electric light and power | 112.3 | 111.7 | 110.9 | 105.7 | 191.9 | 188.6 | [184.4 | 168.2 |
| TRADE: 5/ |  |  |  |  |  |  |  |  |
| Wholesale | 114.4 | 114.8 | 115.3 | 109.7 | 211.6 | 210.8 | 210.8 | 191.4 |
| Retail | 113.1 | 112.8 | 113.8 | 111.3 | 213.8 | 211.1 | 210.4 | 195.3 |
| Food | 116.3 | 116.1 | 1116.7 | 113.9 | 227.0 | 225.5 | 226.1 | 206.0 |
| General merchandise | 123.7 | 123.6 | 124.5 | 121.2 | 229.2 | 225.5 | 225.5 | 212.3 |
| Apparel | 115.2 | 114.3 | 116.8 | 114.3 | 211.8 | 208.6 | 208.8 | 200.9 |
| Furniture and housefurnishings | 91.9 | 91.7 | 91.9 | 84.6 | 180.3 | 175.5 | 173.7 | 151.9 |
| Automotive | 127.0 | 107.1 | 105.8 | 99.4 | 205.3 | 204.7 | 197.5 | 177.7 |
| Lumber and building materials | 123.7 | 121.9 | 119.4 | 117.5 | 242.6 | 234.9 | 228.6 | 209.9 |
| SERVICE: |  |  |  |  |  |  |  |  |
| Hotels (year-round) 6/ | 127.0 | 116.9 | 116.4 | 118.4 | 234.6 | 233.4 | 229.0 | 221.1 |
| Power laundries | 119.0 | 118.3 | 117.7 | 124.9 | 232.3 | 231.5 | 227.5 | 231.0 |
| Cleaning and dyeing | 160.6 | 159.0 | 154.8 | 167.5 | 312.4 | 308.0 | 291. 2 | 313.5 |

See footnotes, table 9, and explanatory notes, sections $F$ and $G$.
1/ See footnote 3, table 9.
2/ February 1948 revised to 99.9 for employment and 235.0 for pey rolls.
3/ Source: Interstate Commerce Commission.
4/ Not available.
$\overline{5} /$ Includes all nonsupervisory employees and working supervisors.
6/ Maney payments only; additional value of board, room, uniforms, and tips, not Included.

Sec. A. Revisions of Fmployment Estimates - The employment estimates shown in this report for the industry divisions (e.g., manufacturing, mining, etc.) and industry groups (e.g., iron and steel, electrical machinery, etc.) have been adjusted to levels indicated by bench-mark data through 1946 and supersede data shown in mimeographed releases dated prior to June 1948 and in the Monthly Labor Review dated prior to July 1948.

Sec. B. Sources of Bench-Mark Data - The chief purpose of revisions published in the April 1948 DETAITED REPORT, was to adjust the levels of omployment estimates to bench-mark data through 2946. 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 Fedoral Security Agency are the main bases for 1946 bench marks. Bench marks for state and local government are based on data compiled by the Bureau of the Census, while most of the data on Federal Government employmont is made available by the U. S. Civil Service Comission. The Interstate Conmerce Commission is the source for railroads, and the U. S. Maritime Commission for water transportation.

Sec. C. Scope of Employment Revisions - Each of the industry divisions except service was affected by the recent revisions. Adjustments have been made in the 20 major groups comprising the manufacturing industry division. Estimates for the individual manufacturing industries, formerly based on the 1939 Census of Manufactures, are now being revised. As these revisions are completed, they are published in this report and indicated by appropriate footnotes. Since the revised employment estimates shown in this report cover only the current months, a set of surmary sheets presenting comparable figures from January 1939 to date, by month, for each industry will be provided upon request.

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 essential that an accurate base be established from which estimates may be carried forward. This base or "bench mark" is either a complete count or an estimate with a satisfactory degree of accuracy. When a new bench mark becomes avallable, estimates prepered since the last bench mark are reviewed to determine if any adjustment of level is required. This is the basio principle of employment estimating used by the BLS. It yields a catisfactory compromise between a slow but highly accurate complete count on the cne 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 employnent is determined; second, a sample of establishments is selected; and third, changes in employment indicated by this reporting sample are applied to the bench mark to determine the monthly estimates of employment between bench-mark periods. For example, if the latest complete data on employment for an industry were 40,200 in September 1945, and if the industry has a reporting sample of 13 establishments employing 23,200 workers in

September and 2j:. n October, the October estimate would be prepared as follows:

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

In general, data showing month-to-month changes in employment reflect the f?uctuations 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 semple of cities and of a representetive list of blocks in these cities. Data obtained from the establishments in these blocks yield substantially better estimates of month-tomonth changes in employment in the finance and service industrice 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 availabie from new firms, they are frequently introduced into the Bureau of Labor Statistics saraple after they have been in operation for some time. This lapse of time produces a rather consistent understatement which becomes larger from year to year. It is important, therefore, that estimates not be allowed to go uncorrected for too long a period. The most recent revisions correct for the downward blas that had accumulated in the nommanfacturing series jeginning January 1945 and in the manufacturing series beginning January 1946. Revisions in some industry divisions were made in ordor to incorporate greater rerinements in methodology and new source macerials thet have become available.

Sec. E. Comparability With Other Types of Fmployment Data The Bureau of Iabor Statistics employment estinates are based upon reports submitted by cooperating establishments and therefore difter from employment information obtained by household inierviews, such as the Monthly Report of the Labor Force. The Bureau of Labor Statistics estimates of employment in nonagricultural establishments differ from the Monthly Report of the Labor Force total nonagricultural employment estinstes in several important respects. For example: (1) The Bureau of Labor Statistics estimates cover all full- and part-time wage and salary workers in private nonagricultural establishments who worked or received pay during the pay period ending nearest the l5ih of the month; in Federal establishments during the pay period ending just before the first of the month; and in State and local government during the pay period ending on or just before the last of the month. Persons who worked in more than one establishment during the reporting period would be counted more than once; (2) Proprietors, self-employed persons, domestic servants, and unpaid family workers are excluded.

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

The methodology for obtaining pay-roll estimates is aimilar to that for employment estimates. Sample changes showing monthly novements 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 Data - Fmployment and pay-roll eatimates are based on reports from cooperating establishments. Excluding about 9,000 block-sample returns, the approximate number of establishments, and workers covered, for each of the industry divisions are shown below:

## Approximate Coverage of BLS Kmployment and Fay-Roll Sample

| Industry division | Number of | - $\frac{\text { Fmployees or }}{\text { Number }}$ | praduction workers : Percent of total |
| :---: | :---: | :---: | :---: |
| Manufacturing | 34,200 | 7,503,000 | 59 |
| Mining | 2,8.00 | 361,000 | 53 |
| Contract conatruction | 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: ( ${ }^{\text {R }}$ |  |  |  |
| Hotels '(year-round) | 1,200 | 133,000 | 35 |
| Power laundries and cleaning and dyeing | 1,600 | 68,000 | 21 |

Sec. H. Coverege of Emplayment Estimates - The employment estimates shown in tables 1, 2, 3, 6, and 7 cover all full- and part-time wage and salary workers who worked or received pay during the pay period ending nearest the l5th of the month. Proprietoris, self-emplayed persons, domestic servants, and personnel of the armed forces are excluded. The estimates and indexes shown in tables 8 and 10 refer to production and related workers as defined in the glossary, page vi.,

Sec. I. State Estimates - State estimates are prepared in cooperation with various State Agencies as indicated below. The estimates for manufacturing have been adjusted to recent data made available under the Federal Social Seourity program. Since some states have adjusted to more recent bench-mark data than others, and because varying methods of computation are used, the total: of the state estimates differs from the national total (see tables 1 and 2). Because of these recent revisions the state estimates for manufacturing are not consistent with the unrevised data shown prior to June 1947 for total employment in nonagricultural establishments, by state. Comparable series of manufacturina estimates for each state, January 1943 to date, and also For nopagricultural employment for selected states, through December 1946, are available upon request to the cooperating State agency or the appropriate Bureau of Labor Statistics regional office. Estimates of nonagricultural employment, by state, for these States which are now publishing such estimates are shown in table 6. These totals are consistent with the manufacturing estimates in table 7. As nonagricultural eatimates for additional States become available, they will be show in table 6.

Alabama - Dept. of Industrial Relations, Montgomery 5.
Arizona - Unemployment Compensation Div., Bmployment Security Comisaion, Phoenix.
Arkansas - Employment Security Div., Dept. of Labor, Little Rock.
California - Div. of Labor Statistics and Research, Dept. of Industrial Relations, San Francisco 2.
Connecticut - Employment Security Div., Dept, of Labor and Factory Inspection, Hartford 15.
Delaware - Federal Reserve Bank of Philadelphia, Philadelphia 1, Pa.
Florida - Unemployment Compensation Div., Industrial Commission, Tallahassee.
Georgia - Employment Security Agency, Dept. of Labor, Atlanta 3. Illinois - Dept. of Labor, Chicago 1.
Indiana - Employment Security Div., Indianapolis 9.
Iowa - Kmployment Security Commission, Des Moines 8.
Konsas - State Labor Dept., Topeka.
Louisiana - Bureau of Business Research, Louisiana State University, Baton Rouge 3.
Maine - Unemployment Compensation Commission, Augusta.
Maryland - Dept. of Labor and Industry, Baltimore 2.
Massachusetts - Dept. of Labor and Industries, Boston 33.
Michigan - Dept. of Labor and Industry, Lanaing 13.
Minnesota - Div. of Employment and Security, Dept. of Social Security, St. Paul 1.
Missouri - Div. of Employment Security, Dopt. of Labor and Industrial Relations, Jefferson City.
Montana - Unemploynent Ccmpensation 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 Commission, Albuquerque.
New York - Div, of Placement and Unemployment Insurance, Dept. of Labor, New York 17.
North Carolina - Dept. of Labor, Raleigh.
Oklahoma - Employment Security Commission, Oklahoma City 2.
Pennsylvania - Federal Reserve Bank of Philadelphia, Philadelphia 1 (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.
Temessee - Dept. of Employment Security, Nashville 3.
Texas - Bureau of Business Research, University of Texas, Austin 12.
Utah - Dept. of Employment Security, Industrial Commission, Salt Lake City 13.
Vermont - Unemployment Compensation Cormission, 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 Commisision, Casper.

## BLS REGIONAL OFFICESS

New England - Regional Director, U. S. Bureau of Labor Statistics, Old South Bldg., 294 Washington St. ${ }^{\text {B Boston 8, Massachusette (Connecticut, }}$ Maine, Massachusetts, New Hampshire, Rhode Island; Vermont).

North Atlantia - Regional Director, U. S. Bureau of Labor Statistics, 1000 Percel Post Bldg., 341 Ninth Avenue, New York J., 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, Ill. (Illinois, Indiana, Iowa, Kansas, Kontucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dalota, Wisconsin).
Southern - Regional Director, U. S. Bureau of Labor Statistics, 6th Floor Silvey Bldg., 114 Marietta Street, N. W., Atlanta 3, Georgia (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas).
Pacific--Rocky Mountain - Regional Dirsctor, U. S. Bureau of Labor Statistics, 546 Federal Office Bldg., Sen Francisco 2, California (Arizona, California, Coloredo, Idahc, Nicntana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming).

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

## GLOSSARY

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

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

Defense Agencies - Covers civilian employees of the National Military Establishment, Maritime Commission, Naticnal Advisory Comnittee for Aeronautics, The Panama Canal, Philippine Alien Property Administration, Philippine War Damage Commission, Office of Selective Service Records, War Assets Administration, Office of Defense Transportation, Office of Scientific Research and Development, National Security Resources Board.

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

Federal Government-Executive branch - Includes U. S. Navy Yards, Federal arsenals, and force-account construction. Fourth-class postmasters are included under the executive branch in table 4, but are excluded from the government data shown in tablee 1 and 3. mployment shown here for the executive branch differs from data published by the U. S. Civil Service Commission in the following respects: (1) Employment collected and published by the Civil Service Commission as of the last day of the month, is here presented as of the first day of the next month, (2) substitute rural mail carriers are excluded; (3) employment includes in December of each year the additional postal employees necessitatad by the Christmas season, excluded from published Civil Service Commission figures starting 1942; (4) seamen and trainees who are hired and paid by private steamship companies having contracts with the Maritime Commission are excluded; (5) the Panama Railroad Company is shown here under Government corporations but is included under the executive brench by the Civil Service Commission.

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

Govennment - Covers Federal, State, and local govermmental establishments performing legislative, executive, and judicial functions, as well as all government-owned and oper ited establisiments and institutions (arsenals, navy yards, hospitzls, etc.) sorernment corporations and government force-account construction. The data shown in table 1 exclude fourth-class postmasters because they presumably have other major jobs.

Government corporations - Covers only three corporetions: The Panama Railroad Company, the Federel Reserfe beriss, ard the mixed-ownership banks of the Farm Credit Auministraticn. All other corporations are included under the executive branch.

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

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

Leave payments - Payments were authorized by Public Law 704 of the 79th Congress and were continued by Public Law 254 of the 80th Congress to enlisted personnel who were discharged prior to September 1., 1946 for accrued and unused leave and to officers and enlisted personnel then on active duty for leave accrued in excess of 60 days. Value of bonds represents face value; interest is paid in addition when bonds are cashed. Iump-sum payments for terminal leare, which wore authorized by Public Law 350 of the 80 th Congress, and were started Qctober 1947, are excluded here and included under pay rolls.

Manufacturing - Covers only privately owned establishments; governmental manufacturing operations such as arscnals and nary jards are excluded.

Military personnel and pay rolla - Data are for persornel on active duty. Reserve personnel are excluded if on inactive duty or if on active duty for a brief training or emergenoy poriod. Porsonnel is as of the firgt of the month and pay rolls are for the entire month. Through October 1, 1947, discharged officer personnel were included until the end of their terminal-leave period; discharged enlisted personnel were included from October 1, 1946 through October 1, 1 j 47 only. After October 1, 2947, lump-sum terminal-leave pajments at tiree of discharge (ainthorized by Public Law 350 of the 8oth Conesess) were made.

Coast Guard pay rolis for all perfoda and Army pay rolls through April 1947 represent actual expenditures. Other pay rolls represent estimated. obligations based on an averade monthly porsonnel count. Pay rolls for the Navy and Ccast Guard include cash paysents $f$ or clothing-allowance balances in January, April, July, and October.

Mining - Covers establishmants engagen 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 es removal of overburden, tunnelling and shafing; and the drilling or acidizing of oil wells; also includes ore dressing, beneficiating, and concentration.

Nonagricultural establishments - Governmentea ox private buainecs establighnents; (I) that are physically located within continental United States; and (2) whose principal activity can be classified under one of the following industry divisions-mamiaoturing, mining, contract construction, transportation and public utilities, wholesale and retail trade, finance, service, or govermment.

Day rolls - Private pay rolls represent pay rolls of production and related workers (or nonsupervisory employees and working supervisors) before deductions for old-age and unomployment 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, velue of payments in kind, and bonuses, unless earned and paid regaiarly each pay period. In mining industries further deductions are made for explosives or other supplies furnished by the company. In coal minine portal-to-portal pay is included. Federal civilian pay ralls are for all employees bofore deductions for income tax, rettrement, and bonds.

Production and related workers - Tminides working foremen and all nonsupervisory workers (inciuding laad men and trainees) engaged in fabricating, processing, assembling, inspsction, receiving, storage, handling, packing, warehousing, shippins, maintenance, repair, janitorial, watchman services, products development, auxillisery production for plant's own use (e.g., power plant) and record-keeping and other services closely associated with the above production operations. Excludes supervisory employees (above the working foreman l.evel) and. their clerical staifs, routemen, salesmen, and other groups of nonproduction woxkers defined below under wage and salary workers.

Service - Covers establishments primarily engaged in rendering services to individuals and business firms. Exciudes automobile repair services, government owned and operated hespitals, muceums, otc., and domestic service.

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

Tranaportation and public utilities - Covers only privately owned and operated enterprises engaged in providing all types of trensportation and related services; telephone, telegraph and other communication services; or providing electricity, gas, steam, water, or aanitary 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 workens ongaged in the following activities: executive, purchasing, finance, accounting, legal, personnel (including cafeterias, medical, etc.), professicnal and technical activities, sales. sales-delivery, advertisinf, credit, collection, and in installation and servicing of own products, routine offics functions, factory supervision (above the working foroman level) and other workers not included as production woriers. Also includes employees on the establishment pay roll engaged in new construction and major additions or alteratfons to the plent who are utilized as a separate work force (forco-account construction workers).

Wage earner - See production workers.
Washington, D.C. - Data for the executive branch of the Federal Government also include arecs in Maryland and Virginia which are within the metropoliten area, as defined by the Bureau of the Census.

