

**Table 1. Statistics for All Manufacturing Establishments: 2001 and Earlier Years**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| Year <sup>1</sup> | Establishments <sup>2</sup> |                           | All employees <sup>3</sup> |                   | Production workers  |               |                 | Value added <sup>5</sup><br>(\$1,000) | Total cost of materials<br>(\$1,000) | Total value of shipments <sup>6</sup><br>(\$1,000) | Total capital expenditures <sup>7</sup><br>(\$1,000) |
|-------------------|-----------------------------|---------------------------|----------------------------|-------------------|---------------------|---------------|-----------------|---------------------------------------|--------------------------------------|--|--|
|                   | Total                       | With 20 employees or more | Number <sup>4</sup>        | Payroll (\$1,000) | Number <sup>4</sup> | Hours (1,000) | Wages (\$1,000) |                                       |                                      |  |  |
| 2001              | N                           | N                         | 15 879 477                 | 593 050 590       | 11 235 111          | 22 346 746    | 342 990 489     | 1 853 929 431                         | 2 104 865 642                        | 3 970 499 812                                      | 143 651 531  |
| 2000              | N                           | N                         | 16 651 904                 | 617 211 426       | 11 943 646          | 23 954 395    | 363 380 819     | 1 973 622 421                         | 2 245 839 293                        | 4 208 582 047                                      | 154 478 902  |
| 1999              | N                           | N                         | 16 685 639                 | 601 472 998       | 11 977 196          | 24 209 596    | 355 790 664     | 1 954 498 206                         | 2 084 316 398                        | 4 031 884 590                                      | 150 325 065  |
| 1998              | N                           | N                         | 16 944 977                 | 586 957 735       | 12 189 519          | 24 582 584    | 348 953 570     | 1 891 265 885                         | 2 018 054 521                        | 3 899 809 755                                      | 152 708 100  |
| 1997              | 362 829                     | 119 748                   | 16 805 127                 | 569 808 845       | 12 065 257          | 24 183 271    | 338 267 197     | 1 825 688 027                         | 2 015 424 556                        | 3 834 700 920                                      | 151 510 757  |
| 1996              | N                           | N                         | 17 326 300                 | 560 518 300       | 12 167 800          | 25 010 500    | 324 495 800     | 1 749 661 900                         | 1 975 362 100                        | 3 715 428 200                                      | 146 467 500  |
| 1995              | N                           | N                         | 17 419 200                 | 545 362 700       | 12 253 100          | 25 072 000    | 317 767 500     | 1 711 442 300                         | 1 897 570 700                        | 3 594 359 600                                      | 134 318 100  |
| 1994              | N                           | N                         | 17 059 400                 | 522 565 700       | 11 947 100          | 24 560 100    | 304 663 000     | 1 605 980 000                         | 1 752 735 100                        | 3 348 019 200                                      | 118 664 700  |
| 1993              | N                           | N                         | 16 943 500                 | 504 363 100       | 11 726 200          | 23 845 100    | 290 293 200     | 1 483 054 100                         | 1 647 492 600                        | 3 127 620 400                                      | 108 628 500  |
| 1992              | 370 912                     | 118 967                   | 16 948 900                 | 494 108 900       | 11 640 900          | 23 563 100    | 281 538 200     | 1 424 699 700                         | 1 571 773 500                        | 3 004 722 800                                      | 110 643 800  |
| 1991              | N                           | N                         | 16 792 800                 | 467 040 300       | 11 652 000          | 23 383 000    | 270 601 000     | 1 341 386 200                         | 1 531 221 300                        | 2 878 164 800                                      | 103 152 900  |
| 1990              | N                           | N                         | 17 579 400                 | 472 622 300       | 12 232 700          | 24 463 300    | 275 208 400     | 1 346 970 100                         | 1 574 617 300                        | 2 912 228 500                                      | 106 462 800  |
| 1989              | N                           | N                         | 17 794 800                 | 463 045 300       | 12 535 500          | 24 933 900    | 273 119 900     | 1 325 433 600                         | 1 532 330 000                        | 2 840 376 000                                      | 101 894 300  |
| 1988              | N                           | N                         | 17 917 500                 | 450 775 700       | 12 438 700          | 24 815 400    | 265 147 100     | 1 269 313 000                         | 1 444 500 900                        | 2 695 432 300                                      | 84 706 100   |
| 1987              | 358 952                     | 120 822                   | 17 718 000                 | 428 480 000       | 12 280 400          | 24 302 700    | 251 449 500     | 1 165 740 800                         | 1 319 844 600                        | 2 475 939 100                                      | 85 662 100   |
| 1986              | N                           | N                         | 17 086 800                 | 402 466 700       | 11 765 400          | 23 178 200    | 236 599 400     | 1 035 437 400                         | 1 217 608 600                        | 2 260 314 600                                      | 80 795 100   |
| 1985              | N                           | N                         | 17 508 300                 | 396 610 500       | 12 174 400          | 23 731 600    | 235 790 800     | 1 000 142 000                         | 1 276 009 600                        | 2 280 183 800                                      | 91 244 900   |
| 1984              | N                           | N                         | 17 854 900                 | 384 921 500       | 12 572 800          | 24 637 100    | 231 783 900     | 983 227 700                           | 1 288 413 600                        | 2 253 429 300                                      | 80 659 900   |
| 1983              | N                           | N                         | 17 453 100                 | 354 232 200       | 12 203 000          | 23 611 600    | 212 416 400     | 882 014 500                           | 1 170 237 800                        | 2 045 853 300                                      | 67 479 800   |
| 1982              | 348 385                     | 117 959                   | 17 818 100                 | 341 406 200       | 12 400 600          | 23 538 300    | 204 787 200     | 824 117 700                           | 1 130 142 700                        | 1 960 205 800                                      | 77 045 700   |
| 1981              | N                           | N                         | 18 919 800                 | 341 319 800       | 13 542 800          | 26 233 100    | 212 200 900     | 837 506 500                           | 1 193 969 600                        | 2 017 542 500                                      | 83 767 000   |
| 1980              | N                           | N                         | 19 311 400                 | 316 494 500       | 13 900 100          | 26 745 700    | 198 164 000     | 773 831 300                           | 1 093 567 600                        | 1 852 668 300                                      | 74 624 600   |
| 1979              | N                           | N                         | 19 756 500                 | 298 529 100       | 14 537 800          | 28 324 300    | 192 881 500     | 747 480 500                           | 999 157 500                          | 1 727 214 600                                      | 65 796 600   |
| 1978              | N                           | N                         | 19 239 400                 | 271 540 900       | 14 228 700          | 27 676 500    | 176 416 800     | 657 412 000                           | 877 424 700                          | 1 522 937 300                                      | 58 346 000   |
| 1977              | 350 757                     | 113 843                   | 18 515 900                 | 242 031 900       | 13 691 000          | 26 686 700    | 157 163 700     | 585 165 600                           | 782 417 700                          | 1 358 526 400                                      | 51 907 300   |

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM). Also, in census year 1997, collection and publication of census and subsequent ASM data changed from the Standard Industrial Classification (SIC) basis to the North American Industry Classification System (NAICS). For a discussion of the impact of this change on the data, see introductory text.

<sup>2</sup>Includes establishments with payroll at any time during year. Beginning in census year 1997, auxiliary establishments associated with manufacturing companies are classified separately. For 1992 and earlier census years, establishment counts for auxiliaries are excluded.

<sup>3</sup>Figures include employment and payroll data for employees at manufacturing establishments engaged in nonmanufacturing activities (such as distribution and construction). Beginning in 1997, auxiliary establishments associated with manufacturing companies are classified separately. For 1996 and earlier census years, establishment data for auxiliaries are excluded.

<sup>4</sup>Figures represent average number of production workers for payroll period ended nearest the 12th of March, May, August, and November, plus all other employees for payroll period ended nearest the 12th of March.

<sup>5</sup>Beginning in 1982, all respondents were requested to report their inventories at cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, 1982 data for value added are not comparable to prior years.

<sup>6</sup>Data represent value of shipments for most industries. For industries 311411, 311412, 311421, 311422, 311711, 311712, 311941, 311999, 312140, 312210, 312221, and 312229 value of production is shown. For industry 336611, value of work done is shown.

<sup>7</sup>Beginning in 1997, data collected are for total capital expenditures (new and used) only. Prior to 1997, only data for new capital expenditures were shown in this table. 1996 and earlier years data have been adjusted to show total capital expenditures.

Note 1: Previous years' data may differ from that published in the 2000 Annual Survey of Manufactures (ASM) because of changes encountered in subsequent review of the 2001 ASM.

Note 2: The data in this table are based on the 2001 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The data in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the U.S. Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix B.

**Table 2. Statistics for Industry Groups and Industries: 2001 and Earlier Years—Con.**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments <sup>2</sup> (\$1,000) | Relative standard error of estimate <sup>3</sup> (percent) for column— |    |
|------------|--|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|---|--|----|
|            |  | Number <sup>1</sup> | Payroll (\$1,000) | Number <sup>1</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |   | A  | F  |
|            |  | A                   | B                 | C                   | D             | E               |                       |                                   |   | F  | G  |
| 334        | Computer & electronic product mfg—Con.                             |                     |                   |                     |               |                 |                       |                                   |   |  |    |
| 3345       | Navigational, measuring, medical, & control instruments mfg—Con.   |                     |                   |                     |               |                 |                       |                                   |   |  |    |
| 33451      | Navigational, measuring, medical, & control instruments mfg—Con.   |                     |                   |                     |               |                 |                       |                                   |   |  |    |
| 334510     | Electromedical & electrotherapeutic apparatus mfg .....            | 2001.. 54 972       | 2 769 106         | 24 760              | 49 661        | 775 923         | 8 631 183             | 5 041 905                         | 13 642 648                                      | 3  | 2  |
|            |  | 2000.. 52 334       | 2 675 439         | 23 531              | 47 554        | 736 652         | 8 269 567             | 4 709 819                         | 12 909 458                                      | 2  | 2  |
|            |  | 1999.. 53 237       | 2 588 044         | 22 785              | 45 745        | 715 266         | 7 706 455             | 4 409 001                         | 12 166 114                                      | 2  | 2  |
|            |  | 1998.. 55 333       | 2 670 194         | 24 127              | 48 775        | 756 629         | 7 886 308             | 4 156 163                         | 11 959 013                                      | 3  | 2  |
|            |  | 1997.. 55 044       | 2 635 085         | 24 724              | 50 363        | 741 374         | 7 619 290             | 3 995 354                         | 11 581 624                                      | X  | X  |
| 334511     | Search, detection, navigation, & guidance instrument mfg .....     | 2001.. 178 051      | 10 042 268        | 63 269              | 112 217       | 2 924 773       | 23 374 916            | 11 941 457                        | 35 345 464                                      | 1  | 1  |
|            |  | 2000.. 179 659      | 9 751 693         | 64 882              | 119 339       | 2 778 986       | 21 440 486            | 11 359 786                        | 33 081 818                                      | 1  | 1  |
|            |  | 1999.. 172 452      | 9 571 931         | 60 544              | 116 724       | 2 583 897       | 22 107 624            | 10 421 589                        | 32 486 008                                      | 1  | 1  |
|            |  | 1998.. 188 299      | 10 257 901        | 69 485              | 134 441       | 2 910 566       | 23 941 705            | 9 192 213                         | 33 265 406                                      | 1  | 1  |
|            |  | 1997.. 188 325      | 9 977 629         | 65 102              | 126 006       | 2 627 879       | 23 155 326            | 9 051 326                         | 32 661 495                                      | X  | X  |
| 334512     | Automatic environmental control mfg .....                          | 2001.. 18 022       | 646 153           | 11 818              | 23 691        | 320 180         | 1 788 987             | 1 299 069                         | 3 091 114                                       | 6  | 3  |
|            |  | 2000.. 20 241       | 720 002           | 13 450              | 27 264        | 370 240         | 1 972 344             | 1 319 136                         | 3 301 773                                       | 4  | 2  |
|            |  | 1999.. 20 480       | 697 647           | 13 721              | 28 413        | 367 589         | 1 880 864             | 1 173 387                         | 3 089 522                                       | 2  | 2  |
|            |  | 1998.. 20 477       | 670 457           | 14 531              | 27 165        | 366 769         | 1 898 607             | 1 261 242                         | 3 133 485                                       | 6  | 4  |
|            |  | 1997.. 21 470       | 666 464           | 14 922              | 29 904        | 371 348         | 1 737 147             | 1 195 244                         | 2 943 971                                       | X  | X  |
| 334513     | Industrial process control instrument mfg .....                    | 2001.. 42 979       | 1 936 305         | 18 692              | 37 404        | 644 750         | 4 567 236             | 2 776 347                         | 7 376 604                                       | 2  | 3  |
|            |  | 2000.. 44 155       | 1 945 662         | 19 623              | 39 110        | 653 423         | 4 801 589             | 2 947 971                         | 7 715 544                                       | 2  | 2  |
|            |  | 1999.. 45 887       | 1 959 555         | 20 387              | 40 711        | 657 704         | 4 581 307             | 2 892 955                         | 7 482 846                                       | 2  | 1  |
|            |  | 1998.. 46 957       | 2 013 993         | 22 015              | 42 715        | 690 384         | 4 761 813             | 2 858 579                         | 7 821 243                                       | 1  | 2  |
|            |  | 1997.. 48 237       | 1 958 046         | 21 312              | 41 233        | 618 958         | 4 914 894             | 2 728 231                         | 7 662 564                                       | X  | X  |
| 334514     | Totalizing fluid meter & counting device mfg .....                 | 2001.. 16 312       | 730 665           | 10 395              | 20 177        | 399 275         | 1 996 618             | 2 299 565                         | 4 292 784                                       | 5  | 3  |
|            |  | 2000.. 18 172       | 895 115           | 11 891              | 24 932        | 531 022         | 2 126 744             | 2 496 750                         | 4 614 408                                       | 4  | 4  |
|            |  | 1999.. 19 644       | 937 130           | 11 919              | 25 073        | 499 635         | 2 051 183             | 2 183 208                         | 4 248 169                                       | 4  | 2  |
|            |  | 1998.. 16 726       | 695 847           | 11 654              | 23 578        | 422 045         | 2 018 174             | 1 836 148                         | 3 840 622                                       | 1  | 2  |
|            |  | 1997.. 17 155       | 666 032           | 11 853              | 23 367        | 404 421         | 1 996 360             | 1 712 162                         | 3 716 095                                       | X  | X  |
| 334515     | Electricity measuring & testing instrument mfg .....               | 2001.. 65 440       | 3 607 016         | 24 255              | 47 056        | 959 565         | 8 236 509             | 4 880 694                         | 13 109 989                                      | 2  | 3  |
|            |  | 2000.. 61 832       | 3 421 797         | 25 757              | 51 138        | 968 780         | 10 346 835            | 5 821 238                         | 16 002 779                                      | 2  | 2  |
|            |  | 1999.. 63 181       | 3 143 835         | 27 030              | 51 816        | 965 757         | 9 010 404             | 5 161 018                         | 14 079 580                                      | 1  | 2  |
|            |  | 1998.. 63 976       | 3 222 892         | 28 721              | 59 505        | 1 050 922       | 8 754 959             | 4 772 761                         | 13 610 141                                      | 1  | 3  |
|            |  | 1997.. 63 891       | 3 045 208         | 29 626              | 60 904        | 1 033 172       | 8 991 807             | 5 140 771                         | 14 025 050                                      | X  | X  |
| 334516     | Analytical laboratory instrument mfg .....                         | 2001.. 37 050       | 2 124 888         | 12 899              | 25 461        | 485 653         | 4 723 129             | 3 551 125                         | 8 350 423                                       | 4  | 3  |
|            |  | 2000.. 35 914       | 1 880 064         | 12 836              | 25 858        | 468 245         | 4 730 303             | 3 092 046                         | 7 779 121                                       | 3  | 2  |
|            |  | 1999.. 36 113       | 1 784 706         | 13 126              | 27 000        | 454 358         | 4 715 001             | 2 775 193                         | 7 509 390                                       | 3  | 2  |
|            |  | 1998.. 36 278       | 1 767 898         | 13 075              | 26 526        | 512 555         | 4 480 606             | 2 689 605                         | 7 201 507                                       | 1  | 1  |
|            |  | 1997.. 36 820       | 1 728 708         | 13 660              | 27 460        | 495 787         | 4 111 184             | 2 752 613                         | 6 899 852                                       | X  | X  |
| 334517     | Irradiation apparatus mfg .....                                    | 2001.. 12 952       | 706 505           | 4 935               | 10 213        | 209 558         | 2 149 975             | 2 141 791                         | 4 324 647                                       | 3  | 2  |
|            |  | 2000.. 13 177       | 694 270           | 4 870               | 10 825        | 196 160         | 2 255 270             | 2 069 833                         | 4 329 236                                       | 3  | 2  |
|            |  | 1999.. 12 717       | 689 773           | 5 052               | 11 854        | 201 819         | 2 249 883             | 1 664 919                         | 3 948 766                                       | 4  | 2  |
|            |  | 1998.. 13 929       | 692 336           | 5 650               | 12 531        | 203 784         | 2 243 374             | 1 833 998                         | 4 061 936                                       | 1  | 1  |
|            |  | 1997.. 13 547       | 642 088           | 5 657               | 12 299        | 187 134         | 2 075 258             | 1 884 903                         | 3 970 454                                       | X  | X  |
| 334518     | Watch, clock, & part mfg .....                                     | 2001.. 6 382        | 200 238           | 3 752               | 8 268         | 98 677          | 568 414               | 452 773                           | 1 018 151                                       | 11   | 8  |
|            |  | 2000.. 7 026        | 218 154           | 4 318               | 11 117        | 104 345         | 695 090               | 463 498                           | 1 150 650                                       | 8  | 6  |
|            |  | 1999.. 7 480        | 211 189           | 5 324               | 10 471        | 107 948         | 771 902               | 445 232                           | 1 168 367                                       | 10   | 6  |
|            |  | 1998.. 6 521        | 199 384           | 4 510               | 9 596         | 99 179          | 598 509               | 425 110                           | 1 020 778                                       | 2  | 2  |
|            |  | 1997.. 6 333        | 178 487           | 4 482               | 9 229         | 93 587          | 550 979               | 380 479                           | 921 827   | X  | X  |
| 334519     | Other measuring & controlling device mfg .....                     | 2001.. 35 953       | 1 697 901         | 18 010              | 34 276        | 569 728         | 3 997 955             | 2 668 373                         | 6 617 283                                       | 4  | 4  |
|            |  | 2000.. 37 333       | 1 674 713         | 18 621              | 35 241        | 580 318         | 3 904 790             | 2 487 823                         | 6 228 940                                       | 3  | 4  |
|            |  | 1999.. 34 840       | 1 468 209         | 17 649              | 32 392        | 521 951         | 3 230 276             | 2 136 055                         | 5 376 365                                       | 3  | 3  |
|            |  | 1998.. 35 368       | 1 477 220         | 17 954              | 36 051        | 568 759         | 3 331 884             | 2 080 333                         | 5 368 816                                       | 2  | 2  |
|            |  | 1997.. 33 616       | 1 345 708         | 17 900              | 34 855        | 519 231         | 3 132 661             | 1 957 921                         | 5 082 777                                       | X  | X  |
| 3346       | Mfg & reproducing magnetic & optical media .....                   | 2001.. 41 805       | 1 514 587         | 28 698              | 61 334        | 883 767         | 4 100 176             | 3 436 192                         | 7 612 035                                       | 5  | 4  |
|            |  | 2000.. 43 918       | 1 575 326         | 31 854              | 64 347        | 938 181         | 4 607 933             | 4 082 913                         | 8 699 162                                       | 4  | 4  |
|            |  | 1999.. 46 361       | 1 613 020         | 33 184              | 69 479        | 965 183         | 4 888 436             | 3 730 164                         | 8 663 216                                       | 3  | 3  |
|            |  | 1998.. 58 097       | 1 990 910         | 39 571              | 82 580        | 1 145 098       | 6 201 087             | 4 368 987                         | 10 563 622                                      | 3  | 2  |
|            |  | 1997.. 53 917       | 1 853 688         | 37 979              | 79 228        | 1 113 709       | 5 465 519             | 4 241 985                         | 9 697 625                                       | X  | X  |
| 33461      | Mfg & reproducing magnetic & optical media .....                   | 2001.. 41 805       | 1 514 587         | 28 698              | 61 334        | 883 767         | 4 100 176             | 3 436 192                         | 7 612 035                                       | 5  | 4  |
|            |  | 2000.. 43 918       | 1 575 326         | 31 854              | 64 347        | 938 181         | 4 607 933             | 4 082 913                         | 8 699 162                                       | 4  | 4  |
|            |  | 1999.. 46 361       | 1 613 020         | 33 184              | 69 479        | 965 183         | 4 888 436             | 3 730 164                         | 8 663 216                                       | 3  | 3  |
|            |  | 1998.. 58 097       | 1 990 910         | 39 571              | 82 580        | 1 145 098       | 6 201 087             | 4 368 987                         | 10 563 622                                      | 3  | 2  |
|            |  | 1997.. 53 917       | 1 853 688         | 37 979              | 79 228        | 1 113 709       | 5 465 519             | 4 241 985                         | 9 697 625                                       | X  | X  |
| 334611     | Software reproducing .....   | 2001.. 1 841        | 64 813            | 1 774               | 3 295         | 56 672          | 248 917               | 130 281                           | 382 197   | 50   | 28 |
|            |  | 2000.. 1 835        | 80 402            | 1 791               | 3 400         | 57 996          | 253 909               | 149 628                           | 403 414   | 40   | 28 |
|            |  | 1999.. 2 785        | 98 862            | 2 511               | 4 792         | 74 585          | 370 458               | 169 098                           | 535 336   | 26   | 22 |
|            |  | 1998.. 12 432       | 466 143           | 6 364               | 13 318        | 206 046         | 1 256 085             | 648 662                           | 1 889 302                                       | 8  | 9  |
|            |  | 1997.. 7 868        | 302 863           | 4 212               | 9 721         | 192 472         | 786 164               | 421 955                           | 1 209 207                                       | X  | X  |
| 334612     | Prerecorded CD (except software), tape, & record reproducing ..... | 2001.. 28 720       | 936 646           | 20 200              | 43 395        | 577 510         | 2 861 359             | 1 903 794                         | 4 781 851                                       | 6  | 5  |
|            |  | 2000.. 27 053       | 883 399           | 20 424              | 41 980        | 576 829         | 2 913 398             | 1 985 661                         | 4 894 180                                       | 5  | 5  |
|            |  | 1999.. 26 359       | 832 806           | 19 260              | 40 796        | 534 401         | 2 615 452             | 1 742 207                         | 4 364 283                                       | 5  | 4  |
|            |  | 1998.. 26 481       | 808 900           | 20 452              | 42 118        | 544 876         | 2 702 739             | 1 602 553                         | 4 315 726                                       | 1  | 1  |
|            |  | 1997.. 25 180       | 747 551           | 19 430              | 40 123        | 512 482         | 2 379 126             | 1 411 504                         | 3 809 652                                       | X  | X  |
| 334613     | Magnetic & optical recording media mfg .....                       | 2001.. 11 243       | 513 128           | 6 725               | 14 643        | 249 585         | 989 899               | 1 402 117                         | 2 447 987                                       | 6  | 7  |
|            |  | 2000.. 15 030       | 611 525           | 9 639               | 18 967        | 303 356         | 1 440 626             | 1 947 624                         | 3 401 568                                       | 5  | 5  |
|            |  | 1999.. 17 217       | 681 352           | 11 414              | 23 891        | 356 197         | 1 902 526             | 1 818 858                         | 3 763 597                                       | 4  | 3  |
|            |  | 1998.. 19 184       | 715 867           | 12 756              | 27 143        | 394 176         | 2 242 263             | 2 117 772                         | 4 358 594                                       | 8  | 1  |
|            |  | 1997.. 20 869       | 803 274           | 14 337              | 29 384        | 408 755         | 2 300 229             | 2 408 526                         | 4 678 766                                       | X  | X  |

See footnotes at end of table.

**Table 2. Statistics for Industry Groups and Industries: 2001 and Earlier Years—Con.**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | All employees       |                   | Production workers  |               |                 | Value added (\$1,000) | Total cost of materials (\$1,000) | Total value of shipments <sup>2</sup> (\$1,000) | Relative standard error of estimate <sup>3</sup> (percent) for column— |   |   |
|------------|--|---------------------|-------------------|---------------------|---------------|-----------------|-----------------------|-----------------------------------|---|--|---|---|
|            |  | Number <sup>1</sup> | Payroll (\$1,000) | Number <sup>1</sup> | Hours (1,000) | Wages (\$1,000) |                       |                                   |   | A  | F |   |
|            |  |                     |                   |                     |               |                 |                       |                                   |   |  |   | A |
| 336        | Transportation equipment mfg—Con.                                    |                     |                   |                     |               |                 |                       |                                   |   |  |   |   |
| 3363       | Motor vehicle parts mfg—Con.   |                     |                   |                     |               |                 |                       |                                   |   |  |   |   |
| 33637      | Motor vehicle metal stamping .....                                   | 2001..              | 112 488           | 5 391 757           | 94 033        | 190 553         | 4 288 393             | 9 899 453                         | 11 835 530                                      | 21 858 253   | 3 | 4 |
|            |  | 2000..              | 117 012           | 6 027 139           | 98 437        | 207 820         | 4 814 826             | 11 203 829                        | 12 774 960                                      | 24 025 620   | 3 | 3 |
|            |  | 1999..              | 118 695           | 5 927 922           | 100 356       | 217 234         | 4 722 463             | 11 919 991                        | 12 870 092                                      | 24 775 866   | 2 | 2 |
|            |  | 1998..              | 123 214           | 5 461 784           | 101 246       | 215 481         | 4 122 568             | 11 489 675                        | 12 686 748                                      | 24 126 992   | 1 | 1 |
|            |  | 1997..              | 126 668           | 5 642 120           | 105 248       | 226 337         | 4 418 773             | 10 915 335                        | 12 677 687                                      | 23 633 912   | X | X |
| 336370     | Motor vehicle metal stamping .....                                   | 2001..              | 112 488           | 5 391 757           | 94 033        | 190 553         | 4 288 393             | 9 899 453                         | 11 835 530                                      | 21 858 253   | 3 | 4 |
|            |  | 2000..              | 117 012           | 6 027 139           | 98 437        | 207 820         | 4 814 826             | 11 203 829                        | 12 774 960                                      | 24 025 620   | 3 | 3 |
|            |  | 1999..              | 118 695           | 5 927 922           | 100 356       | 217 234         | 4 722 463             | 11 919 991                        | 12 870 092                                      | 24 775 866   | 2 | 2 |
|            |  | 1998..              | 123 214           | 5 461 784           | 101 246       | 215 481         | 4 122 568             | 11 489 675                        | 12 686 748                                      | 24 126 992   | 1 | 1 |
|            |  | 1997..              | 126 668           | 5 642 120           | 105 248       | 226 337         | 4 418 773             | 10 915 335                        | 12 677 687                                      | 23 633 912   | X | X |
| 33639      | Other motor vehicle parts mfg .....                                  | 2001..              | 188 229           | 7 028 570           | 147 553       | 286 411         | 4 606 347             | 18 355 310                        | 27 978 901                                      | 46 509 566   | 2 | 2 |
|            |  | 2000..              | 206 021           | 7 725 383           | 164 673       | 330 583         | 5 365 248             | 20 434 845                        | 28 482 205                                      | 48 980 985   | 2 | 2 |
|            |  | 1999..              | 205 173           | 7 506 672           | 164 503       | 337 394         | 5 298 241             | 20 093 339                        | 26 950 868                                      | 46 971 604   | 2 | 2 |
|            |  | 1998..              | 207 877           | 7 137 624           | 166 765       | 333 927         | 5 077 860             | 19 398 782                        | 24 182 283                                      | 43 595 966   | 1 | 1 |
|            |  | 1997..              | 200 914           | 6 793 341           | 161 700       | 323 034         | 4 881 384             | 18 240 076                        | 22 870 782                                      | 41 137 329   | X | X |
| 336391     | Motor vehicle air-conditioning mfg ...                               | 2001..              | 19 594            | 1 054 336           | 16 031        | 32 042          | 799 321               | 2 355 087                         | 3 287 899                                       | 5 623 073  | 1 | 1 |
|            |  | 2000..              | 20 393            | 1 058 060           | 16 880        | 35 301          | 797 107               | 2 175 068                         | 3 173 022                                       | 5 364 668  | 1 | 1 |
|            |  | 1999..              | 21 477            | 1 169 656           | 17 829        | 39 831          | 886 614               | 2 713 599                         | 3 363 162                                       | 6 065 425  | 1 | 1 |
|            |  | 1998..              | 21 310            | 999 087             | 17 402        | 38 405          | 755 741               | 2 606 692                         | 3 001 970                                       | 5 568 484  | 1 | 1 |
|            |  | 1997..              | 21 522            | 1 053 943           | 17 504        | 38 953          | 821 334               | 2 701 288                         | 2 875 912                                       | 5 626 596  | X | X |
| 336399     | All other motor vehicle parts mfg ....                               | 2001..              | 168 635           | 5 974 234           | 131 522       | 254 368         | 3 807 026             | 16 000 223                        | 24 691 002                                      | 40 886 493   | 3 | 2 |
|            |  | 2000..              | 185 628           | 6 667 323           | 147 793       | 295 281         | 4 568 141             | 18 259 777                        | 25 309 184                                      | 43 526 317   | 2 | 2 |
|            |  | 1999..              | 183 696           | 6 337 017           | 146 674       | 297 563         | 4 411 627             | 17 379 741                        | 23 587 706                                      | 40 906 180   | 2 | 2 |
|            |  | 1998..              | 186 567           | 6 138 537           | 149 363       | 295 521         | 4 322 118             | 16 792 090                        | 21 180 313                                      | 38 027 482   | 1 | 1 |
|            |  | 1997..              | 179 392           | 5 739 398           | 144 196       | 284 081         | 4 060 050             | 15 538 788                        | 19 994 870                                      | 35 510 733   | X | X |
| 3364       | Aerospace product & parts mfg .....                                  | 2001..              | 433 139           | 24 541 701          | 220 756       | 454 704         | 10 529 087            | 71 839 461                        | 64 615 786                                      | 134 867 157  | 1 | 1 |
|            |  | 2000..              | 443 776           | 24 843 971          | 229 243       | 476 250         | 11 005 882            | 59 534 209                        | 60 417 380                                      | 127 588 132  | 1 | 1 |
|            |  | 1999..              | 484 659           | 26 381 357          | 247 837       | 506 701         | 11 286 217            | 72 547 712                        | 65 503 908                                      | 138 988 180  | 1 | 1 |
|            |  | 1998..              | 517 014           | 26 848 225          | 268 720       | 544 190         | 11 751 312            | 76 048 971                        | 69 558 448                                      | 137 403 710  | 1 | 1 |
|            |  | 1997..              | 487 114           | 25 159 567          | 250 448       | 502 557         | 10 784 018            | 57 688 592                        | 62 819 021                                      | 120 438 212  | X | X |
| 33641      | Aerospace product & parts mfg .....                                  | 2001..              | 433 139           | 24 541 701          | 220 756       | 454 704         | 10 529 087            | 71 839 461                        | 64 615 786                                      | 134 867 157  | 1 | 1 |
|            |  | 2000..              | 443 776           | 24 843 971          | 229 243       | 476 250         | 11 005 882            | 59 534 209                        | 60 417 380                                      | 127 588 132  | 1 | 1 |
|            |  | 1999..              | 484 659           | 26 381 357          | 247 837       | 506 701         | 11 286 217            | 72 547 712                        | 65 503 908                                      | 138 988 180  | 1 | 1 |
|            |  | 1998..              | 517 014           | 26 848 225          | 268 720       | 544 190         | 11 751 312            | 76 048 971                        | 69 558 448                                      | 137 403 710  | 1 | 1 |
|            |  | 1997..              | 487 114           | 25 159 567          | 250 448       | 502 557         | 10 784 018            | 57 688 592                        | 62 819 021                                      | 120 438 212  | X | X |
| 336411     | Aircraft mfg .....   | 2001..              | 172 708           | 9 468 561           | 78 860        | 164 984         | 3 921 607             | 31 668 894                        | 36 048 671                                      | 67 853 036   | 1 | 1 |
|            |  | 2000..              | 183 060           | 10 409 486          | 86 842        | 185 171         | 4 504 816             | 26 227 012                        | 33 969 178                                      | 65 783 463   | 1 | 2 |
|            |  | 1999..              | 194 158           | 10 709 911          | 96 086        | 196 459         | 4 677 165             | 33 462 931                        | 37 308 333                                      | 73 397 508   | 1 | 1 |
|            |  | 1998..              | 213 148           | 11 289 840          | 106 227       | 200 368         | 4 812 614             | 36 025 687                        | 40 572 366                                      | 69 540 577   | 1 | 1 |
|            |  | 1997..              | 202 491           | 10 839 372          | 97 742        | 185 616         | 4 426 847             | 20 767 608                        | 36 653 368                                      | 57 893 242   | X | X |
| 336412     | Aircraft engine & engine parts mfg ...                               | 2001..              | 79 914            | 4 514 507           | 47 352        | 94 016          | 2 108 972             | 14 092 299                        | 13 055 267                                      | 26 969 254   | 1 | 1 |
|            |  | 2000..              | 81 961            | 4 503 839           | 47 153        | 94 732          | 2 014 505             | 12 633 195                        | 12 430 469                                      | 25 124 669   | 1 | 1 |
|            |  | 1999..              | 85 111            | 4 520 839           | 49 642        | 99 084          | 1 985 607             | 11 724 627                        | 12 040 018                                      | 24 343 001   | 1 | 1 |
|            |  | 1998..              | 84 617            | 4 292 039           | 49 398        | 103 820         | 2 034 279             | 12 959 853                        | 12 031 522                                      | 24 868 538   | 1 | 1 |
|            |  | 1997..              | 84 373            | 4 298 767           | 49 122        | 100 963         | 1 971 070             | 11 679 669                        | 11 437 209                                      | 22 859 270   | X | X |
| 336413     | Other aircraft part & auxiliary equipment mfg .....                  | 2001..              | 123 032           | 6 438 854           | 71 622        | 150 377         | 3 327 800             | 13 902 974                        | 9 314 165                                       | 23 403 794   | 2 | 2 |
|            |  | 2000..              | 119 727           | 6 048 126           | 70 721        | 148 667         | 3 286 417             | 11 868 719                        | 8 608 373                                       | 20 750 148   | 2 | 2 |
|            |  | 1999..              | 132 663           | 6 306 306           | 74 813        | 155 334         | 3 226 296             | 13 046 837                        | 8 747 824                                       | 22 500 747   | 2 | 2 |
|            |  | 1998..              | 140 978           | 6 464 831           | 82 689        | 180 306         | 3 473 185             | 14 361 166                        | 8 829 955                                       | 22 402 746   | 1 | 1 |
|            |  | 1997..              | 124 677           | 5 574 824           | 72 830        | 155 482         | 3 019 543             | 13 110 835                        | 7 130 109                                       | 19 373 554   | X | X |
| 336414     | Guided missile & space vehicle mfg ...                               | 2001..              | 36 649            | 2 821 132           | 12 487        | 23 701          | 690 708               | 10 251 036                        | 5 207 890                                       | 13 600 509   | 1 | 1 |
|            |  | 2000..              | 38 295            | 2 682 083           | 13 376        | 24 873          | 681 127               | 6 644 577                         | 4 385 514                                       | 12 831 945   | 1 | 1 |
|            |  | 1999..              | 48 748            | 3 517 507           | 14 936        | 30 645          | 817 374               | 11 739 833                        | 6 165 952                                       | 14 963 338   | 1 | 1 |
|            |  | 1998..              | 53 085            | 3 429 407           | 17 967        | 34 739          | 868 777               | 9 949 990                         | 6 697 429                                       | 16 475 701   | 1 | 1 |
|            |  | 1997..              | 51 398            | 3 123 246           | 18 500        | 35 996          | 815 692               | 9 492 504                         | 6 141 862                                       | 16 247 363   | X | X |
| 336415     | Guided missile & space vehicle propulsion unit & parts mfg .....     | 2001..              | 15 324            | 1 020 983           | 6 292         | 13 245          | 292 872               | 1 447 351                         | 665 825   | 2 244 443  | 1 | 1 |
|            |  | 2000..              | 14 688            | 898 320             | 6 485         | 13 619          | 307 268               | 1 656 263                         | 707 460   | 2 258 172  | 1 | 1 |
|            |  | 1999..              | 17 911            | 1 038 530           | 7 592         | 15 542          | 366 744               | 1 996 055                         | 921 613   | 2 879 775  | 1 | 1 |
|            |  | 1998..              | 18 430            | 1 068 768           | 7 812         | 15 569          | 367 833               | 2 139 050                         | 968 871   | 3 030 060  | 1 | 1 |
|            |  | 1997..              | 17 738            | 1 031 920           | 7 903         | 15 557          | 363 756               | 2 062 154                         | 1 061 215                                       | 3 101 378  | X | X |
| 336419     | Other guided missile & space vehicle parts & auxiliary equip mfg ... | 2001..              | 5 512             | 277 665             | 4 143         | 8 382           | 187 128               | 476 907                           | 323 967   | 796 121  | 1 | 1 |
|            |  | 2000..              | 6 044             | 302 118             | 4 666         | 9 188           | 211 748               | 504 443                           | 316 385   | 839 735  | 1 | 1 |
|            |  | 1999..              | 6 068             | 288 265             | 4 769         | 9 637           | 213 031               | 577 428                           | 320 169   | 903 811  | 2 | 1 |
|            |  | 1998..              | 6 755             | 303 339             | 4 627         | 9 388           | 194 624               | 613 225                           | 458 305   | 1 086 089  | 1 | 1 |
|            |  | 1997..              | 6 437             | 291 438             | 4 351         | 8 943           | 187 110               | 575 822                           | 395 258   | 963 405  | X | X |
| 3365       | Railroad rolling stock mfg .....                                     | 2001..              | 34 719            | 1 449 784           | 24 010        | 48 661          | 798 530               | 3 850 160                         | 4 571 097                                       | 8 603 764  | 2 | 2 |
|            |  | 2000..              | 35 578            | 1 480 181           | 24 855        | 57 330          | 872 279               | 4 360 089                         | 5 376 257                                       | 9 722 424  | 1 | 1 |
|            |  | 1999..              | 38 511            | 1 532 969           | 27 913        | 59 927          | 928 851               | 4 460 735                         | 5 869 478                                       | 10 352 310   | 1 | 1 |
|            |  | 1998..              | 37 351            | 1 440 110           | 26 645        | 55 202          | 849 084               | 3 848 408                         | 5 427 590                                       | 9 256 810  | 1 | 1 |
|            |  | 1997..              | 34 012            | 1 319 135           | 23 977        | 53 391          | 796 472               | 3 345 283                         | 5 097 254                                       | 8 263 395  | X | X |
| 33651      | Railroad rolling stock mfg .....                                     | 2001..              | 34 719            | 1 449 784           | 24 010        | 48 661          | 798 530               | 3 850 160                         | 4 571 097                                       | 8 603 764  | 2 | 2 |
|            |  | 2000..              | 35 578            | 1 480 181           | 24 855        | 57 330          | 872 279               | 4 360 089                         | 5 376 257                                       | 9 722 424  | 1 | 1 |
|            |  | 1999..              | 38 511            | 1 532 969           | 27 913        | 59 927          | 928 851               | 4 460 735                         | 5 869 478                                       | 10 352 310   | 1 | 1 |
|            |  | 1998..              | 37 351            | 1 440 110           | 26 645        | 55 202          | 849 084               | 3 848 408                         | 5 427 590                                       | 9 256 810  | 1 | 1 |
|            |  | 19                  |                   |                     |               |                 |                       |                                   |   |  |   |   |

**Table 3. Employment and Labor Costs for Operating Manufacturing Establishments by Industry Group and Industry: 2001 and Earlier Years—Con.**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry                                       | Compensation (\$1,000)     |            |            |                       | Relative standard error of estimate <sup>2</sup> (percent) for column— |
|------------|---|----------------------------|------------|------------|-----------------------|--|
|            |   | All employees <sup>1</sup> | Total      | Payroll    | Total fringe benefits |  |
|            |   | A                          | B          | C          | D                     |  |
| 334        | Computer & electronic product mfg—Con.                            |                            |            |            |                       |  |
| 3344       | Semiconductor & other electronic component mfg ..                 |                            |            |            |                       |  |
|            | 2001..  | 566 864                    | 29 464 614 | 23 944 496 | 5 520 119             | 2  |
|            | 2000..  | 614 083                    | 32 193 283 | 26 387 892 | 5 805 391             | 1  |
|            | 1999..  | 586 221                    | 29 324 556 | 24 043 676 | 5 280 880             | 1  |
|            | 1998..  | 585 395                    | 27 458 385 | 22 320 889 | 5 137 496             | 1  |
|            | 1997..  | 587 313                    | 27 196 768 | 22 142 761 | 5 054 007             | X  |
| 33441      | Semiconductor & other electronic component mfg .....              |                            |            |            |                       |  |
|            | 2001..  | 566 864                    | 29 464 614 | 23 944 496 | 5 520 119             | 2  |
|            | 2000..  | 614 083                    | 32 193 283 | 26 387 892 | 5 805 391             | 1  |
|            | 1999..  | 586 221                    | 29 324 556 | 24 043 676 | 5 280 880             | 1  |
|            | 1998..  | 585 395                    | 27 458 385 | 22 320 889 | 5 137 496             | 1  |
|            | 1997..  | 587 313                    | 27 196 768 | 22 142 761 | 5 054 007             | X  |
| 334411     | Electron tube mfg .....   |                            |            |            |                       |  |
|            | 2001..  | 15 627                     | 838 180    | 632 994    | 205 186               | 1  |
|            | 2000..  | 16 187                     | 833 567    | 633 281    | 200 286               | 1  |
|            | 1999..  | 17 619                     | 852 218    | 663 279    | 188 938               | 1  |
|            | 1998..  | 21 443                     | 949 837    | 736 774    | 213 063               | 1  |
|            | 1997..  | 21 656                     | 934 729    | 726 712    | 208 017               | X  |
| 334412     | Bare printed circuit board mfg .....                              |                            |            |            |                       |  |
|            | 2001..  | 72 333                     | 2 856 401  | 2 359 198  | 497 203               | 4  |
|            | 2000..  | 85 120                     | 3 536 295  | 2 982 541  | 553 754               | 3  |
|            | 1999..  | 81 416                     | 3 198 060  | 2 661 239  | 536 822               | 3  |
|            | 1998..  | 78 774                     | 2 884 516  | 2 395 819  | 488 697               | 1  |
|            | 1997..  | 72 282                     | 2 532 565  | 2 110 176  | 422 389               | X  |
| 334413     | Semiconductor & related device mfg .....                          |                            |            |            |                       |  |
|            | 2001..  | 216 210                    | 14 346 619 | 11 660 780 | 2 685 839             | 4  |
|            | 2000..  | 229 535                    | 15 852 483 | 12 976 631 | 2 875 852             | 2  |
|            | 1999..  | 214 667                    | 14 213 767 | 11 651 290 | 2 562 478             | 1  |
|            | 1998..  | 203 058                    | 12 882 844 | 10 449 335 | 2 433 509             | 1  |
|            | 1997..  | 199 037                    | 12 371 162 | 10 101 783 | 2 269 379             | X  |
| 334414     | Electronic capacitor mfg .....                                    |                            |            |            |                       |  |
|            | 2001..  | 15 529                     | 646 213    | 518 340    | 127 872               | 6  |
|            | 2000..  | 17 940                     | 717 287    | 576 459    | 140 828               | 5  |
|            | 1999..  | 16 159                     | 609 166    | 481 969    | 127 197               | 3  |
|            | 1998..  | 18 197                     | 640 899    | 510 415    | 130 484               | 1  |
|            | 1997..  | 19 317                     | 673 062    | 539 446    | 133 616               | X  |
| 334415     | Electronic resistor mfg .....                                     |                            |            |            |                       |  |
|            | 2001..  | 8 702                      | 314 803    | 251 862    | 62 942                | 6  |
|            | 2000..  | 8 761                      | 316 441    | 254 729    | 61 712                | 6  |
|            | 1999..  | 9 470                      | 331 219    | 268 259    | 62 960                | 4  |
|            | 1998..  | 10 755                     | 358 087    | 288 205    | 69 882                | 2  |
|            | 1997..  | 11 624                     | 376 350    | 305 365    | 70 985                | X  |
| 334416     | Electronic coil, transformer, & other inductor mfg .....          |                            |            |            |                       |  |
|            | 2001..  | 15 342                     | 518 310    | 426 762    | 91 548                | 5  |
|            | 2000..  | 17 282                     | 561 152    | 463 522    | 97 630                | 4  |
|            | 1999..  | 17 052                     | 524 691    | 429 551    | 95 140                | 3  |
|            | 1998..  | 19 034                     | 575 387    | 467 118    | 108 269               | 2  |
|            | 1997..  | 18 999                     | 553 843    | 450 514    | 103 329               | X  |
| 334417     | Electronic connector mfg .....                                    |                            |            |            |                       |  |
|            | 2001..  | 33 866                     | 1 532 058  | 1 245 028  | 287 030               | 6  |
|            | 2000..  | 34 347                     | 1 505 013  | 1 234 381  | 270 633               | 3  |
|            | 1999..  | 32 844                     | 1 380 997  | 1 128 374  | 252 623               | 3  |
|            | 1998..  | 39 358                     | 1 479 615  | 1 187 395  | 292 220               | 3  |
|            | 1997..  | 37 589                     | 1 465 298  | 1 171 568  | 293 730               | X  |
| 334418     | Printed circuit assembly (electronic assembly) mfg .....          |                            |            |            |                       |  |
|            | 2001..  | 110 643                    | 5 098 884  | 4 140 167  | 958 717               | 3  |
|            | 2000..  | 113 989                    | 5 156 874  | 4 219 974  | 936 900               | 3  |
|            | 1999..  | 105 956                    | 4 696 406  | 3 865 530  | 830 876               | 2  |
|            | 1998..  | 104 960                    | 4 328 232  | 3 549 080  | 779 151               | 2  |
|            | 1997..  | 115 076                    | 4 954 244  | 4 007 610  | 946 634               | X  |
| 334419     | Other electronic component mfg .....                              |                            |            |            |                       |  |
|            | 2001..  | 78 612                     | 3 313 146  | 2 709 365  | 603 781               | 4  |
|            | 2000..  | 90 922                     | 3 714 170  | 3 046 374  | 667 796               | 3  |
|            | 1999..  | 91 038                     | 3 518 031  | 2 894 186  | 623 845               | 2  |
|            | 1998..  | 89 815                     | 3 358 967  | 2 736 746  | 622 221               | 1  |
|            | 1997..  | 91 733                     | 3 335 515  | 2 729 587  | 605 928               | X  |
| 3345       | Navigational, measuring, medical, & control instruments mfg ..... |                            |            |            |                       |  |
|            | 2001..  | 468 114                    | 30 640 092 | 24 461 045 | 6 179 047             | 1  |
|            | 2000..  | 469 843                    | 29 864 959 | 23 876 911 | 5 988 047             | 1  |
|            | 1999..  | 466 032                    | 28 514 756 | 23 052 018 | 5 462 739             | 1  |
|            | 1998..  | 483 865                    | 29 430 021 | 23 668 120 | 5 761 901             | 1  |
|            | 1997..  | 484 438                    | 28 556 358 | 22 843 455 | 5 712 903             | X  |
| 33451      | Navigational, measuring, medical, & control instruments mfg ..... |                            |            |            |                       |  |
|            | 2001..  | 468 114                    | 30 640 092 | 24 461 045 | 6 179 047             | 1  |
|            | 2000..  | 469 843                    | 29 864 959 | 23 876 911 | 5 988 047             | 1  |
|            | 1999..  | 466 032                    | 28 514 756 | 23 052 018 | 5 462 739             | 1  |
|            | 1998..  | 483 865                    | 29 430 021 | 23 668 120 | 5 761 901             | 1  |
|            | 1997..  | 484 438                    | 28 556 358 | 22 843 455 | 5 712 903             | X  |
| 334510     | Electromedical & electrotherapeutic apparatus mfg .....           |                            |            |            |                       |  |
|            | 2001..  | 54 972                     | 3 381 857  | 2 769 106  | 612 751               | 3  |
|            | 2000..  | 52 334                     | 3 258 278  | 2 675 439  | 582 839               | 2  |
|            | 1999..  | 53 237                     | 3 107 498  | 2 588 044  | 519 454               | 2  |
|            | 1998..  | 55 333                     | 3 201 870  | 2 670 194  | 531 676               | 5  |
|            | 1997..  | 55 044                     | 3 171 177  | 2 635 085  | 536 092               | X  |
| 334511     | Search, detection, navigation, & guidance instrument mfg .....    |                            |            |            |                       |  |
|            | 2001..  | 178 051                    | 12 939 246 | 10 042 268 | 2 896 978             | 1  |
|            | 2000..  | 179 659                    | 12 526 654 | 9 751 693  | 2 774 961             | 1  |
|            | 1999..  | 172 452                    | 11 982 789 | 9 571 931  | 2 410 857             | 1  |
|            | 1998..  | 188 299                    | 12 867 553 | 10 257 901 | 2 609 652             | 1  |
|            | 1997..  | 188 325                    | 12 642 907 | 9 977 629  | 2 665 278             | X  |
| 334512     | Automatic environmental control mfg .....                         |                            |            |            |                       |  |
|            | 2001..  | 18 022                     | 833 471    | 646 153    | 187 318               | 3  |
|            | 2000..  | 20 241                     | 900 674    | 720 002    | 180 671               | 2  |
|            | 1999..  | 20 480                     | 879 010    | 697 647    | 181 363               | 2  |
|            | 1998..  | 20 477                     | 862 359    | 670 457    | 191 901               | 4  |
|            | 1997..  | 21 470                     | 858 755    | 666 464    | 192 291               | X  |

See footnotes at end of table.

**Table 3. Employment and Labor Costs for Operating Manufacturing Establishments by Industry Group and Industry: 2001 and Earlier Years—Con.**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  |        | Compensation (\$1,000)     |            |            |                       | Relative standard error of estimate <sup>2</sup> (percent) for column— |
|------------|--|--------|----------------------------|------------|------------|-----------------------|--|
|            |  |        | All employees <sup>1</sup> | Total      | Payroll    | Total fringe benefits |  |
|            |  |        | A                          | B          | C          | D                     |  |
| 336        | Transportation equipment mfg—Con.                                      |        |                            |            |            |                       |  |
| 3364       | Aerospace product & parts mfg .....                                    | 2001.. | 433 139                    | 31 812 888 | 24 541 701 | 7 271 187             | 1  |
|            |  | 2000.. | 443 776                    | 31 379 242 | 24 843 971 | 6 535 271             | 1  |
|            |  | 1999.. | 484 659                    | 33 134 184 | 26 381 357 | 6 752 826             | 1  |
|            |  | 1998.. | 517 014                    | 33 774 222 | 26 848 225 | 6 925 997             | 1  |
|            |  | 1997.. | 487 114                    | 31 488 440 | 25 159 567 | 6 328 873             | X  |
| 33641      | Aerospace product & parts mfg .....                                    | 2001.. | 433 139                    | 31 812 888 | 24 541 701 | 7 271 187             | 1  |
|            |  | 2000.. | 443 776                    | 31 379 242 | 24 843 971 | 6 535 271             | 1  |
|            |  | 1999.. | 484 659                    | 33 134 184 | 26 381 357 | 6 752 826             | 1  |
|            |  | 1998.. | 517 014                    | 33 774 222 | 26 848 225 | 6 925 997             | 1  |
|            |  | 1997.. | 487 114                    | 31 488 440 | 25 159 567 | 6 328 873             | X  |
| 336411     | Aircraft mfg .....   | 2001.. | 172 708                    | 12 514 081 | 9 468 561  | 3 045 520             | 1  |
|            |  | 2000.. | 183 060                    | 13 052 420 | 10 409 486 | 2 642 934             | 1  |
|            |  | 1999.. | 194 158                    | 13 377 104 | 10 709 911 | 2 667 194             | 1  |
|            |  | 1998.. | 213 148                    | 14 243 678 | 11 289 840 | 2 953 837             | 1  |
|            |  | 1997.. | 202 491                    | 13 366 721 | 10 839 372 | 2 527 349             | X  |
| 336412     | Aircraft engine & engine parts mfg .....                               | 2001.. | 79 914                     | 5 705 192  | 4 514 507  | 1 190 685             | 2  |
|            |  | 2000.. | 81 961                     | 5 731 646  | 4 503 839  | 1 227 807             | 1  |
|            |  | 1999.. | 85 111                     | 5 726 085  | 4 520 839  | 1 205 246             | 1  |
|            |  | 1998.. | 84 617                     | 5 435 596  | 4 292 039  | 1 143 558             | 1  |
|            |  | 1997.. | 84 373                     | 5 416 713  | 4 298 767  | 1 117 946             | X  |
| 336413     | Other aircraft part & auxiliary equipment mfg ...                      | 2001.. | 123 032                    | 8 400 799  | 6 438 854  | 1 961 946             | 1  |
|            |  | 2000.. | 119 727                    | 7 748 740  | 6 048 126  | 1 700 614             | 2  |
|            |  | 1999.. | 132 663                    | 7 973 109  | 6 306 306  | 1 666 803             | 2  |
|            |  | 1998.. | 140 978                    | 8 170 998  | 6 464 831  | 1 706 167             | 1  |
|            |  | 1997.. | 124 677                    | 7 129 164  | 5 574 824  | 1 554 340             | X  |
| 336414     | Guided missile & space vehicle mfg .....                               | 2001.. | 36 649                     | 3 485 255  | 2 821 132  | 664 123               | 1  |
|            |  | 2000.. | 38 295                     | 3 317 126  | 2 682 083  | 635 043               | 1  |
|            |  | 1999.. | 48 748                     | 4 391 907  | 3 517 507  | 874 400               | 1  |
|            |  | 1998.. | 53 085                     | 4 195 342  | 3 429 407  | 765 935               | 1  |
|            |  | 1997.. | 51 398                     | 3 900 580  | 3 123 246  | 777 334               | X  |
| 336415     | Guided missile & space vehicle propulsion unit & parts mfg .....       | 2001.. | 15 324                     | 1 342 284  | 1 020 983  | 321 301               | 1  |
|            |  | 2000.. | 14 688                     | 1 151 317  | 898 320    | 252 997               | 1  |
|            |  | 1999.. | 17 911                     | 1 306 048  | 1 038 530  | 267 518               | 1  |
|            |  | 1998.. | 18 430                     | 1 345 755  | 1 068 768  | 276 987               | 1  |
|            |  | 1997.. | 17 738                     | 1 305 427  | 1 031 920  | 273 507               | X  |
| 336419     | Other guided missile & space vehicle parts & auxiliary equip mfg ..... | 2001.. | 5 512                      | 365 277    | 277 665    | 87 612                | 1  |
|            |  | 2000.. | 6 044                      | 377 993    | 302 118    | 75 875                | 1  |
|            |  | 1999.. | 6 068                      | 359 931    | 288 265    | 71 665                | 1  |
|            |  | 1998.. | 6 755                      | 382 853    | 303 339    | 79 514                | 1  |
|            |  | 1997.. | 6 437                      | 369 835    | 291 438    | 78 397                | X  |
| 3365       | Railroad rolling stock mfg .....                                       | 2001.. | 34 719                     | 1 898 270  | 1 449 784  | 448 485               | 2  |
|            |  | 2000.. | 35 578                     | 1 941 580  | 1 480 181  | 461 399               | 2  |
|            |  | 1999.. | 38 511                     | 2 011 352  | 1 532 969  | 478 383               | 2  |
|            |  | 1998.. | 37 351                     | 1 895 103  | 1 440 110  | 454 993               | 1  |
|            |  | 1997.. | 34 012                     | 1 739 073  | 1 319 135  | 419 938               | X  |
| 33651      | Railroad rolling stock mfg .....                                       | 2001.. | 34 719                     | 1 898 270  | 1 449 784  | 448 485               | 2  |
|            |  | 2000.. | 35 578                     | 1 941 580  | 1 480 181  | 461 399               | 2  |
|            |  | 1999.. | 38 511                     | 2 011 352  | 1 532 969  | 478 383               | 2  |
|            |  | 1998.. | 37 351                     | 1 895 103  | 1 440 110  | 454 993               | 1  |
|            |  | 1997.. | 34 012                     | 1 739 073  | 1 319 135  | 419 938               | X  |
| 336510     | Railroad rolling stock mfg .....                                       | 2001.. | 34 719                     | 1 898 270  | 1 449 784  | 448 485               | 2  |
|            |  | 2000.. | 35 578                     | 1 941 580  | 1 480 181  | 461 399               | 2  |
|            |  | 1999.. | 38 511                     | 2 011 352  | 1 532 969  | 478 383               | 2  |
|            |  | 1998.. | 37 351                     | 1 895 103  | 1 440 110  | 454 993               | 1  |
|            |  | 1997.. | 34 012                     | 1 739 073  | 1 319 135  | 419 938               | X  |
| 3366       | Ship & boat building .....   | 2001.. | 134 621                    | 6 088 210  | 4 825 268  | 1 262 943             | 3  |
|            |  | 2000.. | 144 951                    | 6 269 599  | 5 012 299  | 1 257 300             | 3  |
|            |  | 1999.. | 139 851                    | 5 925 748  | 4 707 901  | 1 217 846             | 3  |
|            |  | 1998.. | 137 756                    | 5 632 955  | 4 461 362  | 1 171 594             | 1  |
|            |  | 1997.. | 138 237                    | 5 529 868  | 4 382 998  | 1 146 870             | X  |
| 33661      | Ship & boat building .....   | 2001.. | 134 621                    | 6 088 210  | 4 825 268  | 1 262 943             | 3  |
|            |  | 2000.. | 144 951                    | 6 269 599  | 5 012 299  | 1 257 300             | 3  |
|            |  | 1999.. | 139 851                    | 5 925 748  | 4 707 901  | 1 217 846             | 3  |
|            |  | 1998.. | 137 756                    | 5 632 955  | 4 461 362  | 1 171 594             | 1  |
|            |  | 1997.. | 138 237                    | 5 529 868  | 4 382 998  | 1 146 870             | X  |
| 336611     | Ship building & repairing .....  | 2001.. | 84 458                     | 4 396 335  | 3 439 474  | 956 861               | 3  |
|            |  | 2000.. | 87 527                     | 4 366 462  | 3 435 806  | 930 656               | 4  |
|            |  | 1999.. | 88 963                     | 4 269 999  | 3 336 632  | 933 368               | 4  |
|            |  | 1998.. | 94 761                     | 4 289 906  | 3 347 525  | 942 380               | 1  |
|            |  | 1997.. | 97 065                     | 4 290 308  | 3 353 414  | 936 894               | X  |
| 336612     | Boat building .....  | 2001.. | 50 163                     | 1 691 875  | 1 385 794  | 306 082               | 3  |
|            |  | 2000.. | 57 424                     | 1 903 137  | 1 576 493  | 326 644               | 2  |
|            |  | 1999.. | 50 888                     | 1 655 748  | 1 371 270  | 284 479               | 2  |
|            |  | 1998.. | 42 995                     | 1 343 050  | 1 113 836  | 229 213               | 1  |
|            |  | 1997.. | 41 172                     | 1 239 560  | 1 029 584  | 209 976               | X  |
| 3369       | Other transportation equipment mfg .....                               | 2001.. | 42 051                     | 2 056 938  | 1 644 366  | 412 572               | 6  |
|            |  | 2000.. | 43 440                     | 1 975 959  | 1 607 010  | 368 948               | 5  |
|            |  | 1999.. | 40 688                     | 1 816 203  | 1 484 354  | 331 849               | 2  |
|            |  | 1998.. | 41 024                     | 1 812 312  | 1 456 262  | 356 050               | 1  |
|            |  | 1997.. | 41 777                     | 1 714 539  | 1 385 269  | 329 270               | X  |

See footnotes at end of table.



**Table 4. Purchased Fuels and Electric Energy Used for Heat and Power by Industry Group and Industry: 2001 and Earlier Years—Con.**

[Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | Cost of purchased fuels and electric energy (\$1,000) | Electric energy      |                |                                 | Cost of purchased fuels (\$1,000) | Relative standard error of estimate <sup>1</sup> (percent) for column— |   |   |   |
|------------|--|---|----------------------|----------------|---------------------------------|-----------------------------------|--|---|---|---|
|            |  |   | Purchased            |                | Generated less sold (1,000 kWh) |                                   | E  | C | E |   |
|            |  |   | Quantity (1,000 kWh) | Cost (\$1,000) |                                 |                                   |  |   |   | D |
|            |  |   | A                    | B              |                                 |                                   |  |   |   |   |
| 336        | Transportation equipment mfg—Con.                                      |   |                      |                |                                 |                                   |  |   |   |   |
| 3363       | Motor vehicle parts mfg—Con.   |   |                      |                |                                 |                                   |  |   |   |   |
| 33637      | Motor vehicle metal stamping .....                                     | 2001.. 290 020  | 3 917 549            | 214 088        | —                               | 75 932                            | 3  | 3 |   |   |
|            |  | 2000.. 280 376  | 3 889 301            | 213 913        | —                               | 66 463                            | 3  | 4 |   |   |
|            |  | 1999.. 284 903  | 3 904 654            | 220 416        | —                               | 64 487                            | 2  | 5 |   |   |
|            |  | 1998.. 292 934  | 3 955 973            | 224 066        | S                               | 68 868                            | 1  | 5 |   |   |
|            |  | 1997.. 340 924  | 4 783 503            | 270 969        | S                               | 69 955                            | X  | X |   |   |
| 336370     | Motor vehicle metal stamping .....                                     | 2001.. 290 020  | 3 917 549            | 214 088        | —                               | 75 932                            | 3  | 3 |   |   |
|            |  | 2000.. 280 376  | 3 889 301            | 213 913        | —                               | 66 463                            | 3  | 4 |   |   |
|            |  | 1999.. 284 903  | 3 904 654            | 220 416        | —                               | 64 487                            | 2  | 5 |   |   |
|            |  | 1998.. 292 934  | 3 955 973            | 224 066        | S                               | 68 868                            | 1  | 5 |   |   |
|            |  | 1997.. 340 924  | 4 783 503            | 270 969        | S                               | 69 955                            | X  | X |   |   |
| 33639      | Other motor vehicle parts mfg .....                                    | 2001.. 512 469  | 6 795 478            | 342 924        | D                               | 169 544                           | 2  | 3 |   |   |
|            |  | 2000.. 483 505  | 6 622 170            | 337 590        | D                               | 145 915                           | 2  | 4 |   |   |
|            |  | 1999.. 453 894  | 6 544 503            | 329 371        | -125 300                        | 124 523                           | 2  | 3 |   |   |
|            |  | 1998.. 437 778  | 5 992 593            | 318 800        | S                               | 118 978                           | 1  | 1 |   |   |
|            |  | 1997.. 471 255  | 6 404 008            | 340 022        | S                               | 131 233                           | X  | X |   |   |
| 336391     | Motor vehicle air-conditioning mfg .....                               | 2001.. 52 979   | 1 073 872            | 40 688         | —                               | 12 291                            | 1  | 1 |   |   |
|            |  | 2000.. 52 200   | 835 419              | 40 180         | —                               | 12 020                            | 1  | 1 |   |   |
|            |  | 1999.. 47 572   | 893 286              | 38 048         | D                               | 9 524                             | 1  | 1 |   |   |
|            |  | 1998.. 51 854   | 792 811              | 41 816         | S                               | 10 039                            | 1  | 1 |   |   |
|            |  | 1997.. 56 636   | 1 043 198            | 44 019         | S                               | 12 617                            | X  | X |   |   |
| 336399     | All other motor vehicle parts mfg .....                                | 2001.. 459 490  | 5 721 606            | 302 236        | D                               | 157 253                           | 3  | 3 |   |   |
|            |  | 2000.. 431 304  | 5 786 751            | 297 410        | D                               | 133 895                           | 2  | 4 |   |   |
|            |  | 1999.. 406 322  | 5 651 217            | 291 323        | D                               | 115 000                           | 2  | 3 |   |   |
|            |  | 1998.. 385 924  | 5 199 782            | 276 984        | S                               | 108 939                           | 2  | 1 |   |   |
|            |  | 1997.. 414 619  | 5 360 810            | 296 003        | S                               | 118 616                           | X  | X |   |   |
| 3364       | Aerospace product & parts mfg .....                                    | 2001.. 971 874  | 12 399 087           | 718 753        | 171 611                         | 253 120                           | 1  | 2 |   |   |
|            |  | 2000.. 870 462  | 12 027 100           | 665 380        | 178 728                         | 205 081                           | 1  | 1 |   |   |
|            |  | 1999.. 775 790  | 11 337 041           | 623 381        | 191 346                         | 152 409                           | 1  | 2 |   |   |
|            |  | 1998.. 812 477  | 11 133 430           | 630 905        | S                               | 181 573                           | 1  | 2 |   |   |
|            |  | 1997.. 789 791  | 11 857 087           | 640 230        | S                               | 149 561                           | X  | X |   |   |
| 33641      | Aerospace product & parts mfg .....                                    | 2001.. 971 874  | 12 399 087           | 718 753        | 171 611                         | 253 120                           | 1  | 2 |   |   |
|            |  | 2000.. 870 462  | 12 027 100           | 665 380        | 178 728                         | 205 081                           | 1  | 1 |   |   |
|            |  | 1999.. 775 790  | 11 337 041           | 623 381        | 191 346                         | 152 409                           | 1  | 2 |   |   |
|            |  | 1998.. 812 477  | 11 133 430           | 630 905        | S                               | 181 573                           | 1  | 2 |   |   |
|            |  | 1997.. 789 791  | 11 857 087           | 640 230        | S                               | 149 561                           | X  | X |   |   |
| 336411     | Aircraft mfg .....   | 2001.. 220 811  | 3 056 030            | 168 388        | D                               | 52 423                            | 1  | 1 |   |   |
|            |  | 2000.. 243 501  | 3 316 942            | 182 990        | D                               | 60 511                            | 1  | 1 |   |   |
|            |  | 1999.. 232 199  | 3 392 095            | 183 240        | D                               | 48 958                            | 1  | 1 |   |   |
|            |  | 1998.. 254 286  | 3 331 812            | 177 197        | S                               | 77 089                            | 1  | 1 |   |   |
|            |  | 1997.. 218 070  | 3 912 508            | 177 475        | S                               | 40 595                            | X  | X |   |   |
| 336412     | Aircraft engine & engine parts mfg .....                               | 2001.. 207 158  | 2 454 037            | 147 113        | 241 400                         | 60 045                            | 2  | 2 |   |   |
|            |  | 2000.. 195 468  | 2 531 792            | 148 424        | 254 711                         | 47 044                            | 1  | 1 |   |   |
|            |  | 1999.. 170 376  | 2 413 104            | 138 467        | D                               | 31 909                            | 1  | 1 |   |   |
|            |  | 1998.. 177 752  | 2 325 593            | 143 332        | S                               | 34 420                            | 3  | 1 |   |   |
|            |  | 1997.. 199 212  | 2 454 758            | 156 001        | S                               | 43 211                            | X  | X |   |   |
| 336413     | Other aircraft part & auxiliary equipment mfg ...                      | 2001.. 402 778  | 5 193 893            | 296 307        | D                               | 106 472                           | 1  | 5 |   |   |
|            |  | 2000.. 312 359  | 4 559 315            | 237 244        | D                               | 75 115                            | 1  | 3 |   |   |
|            |  | 1999.. 261 238  | 3 728 108            | 206 762        | —                               | 54 476                            | 1  | 5 |   |   |
|            |  | 1998.. 256 971  | 3 620 559            | 206 844        | S                               | 50 127                            | 1  | 6 |   |   |
|            |  | 1997.. 239 949  | 3 523 776            | 195 080        | S                               | 44 869                            | X  | X |   |   |
| 336414     | Guided missile & space vehicle mfg .....                               | 2001.. 65 804   | 785 481              | 51 903         | —                               | 13 901                            | 1  | 1 |   |   |
|            |  | 2000.. 60 987   | 823 081              | 52 599         | —                               | 8 388                             | 1  | 1 |   |   |
|            |  | 1999.. 59 997   | 1 019 027            | 52 860         | —                               | 7 137                             | 1  | 1 |   |   |
|            |  | 1998.. 68 836   | 1 071 515            | 60 392         | S                               | 8 444                             | 1  | 1 |   |   |
|            |  | 1997.. 76 409   | 1 159 207            | 66 854         | S                               | 9 555                             | X  | X |   |   |
| 336415     | Guided missile & space vehicle propulsion unit & parts mfg .....       | 2001.. 50 375   | 648 123              | 36 036         | D                               | 14 339                            | 1  | 1 |   |   |
|            |  | 2000.. 39 984   | 592 524              | 29 913         | D                               | 10 071                            | 1  | 1 |   |   |
|            |  | 1999.. 36 586   | 558 803              | 29 302         | D                               | 7 284                             | 1  | 1 |   |   |
|            |  | 1998.. 37 550   | 561 041              | 30 112         | S                               | 7 438                             | 1  | 1 |   |   |
|            |  | 1997.. 40 854   | 588 957              | 32 539         | S                               | 8 315                             | X  | X |   |   |
| 336419     | Other guided missile & space vehicle parts & auxiliary equip mfg ..... | 2001.. 24 947   | 261 523              | 19 006         | —                               | 5 941                             | 1  | 1 |   |   |
|            |  | 2000.. 18 163   | 203 446              | 14 211         | —                               | 3 952                             | 1  | 1 |   |   |
|            |  | 1999.. 15 395   | 225 903              | 12 751         | —                               | 2 644                             | 1  | 1 |   |   |
|            |  | 1998.. 17 083   | 222 910              | 13 027         | S                               | 4 055                             | 1  | 1 |   |   |
|            |  | 1997.. 15 297   | 217 881              | 12 281         | S                               | 3 016                             | X  | X |   |   |
| 3365       | Railroad rolling stock mfg .....                                       | 2001.. 52 894   | 473 592              | 29 973         | D                               | 22 921                            | 2  | 3 |   |   |
|            |  | 2000.. 52 760   | 531 525              | 31 305         | D                               | 21 454                            | 2  | 2 |   |   |
|            |  | 1999.. 58 616   | 600 253              | 35 143         | D                               | 23 473                            | 2  | 1 |   |   |
|            |  | 1998.. 57 857   | 594 531              | 34 521         | S                               | 23 336                            | 1  | 1 |   |   |
|            |  | 1997.. 59 042   | 574 038              | 35 414         | S                               | 23 628                            | X  | X |   |   |
| 33651      | Railroad rolling stock mfg .....                                       | 2001.. 52 894   | 473 592              | 29 973         | D                               | 22 921                            | 2  | 3 |   |   |
|            |  | 2000.. 52 760   | 531 525              | 31 305         | D                               | 21 454                            | 2  | 2 |   |   |
|            |  | 1999.. 58 616   | 600 253              | 35 143         | D                               | 23 473                            | 2  | 1 |   |   |
|            |  | 1998.. 57 857   | 594 531              | 34 521         | S                               | 23 336                            | 1  | 1 |   |   |
|            |  | 1997.. 59 042   | 574 038              | 35 414         | S                               | 23 628                            | X  | X |   |   |
| 336510     | Railroad rolling stock mfg .....                                       | 2001.. 52 894   | 473 592              | 29 973         | D                               | 22 921                            | 2  | 3 |   |   |
|            |  | 2000.. 52 760   | 531 525              | 31 305         | D                               | 21 454                            | 2  | 2 |   |   |
|            |  | 1999.. 58 616   | 600 253              | 35 143         | D                               | 23 473                            | 2  | 1 |   |   |
|            |  | 1998.. 57 857   | 594 531              | 34 521         | S                               | 23 336                            | 1  | 1 |   |   |
|            |  | 1997.. 59 042   | 574 038              | 35 414         | S                               | 23 628                            | X  | X |   |   |

See footnotes at end of table.

**Table 5. Capital Expenditures for Plant and Equipment for Industry Groups and Industries: 2001 and Earlier Years—Con.**

[Thousand dollars. Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | Total            | Buildings and other structures | Machinery and equipment | Relative standard error of estimate <sup>1</sup> (percent) for column— |
|------------|--|------------------|--------------------------------|-------------------------|--|
|            |  |                  |                                |                         | A  |
| 334        | Computer & electronic product mfg—Con.                             |                  |                                |                         |  |
| 3345       | Navigational, measuring, medical, & control instruments mfg—Con.   |                  |                                |                         |  |
| 33451      | Navigational, measuring, medical, & control instruments mfg .....  | 2001.. 3 479 696 | 1 058 662                      | 2 421 034               | 3  |
|            |  | 2000.. 3 231 557 | 687 864                        | 2 543 694               | 2  |
|            |  | 1999.. 3 083 441 | 583 245                        | 2 500 196               | 2  |
|            |  | 1998.. 3 395 508 | 565 183                        | 2 830 325               | 4  |
|            |  | 1997.. 3 005 990 | 569 474                        | 2 436 516               | X  |
| 334510     | Electromedical & electrotherapeutic apparatus mfg .....            | 2001.. 374 877   | 74 389                         | 300 488                 | 15   |
|            |  | 2000.. 363 001   | 67 443                         | 295 558                 | 4  |
|            |  | 1999.. 351 717   | 68 585                         | 283 132                 | 5  |
|            |  | 1998.. 440 843   | 72 321                         | 368 522                 | 12   |
|            |  | 1997.. 432 245   | 78 726                         | 353 519                 | X  |
| 334511     | Search, detection, navigation, & guidance instrument mfg .....     | 2001.. 1 104 750 | 149 787                        | 954 963                 | 3  |
|            |  | 2000.. 1 022 159 | 166 214                        | 855 945                 | 3  |
|            |  | 1999.. 1 011 519 | 152 902                        | 858 617                 | 2  |
|            |  | 1998.. 1 158 007 | 194 338                        | 963 669                 | 10   |
|            |  | 1997.. 1 021 048 | 186 724                        | 834 324                 | X  |
| 334512     | Automatic environmental control mfg .....                          | 2001.. 85 997    | 5 642                          | 80 356                  | 8  |
|            |  | 2000.. 88 695    | 6 568                          | 82 127                  | 5  |
|            |  | 1999.. 85 863    | 5 491                          | 80 372                  | 4  |
|            |  | 1998.. 115 185   | 11 954                         | 103 231                 | 7  |
|            |  | 1997.. 114 952   | 11 523                         | 103 429                 | X  |
| 334513     | Industrial process control instrument mfg .....                    | 2001.. 158 065   | 21 794                         | 136 271                 | 6  |
|            |  | 2000.. 174 821   | 17 162                         | 157 659                 | 3  |
|            |  | 1999.. 219 806   | 40 987                         | 178 819                 | 7  |
|            |  | 1998.. 305 734   | 37 307                         | 268 427                 | 8  |
|            |  | 1997.. 208 434   | 33 144                         | 175 290                 | X  |
| 334514     | Totalizing fluid meter & counting device mfg ...                   | 2001.. 75 564    | 12 998                         | 62 566                  | 9  |
|            |  | 2000.. 116 763   | 13 604                         | 103 160                 | 8  |
|            |  | 1999.. 128 096   | 10 437                         | 117 659                 | 6  |
|            |  | 1998.. 131 307   | 12 466                         | 118 841                 | 6  |
|            |  | 1997.. 116 807   | 11 228                         | 105 579                 | X  |
| 334515     | Electricity measuring & testing instrument mfg ..                  | 2001.. 1 115 885 | 619 088                        | 496 797                 | 7  |
|            |  | 2000.. 794 593   | 250 886                        | 543 706                 | 3  |
|            |  | 1999.. 662 766   | 158 224                        | 504 542                 | 2  |
|            |  | 1998.. 647 572   | 132 528                        | 515 044                 | 4  |
|            |  | 1997.. 667 632   | 165 244                        | 502 388                 | X  |
| 334516     | Analytical laboratory instrument mfg .....                         | 2001.. 315 203   | 120 529                        | 194 674                 | 15   |
|            |  | 2000.. 303 470   | 52 051                         | 251 419                 | 11   |
|            |  | 1999.. 305 732   | 64 573                         | 241 159                 | 14   |
|            |  | 1998.. 329 347   | 59 146                         | 270 200                 | 3  |
|            |  | 1997.. 207 449   | 44 868                         | 162 581                 | X  |
| 334517     | Irradiation apparatus mfg .....                                    | 2001.. 103 813   | 30 487                         | 73 326                  | 9  |
|            |  | 2000.. 128 800   | 38 460                         | 90 339                  | 11   |
|            |  | 1999.. 121 874   | 32 124                         | 89 750                  | 10   |
|            |  | 1998.. 72 170    | 4 721                          | 67 449                  | 1  |
|            |  | 1997.. 75 942    | 8 710                          | 67 232                  | X  |
| 334518     | Watch, clock, & part mfg .....                                     | 2001.. 23 634    | 997                            | 22 637                  | 8  |
|            |  | 2000.. 44 131    | 12 270                         | 31 861                  | 3  |
|            |  | 1999.. 37 743    | 7 376                          | 30 367                  | 6  |
|            |  | 1998.. 30 855    | 6 492                          | 24 363                  | 11   |
|            |  | 1997.. 26 215    | 4 792                          | 21 423                  | X  |
| 334519     | Other measuring & controlling device mfg .....                     | 2001.. 121 907   | 22 951                         | 98 956                  | 9  |
|            |  | 2000.. 195 124   | 63 205                         | 131 919                 | 14   |
|            |  | 1999.. 158 323   | 42 545                         | 115 779                 | 12   |
|            |  | 1998.. 164 489   | 33 911                         | 130 579                 | 7  |
|            |  | 1997.. 135 266   | 24 515                         | 110 751                 | X  |
| 3346       | Mfg & reproducing magnetic & optical media .....                   | 2001.. 564 465   | 78 695                         | 485 770                 | 5  |
|            |  | 2000.. 682 959   | 72 231                         | 610 727                 | 3  |
|            |  | 1999.. 758 874   | 86 391                         | 672 483                 | 7  |
|            |  | 1998.. 769 391   | 85 603                         | 683 788                 | 5  |
|            |  | 1997.. 855 941   | 126 037                        | 729 904                 | X  |
| 33461      | Mfg & reproducing magnetic & optical media .....                   | 2001.. 564 465   | 78 695                         | 485 770                 | 5  |
|            |  | 2000.. 682 959   | 72 231                         | 610 727                 | 3  |
|            |  | 1999.. 758 874   | 86 391                         | 672 483                 | 7  |
|            |  | 1998.. 769 391   | 85 603                         | 683 788                 | 5  |
|            |  | 1997.. 855 941   | 126 037                        | 729 904                 | X  |
| 334611     | Software reproducing .....   | 2001.. 36 517    | 1 316                          | 35 201                  | 6  |
|            |  | 2000.. 47 666    | 3 934                          | 43 733                  | 10   |
|            |  | 1999.. 71 299    | 4 406                          | 66 892                  | 22   |
|            |  | 1998.. 104 733   | 5 036                          | 99 697                  | 25   |
|            |  | 1997.. 133 552   | 13 050                         | 120 502                 | X  |
| 334612     | Prerecorded CD (except software), tape, & record reproducing ..... | 2001.. 387 927   | 65 989                         | 321 938                 | 7  |
|            |  | 2000.. 374 028   | 29 979                         | 344 049                 | 5  |
|            |  | 1999.. 383 440   | 48 332                         | 335 108                 | 12   |
|            |  | 1998.. 353 222   | 41 626                         | 311 596                 | 7  |
|            |  | 1997.. 282 507   | 33 232                         | 249 275                 | X  |
| 334613     | Magnetic & optical recording media mfg .....                       | 2001.. 140 020   | 11 389                         | 128 631                 | 5  |
|            |  | 2000.. 261 264   | 38 319                         | 222 945                 | 1  |
|            |  | 1999.. 304 135   | 33 652                         | 270 483                 | 4  |
|            |  | 1998.. 311 435   | 38 940                         | 272 495                 | 2  |
|            |  | 1997.. 439 882   | 79 755                         | 360 127                 | X  |

See footnotes at end of table.

**Table 5. Capital Expenditures for Plant and Equipment for Industry Groups and Industries: 2001 and Earlier Years—Con.**

[Thousand dollars. Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | Total            | Buildings and other structures | Machinery and equipment | Relative standard error of estimate <sup>1</sup> (percent) for column— |
|------------|--|------------------|--------------------------------|-------------------------|--|
|            |  | A                | B                              | C                       | A  |
| 336        | Transportation equipment mfg—Con.                                      |                  |                                |                         |  |
| 3363       | Motor vehicle parts mfg—Con.   |                  |                                |                         |  |
| 33637      | Motor vehicle metal stamping .....                                     | 2001.. 1 322 807 | 168 337                        | 1 154 470               | 4  |
|            |  | 2000.. 1 445 013 | 173 952                        | 1 271 061               | 4  |
|            |  | 1999.. 1 582 398 | 141 896                        | 1 440 501               | 4  |
|            |  | 1998.. 1 382 363 | 150 219                        | 1 232 145               | 3  |
|            |  | 1997.. 1 515 648 | 142 136                        | 1 373 512               | X  |
| 336370     | Motor vehicle metal stamping .....                                     | 2001.. 1 322 807 | 168 337                        | 1 154 470               | 4  |
|            |  | 2000.. 1 445 013 | 173 952                        | 1 271 061               | 4  |
|            |  | 1999.. 1 582 398 | 141 896                        | 1 440 501               | 4  |
|            |  | 1998.. 1 382 363 | 150 219                        | 1 232 145               | 3  |
|            |  | 1997.. 1 515 648 | 142 136                        | 1 373 512               | X  |
| 33639      | Other motor vehicle parts mfg .....                                    | 2001.. 2 142 772 | 197 246                        | 1 945 526               | 6  |
|            |  | 2000.. 2 376 804 | 303 568                        | 2 073 236               | 7  |
|            |  | 1999.. 2 353 935 | 208 125                        | 2 145 810               | 6  |
|            |  | 1998.. 2 148 787 | 230 108                        | 1 918 679               | 3  |
|            |  | 1997.. 1 878 904 | 260 601                        | 1 618 303               | X  |
| 336391     | Motor vehicle air-conditioning mfg .....                               | 2001.. 248 486   | 25 333                         | 223 153                 | 3  |
|            |  | 2000.. 243 141   | 25 693                         | 217 448                 | 4  |
|            |  | 1999.. 360 823   | 28 535                         | 332 288                 | 3  |
|            |  | 1998.. 259 407   | 25 765                         | 233 642                 | 3  |
|            |  | 1997.. 188 566   | 15 255                         | 173 311                 | X  |
| 336399     | All other motor vehicle parts mfg .....                                | 2001.. 1 894 285 | 171 913                        | 1 722 373               | 7  |
|            |  | 2000.. 2 133 664 | 277 876                        | 1 855 788               | 8  |
|            |  | 1999.. 1 993 112 | 179 590                        | 1 813 522               | 7  |
|            |  | 1998.. 1 889 380 | 204 343                        | 1 685 037               | 4  |
|            |  | 1997.. 1 690 338 | 245 346                        | 1 444 992               | X  |
| 3364       | Aerospace product & parts mfg .....                                    | 2001.. 2 448 635 | 504 748                        | 1 943 887               | 2  |
|            |  | 2000.. 2 326 266 | 512 126                        | 1 814 140               | 2  |
|            |  | 1999.. 3 421 619 | 985 300                        | 2 436 318               | 2  |
|            |  | 1998.. 3 477 012 | 822 340                        | 2 654 672               | 2  |
|            |  | 1997.. 3 132 055 | 892 757                        | 2 239 298               | X  |
| 33641      | Aerospace product & parts mfg .....                                    | 2001.. 2 448 635 | 504 748                        | 1 943 887               | 2  |
|            |  | 2000.. 2 326 266 | 512 126                        | 1 814 140               | 2  |
|            |  | 1999.. 3 421 619 | 985 300                        | 2 436 318               | 2  |
|            |  | 1998.. 3 477 012 | 822 340                        | 2 654 672               | 2  |
|            |  | 1997.. 3 132 055 | 892 757                        | 2 239 298               | X  |
| 336411     | Aircraft mfg .....   | 2001.. 569 104   | 181 804                        | 387 300                 | 1  |
|            |  | 2000.. 616 902   | 217 022                        | 399 879                 | 2  |
|            |  | 1999.. 767 755   | 260 056                        | 507 698                 | 1  |
|            |  | 1998.. 904 433   | 305 901                        | 598 532                 | 3  |
|            |  | 1997.. 774 858   | 348 942                        | 425 916                 | X  |
| 336412     | Aircraft engine & engine parts mfg .....                               | 2001.. 895 672   | 89 952                         | 805 720                 | 4  |
|            |  | 2000.. 695 490   | 63 377                         | 632 113                 | 5  |
|            |  | 1999.. 787 085   | 98 771                         | 688 314                 | 3  |
|            |  | 1998.. 733 431   | 74 247                         | 659 184                 | 2  |
|            |  | 1997.. 679 800   | 80 170                         | 599 630                 | X  |
| 336413     | Other aircraft part & auxiliary equipment mfg ...                      | 2001.. 594 047   | 109 155                        | 484 892                 | 5  |
|            |  | 2000.. 581 761   | 104 397                        | 477 365                 | 7  |
|            |  | 1999.. 782 733   | 164 501                        | 618 232                 | 6  |
|            |  | 1998.. 975 201   | 154 826                        | 820 375                 | 6  |
|            |  | 1997.. 925 054   | 186 247                        | 738 807                 | X  |
| 336414     | Guided missile & space vehicle mfg .....                               | 2001.. 271 628   | 98 740                         | 172 888                 | 1  |
|            |  | 2000.. 320 001   | 103 870                        | 216 131                 | 1  |
|            |  | 1999.. 906 188   | 421 795                        | 484 393                 | 1  |
|            |  | 1998.. 700 155   | 260 963                        | 439 192                 | 1  |
|            |  | 1997.. 634 227   | 250 228                        | 383 999                 | X  |
| 336415     | Guided missile & space vehicle propulsion unit & parts mfg .....       | 2001.. 97 660    | 21 636                         | 76 024                  | 1  |
|            |  | 2000.. 101 595   | 21 273                         | 80 322                  | 1  |
|            |  | 1999.. 162 045   | 37 154                         | 124 891                 | 1  |
|            |  | 1998.. 124 765   | 20 756                         | 104 009                 | 1  |
|            |  | 1997.. 89 321    | 21 982                         | 67 339                  | X  |
| 336419     | Other guided missile & space vehicle parts & auxiliary equip mfg ..... | 2001.. 20 524    | 3 461                          | 17 063                  | 2  |
|            |  | 2000.. 10 517    | 2 187                          | 8 330                   | 2  |
|            |  | 1999.. 15 814    | 3 023                          | 12 791                  | 1  |
|            |  | 1998.. 39 028    | 5 648                          | 33 380                  | 2  |
|            |  | 1997.. 28 795    | 5 188                          | 23 607                  | X  |
| 3365       | Railroad rolling stock mfg .....                                       | 2001.. 169 596   | 37 604                         | 131 992                 | 16   |
|            |  | 2000.. 202 951   | 42 315                         | 160 636                 | 14   |
|            |  | 1999.. 219 516   | 41 113                         | 178 403                 | 3  |
|            |  | 1998.. 201 617   | 30 606                         | 171 011                 | 1  |
|            |  | 1997.. 197 174   | 22 488                         | 174 686                 | X  |
| 33651      | Railroad rolling stock mfg .....                                       | 2001.. 169 596   | 37 604                         | 131 992                 | 16   |
|            |  | 2000.. 202 951   | 42 315                         | 160 636                 | 14   |
|            |  | 1999.. 219 516   | 41 113                         | 178 403                 | 3  |
|            |  | 1998.. 201 617   | 30 606                         | 171 011                 | 1  |
|            |  | 1997.. 197 174   | 22 488                         | 174 686                 | X  |
| 336510     | Railroad rolling stock mfg .....                                       | 2001.. 169 596   | 37 604                         | 131 992                 | 16   |
|            |  | 2000.. 202 951   | 42 315                         | 160 636                 | 14   |
|            |  | 1999.. 219 516   | 41 113                         | 178 403                 | 3  |
|            |  | 1998.. 201 617   | 30 606                         | 171 011                 | 1  |
|            |  | 1997.. 197 174   | 22 488                         | 174 686                 | X  |

See footnotes at end of table.

**Table 6. Value of Manufacturers' Inventories by Stage of Fabrication for Industry Groups and Industries: Beginning and End of Year—Con.**

[Thousand dollars. Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry   | End of year       |                   |                 |                                  | Beginning of year |                   |                 |                                  | Relative standard error of estimate <sup>1</sup> (percent) for column— |    |    |    |
|------------|---|-------------------|-------------------|-----------------|----------------------------------|-------------------|-------------------|-----------------|----------------------------------|--|----|----|----|
|            |   | Total             | Finished products | Work-in-process | Materials, supplies, fuels, etc. | Total             | Finished products | Work-in-process | Materials, supplies, fuels, etc. | A  | B  | C  | D  |
|            |   | A                 | B                 | C               | D                                | E                 | F                 | G               | H                                |  |    |    |    |
| 334        | Computer & electronic product mfg—Con.                                |                   |                   |                 |                                  |                   |                   |                 |                                  |  |    |    |    |
| 3344       | Semiconductor & other electronic component mfg—Con.                   |                   |                   |                 |                                  |                   |                   |                 |                                  |  |    |    |    |
| 33441      | Semiconductor & other electronic component mfg—Con.                   |                   |                   |                 |                                  |                   |                   |                 |                                  |  |    |    |    |
| 334417     | Electronic connector mfg . . . . .                                    | 2001.. 687 029    | 145 752           | 193 793         | 347 483                          | 718 096           | 151 857           | 261 571         | 304 668                          | 5  | 11 | 8  | 7  |
|            |   | 2000.. 721 985    | 155 554           | 261 333         | 305 098                          | 631 812           | 161 311           | 215 486         | 255 014                          | 4  | 9  | 5  | 7  |
|            |   | 1999.. 653 441    | 170 816           | 226 720         | 255 904                          | 635 766           | 160 254           | 241 940         | 233 571                          | 5  | 9  | 9  | 4  |
|            |   | 1998.. 716 438    | 199 373           | 258 479         | 258 586                          | 703 451           | 191 945           | 264 833         | 246 673                          | 1  | 3  | 3  | 2  |
|            |   | 1997.. 731 479    | 194 516           | 291 655         | 245 308                          | 724 203           | 204 550           | 277 224         | 242 429                          | X  | X  | X  | X  |
| 334418     | Printed circuit assembly (electronic assembly) mfg . . . . .          | 2001.. 3 808 329  | 485 012           | 836 640         | 2 486 678                        | 6 708 252         | 593 554           | 1 676 102       | 4 438 596                        | 6  | 9  | 10 | 6  |
|            |   | 2000.. 6 559 230  | 572 256           | 1 615 774       | 4 371 200                        | 4 120 532         | 697 685           | 1 124 536       | 2 298 310                        | 4  | 8  | 6  | 4  |
|            |   | 1999.. 4 122 612  | 691 632           | 1 124 385       | 2 306 595                        | 3 219 884         | 607 711           | 931 860         | 1 680 313                        | 3  | 4  | 4  | 4  |
|            |   | 1998.. 3 351 859  | 641 268           | 969 116         | 1 741 475                        | 3 750 988         | 441 663           | 1 558 506       | 1 750 819                        | 2  | 2  | 3  | 3  |
|            |   | 1997.. 3 730 561  | 384 860           | 1 506 296       | 1 839 405                        | 4 073 845         | 500 917           | 1 784 652       | 1 788 276                        | X  | X  | X  | X  |
| 334419     | Other electronic component mfg . . . . .                              | 2001.. 1 551 743  | 286 240           | 424 383         | 841 120                          | 2 136 001         | 385 393           | 724 154         | 1 026 454                        | 4  | 11 | 5  | 4  |
|            |   | 2000.. 1 847 883  | 299 565           | 495 758         | 1 052 560                        | 1 569 929         | 309 098           | 452 916         | 807 915                          | 6  | 11 | 7  | 6  |
|            |   | 1999.. 1 649 964  | 334 442           | 476 725         | 838 797                          | 1 555 503         | 259 395           | 467 381         | 828 727                          | 8  | 20 | 7  | 7  |
|            |   | 1998.. 1 643 892  | 305 345           | 487 579         | 850 968                          | 1 669 822         | 291 475           | 506 397         | 871 950                          | 1  | 3  | 1  | 1  |
|            |   | 1997.. 1 709 616  | 316 959           | 479 133         | 913 524                          | 1 512 617         | 277 115           | 507 598         | 727 904                          | X  | X  | X  | X  |
| 3345       | Navigational, measuring, medical, & control instruments mfg . . . . . | 2001.. 16 395 944 | 3 725 401         | 6 341 547       | 6 328 996                        | 16 387 367        | 3 733 077         | 6 393 372       | 6 260 917                        | 1  | 1  | 1  | 1  |
|            |   | 2000.. 16 781 670 | 3 812 752         | 6 571 300       | 6 397 617                        | 15 792 206        | 3 423 588         | 6 741 688       | 5 626 930                        | 1  | 1  | 1  | 1  |
|            |   | 1999.. 15 733 567 | 3 436 277         | 6 676 857       | 5 620 433                        | 15 389 684        | 3 373 099         | 6 706 120       | 5 310 465                        | 1  | 1  | 1  | 1  |
|            |   | 1998.. 15 992 526 | 3 460 458         | 7 061 301       | 5 470 766                        | 15 582 948        | 3 169 858         | 7 303 845       | 5 109 244                        | 1  | 2  | 1  | 1  |
|            |   | 1997.. 15 386 427 | 3 047 952         | 7 232 371       | 5 106 104                        | 15 296 512        | 2 934 069         | 7 728 053       | 4 634 390                        | X  | X  | X  | X  |
| 33451      | Navigational, measuring, medical, & control instruments mfg . . . . . | 2001.. 16 395 944 | 3 725 401         | 6 341 547       | 6 328 996                        | 16 387 367        | 3 733 077         | 6 393 372       | 6 260 917                        | 1  | 1  | 1  | 1  |
|            |   | 2000.. 16 781 670 | 3 812 752         | 6 571 300       | 6 397 617                        | 15 792 206        | 3 423 588         | 6 741 688       | 5 626 930                        | 1  | 1  | 1  | 1  |
|            |   | 1999.. 15 733 567 | 3 436 277         | 6 676 857       | 5 620 433                        | 15 389 684        | 3 373 099         | 6 706 120       | 5 310 465                        | 1  | 1  | 1  | 1  |
|            |   | 1998.. 15 992 526 | 3 460 458         | 7 061 301       | 5 470 766                        | 15 582 948        | 3 169 858         | 7 303 845       | 5 109 244                        | 1  | 2  | 1  | 1  |
|            |   | 1997.. 15 386 427 | 3 047 952         | 7 232 371       | 5 106 104                        | 15 296 512        | 2 934 069         | 7 728 053       | 4 634 390                        | X  | X  | X  | X  |
| 334510     | Electromedical & electrotherapeutic apparatus mfg . . . . .           | 2001.. 2 163 610  | 818 311           | 469 663         | 875 636                          | 2 068 501         | 814 755           | 424 827         | 828 919                          | 2  | 3  | 3  | 3  |
|            |   | 2000.. 2 104 447  | 838 507           | 416 938         | 849 002                          | 2 015 649         | 774 258           | 393 306         | 848 084                          | 2  | 3  | 3  | 3  |
|            |   | 1999.. 1 965 119  | 743 289           | 389 162         | 832 668                          | 1 966 123         | 726 289           | 438 868         | 800 966                          | 2  | 2  | 2  | 2  |
|            |   | 1998.. 2 191 912  | 863 248           | 482 353         | 846 311                          | 2 044 330         | 797 958           | 427 890         | 818 482                          | 4  | 9  | 7  | 2  |
|            |   | 1997.. 2 064 106  | 796 751           | 430 835         | 836 520                          | 1 982 316         | 768 527           | 426 039         | 787 750                          | X  | X  | X  | X  |
| 334511     | Search, detection, navigation, & guidance instrument mfg . . . . .    | 2001.. 5 576 129  | 498 124           | 3 832 573       | 1 245 432                        | 5 631 255         | 491 411           | 3 855 190       | 1 284 654                        | 1  | 3  | 1  | 2  |
|            |   | 2000.. 5 950 328  | 495 425           | 4 049 400       | 1 405 504                        | 6 169 100         | 495 489           | 4 317 694       | 1 355 917                        | 1  | 3  | 1  | 2  |
|            |   | 1999.. 6 025 290  | 491 377           | 4 223 632       | 1 310 281                        | 5 949 874         | 457 222           | 4 201 395       | 1 291 257                        | 1  | 3  | 1  | 2  |
|            |   | 1998.. 6 207 257  | 427 813           | 4 476 061       | 1 303 384                        | 6 159 442         | 370 545           | 4 653 461       | 1 135 436                        | 1  | 2  | 1  | 1  |
|            |   | 1997.. 6 159 390  | 381 215           | 4 662 554       | 1 115 621                        | 6 487 198         | 337 641           | 5 160 971       | 988 586                          | X  | X  | X  | X  |
| 334512     | Automatic environmental control mfg . . . . .                         | 2001.. 358 198    | 108 181           | 120 966         | 129 550                          | 369 287           | 106 829           | 125 776         | 136 681                          | 4  | 5  | 8  | 4  |
|            |   | 2000.. 381 194    | 107 607           | 131 000         | 142 587                          | 388 000           | 109 101           | 140 199         | 138 701                          | 3  | 5  | 5  | 4  |
|            |   | 1999.. 422 813    | 126 353           | 148 126         | 148 333                          | 433 190           | 139 544           | 170 606         | 123 039                          | 4  | 7  | 5  | 4  |
|            |   | 1998.. 433 452    | 128 384           | 168 644         | 136 424                          | 411 127           | 111 253           | 162 290         | 137 584                          | 5  | 3  | 5  | 8  |
|            |   | 1997.. 390 108    | 104 403           | 154 692         | 131 013                          | 373 922           | 133 207           | 137 468         | 103 247                          | X  | X  | X  | X  |
| 334513     | Industrial process control instrument mfg . . . . .                   | 2001.. 1 284 621  | 338 588           | 293 083         | 652 950                          | 1 286 770         | 351 077           | 326 241         | 609 453                          | 3  | 4  | 4  | 3  |
|            |   | 2000.. 1 307 826  | 362 496           | 333 139         | 612 191                          | 1 244 394         | 367 442           | 306 803         | 570 149                          | 3  | 6  | 3  | 2  |
|            |   | 1999.. 1 299 055  | 372 048           | 321 992         | 605 014                          | 1 316 552         | 391 781           | 323 468         | 601 303                          | 2  | 6  | 3  | 2  |
|            |   | 1998.. 1 258 009  | 357 501           | 313 854         | 586 653                          | 1 242 092         | 278 140           | 353 256         | 610 696                          | 2  | 3  | 3  | 2  |
|            |   | 1997.. 1 258 976  | 271 422           | 336 347         | 651 207                          | 1 240 356         | 292 828           | 334 380         | 613 148                          | X  | X  | X  | X  |
| 334514     | Totalizing fluid meter & counting device mfg . . . . .                | 2001.. 362 255    | 59 512            | 80 540          | 222 203                          | 355 089           | 55 542            | 76 623          | 222 923                          | 9  | 18 | 11 | 11 |
|            |   | 2000.. 424 873    | 65 732            | 109 314         | 249 827                          | 334 896           | 46 387            | 115 088         | 173 422                          | 6  | 13 | 8  | 8  |
|            |   | 1999.. 340 790    | 47 591            | 116 924         | 176 275                          | 316 742           | 57 734            | 116 073         | 142 936                          | 6  | 17 | 7  | 9  |
|            |   | 1998.. 310 219    | 64 029            | 123 408         | 122 782                          | 321 915           | 66 509            | 115 746         | 139 660                          | 1  | 1  | 2  | 1  |
|            |   | 1997.. 317 549    | 67 258            | 108 631         | 141 660                          | 312 684           | 63 557            | 119 905         | 129 222                          | X  | X  | X  | X  |
| 334515     | Electricity measuring & testing instrument mfg . . . . .              | 2001.. 2 923 716  | 749 246           | 712 885         | 1 461 585                        | 3 042 097         | 761 125           | 688 562         | 1 592 410                        | 2  | 2  | 3  | 3  |
|            |   | 2000.. 3 030 302  | 772 948           | 686 916         | 1 570 438                        | 2 364 870         | 599 113           | 690 227         | 1 075 530                        | 2  | 2  | 3  | 3  |
|            |   | 1999.. 2 480 835  | 681 463           | 723 471         | 1 075 901                        | 2 260 683         | 610 382           | 697 481         | 952 820                          | 2  | 2  | 2  | 2  |
|            |   | 1998.. 2 390 582  | 646 918           | 723 806         | 1 019 858                        | 2 424 761         | 641 891           | 807 080         | 975 790                          | 1  | 1  | 2  | 2  |
|            |   | 1997.. 2 297 057  | 571 540           | 768 750         | 956 767                          | 2 098 482         | 469 558           | 763 204         | 865 720                          | X  | X  | X  | X  |
| 334516     | Analytical laboratory instrument mfg . . . . .                        | 2001.. 1 335 666  | 372 481           | 184 992         | 778 193                          | 1 291 398         | 396 465           | 228 291         | 666 642                          | 4  | 5  | 7  | 4  |
|            |   | 2000.. 1 271 695  | 398 012           | 225 132         | 648 550                          | 1 137 608         | 368 189           | 202 842         | 566 577                          | 4  | 4  | 8  | 4  |
|            |   | 1999.. 1 127 560  | 335 388           | 215 204         | 576 969                          | 1 071 988         | 344 315           | 216 587         | 511 086                          | 3  | 3  | 7  | 3  |
|            |   | 1998.. 1 079 131  | 349 505           | 201 138         | 528 487                          | 1 071 510         | 353 311           | 212 933         | 505 266                          | 1  | 1  | 2  | 1  |
|            |   | 1997.. 1 064 297  | 350 331           | 211 365         | 502 601                          | 1 056 030         | 374 074           | 223 677         | 458 279                          | X  | X  | X  | X  |
| 334517     | Irradiation apparatus mfg . . . . .                                   | 2001.. 850 417    | 243 578           | 232 171         | 374 668                          | 845 250           | 275 499           | 235 330         | 334 421                          | 4  | 6  | 6  | 4  |
|            |   | 2000.. 814 883    | 260 220           | 223 550         | 331 112                          | 815 545           | 270 482           | 219 620         | 325 443                          | 4  | 4  | 8  | 4  |
|            |   | 1999.. 737 060    | 216 325           | 208 927         | 311 808                          | 789 888           | 265 747           | 195 666         | 328 474                          | 5  | 5  | 9  | 4  |
|            |   | 1998.. 801 610    | 255 516           | 206 591         | 339 503                          | 722 455           | 220 530           | 213 782         | 288 144                          | 1  | 2  | 2  | 2  |
|            |   | 1997.. 660 457    | 181 860           | 206 282         | 272 315                          | 634 720           | 199 523           | 198 912         | 236 285                          | X  | X  | X  | X  |

See footnotes at end of table.

**Table 6. Value of Manufacturers' Inventories by Stage of Fabrication for Industry Groups and Industries: Beginning and End of Year—Con.**

[Thousand dollars. Data based on the 2001 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

| NAICS code | Industry group and industry  | End of year       |                   |                 |                                  | Beginning of year |                   |                 |                                  | Relative standard error of estimate <sup>1</sup> (percent) for column— |    |   |    |
|------------|--|-------------------|-------------------|-----------------|----------------------------------|-------------------|-------------------|-----------------|----------------------------------|--|----|---|----|
|            |  | Total             | Finished products | Work-in-process | Materials, supplies, fuels, etc. | Total             | Finished products | Work-in-process | Materials, supplies, fuels, etc. | A  | B  | C | D  |
|            |  | A                 | B                 | C               | D                                | E                 | F                 | G               | H                                |  |    |   |    |
| 336        | Transportation equipment mfg—Con.                                      |                   |                   |                 |                                  |                   |                   |                 |                                  |  |    |   |    |
| 3363       | Motor vehicle parts mfg—Con.   |                   |                   |                 |                                  |                   |                   |                 |                                  |  |    |   |    |
| 33639      | Other motor vehicle parts mfg .....                                    | 2001.. 3 489 960  | 1 189 020         | 686 344         | 1 614 596                        | 3 755 276         | 1 241 758         | 776 296         | 1 737 222                        | 7  | 14 | 6 | 6  |
|            |  | 2000.. 3 752 411  | 1 188 827         | 819 155         | 1 744 429                        | 3 735 448         | 1 190 623         | 758 628         | 1 786 197                        | 5  | 10 | 7 | 6  |
|            |  | 1999.. 3 661 784  | 1 192 931         | 750 256         | 1 718 597                        | 3 541 603         | 1 092 925         | 744 994         | 1 703 684                        | 4  | 10 | 5 | 5  |
|            |  | 1998.. 3 419 792  | 1 002 454         | 787 446         | 1 629 892                        | 3 032 445         | 829 952           | 919 553         | 1 282 940                        | 1  | 1  | 1 | 1  |
|            |  | 1997.. 3 168 409  | 891 683           | 944 058         | 1 332 668                        | 3 107 485         | 925 907           | 936 305         | 1 245 273                        | X  | X  | X | X  |
| 336391     | Motor vehicle air-conditioning mfg .....                               | 2001.. 395 780    | 133 863           | 71 067          | 190 850                          | 404 637           | 111 053           | 76 131          | 217 453                          | 1  | 1  | 1 | 2  |
|            |  | 2000.. 386 356    | 106 744           | 64 795          | 214 817                          | 396 548           | 126 995           | 63 290          | 206 263                          | 1  | 1  | 1 | 2  |
|            |  | 1999.. 406 029    | 127 382           | 63 372          | 215 275                          | 416 762           | 120 406           | 61 180          | 235 176                          | 1  | 1  | 1 | 1  |
|            |  | 1998.. 426 153    | 125 207           | 62 994          | 237 952                          | 362 045           | 82 019            | 67 654          | 212 372                          | 1  | 1  | 3 | 1  |
|            |  | 1997.. 358 701    | 86 200            | 69 741          | 202 760                          | 398 499           | 121 649           | 83 688          | 193 162                          | X  | X  | X | X  |
| 336399     | All other motor vehicle parts mfg .....                                | 2001.. 3 094 180  | 1 055 157         | 615 277         | 1 423 746                        | 3 350 639         | 1 130 705         | 700 165         | 1 519 769                        | 7  | 15 | 6 | 7  |
|            |  | 2000.. 3 366 055  | 1 082 083         | 754 359         | 1 529 612                        | 3 338 900         | 1 063 628         | 695 338         | 1 579 934                        | 6  | 11 | 8 | 7  |
|            |  | 1999.. 3 255 754  | 1 065 549         | 686 884         | 1 503 322                        | 3 124 841         | 972 519           | 683 814         | 1 468 508                        | 4  | 11 | 5 | 6  |
|            |  | 1998.. 2 993 639  | 877 248           | 724 453         | 1 391 939                        | 2 670 400         | 747 933           | 851 899         | 1 070 568                        | 1  | 1  | 1 | 2  |
|            |  | 1997.. 2 809 708  | 805 483           | 874 317         | 1 129 908                        | 2 708 986         | 804 258           | 852 617         | 1 052 111                        | X  | X  | X | X  |
| 3364       | Aerospace product & parts mfg .....                                    | 2001.. 42 335 693 | 5 111 642         | 30 543 643      | 6 680 408                        | 41 190 627        | 4 272 983         | 29 768 033      | 7 149 611                        | 1  | 2  | 1 | 1  |
|            |  | 2000.. 41 491 076 | 4 300 191         | 29 946 443      | 7 244 441                        | 48 070 469        | 4 528 736         | 37 328 263      | 6 213 471                        | 1  | 2  | 1 | 1  |
|            |  | 1999.. 49 513 614 | 4 568 550         | 38 578 668      | 6 366 396                        | 51 464 270        | 4 587 599         | 39 470 000      | 7 406 671                        | 1  | 2  | 1 | 1  |
|            |  | 1998.. 50 631 369 | 3 893 445         | 39 853 625      | 6 884 299                        | 41 282 829        | 3 663 786         | 31 776 454      | 5 842 589                        | 1  | 1  | 1 | 1  |
|            |  | 1997.. 41 295 188 | 3 910 260         | 31 531 021      | 5 853 907                        | 40 535 006        | 3 213 368         | 32 158 512      | 5 163 126                        | X  | X  | X | X  |
| 33641      | Aerospace product & parts mfg .....                                    | 2001.. 42 335 693 | 5 111 642         | 30 543 643      | 6 680 408                        | 41 190 627        | 4 272 983         | 29 768 033      | 7 149 611                        | 1  | 2  | 1 | 1  |
|            |  | 2000.. 41 491 076 | 4 300 191         | 29 946 443      | 7 244 441                        | 48 070 469        | 4 528 736         | 37 328 263      | 6 213 471                        | 1  | 2  | 1 | 1  |
|            |  | 1999.. 49 513 614 | 4 568 550         | 38 578 668      | 6 366 396                        | 51 464 270        | 4 587 599         | 39 470 000      | 7 406 671                        | 1  | 2  | 1 | 1  |
|            |  | 1998.. 50 631 369 | 3 893 445         | 39 853 625      | 6 884 299                        | 41 282 829        | 3 663 786         | 31 776 454      | 5 842 589                        | 1  | 1  | 1 | 1  |
|            |  | 1997.. 41 295 188 | 3 910 260         | 31 531 021      | 5 853 907                        | 40 535 006        | 3 213 368         | 32 158 512      | 5 163 126                        | X  | X  | X | X  |
| 336411     | Aircraft mfg .....   | 2001.. 26 732 075 | 2 860 622         | 20 119 323      | 3 752 131                        | 26 144 553        | 2 329 326         | 20 785 822      | 3 029 405                        | 1  | 1  | 1 | 2  |
|            |  | 2000.. 26 464 957 | 2 355 767         | 21 012 414      | 3 096 781                        | 32 393 064        | 2 633 893         | 26 321 287      | 3 437 884                        | 1  | 1  | 1 | 1  |
|            |  | 1999.. 32 604 499 | 2 621 711         | 26 460 625      | 3 522 163                        | 35 680 310        | 1 596 931         | 30 111 381      | 3 971 998                        | 1  | 1  | 1 | 1  |
|            |  | 1998.. 35 377 691 | 1 590 096         | 29 775 361      | 4 012 234                        | 27 412 175        | 1 403 460         | 22 832 962      | 3 175 753                        | 1  | 1  | 1 | 1  |
|            |  | 1997.. 27 690 799 | 1 687 456         | 22 811 149      | 3 192 194                        | 27 766 417        | 1 671 834         | 23 299 037      | 2 795 546                        | X  | X  | X | X  |
| 336412     | Aircraft engine & engine parts mfg .....                               | 2001.. 3 462 384  | 1 211 864         | 1 566 675       | 683 845                          | 3 241 198         | 976 521           | 1 638 035       | 626 642                          | 2  | 3  | 4 | 4  |
|            |  | 2000.. 3 423 141  | 966 372           | 1 824 975       | 631 795                          | 3 411 536         | 958 427           | 1 908 253       | 544 856                          | 2  | 3  | 2 | 4  |
|            |  | 1999.. 3 370 751  | 994 119           | 1 825 253       | 551 379                          | 3 959 342         | 1 497 492         | 1 914 566       | 547 284                          | 1  | 3  | 2 | 3  |
|            |  | 1998.. 3 987 729  | 1 480 393         | 1 920 313       | 587 023                          | 3 781 960         | 1 239 952         | 2 056 792       | 485 216                          | 1  | 1  | 1 | 1  |
|            |  | 1997.. 3 842 004  | 1 289 187         | 2 055 543       | 497 274                          | 3 547 838         | 1 025 102         | 2 062 020       | 460 716                          | X  | X  | X | X  |
| 336413     | Other aircraft part & auxiliary equipment mfg ..                       | 2001.. 6 198 314  | 1 026 498         | 3 950 801       | 1 221 016                        | 6 206 546         | 954 798           | 4 168 953       | 1 082 795                        | 3  | 8  | 2 | 4  |
|            |  | 2000.. 6 202 636  | 966 162           | 4 143 762       | 1 092 712                        | 6 602 583         | 923 069           | 4 419 709       | 1 259 805                        | 2  | 9  | 1 | 3  |
|            |  | 1999.. 6 624 298  | 940 873           | 4 455 075       | 1 228 350                        | 7 281 556         | 864 459           | 5 197 374       | 1 219 724                        | 2  | 7  | 1 | 3  |
|            |  | 1998.. 7 230 438  | 815 450           | 5 189 156       | 1 225 833                        | 6 296 547         | 1 013 354         | 4 140 794       | 1 142 399                        | 1  | 1  | 1 | 1  |
|            |  | 1997.. 5 975 661  | 924 892           | 3 923 859       | 1 126 910                        | 4 794 094         | 510 980           | 3 470 381       | 812 733                          | X  | X  | X | X  |
| 336414     | Guided missile & space vehicle mfg .....                               | 2001.. 5 252 383  | D                 | 4 276 449       | D                                | 4 776 472         | D                 | 2 418 085       | D                                | 1  | X  | 1 | X  |
|            |  | 2000.. 4 788 519  | D                 | 2 418 447       | D                                | 5 129 070         | D                 | 4 219 982       | D                                | 1  | X  | 1 | X  |
|            |  | 1999.. 6 380 961  | D                 | 5 376 349       | D                                | 4 010 282         | D                 | 1 811 968       | D                                | 1  | X  | 1 | X  |
|            |  | 1998.. 3 504 103  | D                 | 2 549 448       | D                                | 3 338 472         | D                 | 2 389 882       | D                                | 1  | X  | 1 | X  |
|            |  | 1997.. 3 336 540  | D                 | 2 387 724       | D                                | 4 016 196         | D                 | 3 000 742       | D                                | X  | X  | X | X  |
| 336415     | Guided missile & space vehicle propulsion unit & parts mfg .....       | 2001.. 594 744    | D                 | 556 426         | D                                | 726 678           | D                 | 687 942         | D                                | 1  | X  | 1 | X  |
|            |  | 2000.. 515 671    | D                 | 477 173         | D                                | 420 662           | D                 | 372 815         | D                                | 1  | X  | 1 | X  |
|            |  | 1999.. 429 671    | D                 | 382 482         | D                                | 420 143           | D                 | 346 328         | D                                | 1  | X  | 1 | X  |
|            |  | 1998.. 426 989    | D                 | 353 716         | D                                | 335 864           | D                 | 276 118         | D                                | 1  | X  | 1 | X  |
|            |  | 1997.. 338 001    | D                 | 275 786         | D                                | 307 230           | D                 | 255 363         | D                                | X  | X  | X | X  |
| 336419     | Other guided missile & space vehicle parts & auxiliary equip mfg ..... | 2001.. 95 792     | D                 | 73 970          | D                                | 95 180            | D                 | 69 196          | D                                | 1  | X  | 1 | X  |
|            |  | 2000.. 96 152     | D                 | 69 672          | D                                | 113 554           | D                 | 86 217          | D                                | 1  | X  | 1 | X  |
|            |  | 1999.. 103 434    | D                 | 78 883          | D                                | 112 637           | D                 | 88 385          | D                                | 1  | X  | 1 | X  |
|            |  | 1998.. 104 418    | D                 | 65 632          | D                                | 117 811           | D                 | 79 906          | D                                | 1  | X  | 1 | X  |
|            |  | 1997.. 112 183    | D                 | 76 960          | D                                | 103 231           | D                 | 70 969          | D                                | X  | X  | X | X  |
| 3365       | Railroad rolling stock mfg .....                                       | 2001.. 1 350 212  | 471 012           | 476 770         | 402 430                          | 1 591 536         | 448 836           | 673 599         | 469 101                          | 4  | 5  | 2 | 10 |
|            |  | 2000.. 1 612 531  | 454 685           | 711 955         | 445 891                          | 1 681 502         | 473 406           | 671 460         | 536 636                          | 2  | 3  | 1 | 4  |
|            |  | 1999.. 1 704 001  | 467 986           | 679 555         | 556 459                          | 1 640 264         | 457 117           | 704 667         | 478 480                          | 1  | 1  | 1 | 2  |
|            |  | 1998.. 1 684 943  | 475 645           | 706 240         | 503 057                          | 1 592 216         | 394 220           | 764 061         | 433 936                          | 1  | 1  | 1 | 1  |
|            |  | 1997.. 1 591 538  | 400 213           | 761 923         | 429 402                          | 1 395 563         | 321 732           | 661 262         | 412 569                          | X  | X  | X | X  |
| 33651      | Railroad rolling stock mfg ....  | 2001.. 1 350 212  | 471 012           | 476 770         | 402 430                          | 1 591 536         | 448 836           | 673 599         | 469 101                          | 4  | 5  | 2 | 10 |
|            |  | 2000.. 1 612 531  | 454 685           | 711 955         | 445 891                          | 1 681 502         | 473 406           | 671 460         | 536 636                          | 2  | 3  | 1 | 4  |
|            |  | 1999.. 1 704 001  | 467 986           | 679 555         | 556 459                          | 1 640 264         | 457 117           | 704 667         | 478 480                          | 1  | 1  | 1 | 2  |
|            |  | 1998.. 1 684 943  | 475 645           | 706 240         | 503 057                          | 1 592 216         | 394 220           | 764 061         | 433 936                          | 1  | 1  | 1 | 1  |
|            |  | 1997.. 1 591 538  | 400 213           | 761 923         | 429 402                          | 1 395 563         | 321 732           | 661 262         | 412 569                          | X  | X  | X | X  |
| 336510     | Railroad rolling stock mfg ..  | 2001.. 1 350 212  | 471 012           | 476 770         | 402 430                          | 1 591 536         | 448 836           | 673 599         | 469 101                          | 4  | 5  | 2 | 10 |
|            |  | 2000.. 1 612 531  | 454 685           | 711 955         | 445 891                          | 1 681 502         | 473 406           | 671 460         | 536 636                          | 2  | 3  | 1 | 4  |
|            |  | 1999.. 1 704 001  | 467 986           | 679 555         | 556 459                          | 1 640 264         | 457 117           | 704 667         | 478 480                          | 1  | 1  | 1 | 2  |
|            |  | 1998.. 1 684 943  | 475 645           | 706 240         | 503 057                          | 1 592 216         | 394 220           | 764 061         | 433 936                          | 1  | 1  | 1 | 1  |
|            |  | 1997.. 1 591 538  | 400 213           | 761 923         | 429 402                          | 1 395 563         | 321 732           | 661 262         | 412 569                          | X  | X  | X | X  |

See footnotes at end of table.