

Major Household Appliances: 2004

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Current Industrial Reports

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These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. For the 2004 calendar year, manufacturers' shipments of major

household appliances increased 4 percent, from \$18.1 billion in 2003 to \$18.9 billion in 2004. Shipments of household cooking equipment, including parts and accessories, decreased from \$4.2 billion in 2003 to \$4.1 billion in 2004. Shipments of household refrigerators and freezers, including parts and attachments, decreased 3 percent from \$5.6 billion in 2003 to \$5.4 billion in 2004. Shipments for household laundry equipment and parts increased 8 percent, from \$4.8 billion in 2003 to \$5.2 billion in 2004. Shipments for household appliances and parts, not elsewhere classified, increased 11 percent from \$2.0 billion in 2003 to \$2.3 billion in 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Vera Harris-Bourne, 301-763-5169.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU

Table 1. Value of Shipments of Major Household Appliances by Product Class: 1999 to 2004
 [Millions of dollars]

| Product class | Product description | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 |
|---------------|--|---------|----------|---------|---------|---------|---------|
| 3352211 | Electric household ranges, ovens, and surface cooking units, equipment, and parts..... | 2,234.4 | 2,176.1 | 1,823.5 | 2,004.5 | 2,170.3 | 2,197.1 |
| 3352213 | Gas household ranges, ovens, and surface cooking units, equipment and parts..... | 1,030.7 | 1,017.9 | 929.4 | 902.0 | 779.1 | 786.3 |
| 3352215 | Other household ranges, cooking equipment, and outdoor cooking equipment, including parts and accessories..... | 868.8 | r/ 966.7 | 1,050.8 | 1,027.0 | 1,251.1 | 1,218.6 |
| 3352221 | Household refrigerators, including combination refrigerator-freezers..... | 4,915.8 | 4,993.3 | 5,080.3 | 5,227.1 | 5,395.8 | 4,968.8 |
| 3352222 | Food freezers, complete units, for freezing and/or storing frozen food (household type) 1/..... | (D) | (D) | (D) | (D) | (D) | (D) |
| 3352223 | Parts and attachments for household refrigerators and freezers 1/..... | 519.5 | r/ 584.8 | 78.4 | 63.7 | 99.4 | 92.4 |
| 3352240 | Household laundry machines and parts..... | 5,174.8 | 4,769.5 | 4,446.5 | 4,162.0 | 4,046.6 | 4,029.7 |
| 3352281 | Water heaters, electric..... | 684.5 | 569.5 | 576.0 | 555.7 | 572.7 | 580.0 |
| 3352283 | Water heaters (except electric)..... | 1,185.4 | 985.6 | 842.0 | 799.3 | 843.6 | 842.8 |
| 3352285 | Household appliances, n.e.c. and parts..... | 2,273.6 | 2,055.9 | 2,008.9 | 2,033.1 | 2,066.1 | 1,998.8 |

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data.

1/Product class code 3352222 is combined with product class code 3352223 to avoid disclosing data for individual companies.

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2004 and 2003
 [Quantity in number of units. Value in thousands of dollars]

| Product code | Product description | Number of companies | 2004 | | 2003 | |
|--------------|---|---------------------|----------|------------|-----------|---------------------|
| | | | Quantity | Value | Quantity | Value |
| | Major household appliances..... | (NA) | (X) | 18,887,496 | (X) | 18,119,261 |
| 3352211 | Electric ranges, ovens, and surface cooking units, equipment, including parts and accessories..... | 16 | (X) | 2,234,406 | (X) | 2,176,065 |
| 3352211318 | Free-standing ranges (all household all types, including apartment house type..... | 10 | | 3,783,099 | 3,577,718 | 1,322,901 |
| | Other than free-standing: | | | | | |
| | Built-in ranges: | | | | | |
| | Built-in ovens: | | | | | |
| 3352211417 | Single oven..... | 6 | | 578,034 | 550,405 | 294,838 |
| 3352211419 | Two ovens..... | 5 | | 110,682 | 103,360 | r/ 88,046 |
| 3352211421 | Surface cooking tops..... | 7 | | 356,018 | 352,700 | 111,265 |
| 3352211525 | Microwave ranges and ovens, including combination microwave/ electric ranges and built-in ovens that utilize microwave and electric thermal energy in one or more of the oven cavities..... | 6 | | 1,103,535 | 1,521,494 | 211,997 |
| 3352211429 | Other electric and electronic ranges and ovens not listed above..... | 5 | | 56,458 | 75,912 | r/ 54,952 r/ 59,407 |
| 3352211290 | Parts and accessories for household electric ranges and ovens, such as burners, rotisseries, oven racks, and broiler pans, sold separately..... | 13 | (X) | 93,049 | (X) | 87,611 |
| 3352213 | Gas household ranges, ovens, and surface cooking units, equipment, including parts and accessories..... | 15 | (X) | 1,030,736 | (X) | 1,017,870 |
| 3352213112 | Standard type, free-standing and built-in installation, including apartment ranges..... | 10 | | 1,841,922 | 1,903,210 | 677,520 |
| 3352213119 | Surface cooking tops (one or more burners)..... | 8 | | 447,297 | 419,237 | r/ 172,257 |
| 3352213121 | Nonstandard types, including wall hung, slide-in or drop-in 1/..... | 5 | (D) | (D) | 301,985 | 88,876 |
| 3352213123 | Other gas household ranges, ovens, hot plates, and surface cooking units not listed above 1/..... | 3 | | 423,108 | 4,735 | 8,290 |
| 3352213190 | Parts and accessories for gas household ranges and ovens, such as burners, rotisseries, oven racks, and broiler pans, sold separately..... | 11 | (X) | 83,824 | (X) | 70,927 |
| 3352215 | Other household ranges and cooking equipment (except gas and electric) and outdoor cooking equipment, including parts and accessories..... | 22 | | 7,924,643 | 8,509,614 | r/ 966,684 |
| | Barbecuers, grills, stoves, braziers, etc., cooking and other cooking: | | | | | |
| | Portable units: | | | | | |
| 3352215111 | Gas fuel or both gas and other fuel..... | 13 | | 4,420,043 | 4,803,261 | 706,138 |
| 3352215113 | Solid fuel (charcoal, wood, coal, etc.) 2/..... | 7 | (D) | (D) | (D) | (D) |
| 3352215115 | Liquid fuel (oil, kerosene, etc.) 2/..... | 2 | | 3,310,071 | 3,526,222 | 121,947 |
| 3352215117 | All other outdoor and other cooking equipment..... | 5 | | 194,529 | 180,131 | 27,521 |
| 3352215190 | Parts and accessories for outdoor and other cooking equipment, sold separately..... | 13 | (X) | 123,466 | (X) r/ | 111,078 |
| 3352221 | Household refrigerators, including combination refrigerator-freezers..... | 12 | | 9,871,107 | 9,440,790 | 4,993,300 |

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2004 and 2003
 [Quantity in number of units. Value in thousands of dollars]

| Product code | Product description | Number of companies | 2004 | | 2003 | |
|--------------|---|---------------------|------------|-----------|-----------|------------|
| | | | Quantity | Value | Quantity | Value |
| | Compression type, fitted with separate external doors, including all combinations with two or more external doors: | | | | | |
| 3352221110 | 15.4 cu. ft. and under (under 438 liters but under 438 liters)..... | 4 | (D) | (D) | 793,494 | 190,650 |
| 3352221117 | 15.5 to 17.4 cu. ft. (438 liters but under 495 liters)..... | 3 | (D) | (D) | 580,139 | r/ 126,929 |
| 3352221119 | 17.5 to 19.4 cu. ft. (495 liters but under 552 liters)..... | 4 | 2,960,431 | 869,219 | 2,797,790 | 845,528 |
| 3352221121 | 19.5 to 21.4 cu. ft. (552 liters but under 608 liters)..... | 7 | 813,833 | 520,975 | 834,767 | 507,613 |
| 3352221123 | 21.5 to 24.4 cu. ft. (608 liters but under 693 liters)..... | 7 | 1,678,903 | 1,006,501 | 1,634,198 | 1,093,635 |
| 3352221125 | 24.4 cu. ft. and over (693 liters and over)..... | 8 | 2,576,626 | 1,986,728 | 2,440,975 | 2,070,021 |
| 3352221126 | Compression type, fitted with only one external door 3/..... | 5 | (D) | (D) | (D) | (D) |
| 3352221131 | Other household refrigerators 3/..... | 2 | 440,380 | 186,371 | 359,427 | 158,924 |
| 3352222 | Food freezers, complete units, for freezing and/or storing frozen food (household type): | | | | | |
| 3352222110 | Upright and chest type freezers 4/..... | 5 | (D) | (D) | (D) | (D) |
| 3352223100 | Parts and attachments for household refrigerators and freezers, excluding compressors and condensing units and ice-making machines 4/..... | 13 | (X) | 519,509 | (X) r/ | 584,832 |
| 3352240 | Household laundry machines (household type defined as having dry linen capacity not exceeding 10 kg (22 lb), including parts and accessories..... | 7 | (X) | 5,174,806 | (X) | 4,769,502 |
| 3352240214 | Washing machines, fully automatic (electric), (coin-operated and noncoin-operated)..... | 7 | 10,229,109 | 3,176,798 | 9,555,896 | 2,913,359 |
| | Dryers, mechanical (incorporating heat): | | | | | |
| 3352240317 | Gas (noncoin-operated)..... | 5 | 1,662,433 | 466,750 | 1,589,893 | 433,432 |
| 3352240319 | Electric (noncoin-operated)..... | 5 | 5,699,624 | 1,318,949 | 5,478,152 | 1,218,996 |
| 3352240321 | Coin-operated..... | 3 | 135,854 | 64,692 | 137,029 | 63,055 |
| 3352240193 | Parts, accessories, and attachments for household laundry equipment, sold separately..... | 7 | (X) | 147,617 | (X) | 140,660 |
| 3352281 | Water heaters, electric (for permanent installation)..... | 7 | 4,673,102 | 684,481 | 4,373,429 | 569,501 |
| | Storage type: | | | | | |
| 3352281111 | 34 gallons and under (under 132 liters)..... | 5 | 1,010,225 | 131,162 | 926,284 | 103,197 |
| 3352281113 | 35 to 44 gallons (132 liters but under 170 liters)..... | 5 | 1,509,044 | 206,580 | 1,392,155 | 165,009 |
| 3352281115 | 45 to 54 gallons (170 liters but under 208 liters)..... | 4 | 1,565,307 | 238,979 | 1,521,193 | 213,246 |
| 3352281117 | 55 gallons and over (208 liters and over) 5/..... | 5 | (D) | (D) | (D) | (D) |
| 3352281119 | Other types, including circulating and portable storage 5/..... | 3 | 588,526 | 107,760 | 533,797 | r/ 88,049 |
| 3352283 | Water heaters (except electric)..... | 7 | 5,337,270 | 1,185,365 | 5,120,879 | 985,575 |
| 3352283118 | Direct fired water heaters, gas or oil..... | 8 | 5,147,190 | 1,142,992 | 4,948,269 | 947,168 |
| 3352283115 | Indirect water heaters, including storage, cast or coil type (less tank); tanks (with or without generator coils); generator coils with tank collar (sold without tank); and instantaneous... | 7 | 190,080 | 42,373 | 172,610 | 38,407 |

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2004 and 2003
 [Quantity in number of units. Value in thousands of dollars]

| Product code | Product description | Number of companies | 2004 | | 2003 | |
|--------------|--|---------------------|------------|-----------|------------|-----------|
| | | | Quantity | Value | Quantity | Value |
| 3352285 | Other household type appliances and parts, n.e.c. | 21 | (X) | 2,273,569 | (X) | 2,055,932 |
| 3352285115 | Dishwashing machines 6/..... | 7 | (D) | (D) | (D) | (D) |
| 3352285120 | All other major household appliances, n.e.c. 6/..... | 4 | 14,037,102 | 2,187,105 | 13,065,025 | 1,983,490 |
| | Parts for other household appliances, n.e.c.: | | | | | |
| 3352285193 | For electric water heaters..... | 6 | (X) | 21,737 | (X) r/ | 16,664 |
| 3352285195 | For nonelectric water heaters..... | 4 | (X) | 15,327 | (X) | 12,025 |
| 3352285197 | For dishwashing machines..... | 5 | (X) | 11,673 | (X) r/ | 16,551 |
| 3352285199 | For other major household appliances, n.e.c. | 6 | (X) | 37,727 | (X) | 27,202 |

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data. X Not applicable.

- 1/For 2004, product code 3352213121 is combined with product code 3352212123 to avoid disclosing data for individual companies.
- 2/Product code 3352215113 is combined with product code 3352215115 to avoid disclosing data for individual companies.
- 3/Product code 3352211126 is combined with product code 3352221131 to avoid disclosing data for individual companies.
- 4/Product code 3352222110 is combined with product code 3352223100 to avoid disclosing data for individual companies.
- 5/Product code 3352281117 is combined with product code 3352281119 to avoid disclosing data for individual companies.
- 6/Product code 3352285115 is combined with product code 3352285120 to avoid disclosing data for individual companies.

Table 3. Shipments, Exports, and Imports of Major Household Appliances: 2004
 [Quantity in number of units. Value in thousands of dollars]

| Product code | Product description | Manufacturers' shipments | | Exports of domestic merchandise 1/ 2/ | | Imports for consumption 1/ 3/ | |
|-------------------------------------|---|--------------------------|-----------|---------------------------------------|---------|-------------------------------|-----------|
| | | Quantity | Value | Quantity | Value | Quantity | Value 4/ |
| 3352211318, 417, 419, 421 | Electric ranges, ovens, surface cooking units, microwave oven combinations..... | 4,827,833 | 1,850,342 | 280,317 | 155,745 | 1,531,839 | 655,842 |
| 3352211525 | Microwave ovens..... | 1,103,535 | 215,103 | 210,109 | 33,235 | (X) | (X) |
| 3352211290 | Parts and accessories for electric ranges and ovens..... | (X) | 93,049 | (X) | 144,971 | (X) | 191,189 |
| 3352213112, 119, 121, 123 | Gas ranges, ovens, and surface cooking units..... | 2,712,327 | 946,912 | 110,829 | 54,896 | 6,035,735 | 1,093,642 |
| 3352213190 | Parts and accessories for gas ranges and ovens, and other cooking equipment..... | (X) | 83,824 | (X) | 25,420 | (X) | 125,317 |
| | Other household ranges and cooking equipment, including barbecuers, grills, stoves, braziers, etc., (except gas and electric) for outdoor cooking, and other cooking: | | | | | | |
| 3352215111 | Gas fuel or both gas and other fuel..... | 4,420,043 | 608,232 | 464,940 | 63,720 | (X) | (X) |
| 3352215113 | Solid fuel (charcoal, wood, and coal) 5/..... | (D) | (D) | 421,820 | 22,943 | 6,510,946 | 79,109 |
| 3352215115 | Liquid fuel (oil, and kerosene) 5/..... | 3,310,071 | 106,566 | 153,320 | 6,510 | 498,592 | 6,391 |
| 3352215117 | All other outdoor cooking equipment..... | 194,529 | 30,559 | 51,550 | 5,774 | 1,150,841 | 73,288 |
| 3352221110, 117, 119, 121, 123, 125 | Compression type refrigerators, fitted with separate external doors, including all combinations with two or more external doors..... | (D) | (D) | 1,028,795 | 518,542 | 2,230,793 | 1,016,245 |
| 3352221126 | Compression type refrigerators, fitted with one external door 6/..... | (D) | (D) | 65,443 | 30,839 | 3,712,948 | 378,469 |
| 3352221131 | Other household refrigerators, noncompression, fitted with one external door 6/..... | 440,380 | 186,371 | 94,786 | 22,822 | 126,647 | 25,635 |
| 3352222110 | Upright and chest type freezers..... | (D) | (D) | 278,747 | 92,689 | 877,825 | 127,064 |
| 3352240214 | Washing machines, fully automatic (electric), (coin-operated and noncoin-operated)..... | 10,229,109 | 3,176,798 | 629,423 | 220,527 | 424,342 | 153,495 |
| 3352240317, 319 | Gas and electric dryers (noncoin-operated)..... | 7,362,057 | 1,785,699 | 446,025 | 80,107 | 1,233,264 | 222,165 |
| 3352240321 | Dryers (coin-operated)..... | 135,854 | 64,692 | 17,132 | 6,249 | 7,434 | 1,752 |
| | Other household type appliances, n.e.c.: | | | | | | |
| 3352285115 | Dishwashing machines, household 7/..... | (D) | (D) | 507,796 | 124,465 | 279,326 | 102,419 |
| 3352285120 | All other major household appliances, n.e.c. 7/... | 14,037,102 | 2,187,105 | 321,434 | 26,237 | 341,784 | 10,109 |
| 3352285197, 199 | Parts for other major household appliances..... | (X) | 49,400 | (X) | 4,821 | (X) | 64,504 |

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified. X Not applicable.

1/For comparison of North American Industry Classification Systems (NAICS)-based product codes with Schedule B export codes, and HTSUSA import codes, see Table 4.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

4/Value represents c.i.f. (cost, insurance, and freight) plus import duties.

5/Product code 3352215113 is combined with product code 3352215115 for manufacturers' shipments to avoid disclosing data for individual companies.

6/Product code 3352221126 is combined with product code 3352221131 for manufacturers' shipments to avoid disclosing data for individual companies.

7/Product code 3352285115 is combined with product code 3352285120 for manufacturers' shipments to avoid disclosing data for individual companies.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2004

| Product code | Description | Export code 1/ | Import code 2/ |
|------------------------------|---|--|--|
| 3352211318, 417, 419, 421 | Electric ranges, ovens, and surface cooking units, microwave oven combinations..... | 8516.60.4000 | 8516.60.4060 8516.60.4070 8516.60.4080 |
| 3352211525 | Microwave ovens..... | 8516.50.0000 | 8516.50.0030 8516.50.0060 8516.50.0090 |
| 3352211290 | Parts and accessories for electric ranges and ovens..... | 8516.90.1700 8516.90.2700 8516.90.9500 | 8516.90.0500 8516.90.1500 8516.90.2500 8516.90.3500 8516.90.4500 8516.90.5000 8516.90.5500 8516.90.6500 8516.90.7500 8516.90.8000 |
| 3352213112, 119, 121, 123 | Gas ranges, ovens, and surface cooking units..... | 7321.11.5000 | 7321.11.1030 7321.11.1060 |
| 3352213190 | Parts and accessories for gas ranges and ovens and other cooking equipment..... | 7321.90.6050 | 7321.90.1000 7321.90.2000 7321.90.4000 7321.90.5000 7321.90.6030 |
| 3352215111 | Gas fuel or both gas and other fuel..... | 7321.81.1000 | 7321.81.1000 |
| 3352215113 | Solid fuel (charcoal, wood, coal, etc.)..... | 7321.83.0050 | 7321.83.0010 7321.83.0050 |
| 3352215115 | Liquid fuel (oil, kerosene, etc.)..... | 7321.82.0000 | 7321.82.0000 |

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2004

| Product code | Description | Export code 1/ | Import code 2/ |
|---|---|--|--|
| 3352215117 | All other outdoor and other cooking equipment..... | 7321.13.0070 | 7321.13.0060 7321.13.0080 |
| 3352221110, 117, 119, 121, 123, 125 | Compression type refrigerators, fitted with separate external doors, including all combinations with two or more external doors)..... | 8418.10.0010 8418.10.0020 8418.10.0030 8418.10.0040 8418.10.0090 | 8418.10.0010 8418.10.0020 8418.10.0030 8418.10.0040 8418.10.0090 |
| 3352221126 | Compression type, fitted with one external door..... | 8418.21.0010 8418.21.0020 8418.21.0030 8418.21.0090 | 8418.21.0010 8418.21.0020 8418.21.0030 8418.21.0090 |
| 3352221131 | Other household refrigerators, noncompression, fitted with one external door..... | 8418.22.0000 8418.29.0000 | 8418.22.0000 8418.29.0000 |
| 3352222110 | Upright and chest type freezers..... | 8418.30.0000 8418.40.0000 | 8418.30.0000 8418.40.0000 |
| 3352240214 | Washing machines, fully automatic (electric), (coin-operated and noncoin-operated)..... | 8450.11.0010 8450.11.0090 8450.12.0000 8450.19.0000 | 8450.11.0010 8450.11.0040 8450.11.0080 8450.12.0000 8450.19.0000 |
| 3352240317, 319 | Dryers (noncoin-operated) and other drying equipment..... | 8451.21.0090 | 8451.21.0090 |

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2004

| Product code | Description | Export code 1/ | Import code 2/ |
|--------------------|---|------------------------------|--|
| 3352240321 | Dryers (coin-operated)..... | 8451.21.0010 | 8451.21.0010 |
| 3352285115 | Dishwashing machines, household..... | 8422.11.0000 | 8422.11.0000 |
| 3352285120 | All other major household appliances..... | 8509.20.0000 8509.30.0000 | 8509.20.0000 8509.30.0000 |
| 3352285197, 199 | Parts for other major household appliances, n.e.c. | 8422.90.0540 8509.90.3000 | 8422.11.0000 8422.90.0200 8422.90.0400 8422.90.0640 8509.90.2500 8509.90.3500 |

1/Source: 2004 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2004).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped,

net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on major household appliances have been collected by the Census Bureau since 1968. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.