

**Table HC5-10a. Appliances by Midwest Census Region,  
Million U.S. Households, 2001**

| Appliance Types<br>and Characteristics    | Total<br>U.S. | Midwest Census Region |                    |                    | RSE<br>Row<br>Factors |
|---|---------------|-----------------------|--------------------|--------------------|-----------------------|
|   |               | Total                 | Census Division    |                    |                       |
|   |               |                       | East North Central | West North Central |                       |
| RSE Column Factor:                        | 0.5           | 1.0                   | 1.2                | 1.5                |                       |
| <b>Total</b> .....                        | 107.0         | 24.5                  | 17.1               | 7.4                | NE                    |
| <b>Kitchen Appliances</b>                 |               |                       |                    |                    |                       |
| <b>Cooking Appliances</b>                 |               |                       |                    |                    |                       |
| <b>Oven</b> .....                         | 101.7         | 23.8                  | 16.6               | 7.2                | NE                    |
| 1 .....                                   | 95.2          | 22.3                  | 15.5               | 6.8                | 0.8                   |
| 2 or More .....                           | 6.5           | 1.6                   | 1.1                | 0.4                | 11.8                  |
| <b>Most Used Oven</b> .....               | 101.7         | 23.8                  | 16.6               | 7.2                | NE                    |
| Electric .....                            | 63.0          | 14.0                  | 9.5                | 4.5                | 4.1                   |
| Natural Gas .....                         | 34.3          | 8.7                   | 6.7                | 2.0                | 6.9                   |
| LPG .....                                 | 4.4           | 1.1                   | 0.5                | 0.6                | 25.1                  |
| Other .....                               | Q             | Q                     | Q                  | Q                  | NF                    |
| <b>Most Used Self-Cleaning Oven</b> ..... | 48.2          | 12.3                  | 8.7                | 3.6                | 3.5                   |
| Continuous .....                          | 11.2          | 3.1                   | 2.2                | 0.9                | 12.7                  |
| Manual Start .....                        | 37.0          | 9.2                   | 6.5                | 2.7                | 4.0                   |
| <b>Range</b> .....                        | 105.7         | 24.1                  | 16.8               | 7.4                | NE                    |
| 1 .....                                   | 100.5         | 22.9                  | 15.9               | 7.0                | 0.8                   |
| 2 or More .....                           | 5.2           | 1.2                   | 0.9                | 0.3                | 13.1                  |
| <b>Most Used Range</b> .....              | 105.7         | 24.1                  | 16.8               | 7.4                | NE                    |
| Electric .....                            | 64.2          | 13.9                  | 9.2                | 4.7                | 4.2                   |
| Natural Gas .....                         | 36.7          | 9.1                   | 7.1                | 2.0                | 7.1                   |
| LPG .....                                 | 4.7           | 1.1                   | 0.5                | 0.6                | 26.3                  |
| Other .....                               | Q             | Q                     | Q                  | Q                  | NF                    |
| <b>Built-in/Stove-top Grill</b> .....     | 2.9           | 0.4                   | 0.2                | Q                  | 31.2                  |
| Electric .....                            | 1.8           | 0.3                   | Q                  | Q                  | 35.9                  |
| Natural Gas .....                         | 1.0           | Q                     | Q                  | Q                  | 31.5                  |
| LPG .....                                 | Q             | Q                     | Q                  | Q                  | NF                    |
| Other .....                               | Q             | Q                     | Q                  | Q                  | NF                    |
| <b>Refrigerators and Freezers</b>         |               |                       |                    |                    |                       |
| <b>Refrigerators</b> .....                | 106.8         | 24.5                  | 17.1               | 7.4                | NE                    |
| 1 .....                                   | 88.7          | 19.7                  | 14.1               | 5.6                | 1.6                   |
| 2 or More .....                           | 18.1          | 4.8                   | 3.0                | 1.7                | 6.3                   |
| <b>Most-Used Refrigerator</b>             |               |                       |                    |                    |                       |
| Defrost Method                            |               |                       |                    |                    |                       |
| Frost-Free .....                          | 96.9          | 21.7                  | 15.2               | 6.4                | 1.6                   |
| Manual .....                              | 9.9           | 2.8                   | 1.9                | 0.9                | 12.0                  |
| <b>Type of Refrigerator</b>               |               |                       |                    |                    |                       |
| 2-Doors (top and bottom) .....            | 73.0          | 16.6                  | 11.5               | 5.1                | 3.0                   |
| 2-Doors (side-by-side) .....              | 27.1          | 6.5                   | 4.8                | 1.7                | 6.9                   |
| Regular (single door) .....               | 5.7           | 1.2                   | 0.7                | 0.5                | 18.4                  |
| Half-Size/Other .....                     | 1.0           | Q                     | Q                  | Q                  | 27.6                  |

See footnotes at end of table.

**Table HC5-10a. Appliances by Midwest Census Region,  
Million U.S. Households, 2001 (Continued)**

| Appliance Types<br>and Characteristics    | Total<br>U.S. | Midwest Census Region |                    |                    | RSE<br>Row<br>Factors |
|---|---------------|-----------------------|--------------------|--------------------|-----------------------|
|   |               | Total                 | Census Division    |                    |                       |
|   |               |                       | East North Central | West North Central |                       |
| RSE Column Factor:                        | 0.5           | 1.0                   | 1.2                | 1.5                |                       |
| <b>Age of Refrigerator</b>                |               |                       |                    |                    |                       |
| Less than 2 Years .....                   | 14.5          | 3.3                   | 2.6                | 0.7                | 7.9                   |
| 2 to 4 Years .....                        | 20.7          | 4.2                   | 3.2                | 1.0                | 8.9                   |
| 5 to 9 Years .....                        | 31.1          | 6.4                   | 4.5                | 1.9                | 3.5                   |
| 10 to 19 Years .....                      | 26.7          | 7.0                   | 4.5                | 2.4                | 6.6                   |
| 20 Years or More .....                    | 7.1           | 2.3                   | 1.3                | 1.0                | 13.4                  |
| Don't Know .....                          | 6.7           | 1.3                   | 1.0                | 0.3                | 14.5                  |
| <b>Size of Refrigerator</b>               |               |                       |                    |                    |                       |
| Very Small (Less than 11 cf) .....        | 0.6           | Q                     | Q                  | Q                  | 40.4                  |
| Small (11-14 cf) .....                    | 5.7           | 1.4                   | 0.9                | 0.5                | 16.3                  |
| Medium (15-18 cf) .....                   | 52.2          | 12.5                  | 8.8                | 3.7                | 3.6                   |
| Large (19-22 cf) .....                    | 43.0          | 9.1                   | 6.3                | 2.8                | 4.0                   |
| Very Large (23 or More cf) .....          | 5.3           | 1.2                   | 1.0                | 0.3                | 18.2                  |
| <b>Through-the-Door Ice/Water Service</b> |               |                       |                    |                    |                       |
| Yes .....                                 | 22.1          | 5.0                   | 3.6                | 1.4                | 7.0                   |
| No .....                                  | 84.9          | 19.5                  | 13.5               | 6.0                | 1.8                   |
| <b>Freezer (separate)</b>                 |               |                       |                    |                    |                       |
| 1 .....                                   | 34.2          | 9.6                   | 6.0                | 3.5                | 4.8                   |
| 2 or more .....                           | 30.8          | 8.6                   | 5.6                | 2.9                | 4.6                   |
|   | 3.4           | 1.0                   | 0.4                | 0.6                | 16.2                  |
| <b>Most-Used Freezer</b>                  |               |                       |                    |                    |                       |
| Defrost Method                            |               |                       |                    |                    |                       |
| Frost-Free .....                          | 12.2          | 2.8                   | 1.8                | 1.0                | 10.2                  |
| Manual .....                              | 22.0          | 6.7                   | 4.2                | 2.5                | 7.0                   |
| <b>Type of Freezer</b>                    |               |                       |                    |                    |                       |
| Upright .....                             | 17.8          | 4.2                   | 2.9                | 1.3                | 5.0                   |
| Chest .....                               | 16.5          | 5.4                   | 3.1                | 2.3                | 7.4                   |
| <b>Age of Freezer</b>                     |               |                       |                    |                    |                       |
| Less than 2 Years .....                   | 3.1           | 0.9                   | 0.5                | 0.3                | 14.0                  |
| 2 to 4 Years .....                        | 4.6           | 1.6                   | 1.1                | 0.5                | 11.3                  |
| 5 to 9 Years .....                        | 6.8           | 1.6                   | 1.0                | 0.7                | 10.3                  |
| 10 to 19 Years .....                      | 11.7          | 3.1                   | 1.9                | 1.1                | 9.6                   |
| 20 Years or More .....                    | 7.3           | 2.4                   | 1.5                | 0.9                | 13.2                  |
| Don't Know .....                          | 0.6           | Q                     | Q                  | Q                  | 33.1                  |
| <b>Freezer Size</b>                       |               |                       |                    |                    |                       |
| Very Small (Less than 11 cf) .....        | 2.5           | 0.8                   | 0.5                | 0.3                | 13.5                  |
| Small (11-14 cf) .....                    | 8.2           | 2.3                   | 1.5                | 0.8                | 11.6                  |
| Medium (15-18 cf) .....                   | 13.3          | 3.7                   | 2.1                | 1.7                | 8.2                   |
| Large (19-22 cf) .....                    | 8.7           | 2.5                   | 1.8                | 0.7                | 10.9                  |
| Very Large (23 or More cf) .....          | 1.6           | 0.3                   | Q                  | Q                  | 23.9                  |
| <b>Other Kitchen Appliances</b>           |               |                       |                    |                    |                       |
| Dishwasher .....                          | 56.7          | 12.1                  | 8.0                | 4.2                | 4.8                   |
| Electric Coffee Makers .....              | 65.5          | 16.1                  | 11.0               | 5.1                | 2.5                   |
| Electric Toaster Oven .....               | 36.1          | 5.5                   | 3.8                | 1.7                | 6.1                   |
| Microwave Oven .....                      | 92.1          | 22.3                  | 15.4               | 6.9                | 1.1                   |

See footnotes at end of table.

**Table HC5-10a. Appliances by Midwest Census Region,  
Million U.S. Households, 2001 (Continued)**

| Appliance Types<br>and Characteristics                           | Total<br>U.S. | Midwest Census Region |                    |                    | RSE<br>Row<br>Factors |
|--|---------------|-----------------------|--------------------|--------------------|-----------------------|
|  |               | Total                 | Census Division    |                    |                       |
|  |               |                       | East North Central | West North Central |                       |
| RSE Column Factor:   | 0.5           | 1.0                   | 1.2                | 1.5                |                       |
| <b>Households With Electric</b>                                  |               |                       |                    |                    |                       |
| <b>Air-Conditioning Equipment</b> .....                          | 82.9          | 20.5                  | 13.6               | 6.8                | 2.2                   |
| Air Conditioners Not Used .....                                  | 2.1           | 0.3                   | Q                  | Q                  | 27.9                  |
| <b>Households Using Electric</b>                                 |               |                       |                    |                    |                       |
| <b>Air-Conditioning<sup>1</sup></b> .....                        | 80.8          | 20.2                  | 13.4               | 6.7                | 2.3                   |
| <b>Type of Electric Air-Conditioning Used</b>                    |               |                       |                    |                    |                       |
| Central Air-Conditioning <sup>2</sup> .....                      | 57.5          | 14.3                  | 9.5                | 4.8                | 3.8                   |
| Without a Heat Pump .....  | 46.2          | 13.6                  | 9.0                | 4.6                | 3.9                   |
| With a Heat Pump .....   | 11.3          | 0.7                   | 0.5                | 0.2                | 22.7                  |
| Room Air-Conditioning .....                                      | 23.3          | 5.8                   | 3.9                | 1.9                | 7.1                   |
| 1 Unit .....   | 12.8          | 3.6                   | 2.4                | 1.1                | 8.3                   |
| 2 Units .....  | 7.5           | 1.7                   | 1.1                | 0.6                | 10.4                  |
| 3 or More Units .....  | 3.0           | 0.5                   | 0.4                | Q                  | 16.7                  |
| <b>Entertainment</b>   |               |                       |                    |                    |                       |
| <b>Color Television Sets</b> .....                               | 105.8         | 24.4                  | 17.0               | 7.4                | NE                    |
| 1 .....  | 29.3          | 6.4                   | 4.1                | 2.4                | 6.3                   |
| 2 .....  | 38.4          | 8.2                   | 5.8                | 2.4                | 3.5                   |
| 3 .....  | 23.3          | 5.9                   | 4.2                | 1.7                | 5.7                   |
| 4 .....  | 10.2          | 2.7                   | 2.2                | 0.6                | 11.7                  |
| 5 or More .....  | 4.5           | 1.1                   | 0.8                | 0.3                | 12.5                  |
| <b>Large Screen Television Sets</b> .....                        | 36.6          | 8.1                   | 6.2                | 1.9                | 7.1                   |
| 1 .....  | 27.3          | 5.9                   | 4.5                | 1.4                | 7.5                   |
| 2 .....  | 7.9           | 1.8                   | 1.4                | 0.4                | 12.2                  |
| 3 or More .....  | 1.4           | 0.4                   | Q                  | Q                  | 41.5                  |
| <b>Cable/Satellite Dish Antennas</b> .....                       | 82.2          | 19.1                  | 13.3               | 5.7                | 1.8                   |
| Cable Network .....  | 68.3          | 15.1                  | 10.9               | 4.2                | 3.3                   |
| Satellite Dish Antenna .....                                     | 12.0          | 3.4                   | 2.1                | 1.4                | 8.8                   |
| Both .....   | 1.9           | 0.5                   | 0.4                | Q                  | 19.8                  |
| <b>Video Cassette Recorders<br/>(VCRs) and DVD Players</b> ..... | 96.1          | 22.5                  | 15.6               | 6.8                | 1.1                   |
| 1 .....  | 52.3          | 11.3                  | 7.5                | 3.9                | 4.0                   |
| 2 .....  | 29.0          | 7.1                   | 4.9                | 2.2                | 6.3                   |
| 3 or More .....  | 14.7          | 4.0                   | 3.3                | 0.8                | 8.8                   |
| <b>Stereo Equipment</b> .....                                    | 80.3          | 18.2                  | 12.9               | 5.3                | 1.5                   |
| Portable/Boom Box .....  | 26.1          | 6.9                   | 4.8                | 2.1                | 6.4                   |
| Compact Stereo System .....                                      | 36.5          | 7.8                   | 5.7                | 2.1                | 3.8                   |
| Component Stereo System .....                                    | 36.3          | 9.0                   | 6.6                | 2.4                | 4.5                   |
| Other System .....   | 3.1           | 0.9                   | 0.6                | 0.2                | 19.2                  |
| <b>Clothes Washers and Dryers</b>                                |               |                       |                    |                    |                       |
| <b>Clothes Washer</b> .....                                      | 84.1          | 19.8                  | 13.4               | 6.4                | 2.0                   |
| Top loading .....  | 81.6          | 19.0                  | 12.9               | 6.1                | 2.1                   |
| Front loading .....  | 2.5           | 0.7                   | 0.5                | 0.2                | 19.9                  |

See footnotes at end of table.

**Table HC5-10a. Appliances by Midwest Census Region,  
Million U.S. Households, 2001 (Continued)**

| Appliance Types<br>and Characteristics           | Total<br>U.S. | Midwest Census Region |                    |                    | RSE<br>Row<br>Factors |
|--|---------------|-----------------------|--------------------|--------------------|-----------------------|
|  |               | Total                 | Census Division    |                    |                       |
|  |               |                       | East North Central | West North Central |                       |
| RSE Column Factor:                               | 0.5           | 1.0                   | 1.2                | 1.5                |                       |
| <b>Clothes Dryer</b> .....                       | 78.8          | 19.2                  | 13.0               | 6.2                | 2.1                   |
| Electric .....                                   | 61.1          | 13.4                  | 8.5                | 5.0                | 4.0                   |
| Natural Gas .....                                | 16.9          | 5.4                   | 4.4                | 1.1                | 9.2                   |
| LPG .....  | 0.8           | 0.4                   | 0.2                | Q                  | 34.8                  |
| <b>Water Heater Equipment</b>                    |               |                       |                    |                    |                       |
| <b>Water Heaters</b> .....                       | 107.0         | 24.5                  | 17.1               | 7.4                | NE                    |
| Electric .....                                   | 40.8          | 6.3                   | 4.2                | 2.2                | 6.8                   |
| For One Housing Unit .....                       | 37.7          | 5.7                   | 3.6                | 2.1                | 8.6                   |
| For Two or More Units .....                      | 3.1           | 0.6                   | Q                  | Q                  | 30.6                  |
| Natural Gas .....                                | 58.0          | 16.9                  | 12.4               | 4.5                | 3.9                   |
| For One Housing Unit .....                       | 50.9          | 15.2                  | 11.1               | 4.2                | 4.8                   |
| For Two or More Units .....                      | 7.1           | 1.7                   | 1.3                | 0.3                | 20.4                  |
| Fuel Oil .....                                   | 4.6           | Q                     | Q                  | Q                  | 20.9                  |
| For One Housing Unit .....                       | 3.0           | Q                     | Q                  | Q                  | 26.6                  |
| For Two or More Units .....                      | 1.6           | Q                     | Q                  | Q                  | 37.0                  |
| LPG .....  | 2.9           | 1.3                   | 0.5                | 0.7                | 23.0                  |
| Other .....                                      | 0.5           | Q                     | Q                  | Q                  | 58.5                  |
| No Water Heater .....                            | Q             | Q                     | Q                  | Q                  | NF                    |
| <b>Water Heater (for one housing unit)</b> ..... | 95.0          | 22.2                  | 15.1               | 7.0                | 1.9                   |
| Age  |               |                       |                    |                    |                       |
| Less than 2 Years .....                          | 11.4          | 2.9                   | 1.8                | 1.0                | 11.4                  |
| 2 to 4 Years .....                               | 17.3          | 3.9                   | 2.9                | 1.0                | 7.0                   |
| 5 to 9 Years .....                               | 25.3          | 6.3                   | 4.4                | 1.9                | 7.8                   |
| 10 to 19 Years .....                             | 21.7          | 5.3                   | 3.5                | 1.8                | 6.2                   |
| 20 Years or More .....                           | 7.4           | 1.6                   | 1.0                | 0.7                | 13.0                  |
| Don't Know .....                                 | 9.4           | 1.9                   | 1.3                | 0.6                | 11.5                  |
| No Separate Heater .....                         | 2.5           | 0.2                   | Q                  | Q                  | 29.1                  |
| No Water Heater .....                            | Q             | Q                     | Q                  | Q                  | NF                    |
| Water Heaters for                                |               |                       |                    |                    |                       |
| Two or More Units .....                          | 11.9          | 2.3                   | 2.0                | 0.4                | 19.8                  |
| Size   |               |                       |                    |                    |                       |
| Small .....                                      | 12.2          | 3.0                   | 2.0                | 1.0                | 12.7                  |
| Medium .....                                     | 49.4          | 11.8                  | 8.4                | 3.4                | 4.0                   |
| Large .....                                      | 25.6          | 5.8                   | 3.9                | 1.9                | 8.1                   |
| Don't Know .....                                 | 3.8           | 1.1                   | 0.6                | 0.5                | 23.4                  |
| No Separate Heater .....                         | 2.5           | 0.2                   | Q                  | Q                  | 29.1                  |
| No Water Heater .....                            | Q             | Q                     | Q                  | Q                  | NF                    |
| Water Heaters for                                |               |                       |                    |                    |                       |
| Two or More Units .....                          | 11.9          | 2.3                   | 2.0                | 0.4                | 19.8                  |
| <b>Heaters (other)</b>                           |               |                       |                    |                    |                       |
| Hot Tub or Spa (heaters) .....                   | 4.4           | 0.6                   | 0.4                | 0.2                | 19.5                  |
| Electric .....                                   | 3.3           | 0.5                   | Q                  | Q                  | 20.3                  |
| Natural Gas .....                                | 0.9           | Q                     | Q                  | Q                  | 33.7                  |
| LPG/Other .....                                  | Q             | Q                     | Q                  | Q                  | NF                    |
| Portable Space (heaters) .....                   | 13.4          | 3.1                   | 2.0                | 1.1                | 7.7                   |
| Electric .....                                   | 11.9          | 2.7                   | 1.7                | 1.1                | 8.5                   |
| Kerosene .....                                   | 1.8           | 0.5                   | 0.4                | Q                  | 15.3                  |

See footnotes at end of table.

**Table HC5-10a. Appliances by Midwest Census Region,  
Million U.S. Households, 2001 (Continued)**

| Appliance Types<br>and Characteristics           | Total<br>U.S. | Midwest Census Region |                    |                    | RSE<br>Row<br>Factors |
|--|---------------|-----------------------|--------------------|--------------------|-----------------------|
|  |               | Total                 | Census Division    |                    |                       |
|  |               |                       | East North Central | West North Central |                       |
| RSE Column Factor:                               | 0.5           | 1.0                   | 1.2                | 1.5                |                       |
| Swimming Pool (heaters) .....                    | 1.2           | Q                     | Q                  | Q                  | 34.9                  |
| Natural Gas .....                                | 0.8           | Q                     | Q                  | Q                  | 43.2                  |
| Electric/LPG/Other .....                         | 0.4           | Q                     | Q                  | Q                  | 53.1                  |
| Waterbed Heaters .....                           | 5.5           | 2.1                   | 1.4                | 0.7                | 10.7                  |
| 1 .....  | 4.8           | 1.9                   | 1.3                | 0.6                | 11.3                  |
| 2 or More .....                                  | 0.8           | Q                     | Q                  | Q                  | 39.0                  |
| Used All Year .....                              | 5.0           | 1.9                   | 1.2                | 0.6                | 11.5                  |
| 1 .....  | 4.3           | 1.7                   | 1.1                | 0.6                | 12.6                  |
| 2 or More .....                                  | 0.6           | Q                     | Q                  | Q                  | 44.0                  |
| <b>Other Appliances</b>                          |               |                       |                    |                    |                       |
| Automobile Block/Engine/<br>Battery Heater ..... | 2.3           | 0.8                   | Q                  | 0.5                | 23.4                  |
| Ceiling Fans .....                               | 69.6          | 18.0                  | 12.3               | 5.8                | 2.7                   |
| 1 .....  | 22.0          | 5.8                   | 3.9                | 1.9                | 6.2                   |
| 2 .....  | 15.1          | 4.4                   | 3.0                | 1.4                | 9.4                   |
| 3 or more .....                                  | 32.6          | 7.9                   | 5.4                | 2.5                | 4.9                   |
| Electric Dehumidifier .....                      | 12.1          | 6.1                   | 4.1                | 2.0                | 9.6                   |
| Electric Humidifier .....                        | 15.6          | 7.2                   | 4.8                | 2.4                | 7.6                   |
| Evaporative/Swamp Cooler .....                   | 2.7           | Q                     | Q                  | Q                  | 33.2                  |
| Heated Aquarium .....                            | 4.5           | 1.4                   | 0.9                | 0.4                | 13.0                  |
| Outdoor Gas Light <sup>3</sup> .....             | 0.5           | Q                     | Q                  | Q                  | 31.0                  |
| Pumps (Electric) .....                           | 21.2          | 5.3                   | 4.0                | 1.2                | 9.1                   |
| Rechargeable Tools/Appliances .....              | 47.7          | 12.5                  | 8.7                | 3.7                | 3.2                   |
| Swimming Pool (with filters) .....               | 6.5           | 1.1                   | 1.0                | Q                  | 14.0                  |
| Well Water .....                                 | 13.8          | 4.1                   | 3.2                | 1.0                | 14.1                  |

<sup>1</sup> The number of households, where the end use is electric air-conditioning, does **not** include households that did not use their equipment (2.1 million). It does include the small number of households where the fuel for central air-conditioning equipment was something other than electricity; those households were treated as if the fuel was electricity.

<sup>2</sup> The 2001 RECS reported 800,000 households having both central air-conditioning and room/wall air-conditioners, with 600,000 households using both central air-conditioning and 200,000 households using only room/wall air-conditioners. These room/wall air-conditioners are not included in the count of 23.3 million households using room/wall air-conditioners. Note: This applies to all occurrences of central air-conditioning.

<sup>3</sup> Includes LPG and natural gas.

cf = Cubic feet.

NE = RSE row factor not estimated because RSE's for all statistics in this row are between 0.0 and 1.0 percent.

NF = No applicable RSE row factor.

Q = Data withheld either because the Relative Standard Error (RSE) was greater than 50 percent or fewer than 10 households were sampled.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding column and row factors. • Because of rounding, data may not sum to totals.

• See "Glossary" for definition of terms used in this report.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A, B, C of the 2001 Residential Energy Consumption Survey.