Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|                                      |                                      | All Buildings*<br>Using Electricity    | ,   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|--------------------------------------|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|                                      |                                      |  |   | Primary                    | Si                         | te                        |                               |
|                                      | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*                       | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Building Floorspace                  |                                      |  |   |                            |                            |                           |                               |
| (Square Feet)                        |                                      |  |   |                            |                            |                           |                               |
| 1,001 to 5,000                       | 2,384                                | 6,346                                  | 2.7   | 1,164                      | 386                        | 113                       | 10,348                        |
| 5,001 to 10,000                      | 834                                  | 6,197                                  | 7.4   | 790                        | 262                        | 77                        | 7,296                         |
| 10,001 to 25,000                     | 727                                  | 11,370                                 | 15.6  | 1,229                      | 407                        | 119                       | 10,001                        |
| 25,001 to 50,000                     | 234                                  | 8,385                                  | 35.8  | 1,058                      | 350                        | 103                       | 7,871                         |
| 50,001 to 100,000                    | 128                                  | 9,031                                  | 70.5  | 1,223                      | 405                        | 119                       | 8,717                         |
| 100,001 to 200,000                   | 65                                   | 9,031                                  | 139.0   | 1,458                      | 483                        | 141                       | 9,500                         |
| 200,001 to 500,000                   | 24                                   | •                                      | 289.8   | -                          | 361                        | 106                       | •                             |
| Over 500,000                         | 7                                    | 7,051<br>5,908                         | 896.1   | 1,090<br>1,157             | 383                        | 112                       | 7,323<br>7,977                |
| Principal Building Activity          |                                      |  |   |                            |                            |                           |                               |
| Education                            | 384                                  | 9,871                                  | 25.7  | 1,121                      | 371                        | 109                       | 8,111                         |
|                                      |                                      | •                                      |   |                            |                            |                           | ,                             |
| Food Sales                           | 221                                  | 1,237                                  | 5.6   | 629                        | 208                        | 61                        | 4,627                         |
| Food Service                         | 297                                  | 1,654                                  | 5.6   | 654                        | 217                        | 63                        | 5,176                         |
| Health Care                          | 129                                  | 3,163                                  | 24.6  | 748                        | 248                        | 73                        | 4,882                         |
| Inpatient                            | 8                                    | 1,905                                  | 241.4   | 539                        | 178                        | 52                        | 3,198                         |
| Outpatient                           | 121                                  | 1,258                                  | 10.4  | 209                        | 69                         | 20                        | 1,684                         |
| Lodging                              | 142                                  | 5,096                                  | 35.8  | 709                        | 235                        | 69                        | 5,288                         |
| Retail (Other Than Mall)             | 443                                  | 4,317                                  | 9.7   | 637                        | 211                        | 62                        | 5,132                         |
| Office                               | 824                                  | 12,208                                 | 14.8  | 2,170                      | 719                        | 211                       | 17,050                        |
| Public Assembly                      | 274                                  | 3,935                                  | 14.4  | 506                        | 167                        | 49                        | 3,943                         |
| Public Order and Safety              | 71                                   | 1,090                                  | 15.5  | 172                        | 57                         | 17                        | 1,216                         |
| Religious Worship                    | 370                                  | 3,754                                  | 10.1  | 188                        | 62                         | 18                        | 1,628                         |
| Service                              | 601                                  | 3,982                                  | 6.6   | 451                        | 149                        | 44                        | 3,485                         |
| Warehouse and Storage                | 464                                  | 9,425                                  | 20.3  | 738                        | 244                        | 72                        | 5,034                         |
| Other                                | 76                                   | 1,729                                  | 22.7  | 401                        | 133                        | 39                        | 3,049                         |
| Vacant                               | 106                                  | 1,846                                  | 17.3  | 46                         | 15                         | 4                         | 412                           |
| Year Constructed                     |                                      |  |   |                            |                            |                           |                               |
| Before 1920                          | 318                                  | 3,730                                  | 11.7  | 271                        | 90                         | 26                        | 2,319                         |
| 1920 to 1945                         | 499                                  | 6,595                                  | 13.2  | 626                        | 208                        | 61                        | 5,123                         |
| 1946 to 1959                         | 541                                  | 6,838                                  | 12.6  | 696                        | 231                        | 68                        | 5,729                         |
| 1960 to 1969                         | 571                                  | 8,057                                  | 14.1  | 989                        | 327                        | 96                        | 7,714                         |
|                                      |                                      | · ·                                    |   |                            |                            |                           | ·                             |
| 1970 to 1979                         | 700                                  | 10,555                                 | 15.1  | 1,726                      | 572                        | 168                       | 12,637                        |
| 1980 to 1989                         | 668                                  | 10,154                                 | 15.2  | 1,892                      | 627                        | 184                       | 13,902                        |
| 1990 to 1999<br>2000 to 2003         | 809<br>298                           | 12,078<br>5,299                        | 14.9<br>17.8  | 2,082<br>884               | 690<br>293                 | 202<br>86                 | 15,236<br>6,373               |
|                                      | _30                                  | -,00                                   |   |                            |                            |                           | -,                            |
| Census Region and Division Northeast | 710                                  | 12,809                                 | 18.0  | 1,519                      | 503                        | 147                       | 14,262                        |
| New England                          | 228                                  | 2,942                                  | 12.9  | 326                        | 108                        | 32                        | 3,125                         |
|                                      |                                      | · ·                                    |   |                            |                            |                           | ·                             |
| Middle Atlantic                      | 482                                  | 9,867                                  | 20.5  | 1,192                      | 395                        | 116                       | 11,137                        |
| Midwest                              | 1,189                                | 16,701                                 | 14.0  | 2,224                      | 737                        | 216                       | 14,172                        |
| East North Central                   | 659                                  | 11,373                                 | 17.3  | 1,580                      | 524                        | 153                       | 10,220                        |
| West North Central                   | 531                                  | 5,328                                  | 10.0  | 643                        | 213                        | 62                        | 3,952                         |
| South                                | 1,654                                | 22,766                                 | 13.8  | 3,858                      | 1,278                      | 375                       | 25,540                        |
| South Atlantic                       | 835                                  | 12,097                                 | 14.5  | 2,166                      | 717                        | 210                       | 14,155                        |
| East South Central                   | 312                                  | 3,220                                  | 10.3  | 515                        | 171                        | 50                        | 3,348                         |
| West South Central                   | 507                                  | 7,449                                  | 14.7  | 1,177                      | 390                        | 114                       | 8,037                         |
| West                                 | 851                                  | 11,030                                 | 13.0  | 1,568                      | 519                        | 152                       | 15,057                        |
| Mountain                             | 285                                  | 3,633                                  | 12.7  | 576                        | 191                        | 56                        | 4,272                         |
|                                      |                                      | 7,397                                  | 13.1  | 992                        |                            |                           |                               |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|   |                                      | All Buildings*<br>Using Electricity    | /   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|---|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|   |                                      |  |   | Primary                    | Si                         | te                        |                               |
|   | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*  | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Climate Zone: 30-Year Average                         |                                      |  |   |                            |                            |                           |                               |
| Under 2,000 CDD and                                   | 000                                  | 40.000                                 | 40.0  | 4 000                      | 400                        | 400                       | 0.405                         |
| More than 7,000 HDD                                   | 809                                  | 10,393                                 | 12.8  | 1,232                      | 408                        | 120                       | 9,135                         |
| 5,500-7,000 HDD                                       | 1,129                                | 17,076                                 | 15.1  | 2,305                      | 763                        | 224                       | 16,298                        |
| 4,000-5,499 HDD                                       | 642                                  | 11,375                                 | 17.7  | 1,713                      | 567                        | 166                       | 13,354                        |
| Fewer than 4,000 HDD                                  | 1,193                                | 15,172                                 | 12.7  | 2,259                      | 748                        | 219                       | 18,211                        |
| 2,000 CDD or More and                                 |                                      |  |   |                            |                            |                           |                               |
| Fewer than 4,000 HDD                                  | 631                                  | 9,290                                  | 14.7  | 1,659                      | 549                        | 161                       | 12,034                        |
| Number of Floors One                                  | 2,919                                | 24,935                                 | 8.5   | 3 442                      | 1,140                      | 334                       | 26,809                        |
|   | ·                                    | · ·                                    |   | 3,442                      | •                          |                           | •                             |
| Three   | 1,011                                | 15,978                                 | 15.8<br>22.1  | 2,080                      | 689                        | 202<br>84                 | 16,066                        |
| Three Four to Nine                                    | 333                                  | 7,381                                  | 78.7  | 863                        | 286                        |                           | 6,389<br>12.517               |
| Ten or More   | 128<br>12                            | 10,065<br>4,947                        | 420.0   | 1,796<br>987               | 595<br>327                 | 174<br>96                 | 7,251                         |
| Elevators and Escalators<br>(more than one may apply) |                                      | 22                                     |   |                            |                            |                           |                               |
| Any Elevators   | 305                                  | 24,495                                 | 80.3  | 4,289                      | 1,421                      | 416                       | 30,227                        |
| Number of Elevators                                   |                                      |  |   |                            |                            |                           |                               |
| One   | 205                                  | 8,107                                  | 39.6  | 1,069                      | 354                        | 104                       | 7,712                         |
| Two to Five   | 88                                   | 10,120                                 | 115.3   | 1,767                      | 585                        | 172                       | 12,340                        |
| Six or More   | 13                                   | 6,268                                  | 491.5   | 1,453                      | 481                        | 141                       | 10,175                        |
| Any Escalators  | 6                                    | 2,350                                  | 388.7   | 583                        | 193                        | 57                        | 4,096                         |
| Number of Workers (main shift)                        | 0.445                                | 44.004                                 | 5.0   | 1 100                      | 270                        | 100                       | 0.502                         |
| Fewer than 5  | 2,415                                | 14,061                                 | 5.8   | 1,122                      | 372                        | 109<br>73                 | 9,503                         |
| 5 to 9  | 775                                  | 6,147                                  | 7.9   | 749                        | 248                        |                           | 6,390                         |
| 10 to 19  | 563                                  | 7,803                                  | 13.9  | 915                        | 303<br>524                 | 89                        | 7,647                         |
| 20 to 49  | 397<br>147                           | 10,962<br>7,934                        | 27.6<br>53.8  | 1,581<br>1,218             | 403                        | 154<br>118                | 11,966<br>8,532               |
|   | 77                                   | 6,871                                  | 89.7  | 1,216                      | 460                        | 135                       | 9,768                         |
| 100 to 249<br>250 or More                             | 30                                   | 9,528                                  | 320.4   | 2,195                      | 727                        | 213                       | 15,224                        |
| Weekly Operating Hours                                |                                      |  |   |                            |                            |                           |                               |
| Fewer than 40   | 866                                  | 5,900                                  | 6.8   | 272                        | 90                         | 26                        | 2,489                         |
| 40 to 48  | 1,105                                | 11,571                                 | 10.5  | 1,199                      | 397                        | 116                       | 9,577                         |
| 49 to 60  | 1,055                                | 15,702                                 |   | 1,805                      | 598                        | 175                       | 14,232                        |
| 61 to 84  | 580                                  | 10,312                                 |   | 1,500                      | 497                        | 146                       | 11,559                        |
| 85 to 167   | 376                                  | 6,941                                  | 18.5  | 1,579                      | 523                        | 153                       | 11,188                        |
| Open Continuously                                     | 422                                  | 12,881                                 | 30.5  | 2,813                      | 932                        | 273                       | 19,987                        |
| Ownership and Occupancy                               |                                      |  |   |                            |                            |                           |                               |
| Nongovernment Owned                                   | 3,783                                | 48,012                                 | 12.7  | 6,944                      | 2,300                      | 674                       | 54,122                        |
| Owner Occupied  | 1,817                                | 23,454                                 | 12.9  | 3,280                      | 1,086                      | 318                       | 25,441                        |
| Nonowner Occupied                                     | 1,885                                | 23,258                                 | 12.3  | 3,639                      | 1,205                      | 353                       | 28,446                        |
| Unoccupied  | 81                                   | 1,299                                  | 16.0  | 25                         | 8                          | 2                         | Q                             |
| Government Owned                                      | 620                                  | 15,295                                 | 24.7  | 2,224                      | 737                        | 216                       | 14,910                        |
| Federal   | 46                                   | 1,951                                  | 42.8  | 395                        | 131                        | 38                        | 2,159                         |
| State   | 163                                  | 3,786                                  | 23.2  | 616                        | 204                        | 60                        | 3,973                         |
| Local   | 411                                  | 9,558                                  | 23.2  | 1,213                      | 402                        | 118                       | 8,777                         |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|   |                                      | All Buildings*<br>Using Electricity    | /   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures           |
|---|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|---------------------------------------|
|   |                                      |  |   | Primary                    | Si                         | te                        |                                       |
|   | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars)         |
| All Buildings*                                      | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                                |
| Vacancy Status                                      | 0.5                                  | 4 400                                  | 47.5  | 00                         | 0                          | 0                         | 050                                   |
| Completely Vacant                                   | 85                                   | 1,489                                  | 17.5  | 28                         | 9                          | 3                         | 258                                   |
| Mostly Vacant                                       | Q                                    | Q                                      | Q   | Q                          | Q                          | Q                         | Q                                     |
| Partially Vacant                                    | 499                                  | 12,199                                 | 24.4  | 1,736                      | 575                        | 169                       | 13,209                                |
| Not At All Vacant                                   | 3,798                                | 49,262                                 | 13.0  | 7,386                      | 2,446                      | 717                       | 55,411                                |
| Number of Establishments                            | 0.504                                | 44.070                                 | 40.4  | 0.454                      | 0.400                      | 007                       | 40.070                                |
| One   | 3,591                                | 44,379                                 | 12.4  | 6,454                      | 2,138                      | 627                       | 48,376                                |
| 2 to 5  | 635                                  | 10,921                                 | 17.2  | 1,517                      | 502                        | 147                       | 11,440                                |
| 6 to 10   | 55                                   | 1,958                                  | 35.7  | 348                        | 115                        | 34                        | 2,632                                 |
| 11 to 20  | 23                                   | 1,951                                  | 85.7  | 295                        | 98                         | 29                        | 2,268                                 |
| More than 20  | 14                                   | 2,609                                  | 181.1   | 526                        | 174                        | 51                        | 4,057                                 |
| Currently Unoccupied                                | 85                                   | 1,489                                  | 17.5  | 28                         | 9                          | 3                         | 258                                   |
| Predominant Exterior<br>Wall Material               |                                      |  |   |                            |                            |                           |                                       |
| Brick, Stone or Stucco                              | 1,991                                | 32,295                                 | 16.2  | 4,549                      | 1,507                      | 442                       | 34,133                                |
| Concrete (Block or Poured)                          | 756                                  | 10,738                                 | 14.2  | 1,599                      | 530                        | 155                       | 12,417                                |
| Concrete Panels                                     | 122                                  | 6,383                                  | 52.2  | 1,205                      | 399                        | 117                       | 8,417                                 |
| Siding or Shingles                                  | 742                                  | 3,975                                  | 5.4   | 452                        | 150                        | 44                        | 4,007                                 |
| Metal Panels  | 714                                  | 7,377                                  | 10.3  | 897                        | 297                        | 87                        | 6,726                                 |
| Window Glass  | 17                                   | ·                                      |   | 201                        |                            |                           |                                       |
|   |                                      | 1,024                                  | 60.1  |                            | 67                         | 20                        | 1,462                                 |
| Other No One Major Type                             | 44<br>Q                              | 1,108<br>Q                             | 25.4<br>Q   | 190<br>Q                   | 63<br>Q                    | 18<br>Q                   | 1,416<br>Q                            |
| Predominant Roof Material                           |                                      |  |   |                            |                            |                           |                                       |
| Built-Up  | 1,008                                | 20.781                                 | 20.6  | 3,143                      | 1,041                      | 305                       | 24,170                                |
|   |                                      | -, -                                   |   |                            |                            | 121                       | •                                     |
| Shingles (Not Wood)                                 | 1,283                                | 9,871                                  | 7.7   | 1,247                      | 413                        |                           | 10,264                                |
| Metal Surfacing                                     | 1,134                                | 11,234                                 | 9.9   | 1,184                      | 392                        | 115                       | 8,837                                 |
| Synthetic or Rubber                                 | 504                                  | 14,711                                 | 29.2  | 2,686                      | 890                        | 261                       | 18,633                                |
| Slate or Tile                                       | 257                                  | 2,438                                  | 9.5   | 313                        | 104                        | 30                        | 2,816                                 |
| Wooden Materials                                    | 119                                  | 881                                    | 7.4   | 111                        | 37                         | 11                        | 869                                   |
| Concrete  | 61                                   | 2,231                                  | 36.7  | 299                        | 99                         | 29                        | 2,029                                 |
| Other   | 13                                   | 595                                    | 44.4  | 125                        | 41                         | 12                        | 845                                   |
| No One Major Type                                   | 25                                   | 565                                    | 22.7  | 61                         | 20                         | 6                         | 568                                   |
| Renovations in Buildings<br>Constructed Before 1980 |                                      |  |   |                            |                            |                           |                                       |
| (more than one may apply)                           |                                      |  |   |                            |                            |                           |                                       |
| Any Type of Renovation                              |                                      |  |   |                            |                            |                           |                                       |
| Since 1980  | 1,006                                | 17,638                                 | 17.5  | 2,356                      | 780                        | 229                       | 17,830                                |
| Addition or Annex                                   | 256                                  | 6,551                                  | 25.6  | 951                        | 315                        | 92                        | 6,501                                 |
| Reduction In Floorspace                             | 22                                   | 1,012                                  | 46.1  | 158                        | 52                         | 15                        | 1,180                                 |
| Cosmetic Improvements                               | 735                                  | 13,002                                 | 17.7  | 1,812                      | 600                        | 176                       | 13,845                                |
| Wall or Roof Replacement                            | 365                                  | 8,056                                  | 22.0  | 1,046                      | 347                        | 102                       | 8,129                                 |
| Interior Wall                                       | 000                                  | 0,000                                  | 22.0  | .,0.0                      | 0.7                        | 102                       | 5,120                                 |
| Re-Configuration                                    | 407                                  | 8,502                                  | 20.9  | 1,212                      | 401                        | 118                       | 9,035                                 |
| HVAC Equipment Upgrade                              | 440                                  | 10,765                                 | 24.5  | 1,591                      | 527                        | 154                       | 11,822                                |
| Lighting Upgrade                                    | 453                                  | 10,763                                 | 22.7  | 1,442                      | 478                        | 140                       | 10,741                                |
|   |                                      | ·                                      |   |                            |                            |                           | · · · · · · · · · · · · · · · · · · · |
| Window Replacement                                  | 307                                  | 6,277                                  | 20.5  | 757                        | 251                        | 73                        | 6,168                                 |
| Plumbing System Upgrade                             | 313                                  | 7,141                                  | 22.8  | 947                        | 314                        | 92                        | 7,360                                 |
| Insulation Upgrade                                  | 225                                  | 4,012                                  | 17.8  | 526                        | 174                        | 51                        | 4,065                                 |
| Other Renovation                                    | 19                                   | 523                                    | 27.3  | 49                         | 16                         | 5                         | 517                                   |
| No Renovations Since 1980                           | 1,622                                | 18,137                                 | 11.2  | 1,953                      | 647                        | 190                       | 15,691                                |
| Building Newer than 1980                            | 1,776                                | 27,532                                 | 15.5  | 4,859                      | 1,609                      | 472                       | 35,511                                |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|  |                                      | All Buildings*<br>Using Electricity    | ,   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|--|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|  |                                      |  |   | Primary                    | Si                         | te                        |                               |
|  | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*   | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Energy Sources (more than                                  |                                      |  |   |                            |                            |                           |                               |
| one may apply)   | 4 404                                | 00.007                                 | 44.4  | 0.400                      | 0.007                      | 000                       | 00.000                        |
| Electricity  | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Natural Gas  | 2,390                                | 43,461                                 | 18.2  | 6,524                      | 2,161                      | 633                       | 48,584                        |
| Fuel Oil   | 448                                  | 15,142                                 |   | 2,578                      | 854                        | 250                       | 18,631                        |
| District Heat  |                                      | 5,443                                  |   | 1,011                      | 335                        | 98                        | 6,519                         |
| District Chilled Water                                     |                                      | 2,853                                  |   | 580                        | 192                        | 56                        | 3,667                         |
| Propane  |                                      | 7,067                                  | 14.2  | 1,022                      | 339                        | 99                        | 7,234                         |
| Other  | 126                                  | 1,380                                  | 11.0  | 233                        | 77                         | 23                        | 1,539                         |
| Space-Heating Energy Sources                               | 1,766                                | 28,600                                 | 16.2  | 4,696                      | 1 555                      | 456                       | 34.865                        |
| Electricity  | ,                                    | · ·                                    | 12.7  |                            | 1,555                      | 266                       |                               |
| Electricity Main   | ·                                    | 15,996                                 |   | 2,739                      | 907<br>648                 |                           | 20,527                        |
| Electricity Secondary                                      |                                      | 12,604                                 | 24.8  | 1,957                      |                            | 190                       | 14,338                        |
| Other Excluding Electricity<br>Buildings without Heating   |                                      | 31,391<br>3,315                        | 14.2<br>7.7   | 4,191<br>281               | 1,388<br>93                | 407<br>27                 | 31,387<br>2,779               |
| Primary Space-Heating                                      |                                      |  |   |                            |                            |                           |                               |
| Energy Source  |                                      |  |   |                            |                            |                           |                               |
| Electricity  | 1,258                                | 15,996                                 | 12.7  | 2,739                      | 907                        | 266                       | 20,527                        |
| Natural Gas  | 1,998                                | 32,963                                 | 16.5  | 4,724                      | 1,565                      | 459                       | 35,355                        |
| Fuel Oil   | 282                                  | 3,818                                  | 13.5  | 232                        | 77                         | 23                        | 2,246                         |
| District Heat  |                                      | 4,907                                  | 77.4  | 935                        | 310                        | 91                        | 5,910                         |
| Propane  |                                      | 1,946                                  | 6.4   | 211                        | 70                         | 20                        | 1,909                         |
| Other  | 65                                   | 361                                    | 5.5   | 47                         | 16                         | 5                         | 306                           |
| Cooling Energy Sources                                     |                                      |  |   |                            |                            |                           |                               |
| Electricity  | 3,589                                | 54,321                                 | 15.1  | 8,386                      | 2,778                      | 814                       | 63,402                        |
| Other Excluding Electricity                                | ,                                    | 2,604                                  | 76.5  | 469                        | 156                        | 46                        | 3,153                         |
| Buildings without Cooling                                  |                                      | 6,381                                  | 8.2   | 312                        | 104                        | 30                        | 2,476                         |
| Water-Heating Energy Sources                               |                                      |  |   |                            |                            |                           |                               |
| Electricity  | 1,910                                | 27,490                                 | 14.4  | 4,146                      | 1,373                      | 402                       | 30,298                        |
| Other Excluding Electricity                                | 1,560                                | 28,973                                 | 18.6  | 4,586                      | 1,519                      | 445                       | 35,228                        |
| Bldgs without Water Heating                                | 933                                  | 6,844                                  | 7.3   | 436                        | 144                        | 42                        | 3,505                         |
| Cooking Energy Sources                                     |                                      |  |   |                            |                            |                           |                               |
| Electricity  |                                      | 13,161                                 | 32.1  | 2,561                      | 848                        | 249                       | 17,845                        |
| Other Excluding Electricity                                |                                      | 9,076                                  | 23.2  | 1,598                      | 529                        | 155                       | 11,932                        |
| Buildings without Cooking                                  | 3,603                                | 41,070                                 | 11.4  | 5,010                      | 1,659                      | 486                       | 39,254                        |
| Energy End Uses (more than                                 |                                      |  |   |                            |                            |                           |                               |
| one may apply)   | 0.074                                | F0 004                                 | 45.4  | 0.007                      | 0.044                      | 000                       | 00.050                        |
| Buildings with Space Heating                               |                                      | 59,991<br>56,035                       | 15.1  | 8,887                      | 2,944                      | 863                       | 66,253                        |
| Buildings with Woter Leating                               |                                      | 56,925                                 | 15.7  | 8,855                      | 2,933                      | 860                       | 66,555                        |
| Buildings with Water Heating                               |                                      | 56,463                                 |   | 8,732                      | 2,892                      | 848                       | 65,526                        |
| Buildings with Cooking                                     |                                      | 22,237                                 |   | 4,158                      | 1,377                      | 404                       | 29,777                        |
| Buildings with Manufacturing<br>Buildings with Electricity | 119                                  | 3,138                                  | 26.5  | 426                        | 141                        | 41                        | 3,117                         |
| Generation   | 149                                  | 12,821                                 | 85.9  | 2,687                      | 890                        | 261                       | 18,679                        |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|                              |                                      | All Buildings*<br>Using Electricity    | /   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|------------------------------|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|                              |                                      |  | <b>F</b> 1  | Primary                    | Si                         | te                        |                               |
|                              | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*               | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Percent of Floorspace Heated |                                      |  |   |                            |                            |                           |                               |
| Not Heated                   | 432                                  | 3,315                                  | 7.7   |                            | 93                         | 27                        | 2,779                         |
| 1 to 50                      | 520                                  | 6,829                                  | 13.1  |                            | 187                        | 55                        | 4,645                         |
| 51 to 99                     | 498                                  | 8,107                                  | 16.3  | ,                          | 395                        | 116                       | 9,096                         |
| 100                          | 2,953                                | 45,055                                 | 15.3  | 7,129                      | 2,361                      | 692                       | 52,512                        |
| Percent of Floorspace Cooled |                                      |  |   |                            |                            |                           |                               |
| Not Cooled                   | 780                                  | 6,381                                  | 8.2   |                            | 104                        | 30                        | 2,476                         |
| 1 to 50                      | 983                                  | 16,583                                 |   | ,                          | 444                        | 130                       | 10,901                        |
| 51 to 99                     | 629                                  | 13,211                                 | 21.0  | ,                          | 746                        | 219                       | 16,916                        |
| 100                          | 2,011                                | 27,132                                 | 13.5  | 5,265                      | 1,744                      | 511                       | 38,738                        |
| Percent Lit When Open        | _                                    |  |   |                            |                            |                           |                               |
| Zero                         | Q                                    | Q                                      | Q   |                            | Q                          | Q                         | Q                             |
| 1 to 50                      | 929                                  | 10,203                                 |   |                            | 225                        | 66                        | 5,942                         |
| 51 to 99                     | 1,108                                | 18,288                                 | 16.5  | ,                          | 894                        | 262                       | 20,893                        |
| 100                          | 2,176                                | 32,789                                 | 15.1  | 5,740                      | 1,901                      | 557                       | 41,762                        |
| Building Never Open/         |                                      |  |   |                            |                            |                           |                               |
| Electricity Not Used         | 144                                  | 1,733                                  | 12.1  | 37                         | 12                         | 4                         | 325                           |
| Percent Lit When Closed      |                                      |  |   |                            |                            |                           |                               |
| Zero                         | 1,964                                | 17,385                                 | 8.9   | 1,639                      | 543                        | 159                       | 13,104                        |
| 1 to 50                      | 1,882                                | 30,948                                 | 16.4  | 4,248                      | 1,407                      | 412                       | 32,796                        |
| 51 to 100                    | 136                                  | 2,093                                  | 15.4  | 468                        | 155                        | 45                        | 3,144                         |
| Building Never Closed/       |                                      |  |   |                            |                            |                           |                               |
| Electricity Not Used         | 422                                  | 12,881                                 | 30.5  | 2,813                      | 932                        | 273                       | 19,987                        |
| Heating Equipment (more      |                                      |  |   |                            |                            |                           |                               |
| than one may apply)          |                                      |  |   |                            |                            |                           |                               |
| Heat Pumps                   | 476                                  | 8,814                                  | 18.5  | ,                          | 523                        | 153                       | 11,629                        |
| Packaged Heat Pumps          | 278                                  | 5,442                                  | 19.6  |                            | 359                        | 105                       | 7,929                         |
| Split-System Heat Pumps      | 166                                  | 2,581                                  | 15.5  |                            | 136                        | 40                        | 2,946                         |
| Individual Room Heat Pumps   | 58                                   | 2,691                                  | 46.5  |                            | 148                        | 43                        | 3,289                         |
| Furnaces                     | 1,860                                | 19,604                                 | 10.5  | ,                          | 761                        | 223                       | 17,887                        |
| Individual Space Heaters     | 819                                  | 12,540                                 | 15.3  |                            | 563                        | 165                       | 12,387                        |
| District Heat                | 65                                   | 5,166                                  | 79.7  |                            | 317                        | 93                        | 6,051                         |
| Boilers                      | 579                                  | 20,423                                 | 35.3  | 3,045                      | 1,009                      | 296                       | 22,045                        |
| Packaged Heating Units Other | 953<br>198                           | 18,021<br>3,242                        | 18.9<br>16.4  |                            | 1,058<br>168               | 310<br>49                 | 24,318<br>3,451               |
| Other                        | 190                                  | 3,242                                  | 10.4  | 506                        | 100                        | 49                        | 3,451                         |
| Cooling Equipment (more      |                                      |  |   |                            |                            |                           |                               |
| than one may apply)          |                                      |  |   |                            |                            |                           |                               |
| Residential-Type Central     |                                      | ,                                      |   |                            | . = -                      |                           | 4=                            |
| Air Conditioners             | 1,006                                | 11,035                                 | 11.0  |                            | 455                        | 133                       | 10,746                        |
| Heat Pumps                   | 492                                  | 9,041                                  | 18.4  | ,                          | 547                        | 160                       | 12,060                        |
| Packaged Heat Pumps          | 288                                  | 5,426                                  | 18.9  | -                          | 360                        | 105                       | 7,909                         |
| Split-System Heat Pumps      | 174                                  | 2,606                                  | 15.0  |                            | 139                        | 41                        | 3,005                         |
| Individual Room Heat Pumps   | 58                                   | 2,940                                  | 50.7  |                            | 171                        | 50                        | 3,721                         |
| Individual Air Conditioners  | 742                                  | 12,558                                 | 16.9  |                            | 479                        | 140                       | 11,268                        |
| District Chilled Water       | 33                                   | 2,853                                  | 86.7  |                            | 192                        | 56                        | 3,667                         |
| Central Chillers             | 111                                  | 11,636                                 | 105.1   | 2,524                      | 836                        | 245                       | 17,065                        |
| Packaged Air Conditioning    |                                      |  |   |                            |                            |                           |                               |
| Units                        | 1,613                                | 29,969                                 | 18.6  | 4,765                      | 1,578                      | 463                       | 36,258                        |
| Swamp Coolers                | 122                                  | 1,561                                  | 12.8  | 227                        | 75                         | 22                        | 1,808                         |
| Other                        | 37                                   | 1,217                                  | 32.5  | 225                        | 75                         | 22                        | 1,540                         |
|                              |                                      | *                                      |   |                            |                            |                           | •                             |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|   | ı                                    | All Buildings*<br>Using Electricity    | ,   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|---|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|   |                                      |  |   | Primary                    | Si                         | te                        |                               |
|   | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*  | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Main Equipment Replaced Since<br>1990 (more than one may apply) | 4.400                                | 40.004                                 |   |                            |                            | 242                       | 40.000                        |
| Heating Cooling   | 1,193<br>1,356                       | 16,394<br>20,995                       | 13.7<br>15.5  | 2,161<br>2,947             | 716<br>976                 | 210<br>286                | 16,626<br>22,737              |
| Water Heating Equipment   | 0.544                                | 04.050                                 | 10.0  | 5.040                      | 4.750                      | 545                       | 40.074                        |
| Centralized System  | 2,511                                | 34,656                                 | 13.8  | 5,310                      | 1,759                      | 515                       | 40,871                        |
| Distributed System  Combination of Centralized                  | 785                                  | 11,540                                 | 14.7  | 1,458                      | 483                        | 142                       | 11,253                        |
| and Distributed System  | 175                                  | 10,267                                 | 58.8  | 1,964                      | 651                        | 191                       | 13,401                        |
| Lighting Equipment Types (more than one may apply)              |                                      |  |   |                            |                            |                           |                               |
| Incandescent  | 2,184                                | 38,528                                 | 17.6  | 6,057                      | 2,006                      | 588                       | 44,422                        |
| Standard Fluorescent  | 3,943                                | 59,688                                 | 15.1  | 8,909                      | 2,951                      | 865                       | 66,864                        |
| Compact Fluorescent   | 941                                  | 27,571                                 | 29.3  | 5,027                      | 1,665                      | 488                       | 36,584                        |
| High Intensity Discharge  | 455                                  | 20,643                                 | 45.4  | 3,400                      | 1,126                      | 330                       | 23,651                        |
| Halogen   | 565                                  | 17,703                                 | 31.3  | 3,226                      | 1,069                      | 313                       | 23,011                        |
| Other   | Q                                    | Q                                      | Q   | Q                          | Q                          | Q                         | Q                             |
| Refrigeration Equipment (more than one may apply) <sup>a</sup>  |                                      |  |   |                            |                            |                           |                               |
| Any Refrigeration   | 3,176                                | 52,974                                 | 16.7  | 8,366                      | 2,771                      | 812                       | 62,357                        |
| Commercial Refrigeration  | 1,007                                | 26,768                                 | 26.6  | 5,397                      | 1,788                      | 524                       | 38,581                        |
| Walk-In Units   | 666                                  | 20,254                                 | 30.4  | 4,496                      | 1,489                      | 436                       | 31,769                        |
| Cases or Cabinets   | 825                                  | 20,424                                 | 24.8  | 4,349                      | 1,441                      | 422                       | 31,335                        |
| Residential-Type Units  | 2,370                                | 38,884                                 | 16.4  | 5,342                      | 1,769                      | 519                       | 39,936                        |
| Vending Machines  No Refrigeration                              | 996<br>1,227                         | 35,335<br>10,333                       | 35.5<br>8.4   | 5,992<br>802               | 1,985<br>266               | 582<br>78                 | 42,043<br>6,675               |
| Office Equipment (more  |                                      |  |   |                            |                            |                           |                               |
| than one may apply)   |                                      |  |   |                            |                            |                           | 0.1.0.10                      |
| Computers   | 3,081                                | 55,627                                 | 18.1  | 8,567                      | 2,838                      | 832                       | 64,010                        |
| With Flat Screen Monitors                                       | 877                                  | 26,417                                 | 30.1  | 4,797                      | 1,589                      | 466                       | 34,985                        |
| Dedicated Servers   | 1,175<br>1,970                       | 36,338<br>33,012                       | 30.9  | 6,143<br>4,679             | 2,035<br>1,550             | 596<br>454                | 44,941<br>36,031              |
| Laser Printers Inkjet Printers                                  | 1,420                                | 32,210                                 | 16.8<br>22.7  | 5,495                      | 1,820                      | 533                       | 39,920                        |
| FAX Machines  | 2,715                                | 52,373                                 | 19.3  | 8,154                      | 2,701                      | 792                       | 60,928                        |
| Photocopiers  | 1,939                                | 46,257                                 | 23.9  | 7,128                      | 2,361                      | 692                       | 52,409                        |
| Number of Computers None  | 1,323                                | 7,679                                  | E O   | 601                        | 199                        | 58                        | 5,021                         |
| 1 to 4  | 1,670                                | 12,395                                 | 5.8<br>7.4  | 1,578                      | 523                        | 153                       | 12,918                        |
| 5 to 9  | 559                                  | 7,179                                  | 12.8  | 826                        | 274                        | 80                        | 6,606                         |
| 10 to 19  | 370                                  | 6,610                                  | 17.9  | 859                        | 285                        | 83                        | 6,741                         |
| 20 to 49  | 255                                  | 7,414                                  | 29.1  | 1,233                      | 408                        | 120                       | 9,322                         |
| 50 to 99  | 110                                  | 5,376                                  | 48.9  | 781                        | 259                        | 76                        | 5,664                         |
| 100 to 249  | 79                                   | 6,690                                  | 84.3  | 1,111                      | 368                        | 108                       | 7,675                         |
| 250 or More   | 38                                   | 9,963                                  | 264.3   | 2,179                      | 722                        | 212                       | 15,085                        |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|  |                                      | All Buildings*<br>Using Electricity    | /   | C                          | Electricity<br>Consumptio  | n                         | Electricity<br>Expenditures   |
|--|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|
|  |                                      |  |   | Primary                    | Si                         | te                        |                               |
|  | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |
| All Buildings*   | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |
| Number of Dedicated Servers                              |                                      |  |   |                            | 4 000                      |                           |                               |
| None   | 3,229                                | 26,969                                 | 8.4   | 3,025                      | 1,002                      | 294                       | 24,090                        |
| 1 to 4   | 1,060                                | 24,116                                 | 22.8  | 3,520                      | 1,166                      | 342                       | 26,074                        |
| 5 to 9   | 58                                   | 3,864                                  | 67.0  | 756                        | 250                        | 73                        | 5,608                         |
| 10 to 19   | 30                                   | 3,027                                  | 100.1   | 653                        | 216                        | 63                        | 4,457                         |
| 20 to 49   | 17                                   | 2,583                                  | 150.0   | 552                        | 183                        | 54                        | 3,685                         |
| 50 or More   | 10                                   | 2,748                                  | 276.6   | 662                        | 219                        | 64                        | 5,118                         |
| Number of Photocopiers                                   | 0.404                                | 47.050                                 | 0.0   | 0.040                      | 070                        | 400                       | 40.000                        |
| None   | 2,464                                | 17,050                                 | 6.9   | 2,040                      | 676                        | 198                       | 16,622                        |
| One  | 1,250                                | 15,475                                 | 12.4  | 1,792                      | 593                        | 174                       | 14,098                        |
| 2 to 4   | 549                                  | 15,082                                 | 27.5  | 2,132                      | 706                        | 207                       | 15,555                        |
| 5 to 9   | 85<br>54                             | 5,515<br>10,185                        | 64.7<br>187.2   | 976<br>2,229               | 323<br>738                 | 95<br>216                 | 7,138<br>15,618               |
|  | 01                                   | 10,100                                 | 107.2   | 2,220                      | 100                        | 210                       | 10,010                        |
| Energy-Related Space Functions (more than one may apply) |                                      |  |   |                            |                            |                           |                               |
| Commercial Food Preparation                              | 799                                  | 22,223                                 | 27.8  | 4,155                      | 1,376                      | 403                       | 29,771                        |
| Activities with Large                                    |                                      | , -                                    |   | ,                          | ,-                         |                           | -,                            |
| Amounts of Hot Water                                     | 567                                  | 19,482                                 | 34.4  | 3,522                      | 1,167                      | 342                       | 24,710                        |
| Separate Computer Area                                   | 553                                  | 26,873                                 | 48.6  | 4,678                      | 1,550                      | 454                       | 33,308                        |
| HVAC Conservation Features                               |                                      |  |   |                            |                            |                           |                               |
| (more than one may apply)                                |                                      |  |   |                            |                            |                           |                               |
| Variable Air-Volume System                               | 466                                  | 19,597                                 | 42.1  | 3,827                      | 1,267                      | 371                       | 26,726                        |
| Economizer Cycle   | 508                                  | 21,108                                 | 41.5  | 4,251                      | 1,408                      | 413                       | 29,663                        |
| HVAC Maintenance   | 2,576                                | 51,151                                 | 19.9  | 8,161                      | 2,703                      | 792                       | 60,420                        |
| Energy Management and                                    | 2,070                                | 01,101                                 | 10.0  | 0,101                      | 2,700                      | .02                       | 00,120                        |
| Control System (EMCS)                                    | 252                                  | 15,630                                 | 62.0  | 2,881                      | 954                        | 280                       | 20,451                        |
| Window and Interior Lighting                             |                                      |  |   |                            |                            |                           |                               |
| Features (more than one                                  |                                      |  |   |                            |                            |                           |                               |
| may apply)   |                                      |  |   |                            |                            |                           |                               |
| Multipaned Windows                                       | 2,175                                | 38,727                                 | 17.8  | 6,109                      | 2,024                      | 593                       | 43,784                        |
| Tinted Window Glass                                      | 1,313                                | 29,625                                 | 22.6  | 5,077                      | 1,682                      | 493                       | 37,166                        |
| Reflective Window Glass External Overhangs               | 305                                  | 8,529                                  | 27.9  | 1,576                      | 522                        | 153                       | 11,302                        |
| or Awnings   | 1,220                                | 17,172                                 | 14.1  | 2,900                      | 961                        | 282                       | 21,798                        |
| Skylights or Atriums                                     | 324                                  | 12,508                                 | 38.6  | 1,948                      | 645                        | 189                       | 14,007                        |
| Daylighting Sensors                                      | 74                                   | 2,868                                  | 38.7  | 623                        | 206                        | 60                        | 4,847                         |
| Specular Reflectors                                      | 928                                  | 26,118                                 | 28.2  | 4,488                      | 1,487                      | 436                       | 32,092                        |
| Electronic Ballasts                                      | 2,577                                | 46,882                                 | 18.2  | 7,543                      | 2,498                      | 732                       | 55,837                        |
| Energy Management and                                    | 2,511                                | 40,002                                 | 10.2  | 7,343                      | 2,490                      | 732                       | 33,037                        |
| Control System (EMCS) For Lighting                       | 60                                   | 4,781                                  | 80.1  | 939                        | 311                        | 91                        | 6,922                         |
| Equipment Usage Reduced When Building Not In Full Use    |                                      |  |   |                            |                            |                           |                               |
| (more than one may apply) <sup>a</sup>                   | 0.070                                | 40 707                                 | 440   | E 000                      | 4 020                      | E60                       | 4E 400                        |
| Heating  | 2,876                                | 42,707                                 | 14.8  | 5,828                      | 1,930                      | 566<br>505                | 45,100                        |
| Cooling  | 2,759                                | 43,190                                 | 15.7  | 6,132                      | 2,031                      | 595                       | 47,552                        |
| Lighting   | 3,685                                | 46,987                                 | 12.7  | 6,057                      | 2,006                      | 588                       | 46,811                        |
| Office Equipment   | 1,504                                | 19,397                                 | 12.9  | 2,177                      | 721                        | 211                       | 17,466                        |

Table C13. Total Electricity Consumption and Expenditures for Non-Mall Buildings, 2003

|   |                                      | All Buildings*<br>Using Electricity    | ,   | C                          | Electricity<br>Consumption |                           |                               |  |  |
|---|--------------------------------------|--|---|----------------------------|----------------------------|---------------------------|-------------------------------|--|--|
|   |                                      |  |   | Primary                    | Si                         | te                        |                               |  |  |
|   | Number of<br>Buildings<br>(thousand) | Floorspace<br>(million<br>square feet) | Floorspace<br>per Building<br>(thousand<br>square feet) | Total<br>(trillion<br>Btu) | Total<br>(trillion<br>Btu) | Total<br>(billion<br>kWh) | Total<br>(million<br>dollars) |  |  |
| All Buildings*  | 4,404                                | 63,307                                 | 14.4  | 9,168                      | 3,037                      | 890                       | 69,032                        |  |  |
| Annual Consumption  |                                      |  |   |                            |                            |                           |                               |  |  |
| (kilowatthours)   |                                      |  |   |                            |                            |                           |                               |  |  |
| 10,000 or Less  | 757                                  | 2,861                                  | 3.8   | 39                         | 13                         | 4                         | 476                           |  |  |
| 10,001 to 50,000  | 1,698                                | 9,228                                  | 5.4   | 463                        | 153                        | 45                        | 4,668                         |  |  |
| 50,001 to 100,000   | 705                                  | 6,461                                  | 9.2   | 532                        | 176                        | 52                        | 5,055                         |  |  |
| 100,001 to 500,000  | 954<br>142                           | 16,111<br>6.737                        | 16.9<br>47.5  | 2,157<br>999               | 715<br>331                 | 209<br>97                 | 18,053<br>7.735               |  |  |
| 500,001 to 1,000,000  | 129                                  | 13.209                                 | 102.6   | 2.769                      | 917                        | 269                       | 18.537                        |  |  |
| Over 5,000,000  | 19                                   | 8,699                                  | 464.8   | 2,209                      | 732                        | 214                       | 14,507                        |  |  |
| Provider of Purchased<br>Electricity (more than<br>one may apply) |                                      |  |   |                            |                            |                           |                               |  |  |
| Local Utility   | 4,225                                | 57,853                                 | 13.7  | 8,151                      | 2,700                      | 791                       | 61,476                        |  |  |
| Some Other Provider   | 152                                  | 4,945                                  | 32.5  | 930                        | 308                        | 90                        | 7,052                         |  |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Site electricity is the amount of electricity delivered to commercial buildings. Primary electricity, which is not included in the "Total of Major Fuels" category, is site electricity plus the conversion losses in the generation, transmission, and distribution processes. • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

| 2000  |                                      |                                |                                    |                          |   |                              |  |                                    |                                  |
|---|--------------------------------------|--------------------------------|------------------------------------|--------------------------|---|------------------------------|--|------------------------------------|----------------------------------|
|   |                                      | E                              | lectricity Con                     | sumption                 |   |                              |  |                                    |                                  |
|   |                                      |                                |                                    | Building                 | stribution<br>g-Level Int<br>h/square f | ensities                     | Electric                                 | ity Expend                         | litures                          |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile  | Median                                  | 75th<br>Per-<br>centile      | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars)          |
| All Buildings*  | 202                                  | 14.1                           | 12.2                               | 3.6                      | 8.2                                     | 17.1                         | 15.7                                     | 1.09                               | 0.078                            |
| Building Floorspace<br>(Square Feet)<br>1,001 to 5,000<br>5,001 to 10,000 | 47<br>92                             | 17.8<br>12.4                   | 11.4<br>10.3                       | 3.8<br>3.8               | 8.9<br>7.4                              | 20.3<br>14.5                 | 4.3<br>8.7                               | 1.63<br>1.18                       | 0.092<br>0.095                   |
| 10,001 to 25,000  | 164<br>439<br>927                    | 10.5<br>12.2<br>13.1           | 11.1<br>11.6<br>14.1               | 2.9<br>3.8<br>4.5        | 6.3<br>8.8<br>9.9                       | 13.4<br>16.2<br>17.0         | 13.8<br>33.6<br>68.0                     | 0.88<br>0.94<br>0.97               | 0.084<br>0.077<br>0.073          |
| 100,001 to 200,000  | 2,181<br>4,347<br>17,034             | 15.7<br>15.0<br>19.0           | 12.2<br>15.4<br>12.8               | 5.3<br>5.8<br>10.0       | 13.0<br>12.1<br>16.6                    | 23.4<br>20.7<br>25.2         | 146.4<br>301.0<br>1209.8                 | 1.05<br>1.04<br>1.35               | 0.073<br>0.067<br>0.069<br>0.071 |
| Principal Building Activity Education                                     | 283                                  | 11.0                           | 8.7                                | 4.9                      | 8.9                                     | 13.6                         | 21.1                                     | 0.82                               | 0.075                            |
| Food Sales  | 276<br>213                           | 49.4<br>38.4                   | 43.0<br>20.3                       | 33.4<br>18.8             | 48.0<br>37.4                            | 77.0<br>70.3                 | 20.9<br>17.4                             | 3.74<br>3.13                       | 0.076<br>0.082                   |
| Health Care Inpatient Outpatient  | 564<br>6,628<br>168                  | 22.9<br>27.5<br>16.1           | 11.5<br>14.1<br>7.8                | 6.1<br>21.8<br>5.8       | 12.0<br>24.0<br>11.3                    | 18.4<br>35.6<br>16.5         | 37.9<br>405.3<br>13.9                    | 1.54<br>1.68<br>1.34               | 0.067<br>0.061<br>0.083          |
| LodgingRetail (Other Than Mall)   | 483<br>139<br>256                    | 13.5<br>14.3<br>17.3           | 28.0<br>17.8<br>7.5                | 6.7<br>4.3<br>6.5        | 11.9<br>9.4<br>11.5                     | 17.7<br>18.4<br>17.6         | 37.1<br>11.6<br>20.7                     | 1.04<br>1.19<br>1.40               | 0.083<br>0.077<br>0.083<br>0.081 |
| Office  | 179<br>237                           | 12.5<br>15.3                   | 20.5<br>12.4                       | 2.2<br>4.0               | 5.1<br>7.9                              | 11.3<br>17.6                 | 14.4<br>17.2                             | 1.00<br>1.12                       | 0.080<br>0.073                   |
| Religious Worship<br>Service<br>Warehouse and Storage                     | 49<br>73<br>154                      | 4.9<br>11.0<br>7.6             | 10.7<br>12.0<br>16.7               | 1.9<br>3.0<br>1.4        | 3.5<br>6.3<br>3.1                       | 6.0<br>11.8<br>6.2           | 4.4<br>5.8<br>10.8                       | 0.43<br>0.88<br>0.53               | 0.089<br>0.080<br>0.070          |
| Other<br>Vacant   | 510<br>42                            | 22.5<br>2.4                    | 21.4<br>Q                          | 3.5<br>0.4               | 7.2<br>1.7                              | 20.3<br>3.8                  | 40.0<br>3.9                              | 1.76<br>0.22                       | 0.078<br>0.092                   |
| Year Constructed Before 1920  | 83                                   | 7.1                            | 8.7                                | 1.6                      | 3.9                                     | 9.6                          | 7.3                                      | 0.62                               | 0.088                            |
| 1920 to 1945<br>1946 to 1959<br>1960 to 1969                              | 122<br>125<br>168                    | 9.2<br>9.9<br>11.9             | 9.9<br>10.2<br>11.0                | 3.2<br>3.1<br>3.4        | 6.9<br>6.4<br>7.4                       | 13.9<br>14.3<br>14.7         | 10.3<br>10.6<br>13.5                     | 0.84<br>0.96                       | 0.084<br>0.085<br>0.080          |
| 1970 to 1979<br>1980 to 1989<br>1990 to 1999                              | 239<br>275<br>250                    | 15.9<br>18.1<br>16.7           | 13.3<br>12.2<br>12.5               | 4.4<br>4.8<br>4.7        | 9.5<br>10.1<br>10.5                     | 21.4<br>20.5<br>22.6         | 18.1<br>20.8<br>18.8                     | 1.20<br>1.37<br>1.26               | 0.075<br>0.076<br>0.075          |
| 2000 to 2003  Census Region and Division                                  | 288                                  | 16.2                           | 19.2                               | 3.1                      | 7.8                                     | 18.3                         | 21.4                                     | 1.20                               | 0.074                            |
| Northeast New England   | 208<br>139                           | 11.5<br>10.8                   | 9.9<br>10.0                        | 2.4<br>1.8               | 6.1<br>4.3                              | 14.2<br>13.2                 | 20.1<br>13.7                             | 1.11<br>1.06                       | 0.097<br>0.099                   |
| Middle Atlantic   | 240<br>182<br>233                    | 11.7<br>12.9<br>13.5           | 9.8<br>13.2<br>13.4                | 2.9<br>3.5<br>4.2        | 6.9<br>7.9<br>8.3                       | 15.2<br>15.9<br>19.1         | 23.1<br>11.9<br>15.5                     | 1.13<br>0.85<br>0.90               | 0.096<br>0.066<br>0.067          |
| West North Central South South Atlantic East South Central                | 118<br>226<br>252<br>160             | 11.7<br>16.5<br>17.4<br>15.5   | 12.8<br>13.9<br>12.6<br>16.4       | 3.0<br>4.1<br>4.2<br>3.8 | 7.2<br>9.2<br>9.7<br>8.4                | 13.6<br>19.7<br>19.7<br>19.8 | 7.4<br>15.4<br>17.0<br>10.7              | 0.74<br>1.12<br>1.17<br>1.04       | 0.063<br>0.068<br>0.067<br>0.067 |
| West South Central West Mountain Pacific                                  | 226<br>179<br>196<br>170             | 15.3<br>13.8<br>15.4<br>13.0   | 15.8<br>10.6<br>13.1<br>9.5        | 4.0<br>4.0<br>4.3<br>3.8 | 9.0<br>9.2<br>8.6<br>9.3                | 19.3<br>15.2<br>14.4<br>15.7 | 15.9<br>17.7<br>15.0<br>19.1             | 1.08<br>1.37<br>1.18<br>1.46       | 0.070<br>0.099<br>0.076<br>0.112 |

|  |                                      | Е                              | lectricity Con                     | sumption                | l   |                         |  |                                    |                         |
|--|--------------------------------------|--------------------------------|------------------------------------|-------------------------|---|-------------------------|--|------------------------------------|-------------------------|
|  |                                      |                                |                                    | Buildin                 | istribution<br>g-Level Int<br>/h/square f | ensities                | Electric                                 | city Expend                        | litures                 |
|  | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile | Median                                    | 75th<br>Per-<br>centile | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars) |
| All Buildings*                                     | 202                                  | 14.1                           | 12.2                               | 3.6                     | 8.2                                       | 17.1                    | 15.7                                     | 1.09                               | 0.078                   |
| Climate Zone: 30-Year Average                      |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Under 2,000 CDD and                                |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| More than 7,000 HDD                                |                                      |                                | 11.6                               | 2.9                     | 7.2                                       | 15.0                    | 11.3                                     | 0.88                               | 0.076                   |
| 5,500-7,000 HDD                                    |                                      |                                | 12.9                               | 3.2                     | 7.4                                       | 15.4                    | 14.4                                     | 0.95                               | 0.073                   |
| 4,000-5,499 HDD                                    | 259                                  | 14.6                           | 11.9                               | 3.9                     | 8.0                                       | 17.6                    | 20.8                                     | 1.17                               | 0.080                   |
| Fewer than 4,000 HDD                               | 184                                  | 14.5                           | 12.8                               | 3.8                     | 8.3                                       | 16.4                    | 15.3                                     | 1.20                               | 0.083                   |
| 2,000 CDD or More and                              |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Fewer than 4,000 HDD                               | 255                                  | 17.3                           | 11.5                               | 4.9                     | 12.7                                      | 22.9                    | 19.1                                     | 1.30                               | 0.075                   |
| Number of Floors                                   |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| One  | 114                                  |                                | 14.1                               | 3.7                     | 8.2                                       | 18.0                    | 9.2                                      | 1.08                               | 0.080                   |
| Two  | 200                                  |                                | 12.5                               | 3.5                     | 8.3                                       | 16.5                    | 15.9                                     | 1.01                               | 0.080                   |
| Three  | 251                                  |                                | 10.5                               | 3.1                     | 7.1                                       | 14.9                    | 19.2                                     | 0.87                               | 0.076                   |
| Four to Nine                                       | 1,363                                |                                | 11.0                               | 3.5                     | 10.7                                      | 18.3                    | 97.9                                     | 1.24                               | 0.072                   |
| Ten or More  | 8,134                                | 19.4                           | 10.6                               | 12.1                    | 18.1                                      | 25.2                    | 615.6                                    | 1.47                               | 0.076                   |
| Elevators and Escalators (more than one may apply) |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Any Elevators                                      | 1,365                                | 17.0                           | 11.4                               | 5.8                     | 12.6                                      | 20.7                    | 99.1                                     | 1.23                               | 0.073                   |
| Number of Elevators                                |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| One  | 508                                  | 12.8                           | 11.4                               | 5.2                     | 10.6                                      | 18.3                    | 37.7                                     | 0.95                               | 0.074                   |
| Two to Five  | 1,955                                | 17.0                           | 10.8                               | 8.1                     | 16.9                                      | 25.2                    | 140.6                                    | 1.22                               | 0.072                   |
| Six or More  | 11,057                               | 22.5                           | 12.2                               | 12.5                    | 19.0                                      | 29.5                    | 797.9                                    | 1.62                               | 0.072                   |
| Any Escalators                                     | 9,366                                | 24.1                           | 14.0                               | 10.4                    | 14.9                                      | 22.6                    | 677.6                                    | 1.74                               | 0.072                   |
| Number of Workers (main shift)                     |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Fewer than 5                                       | 45                                   | 7.7                            | 23.9                               | 2.4                     | 5.4                                       | 12.3                    | 3.9                                      | 0.68                               | 0.087                   |
| 5 to 9   | 94                                   | 11.8                           | 14.4                               | 5.5                     | 10.3                                      | 20.5                    | 8.2                                      | 1.04                               | 0.088                   |
| 10 to 19   | 158                                  | 11.4                           | 12.2                               | 5.9                     | 10.8                                      | 20.6                    | 13.6                                     | 0.98                               | 0.086                   |
| 20 to 49   | 386                                  | 14.0                           | 13.0                               | 8.1                     | 13.6                                      | 21.3                    | 30.1                                     | 1.09                               | 0.078                   |
| 50 to 99   |                                      |                                | 12.4                               | 8.9                     | 15.0                                      | 21.7                    | 57.9                                     | 1.08                               | 0.072                   |
| 100 to 249   | 1,759                                |                                | 12.1                               | 10.9                    | 19.1                                      | 30.4                    | 127.5                                    |                                    | 0.072                   |
| 250 or More  | 7,165                                | 22.4                           | 9.1                                | 14.8                    | 22.8                                      | 29.4                    | 511.9                                    | 1.60                               | 0.071                   |
| Weekly Operating Hours                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Fewer than 40                                      |                                      |                                | 8.0                                | 1.6                     | 3.2                                       | 6.5                     | 2.9                                      | 0.42                               | 0.094                   |
| 40 to 48   |                                      |                                | 8.5                                | 4.0                     | 7.5                                       | 12.9                    | 8.7                                      | 0.83                               | 0.082                   |
| 49 to 60   |                                      |                                | 9.2                                | 4.2                     |   | 15.7                    | 13.5                                     | 0.91                               | 0.081                   |
| 61 to 84   |                                      |                                | 12.5                               | 7.1                     | 13.8                                      | 27.1                    | 19.9                                     | 1.12                               | 0.079                   |
| 85 to 167  |                                      |                                | 14.7                               | 13.8                    | 33.4                                      | 58.5                    | 29.8                                     | 1.61                               | 0.073                   |
| Open Continuously                                  | 647                                  | 21.2                           | 18.8                               | 4.9                     | 13.7                                      | 29.5                    | 47.4                                     | 1.55                               | 0.073                   |
| Ownership and Occupancy                            |                                      |                                |                                    |                         |   |                         |  |                                    | _                       |
| Nongovernment Owned                                |                                      |                                | 12.7                               | 3.4                     | 8.0                                       | 17.9                    | 14.3                                     | 1.13                               | 0.080                   |
| Owner Occupied                                     | 175                                  |                                | 11.8                               | 3.5                     |   | 15.1                    | 14.0                                     | 1.08                               | 0.080                   |
| Nonowner Occupied                                  | 187                                  |                                | 13.5                               | 3.6                     | 9.4                                       | 21.7                    | 15.1                                     | 1.22                               | 0.081                   |
| Unoccupied   | 30                                   |                                | N                                  | 0.4                     |   | 3.4                     | 2.9                                      | Q                                  | Q                       |
| Government Owned                                   | 348                                  |                                | 11.1                               | 4.8                     | 9.3                                       | 15.3                    | 24.0                                     | 0.97                               | 0.069                   |
| Federal  | 842                                  |                                | 15.8                               | 4.3                     | 9.2                                       | 17.3                    | 47.3                                     | 1.11                               | 0.056                   |
| State  | 366                                  |                                | 8.3                                | 5.9                     |   | 14.5                    | 24.3                                     | 1.05                               | 0.066                   |
| Local  | 286                                  | 12.3                           | 12.0                               | 4.8                     | 9.5                                       | 15.8                    | 21.3                                     | 0.92                               | 0.075                   |

|   |   | Е   | lectricity Con                         | sumption                               | ı   |   |  |  |  |
|---|---|---|--|--|---|---|--|--|--|
|   |   |   |  | Buildin                                | istribution<br>g-Level Int<br>/h/square f | ensities                                    | Electric                                     | ity Expend                                   | litures  |
|   | per<br>Building<br>(thousand<br>kWh)      | per<br>Square<br>Foot<br>(kWh)              | per<br>Worker<br>(thousand<br>kWh)     | 25th<br>Per-<br>centile                | Median                                    | 75th<br>Per-<br>centile                     | per<br>Building<br>(thousand<br>dollars)     | per<br>Square<br>Foot<br>(dollars)           | per<br>kWh<br>(dollars)                            |
| All Buildings*                                      | 202                                       | 14.1  | 12.2                                   | 3.6                                    | 8.2                                       | 17.1  | 15.7   | 1.09   | 0.078  |
| Vacancy Status                                      |   |   |  |  |   |   |  |  |  |
| Completely Vacant                                   | 32<br>Q                                   | 1.8<br>Q                                    | N<br>Q                                 | 0.4<br>1.4                             | 1.5<br>3.0                                | 3.4<br>8.0                                  | 3.0<br>Q                                     | 0.17<br>Q                                    | 0.096<br>Q   |
| Partially Vacant  Not At All Vacant                 | 338<br>189                                | 13.8<br>14.6                                | 9.9<br>12.9                            | 2.9<br>3.9                             | 6.7<br>8.7                                | 14.2<br>18.3                                | 26.5<br>14.6                                 | 1.08<br>1.12                                 | 0.078<br>0.077                                     |
| Number of Establishments                            |   |   |  |  |   |   |  |  |  |
| One   | 174<br>232<br>616<br>1,259<br>3,544<br>32 | 14.1<br>13.5<br>17.3<br>14.7<br>19.6<br>1.8 | 14.2<br>11.3<br>5.2<br>8.6<br>8.6<br>N | 3.7<br>3.9<br>5.5<br>4.7<br>3.0<br>0.4 | 8.3<br>8.7<br>11.2<br>14.2<br>10.5<br>1.5 | 18.2<br>15.3<br>18.3<br>19.1<br>18.7<br>3.4 | 13.5<br>18.0<br>48.0<br>99.6<br>281.6<br>3.0 | 1.09<br>1.05<br>1.34<br>1.16<br>1.56<br>0.17 | 0.077<br>0.078<br>0.078<br>0.079<br>0.079<br>0.096 |
| Predominant Exterior                                | 3-  |   |  | 0                                      |   | <b>.</b>                                    | 0.0  | •  | 0.000  |
| Wall Material Brick, Stone or Stucco                | 222                                       | 13.7  | 12.0                                   | 4.4                                    | 9.7                                       | 20.3  | 17.1   | 1.06   | 0.077  |
| Concrete (Block or Poured)                          |   | 14.5  | 14.9                                   | 4.0                                    | 9.4                                       | 20.0  | 16.4   | 1.16   | 0.080  |
| Concrete Panels                                     | 956                                       | 18.3  | 10.8                                   | 5.8                                    | 11.3                                      | 26.2  | 68.8   | 1.32   | 0.072  |
| Siding or Shingles                                  | 59  | 11.0  | 9.6                                    | 3.3                                    | 7.4                                       | 14.1  | 5.4  | 1.01   | 0.091  |
| Metal Panels Window Glass                           | 122<br>1,148                              | 11.8<br>19.1                                | 14.1<br>10.2                           | 2.1<br>6.6                             | 4.5<br>17.0                               | 9.7<br>27.6                                 | 9.4<br>85.8                                  | 0.91<br>1.43                                 | 0.077<br>0.075                                     |
| Other   | 423                                       | 16.7  | 12.0                                   | 2.0                                    | 9.5                                       | 21.6  | 32.4   | 1.43   | 0.073  |
| No One Major Type                                   | Q   | Q   | Q                                      | 1.1                                    | 5.4                                       | 10.4  | Q  | Q  | Q  |
| Predominant Roof Material                           |   | 44-   | 44.0                                   | 4.0                                    | 44.0                                      | 0.4.4                                       | 04.0   | 4.40   | 0.070  |
| Built-Up  | 303                                       | 14.7<br>12.3                                | 11.8                                   | 4.9<br>3.2                             | 11.3<br>7.1                               | 24.4  | 24.0   | 1.16   | 0.079<br>0.085                                     |
| Shingles (Not Wood) Metal Surfacing                 | 94<br>101                                 | 12.3  | 11.6<br>13.7                           | 3.2<br>2.4                             | 5.3                                       | 14.7<br>11.1                                | 8.0<br>7.8                                   | 1.04<br>0.79                                 | 0.065  |
| Synthetic or Rubber                                 | 518                                       | 17.7  | 12.6                                   | 6.0                                    | 12.3                                      | 24.5  | 37.0   | 1.27   | 0.077  |
| Slate or Tile                                       | 118                                       | 12.5  | 10.1                                   | 5.0                                    | 9.7                                       | 19.6  | 11.0   | 1.16   | 0.093  |
| Wooden Materials                                    | 91  | 12.2  | 11.1                                   | 4.2                                    | 8.3                                       | 15.7  | 7.3  | 0.99   | 0.081  |
| Concrete  | 477                                       | Q   | 14.8                                   | 6.2                                    |   | 24.2  | 33.4   | Q  | 0.070  |
| Other   | 908                                       | 20.4  | 18.6                                   | 5.8                                    | 15.3                                      | 39.2  | 63.2   | 1.42   | 0.070  |
| No One Major Type                                   | 237                                       | 10.4  | 8.8                                    | 3.0                                    | 5.8                                       | 21.6  | 22.8   | 1.01   | 0.097  |
| Renovations in Buildings<br>Constructed Before 1980 |   |   |  |  |   |   |  |  |  |
| (more than one may apply)                           |   |   |  |  |   |   |  |  |  |
| Any Type of Renovation Since 1980                   | 227                                       | 13.0  | 11.2                                   | 3.7                                    | 8.2                                       | 15.7  | 17.7   | 1.01   | 0.078  |
| Addition or Annex                                   | 360                                       | 14.1  | 13.9                                   | 3.7<br>4.0                             | 8.7                                       | 17.0  | 25.4   | 0.99   | 0.076  |
| Reduction In Floorspace                             | 699                                       | 15.2  | 14.2                                   | 7.4                                    |   | 29.5  | 53.7   | 1.17   | 0.070  |
| Cosmetic Improvements                               | 239                                       | 13.5  | 11.1                                   | 3.7                                    | 8.0                                       | 15.8  | 18.8   | 1.06   | 0.079  |
| Wall or Roof Replacement                            | 278                                       | 12.6  | 10.0                                   | 3.2                                    |   | 15.0  | 22.2   | 1.01   | 0.080  |
| Interior Wall                                       |   |   |  |  |   |   |  |  |  |
| Re-Configuration                                    | 289                                       | 13.8  | 10.5                                   | 4.1                                    | 8.2                                       | 17.5  | 22.2   | 1.06   | 0.077  |
| HVAC Equipment Upgrade                              | 351                                       | 14.4  | 11.2                                   | 4.3                                    | 8.2                                       | 16.0  | 26.9   | 1.10   | 0.077  |
| Lighting Upgrade                                    | 309                                       | 13.6  | 11.2                                   | 3.7                                    | 8.0                                       | 15.4  | 23.7   | 1.05   | 0.077  |
| Window Replacement                                  | 239<br>294                                | 11.7<br>12.9                                | 9.8<br>10.5                            | 4.0<br>3.9                             | 7.2<br>7.9                                | 13.5<br>15.0                                | 20.1<br>23.5                                 | 0.98<br>1.03                                 | 0.084<br>0.080                                     |
| Plumbing System UpgradeInsulation Upgrade           | 294<br>227                                | 12.9  | 10.5                                   | 3.9<br>3.0                             | 6.7                                       | 13.0  | 23.5<br>18.0                                 | 1.03   | 0.080  |
| Other Renovation                                    | 246                                       | 9.0   | 9.9                                    | 3.0                                    | 10.1                                      | 24.0  | 27.0   | 0.99   | 0.000  |
| No Renovations Since 1980                           |   | 10.5  | 11.4                                   | 3.1                                    | 6.7                                       | 14.1  | 9.7  | 0.87   | 0.083  |
| Building Newer than 1980                            | 266                                       | 17.1  | 13.2                                   | 4.4                                    |   | 20.6  | 20.0   | 1.29   | 0.075  |

|   |                                      | E                              | lectricity Con                     | sumption                 |   |                             |  |                                    |                                  |
|---|--------------------------------------|--------------------------------|------------------------------------|--------------------------|---|-----------------------------|--|------------------------------------|----------------------------------|
|   |                                      |                                | country con                        | Di<br>Buildin            | stribution<br>g-Level Int<br>h/square f | ensities                    | Electric                                 | ity Expend                         | litures                          |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile  | Median                                  | 75th<br>Per-<br>centile     | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars)          |
| All Buildings*                                  | 202                                  | 14.1                           | 12.2                               | 3.6                      | 8.2                                     | 17.1                        | 15.7                                     | 1.09                               | 0.078                            |
| Energy Sources (more than one may apply)        |                                      |                                |                                    |                          |   |                             |  |                                    |                                  |
| Electricity                                     | 202                                  | 14.1                           | 12.2                               | 3.6                      | 8.2                                     | 17.1                        | 15.7                                     | 1.09                               | 0.078                            |
| Natural Gas                                     | 265                                  | 14.6                           | 12.2                               | 4.3                      | 8.8                                     | 18.5                        | 20.3                                     | 1.12                               | 0.077                            |
| Fuel Oil  | 558                                  | 16.5                           | 12.8                               | 2.2                      | 5.5                                     | 14.0                        | 41.5                                     | 1.23                               | 0.074                            |
| District Chilled Water                          | 1,467                                | 18.0                           | 9.6                                | 6.4                      | 12.6                                    | 20.4                        | 97.5                                     | 1.20                               | 0.066                            |
| District Chilled Water<br>Propane               | 1,711<br>199                         | 19.7<br>14.0                   | 7.8<br>16.9                        | 10.9<br>3.3              | 15.3<br>6.9                             | 23.1<br>14.0                | 111.4<br>14.5                            | 1.29<br>1.02                       | 0.065<br>0.073                   |
| Other   | 180                                  | 16.4                           | 12.1                               | 3.3<br>2.8               | 5.3                                     | 14.0                        | 14.5                                     | 1.02                               | 0.073                            |
| Other   | 160                                  | 10.4                           | 12.1                               | 2.0                      | 5.5                                     | 11.2                        | 12.2                                     | 1.11                               | 0.000                            |
| Space-Heating Energy Sources Electricity        | 258                                  | 15.9                           | 13.4                               | 5.5                      | 11.3                                    | 20.8                        | 19.7                                     | 1.22                               | 0.076                            |
| Electricity Main                                | 211                                  | 16.6                           | 13.7                               | 6.3                      | 12.6                                    | 23.3                        | 16.3                                     | 1.28                               | 0.070                            |
| Electricity Secondary                           | 375                                  | 15.1                           | 13.1                               | 4.7                      | 8.7                                     | 16.1                        | 28.3                                     | 1.14                               | 0.077                            |
| Other Excluding Electricity                     | 184                                  | 13.0                           | 11.0                               | 3.3                      | 6.9                                     | 14.1                        | 14.2                                     | 1.00                               | 0.077                            |
| Buildings without Heating                       | 63                                   | 8.2                            | 14.0                               | 0.9                      | 2.8                                     | 12.2                        | 6.4                                      | 0.84                               | 0.102                            |
| Primary Space-Heating Energy Source Electricity | 211<br>230<br>80<br>1,432            | 16.6<br>13.9<br>5.9<br>18.5    | 13.7<br>12.5<br>8.4<br>9.3         | 6.3<br>4.2<br>1.8<br>4.9 | 12.6<br>8.0<br>3.4<br>12.6              | 23.3<br>16.0<br>8.2<br>20.7 | 16.3<br>17.7<br>8.0<br>93.3              | 1.28<br>1.07<br>0.59<br>1.20       | 0.077<br>0.077<br>0.100<br>0.065 |
| Propane   | 67                                   | 10.5                           | 10.7                               | 2.9                      | 6.2                                     | 12.0                        | 6.3                                      | 0.98                               | 0.003                            |
| Other   | 70                                   | 12.6                           | 15.9                               | 2.5                      | 4.0                                     | 9.4                         | 4.7                                      | 0.85                               | 0.067                            |
| Cooling Energy Sources                          |                                      |                                |                                    |                          |   |                             |  |                                    |                                  |
| Electricity                                     | 227                                  | 15.0                           | 12.9                               | 4.9                      | 9.8                                     | 19.4                        | 17.7                                     | 1.17                               | 0.078                            |
| Other Excluding Electricity                     | 1,340                                | 17.5                           | 6.6                                | 7.0                      | 11.2                                    | 19.1                        | 92.7                                     | 1.21                               | 0.069                            |
| Buildings without Cooling                       | 39                                   | 4.8                            | 11.8                               | 1.1                      | 2.4                                     | 5.1                         | 3.2                                      | 0.39                               | 0.082                            |
| Water-Heating Energy Sources Electricity        | 211                                  | 14.6                           | 12.3                               | 4.4                      | 9.6                                     | 18.5                        | 15.9                                     | 1.10                               | 0.075                            |
| Other Excluding Electricity                     | 285                                  | 15.4                           | 12.3                               | 4.8                      | 9.9                                     | 20.1                        | 22.6                                     | 1.10                               | 0.073                            |
| Bldgs without Water Heating                     | 45                                   | 6.2                            | 12.1                               | 1.5                      | 3.7                                     | 9.1                         | 3.8                                      | 0.51                               | 0.083                            |
| Cooking Energy Sources                          |                                      |                                |                                    |                          |   |                             |  |                                    |                                  |
| Electricity                                     | 606                                  | 18.9                           | 15.5                               | 6.9                      | 18.3                                    | 39.5                        | 43.5                                     | 1.36                               | 0.072                            |
| Other Excluding Electricity                     | 397                                  |                                | 13.8                               | 6.3                      | 15.0                                    | 40.7                        | 30.5                                     | 1.31                               | 0.077                            |
| Buildings without Cooking                       | 135                                  | 11.8                           | 10.7                               | 3.3                      | 7.2                                     | 14.2                        | 10.9                                     | 0.96                               | 0.081                            |
| Energy End Uses (more than one may apply)       |                                      |                                |                                    |                          |   |                             |  |                                    |                                  |
| Buildings with Space Heating                    | 217                                  | 14.4                           | 12.2                               | 4.1                      | 8.7                                     | 17.7                        | 16.7                                     | 1.10                               | 0.077                            |
| Buildings with Cooling                          | 237                                  | 15.1                           | 12.3                               | 4.9                      | 9.9                                     | 19.4                        | 18.4                                     | 1.17                               | 0.077                            |
| Buildings with Water Heating                    | 244                                  | 15.0                           | 12.2                               | 4.6                      | 9.7                                     | 19.2                        | 18.9                                     | 1.16                               | 0.077                            |
| Buildings with Cooking                          | 504                                  | 18.2                           | 14.8                               | 6.6                      | 16.5                                    | 40.0                        | 37.2                                     | 1.34                               | 0.074                            |
| Buildings with Manufacturing                    | 349                                  | 13.2                           | 14.4                               | 3.1                      | 6.7                                     | 9.9                         | 26.3                                     | 0.99                               | 0.075                            |
| Buildings with Electricity                      |                                      |                                |                                    | _                        |   |                             |  |                                    |                                  |
| Generation                                      | 1,748                                | 20.3                           | 13.5                               | 9.9                      | 16.7                                    | 25.8                        | 125.2                                    | 1.46                               | 0.072                            |

| 2003  |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
|---|--------------------------------------|--------------------------------|------------------------------------|-------------------------|---|-------------------------|--|------------------------------------|-------------------------|
|   |                                      | Е                              | lectricity Con                     | sumption                | 1   |                         |  |                                    |                         |
|   |                                      |                                |                                    | Building                | istribution<br>g-Level Int<br>/h/square f | ensities                | Electric                                 | city Expend                        | litures                 |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile | Median                                    | 75th<br>Per-<br>centile | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars) |
| All Buildings*                                      | 202                                  | 14.1                           | 12.2                               | 3.6                     | 8.2                                       | 17.1                    | 15.7                                     | 1.09                               | 0.078                   |
| Percent of Floorspace Heated                        |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Not Heated  | 63                                   |                                | 14.0                               | 0.9                     |   | 12.2                    | 6.4                                      |                                    | 0.102                   |
| 1 to 50   | 105                                  | 8.0                            | 13.3                               | 2.4                     |   | 9.2                     | 8.9                                      |                                    | 0.085                   |
| 51 to 99  | 233                                  |                                | 12.0                               | 4.0                     |   | 18.5                    | 18.3                                     |                                    | 0.079                   |
| 100   | 234                                  | 15.4                           | 12.1                               | 4.6                     | 9.7                                       | 18.6                    | 17.8                                     | 1.17                               | 0.076                   |
| Percent of Floorspace Cooled Not Cooled             | 39                                   | 4.8                            | 11.8                               | 1.1                     | 2.4                                       | 5.1                     | 3.2                                      | 0.39                               | 0.082                   |
| 1 to 50   | 132                                  |                                | 11.7                               | 3.1                     | 5.7                                       | 10.1                    | 11.1                                     | 0.59                               | 0.082                   |
| 51 to 99  | 348                                  | 16.5                           | 13.2                               | 6.1                     | 11.2                                      | 22.5                    | 26.9                                     | 1.28                               | 0.004                   |
| 100   | 254                                  | 18.8                           | 12.0                               | 6.2                     |   | 23.1                    | 19.3                                     |                                    | 0.076                   |
| Percent Lit When Open                               |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Zero  | Q                                    | Q                              | Q                                  | 0.8                     | 1.2                                       | 1.9                     | Q  | Q                                  | Q                       |
| 1 to 50   | 71                                   | 6.5                            | 14.9                               | 2.3                     | 4.7                                       | 9.7                     | 6.4                                      | 0.58                               | 0.090                   |
| 51 to 99  | 236                                  | 14.3                           | 9.8                                | 4.4                     | 8.8                                       | 17.1                    | 18.9                                     | 1.14                               | 0.080                   |
| 100   | 256                                  | 17.0                           | 13.4                               | 5.0                     | 11.1                                      | 21.9                    | 19.2                                     | 1.27                               | 0.075                   |
| Building Never Open/                                |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Electricity Not Used                                | 25                                   | 2.1                            | Q                                  | 0.4                     | 1.7                                       | 3.8                     | 2.3                                      | 0.19                               | 0.090                   |
| Percent Lit When Closed                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Zero  | 81                                   |                                | 8.8                                | 2.5                     |   | 11.4                    | 6.7                                      |                                    | 0.082                   |
| 1 to 50   | 219                                  | 13.3                           | 11.0                               | 5.1                     | 10.8                                      | 21.5                    | 17.4                                     |                                    | 0.080                   |
| 51 to 100   | 333                                  | 21.7                           | 16.3                               | 6.3                     | 12.9                                      | 32.6                    | 23.1                                     | 1.50                               | 0.069                   |
| Building Never Closed/ Electricity Not Used         | 647                                  | 21.2                           | 18.8                               | 4.9                     | 13.7                                      | 29.5                    | 47.4                                     | 1.55                               | 0.073                   |
| Heating Equipment (more                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| than one may apply)                                 |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Heat Pumps  | 322                                  |                                | 14.2                               | 6.4                     |   | 22.2                    | 24.4                                     | 1.32                               | 0.076                   |
| Packaged Heat Pumps                                 | 379                                  | 19.3                           | 14.1                               | 7.4                     | 13.2                                      | 24.1                    | 28.5                                     | 1.46                               | 0.075                   |
| Split-System Heat Pumps                             | 239                                  | 15.4                           | 14.4                               | 5.1                     | 9.2                                       | 21.0                    | 17.7                                     | 1.14                               | 0.074                   |
| Individual Room Heat Pumps                          | 751                                  | 16.1                           | 14.6                               | 9.8                     | 13.6                                      | 20.7                    | 56.9                                     |                                    | 0.076                   |
| FurnacesIndividual Space Heaters                    | 120<br>202                           | 11.4<br>13.2                   | 12.0<br>12.8                       | 3.5<br>4.0              |   | 14.1<br>14.9            | 9.6                                      | 0.91<br>0.99                       | 0.080<br>0.075          |
| District Heat                                       | 1,435                                | 18.0                           | 9.5                                | 4.0                     | 12.6                                      | 20.7                    | 15.1<br>93.3                             | 1.17                               | 0.075                   |
| Boilers   | 511                                  | 14.5                           | 12.6                               | 3.4                     |   | 16.6                    | 38.1                                     | 1.08                               | 0.005                   |
| Packaged Heating Units                              | 326                                  |                                | 13.7                               | 6.1                     | 12.7                                      | 24.8                    | 25.5                                     |                                    | 0.078                   |
| Other   | 249                                  | 15.2                           | 14.3                               | 4.2                     | 8.8                                       | 16.9                    | 17.4                                     |                                    | 0.070                   |
| Cooling Equipment (more                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| than one may apply)                                 |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Residential-Type Central                            |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Air Conditioners                                    | 133                                  |                                | 11.7                               | 4.5                     |   | 15.8                    | 10.7                                     | 0.97                               | 0.081                   |
| Heat Pumps  | 326                                  |                                | 14.6                               | 6.6                     | 12.0                                      | 22.4                    | 24.5                                     | 1.33                               | 0.075                   |
| Packaged Heat Pumps                                 | 366                                  | 19.4                           | 14.1                               | 7.2                     |   | 23.8                    | 27.5                                     | 1.46                               | 0.075                   |
| Split-System Heat Pumps                             | 235                                  |                                | 14.8                               | 5.9                     | 10.9                                      | 21.5                    | 17.3                                     | 1.15                               | 0.074                   |
| Individual Air Conditioners                         | 867                                  | 17.1                           | 15.4                               | 9.7                     | 13.6                                      | 21.7                    | 64.2                                     | 1.27                               | 0.074                   |
| Individual Air Conditioners  District Chilled Water | 189<br>1,711                         | 11.2<br>19.7                   | 12.2<br>7.8                        | 3.6<br>10.9             | 6.8<br>15.3                               | 13.5<br>23.1            | 15.2<br>111.4                            |                                    | 0.080<br>0.065          |
| Central Chillers                                    | 2,212                                |                                | 14.0                               | 11.2                    |   | 25.1                    | 154.1                                    | 1.47                               | 0.003                   |
| Packaged Air Conditioning                           | 2,212                                | ۲.۱                            | 17.0                               | 11.2                    | 10.5                                      | 20.0                    | 104.1                                    | 1.77                               | 0.070                   |
| Units   | 287                                  | 15.4                           | 12.9                               | 5.6                     | 11.5                                      | 23.4                    | 22.5                                     | 1.21                               | 0.078                   |
| Swamp Coolers                                       | 181                                  | 14.1                           | 13.3                               | 4.0                     |   | 19.9                    | 14.8                                     |                                    | 0.082                   |
| Other   | 584                                  | 18.0                           | 13.1                               | 8.7                     | 12.8                                      | 23.4                    | 41.2                                     | 1.27                               | 0.070                   |
|   |                                      |                                |                                    |                         |   |                         |  |                                    |                         |

|   |                                      | E                              | lectricity Con                     | sumption                |   |                         |  |                                    |                         |
|---|--------------------------------------|--------------------------------|------------------------------------|-------------------------|---|-------------------------|--|------------------------------------|-------------------------|
|   |                                      |                                |                                    | Di<br>Building          | stribution<br>g-Level Int<br>h/square f | ensities                | Electric                                 | ity Expend                         | itures                  |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile | Median                                  | 75th<br>Per-<br>centile | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars) |
| All Buildings*  | 202                                  | 14.1                           | 12.2                               | 3.6                     | 8.2                                     | 17.1                    | 15.7                                     | 1.09                               | 0.078                   |
| Main Equipment Replaced Since<br>1990 (more than one may apply) |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Heating   | 176                                  | 12.8                           | 12.4                               | 4.0                     | 8.3                                     | 16.2                    | 13.9                                     | 1.01                               | 0.079                   |
| Cooling   | 211                                  | 13.6                           | 11.7                               | 4.5                     | 9.2                                     | 18.3                    | 16.8                                     | 1.08                               | 0.079                   |
| Water Heating Equipment   | 205                                  | 44.0                           | 40.0                               | 4.0                     | 40.4                                    | 00.4                    | 40.0                                     | 4.40                               | 0.070                   |
| Centralized System  | 205                                  | 14.9                           | 12.9                               | 4.8                     | 10.1                                    | 20.1                    | 16.3                                     | 1.18                               | 0.079                   |
| Distributed System  | 180                                  | 12.3                           | 12.0                               | 4.0                     | 8.0                                     | 15.8                    | 14.3                                     | 0.98                               | 0.080                   |
| Combination of Centralized                                      | 4 000                                |                                |                                    |                         |   |                         |  |                                    |                         |
| and Distributed System  | 1,092                                | 18.6                           | 10.9                               | 8.4                     | 13.5                                    | 22.5                    | 76.8                                     | 1.31                               | 0.070                   |
| Lighting Equipment Types (more than one may apply)              |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Incandescent  | 269                                  | 15.3                           | 12.0                               | 3.6                     | 8.4                                     | 16.9                    | 20.3                                     | 1.15                               | 0.076                   |
| Standard Fluorescent  | 219                                  | 14.5                           | 12.0                               | 4.2                     | 8.9                                     | 18.4                    | 17.0                                     | 1.13                               | 0.070                   |
| Compact Fluorescent   | 519                                  | 17.7                           | 13.3                               | 5.1                     | 11.4                                    | 23.7                    | 38.9                                     | 1.12                               | 0.077                   |
| •   |                                      | 16.0                           | 12.7                               |                         | 10.1                                    |                         | 52.0                                     | 1.33                               | 0.073                   |
| High Intensity Discharge  | 725<br>554                           | 17.7                           | 13.7                               | 5.0                     | 11.2                                    | 18.6<br>23.3            | 52.0<br>40.7                             |                                    | 0.072                   |
| HalogenOther  | 994<br>Q                             | 17.7<br>Q                      | 13.7<br>Q                          | 4.9<br>25.1             | 35.6                                    | 23.3<br>49.8            | 40.7<br>Q                                | 1.30<br>Q                          | 0.073<br>Q              |
| Refrigeration Equipment   |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| (more than one may apply) <sup>a</sup>                          |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Any Refrigeration   | 256                                  | 15.3                           | 12.4                               | 4.7                     | 10.0                                    | 20.8                    | 19.6                                     | 1.18                               | 0.077                   |
| Commercial Refrigeration  | 520                                  | 19.6                           | 16.2                               | 9.2                     | 21.9                                    | 48.0                    | 38.3                                     | 1.44                               | 0.074                   |
| Walk-In Units   | 655                                  | 21.5                           | 17.3                               | 13.4                    | 32.2                                    | 58.5                    | 47.7                                     | 1.57                               | 0.073                   |
| Cases or Cabinets   | 512                                  | 20.7                           | 16.6                               | 9.6                     | 23.5                                    | 49.9                    | 38.0                                     | 1.53                               | 0.074                   |
| Residential-Type Units  | 219                                  | 13.3                           | 10.8                               | 4.1                     | 8.4                                     | 15.5                    | 16.9                                     | 1.03                               | 0.077                   |
| Vending Machines  | 584                                  | 16.5                           | 12.7                               | 5.6                     | 11.5                                    | 22.2                    | 42.2                                     | 1.19                               | 0.077                   |
| No Refrigeration  | 63                                   | 7.5                            | 10.9                               | 2.0                     | 4.4                                     | 10.1                    | 5.4                                      | 0.65                               | 0.086                   |
| Office Equipment (more  |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| than one may apply)   |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Computers   | 270                                  | 15.0                           | 12.0                               | 5.0                     | 9.9                                     | 18.7                    | 20.8                                     | 1.15                               | 0.077                   |
| With Flat Screen Monitors                                       | 531                                  | 17.6                           | 11.0                               | 6.6                     | 12.0                                    | 20.3                    | 39.9                                     | 1.32                               | 0.075                   |
| Dedicated Servers   | 508                                  | 16.4                           | 11.4                               | 6.9                     | 12.3                                    | 20.7                    | 38.3                                     | 1.24                               | 0.075                   |
| Laser Printers  | 231                                  | 13.8                           | 11.3                               | 4.7                     | 9.0                                     | 17.6                    | 18.3                                     | 1.09                               | 0.079                   |
| Inkjet Printers   | 376                                  | 16.6                           | 12.2                               | 6.2                     | 11.3                                    | 20.2                    | 28.1                                     | 1.24                               | 0.075                   |
| Photocopiers  | 292<br>357                           | 15.1<br>15.0                   | 11.8<br>11.3                       | 5.3<br>4.9              | 10.3<br>9.8                             | 19.3<br>17.4            | 22.4<br>27.0                             | 1.16<br>1.13                       | 0.077<br>0.076          |
| •   |                                      |                                |                                    |                         | 0.0                                     |                         |  |                                    | 0.0.0                   |
| Number of Computers None  | 44                                   | 7.6                            | 15.9                               | 1.8                     | 4.1                                     | 11.6                    | 3.8                                      | 0.65                               | 0.086                   |
| 1 to 4  | 92                                   | 12.4                           | 17.6                               | 4.1                     | 8.1                                     | 17.6                    | 3.6<br>7.7                               | 1.04                               | 0.084                   |
|   |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| 5 to 9  | 143                                  | 11.2                           | 13.3                               | 5.8                     | 9.5                                     | 18.3                    | 11.8                                     | 0.92                               | 0.082                   |
| 10 to 19  | 226                                  | 12.6                           | 12.2                               | 7.3                     | 11.9                                    | 19.3                    | 18.2                                     | 1.02                               | 0.081                   |
| 20 to 49  | 470                                  | 16.1                           | 12.7                               | 8.8                     | 13.5                                    | 21.7                    | 36.6                                     | 1.26                               | 0.078                   |
| 50 to 99  | 690                                  | 14.1                           | 10.9                               | 7.7                     | 13.4                                    | 19.2                    | 51.5                                     | 1.05                               | 0.075                   |
| 100 to 249  | 1,359                                | 16.1                           | 12.2                               | 7.9                     | 14.7                                    | 23.5                    | 96.7                                     | 1.15                               | 0.071                   |
| 250 or More   | 5,611                                | 21.2                           | 9.5                                | 11.4                    | 19.0                                    | 29.4                    | 400.1                                    | 1.51                               | 0.071                   |

|   |                                      | E                              | lectricity Con                     | sumption                |   |                         |  |                                    |                         |
|---|--------------------------------------|--------------------------------|------------------------------------|-------------------------|---|-------------------------|--|------------------------------------|-------------------------|
|   |                                      |                                |                                    | Building                | stribution<br>g-Level Int<br>h/square f | ensities                | Electric                                 | ity Expend                         | litures                 |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile | Median                                  | 75th<br>Per-<br>centile | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars) |
| All Buildings*  | 202                                  | 14.1                           | 12.2                               | 3.6                     | 8.2                                     | 17.1                    | 15.7                                     | 1.09                               | 0.078                   |
| Number of Dedicated Servers                           |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| None  | 91                                   | 10.9                           | 14.5                               | 2.9                     | 6.6                                     | 15.1                    | 7.5                                      | 0.89                               | 0.082                   |
| 1 to 4  | 323                                  | 14.2                           | 12.8                               | 6.6                     | 11.7                                    | 19.7                    | 24.6                                     | 1.08                               | 0.076                   |
| 5 to 9  | 1,272                                | 19.0                           | 12.1                               | 11.2                    | 17.0                                    | 25.9                    | 97.3                                     | 1.45                               | 0.076                   |
| 10 to 19  | 2,096                                | 20.9                           | 7.4                                | 10.0                    | 18.9                                    | 29.4                    | 147.3                                    | 1.47                               | 0.070                   |
| 20 to 49  | 3,109                                | 20.7                           | 11.2                               | 9.9                     | 18.7                                    | 25.3                    | 213.9                                    | 1.43                               | 0.069                   |
| 50 or More  | 6,472                                | 23.4                           | 10.1                               | 17.9                    | 18.2                                    | 31.2                    | 515.2                                    | 1.86                               | 0.080                   |
| Number of Photocopiers                                |                                      | 44.0                           | 47.4                               | 0.0                     | 0.0                                     | 10.0                    | 0.7                                      | 0.07                               | 0.004                   |
| None  | 80                                   | 11.6                           | 17.4                               | 2.8                     | 6.9                                     | 16.9                    | 6.7                                      | 0.97                               | 0.084                   |
| One   | 139                                  | 11.2                           | 13.9                               | 4.3                     | 8.4                                     | 15.0                    | 11.3                                     | 0.91                               | 0.081                   |
| 2 to 4  | 377                                  | 13.7                           | 12.0                               | 6.1                     | 11.0                                    | 18.2                    | 28.3                                     | 1.03                               | 0.075                   |
| 5 to 9  | 1,110<br>3,977                       | 17.2<br>21.2                   | 8.9<br>10.4                        | 10.1<br>11.3            | 15.6<br>17.6                            | 29.3<br>23.9            | 83.7<br>287.0                            | 1.29<br>1.53                       | 0.075<br>0.072          |
| Energy-Related Space Functions                        |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| (more than one may apply)                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Commercial Food Preparation                           | 505                                  | 18.2                           | 14.8                               | 6.6                     | 16.5                                    | 40.3                    | 37.2                                     | 1.34                               | 0.074                   |
| Activities with Large                                 | 303                                  | 10.2                           | 14.0                               | 0.0                     | 10.5                                    | 40.5                    | 07.Z                                     | 1.54                               | 0.074                   |
| Amounts of Hot Water                                  | 603                                  | 17.6                           | 15.7                               | 7.2                     | 13.2                                    | 26.0                    | 43.6                                     | 1.27                               | 0.072                   |
| Separate Computer Area                                | 821                                  | 16.9                           | 12.0                               | 6.6                     | 11.5                                    | 19.2                    | 60.2                                     | 1.24                               | 0.072                   |
| HVAC Conservation Features                            |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| (more than one may apply)                             |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Variable Air-Volume System                            | 798                                  | 19.0                           | 12.1                               | 7.5                     | 14.2                                    | 26.5                    | 57.4                                     | 1.36                               | 0.072                   |
| Economizer Cycle                                      | 812                                  | 19.5                           | 12.8                               | 8.2                     | 14.9                                    | 27.3                    | 58.3                                     | 1.41                               | 0.072                   |
| HVAC Maintenance                                      | 308                                  | 15.5                           | 12.5                               | 4.8                     | 10.4                                    | 20.0                    | 23.5                                     | 1.18                               | 0.076                   |
| Energy Management and Control System (EMCS)           | 1,109                                | 17.9                           | 12.9                               | 8.0                     | 13.6                                    | 23.7                    | 81.1                                     | 1.31                               | 0.073                   |
| Window and Interior Lighting                          |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Features (more than one                               |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| may apply)  |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Multipaned Windows                                    | 273                                  | 15.3                           | 13.5                               | 4.5                     | 9.3                                     | 18.4                    | 20.1                                     | 1.13                               | 0.074                   |
| Tinted Window Glass                                   | 375                                  | 16.6                           | 12.2                               | 4.8                     | 11.0                                    | 21.3                    | 28.3                                     | 1.25                               | 0.075                   |
| Reflective Window Glass  External Overhangs           | 501                                  | 17.9                           | 12.4                               | 4.7                     | 9.5                                     | 18.9                    | 37.0                                     | 1.33                               | 0.074                   |
| or Awnings  | 231                                  | 16.4                           | 12.6                               | 5.8                     | 11.4                                    | 23.2                    | 17.9                                     | 1.27                               | 0.077                   |
| Skylights or Atriums                                  | 584                                  | 15.1                           | 13.4                               | 4.1                     | 8.7                                     | 15.9                    | 43.2                                     | 1.12                               | 0.074                   |
| Daylighting Sensors                                   | 816                                  | 21.1                           | 16.0                               | 5.6                     | 10.1                                    | 25.6                    | 65.4                                     | 1.69                               | 0.080                   |
| Specular Reflectors                                   | 470                                  | 16.7                           | 13.2                               | 5.4                     | 10.4                                    | 18.6                    | 34.6                                     | 1.23                               | 0.074                   |
| Electronic Ballasts                                   | 284                                  | 15.6                           | 12.4                               | 4.5                     | 9.5                                     | 19.3                    | 21.7                                     | 1.19                               | 0.076                   |
| Energy Management and                                 | _0.                                  | .0.0                           |                                    |                         | 0.0                                     |                         |  |                                    | 0.0.0                   |
| Control System (EMCS) For Lighting                    | 1,528                                | 19.1                           | 12.8                               | 10.8                    | 17.8                                    | 34.5                    | 116.0                                    | 1.45                               | 0.076                   |
| Equipment Usage Reduced When Building Not In Full Use |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| (more than one may apply) <sup>a</sup>                |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Heating   | 197                                  | 13.2                           | 11.5                               | 3.7                     | 7.6                                     | 15.4                    | 15.7                                     | 1.06                               | 0.080                   |
|   |                                      | 13.8                           |                                    |                         | 8.9                                     | 16.7                    | 17.2                                     | 1.10                               | 0.080                   |
| Cooling   | 716                                  |                                | 1 1 11                             |                         |   |                         |  |                                    |                         |
| Cooling   | 216<br>160                           | 12.5                           | 11.0<br>10.4                       | 4.5<br>3.9              | 8.4                                     | 16.7                    | 12.7                                     | 1.10                               | 0.080                   |

## Table C14. Electricity Consumption and Expenditure Intensities for Non-Mall Buildings, 2003

|   |                                      | E                              | lectricity Con                     | sumption                |   |                         |  |                                    |                         |
|---|--------------------------------------|--------------------------------|------------------------------------|-------------------------|---|-------------------------|--|------------------------------------|-------------------------|
|   |                                      |                                |                                    | Building                | stribution<br>g-Level Int<br>h/square f | ensities                | Electric                                 | eity Expend                        | litures                 |
|   | per<br>Building<br>(thousand<br>kWh) | per<br>Square<br>Foot<br>(kWh) | per<br>Worker<br>(thousand<br>kWh) | 25th<br>Per-<br>centile | Median                                  | 75th<br>Per-<br>centile | per<br>Building<br>(thousand<br>dollars) | per<br>Square<br>Foot<br>(dollars) | per<br>kWh<br>(dollars) |
| All Buildings*  | 202                                  | 14.1                           | 12.2                               | 3.6                     | 8.2                                     | 17.1                    | 15.7                                     | 1.09                               | 0.078                   |
| Annual Consumption (kilowatthours)                                |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| 10,000 or Less  | 5                                    | 1.3                            | 2.8                                | 1.0                     | 1.9                                     | 3.2                     | 0.6                                      | 0.17                               | 0.124                   |
| 10,001 to 50,000  | 26                                   | 4.9                            | 6.1                                | 3.8                     | 6.9                                     | 11.7                    | 2.7                                      | 0.51                               | 0.104                   |
| 50,001 to 100,000   | 73                                   | 8.0                            | 8.6                                | 6.4                     | 11.4                                    | 24.0                    | 7.2                                      | 0.78                               | 0.098                   |
| 100,001 to 500,000  | 220                                  | 13.0                           | 12.2                               | 10.1                    | 18.9                                    | 40.0                    | 18.9                                     | 1.12                               | 0.086                   |
| 500,001 to 1,000,000  | 684                                  | 14.4                           | 13.6                               | 12.0                    | 16.9                                    | 30.0                    | 54.5                                     | 1.15                               | 0.080                   |
| 1,000,001 to 5,000,000  | 2,087                                | 20.3                           | 13.5                               | 16.0                    | 23.4                                    | 37.7                    | 143.9                                    | 1.40                               | 0.069                   |
| Over 5,000,000  | 11,458                               | 24.7                           | 15.6                               | 20.0                    | 27.5                                    | 36.8                    | 775.0                                    | 1.67                               | 0.068                   |
| Provider of Purchased<br>Electricity (more than<br>one may apply) |                                      |                                |                                    |                         |   |                         |  |                                    |                         |
| Local Utility   | 187                                  | 13.7                           | 12.0                               | 3.5                     | 8.1                                     | 16.7                    | 14.5                                     | 1.06                               | 0.078                   |
| Some Other Provider   | 594                                  | 18.3                           | 12.9                               | 6.5                     | 12.4                                    | 22.9                    | 46.4                                     | 1.43                               | 0.078                   |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals. Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|   | Total Electricity Consumption (billion kWh) |              |           |          | Build          | ings Usi       | rspace<br>ng Elec<br>uare fe | tricity        | Electricity Energy Intensity (kWh/square foot) |              |              |              |
|---|---|--------------|-----------|----------|----------------|----------------|------------------------------|----------------|--|--------------|--------------|--------------|
|   | North-<br>east                              | Mid-<br>west | South     | West     | North-<br>east | Mid-<br>west   | South                        | West           | North-<br>east                                 | Mid-<br>west | South        | West         |
| All Buildings*                          | 147   | 216          | 375       | 152      | 12,809         | 16,701         | 22,766                       | 11,030         | 11.5   | 12.9         | 16.5         | 13.8         |
| Building Floorspace<br>(Square Feet)    |   |              |           |          |                |                |                              |                |  |              |              |              |
| 1,001 to 5,000                          | 13  | 30           | 50        | 19       | 997            | 1,729          | 2,324                        | 1,295          | 13.4   | 17.5         | 21.7         | 14.6         |
| 5,001 to 10,000                         | 10  | 15           | 33        | 19       | 1,083          | 1,447          | 2,454                        | 1,214          | 9.0  | 10.7         | 13.4         | 15.3         |
| 10,001 to 25,000                        | 19  | 29           | 49        | 22       | 1,944          | 3,098          | 4,266                        | 2,063          | 9.6  | 9.3          | 11.6         | 10.9         |
| 25,001 to 50,000                        | 12  | 31           | 41        | 19       | 1,292          | 2,483          | 3,012                        | 1,599          | 9.0  | 12.6         | 13.7         | 11.7         |
| 50,001 to 100,000                       | 22  | 29           | 50        | 17       | 2,040          | 2,260          | 3,435                        | 1,296          | 11.0   | 12.9         | 14.6         | 13.1         |
| 100,001 to 200,000                      | 25  | 33           | 66        | 18       | 2,117          | 2,285          | 3,439                        | 1,177          | 11.6   | 14.6         | 19.1         | 15.0         |
| 200,001 to 500,000                      | 24  | 28           | 38        | 16       | 1,781          | 2,196          | 1,909                        | 1,166          | 13.3   | 12.7         | 20.1         | 13.7         |
| Over 500,000                            | 23  | 20           | 46        | 23       | 1,556          | 1,203          | 1,928                        | 1,221          | 15.0   | 16.4         | 24.0         | 18.8         |
| Principal Building Activity             | 40  | 00           | 50        | 4-       | 4 000          | 0.500          | 2.000                        | 4.00-          | 7.0  | 0.4          | 440          | 40.0         |
| Education                               | 13  | 20           | 58        | 17       | 1,683          | 2,539          | 3,983                        | 1,667          | 7.8  | 8.1          | 14.6         | 10.2         |
| Food Sales                              | Q   | 16           | 24        | Q        | Q              | 305            | 484                          | Q              | Q  | 52.5         | 50.5         | Q            |
| Food Service                            | Q<br>10                                     | 14<br>18     | 37        | 8<br>12  | Q<br>535       | 453            | 764<br>1 277                 | 265            | Q<br>10.4                                      | 29.9         | 48.3         | 31.9<br>22.5 |
| Health Care                             | 10<br>8                                     | 12           | 31<br>26  | 7        | 535<br>358     | 798<br>438     | 1,277<br>838                 | 553<br>270     | 19.4<br>23.2                                   | 23.2<br>26.4 | 24.5<br>30.5 | 25.3         |
| Inpatient Outpatient                    | Q   | 7            | 6         | 6        | 336<br>Q       | 359            | 438                          | 283            | 23.2<br>Q                                      | 19.2         | 13.0         | 19.8         |
| Lodging                                 | 9   | 15           | 29        | 16       | 1,171          | 1,144          | 1,694                        | 1,087          | Q  | 13.0         | 17.2         | 14.7         |
| Retail (Other Than Mall)                | 6   | 12           | 29        | 14       | 630            | 880            | 1,844                        | 963            | 8.8  | 14.2         | 16.0         | 14.7         |
| Office                                  | 50  | 53           | 71        | 36       | 3,012          | 2,989          | 3,782                        | 2,425          | 16.5   | 17.9         | 18.8         | 15.0         |
| Public Assembly                         | 6   | 11           | 21        | 11       | 1,048          | 1,012          | 1,174                        | 701            | 10.5<br>Q                                      | 10.7         | 17.8         | 16.0         |
| Public Order and Safety                 | Q   | Q            | Q         | Q        | 1,040<br>Q     | 1,012<br>Q     | 1,174<br>Q                   | Q              | Q  | Q            | Q            | Q            |
| Religious Worship                       | 2   | 5            | 10        | 2        | 627            | 1,115          | 1,498                        | 515            | 2.8  | 4.1          | 6.7          | 3.6          |
| Service                                 | 5   | 14           | 18        | 7        | 731            | 1,259          | 1,335                        | 657            | 6.9  | 10.8         | 13.2         | 11.4         |
| Warehouse and Storage                   | 9   | 27           | 25        | 11       | 1,467          | 2,849          | 3,623                        | 1,486          | 5.9  | 9.6          | 6.9          | 7.3          |
| Other                                   | 15  | 5            | Q         | Q        | 649            | 306            | Q                            | Q              | 23.3   | 16.7         | Q            | Q            |
| Vacant                                  | Q   | Q            | Q         | Q        | Q              | Q              | Q                            | Q              | Q  | Q            | Q            | Q            |
| Year Constructed                        | 4.4   | •            | •         |          | 4 000          | 4 505          | 540                          | 0              |  | - 4          | 40.0         |              |
| Before 1920                             | 11  | 8            | Q         | Q        | 1,388          | 1,535          | 512                          | Q              | 7.7  | 5.4          | 10.6         | Q            |
| 1920 to 1945                            | 17  | 23           | 12        | 8        | 2,472          | 1,954          | 1,249                        | 920            | 7.0  | 11.8         | 9.5          | 9.2          |
| 1946 to 1959<br>1960 to 1969            | 17<br>22                                    | 17<br>23     | 22<br>34  | 12<br>18 | 2,083<br>1,737 | 2,005<br>2,224 | 1,744<br>2,504               | 1,005<br>1.592 | 8.0<br>12.6                                    | 8.3<br>10.1  | 12.8<br>13.6 | 11.9<br>11.0 |
| 1970 to 1979                            | 26  | 23<br>47     | 64        | 31       | 1,723          | 3,237          | 3,514                        | ,              | 15.0   | 14.5         | 18.1         | 15.1         |
| 1980 to 1989                            | 25  | 35           | 88        | 36       | 1,723          | 1,915          | 4,636                        | 2,229          | 17.9   | 18.2         | 19.1         | 16.1         |
| 1990 to 1999                            | 19  | 45           | 104       | 34       | 1,355          | 2,638          | 6,106                        | 1,979          | 14.2   | 16.9         | 17.0         | 17.3         |
| 2000 to 2003                            | 11  | 19           | 45        | 11       | 675            | 1,193          | 2,501                        | 930            | 16.7   | 15.7         | 18.0         | 11.5         |
| Climate Zone: 30-Year Average           |   |              |           |          |                |                |                              |                |  |              |              |              |
| Under 2,000 CDD and                     | 00  |              | h 1       | 0.4      | 2 205          | E 400          | h 1                          | 0.544          | 0.0  | 44.4         | h 1          | 40.0         |
| More than 7,000 HDD                     | 23  | 62           | N         | 34       | 2,365          | 5,488          | N                            | 2,541          | 9.8  | 11.4         | N            | 13.3         |
| 5,500-7,000 HDD                         | 59<br>65                                    | 134          | N<br>72   | 31       | 5,366          | 9,655          | N<br>4 047                   | 2,055          | 11.0   | 13.9         | N<br>17.9    | 15.0         |
| 4,000-5,499 HDD<br>Fewer than 4,000 HDD | 65<br>N                                     | 19<br>N      | 72<br>156 | Q<br>63  | 5,077<br>N     | 1,558<br>N     | 4,047<br>9,985               | 693<br>5 187   | 12.8   | 12.4         | 17.8<br>15.7 | 14.0<br>12.1 |
| 2,000 CDD or More and                   | N   | N            | 156       |          | N              | N              | -                            | 5,187          | N  | N            |              |              |
| Fewer than 4,000 HDD                    | N   | N            | 146       | 15       | N              | N              | 8,734                        | 555            | N  | N            | 16.7         | 27.1         |
| Number of Floors One                    | 39  | 80           | 155       | 60       | 3,086          | 5 g70          | 11,127                       | 4,849          | 12.5   | 13.6         | 14.0         | 12.4         |
| Two                                     | 39<br>27                                    | 56           | 78        | 60<br>40 | 3,000          | 5,073          | 4,874                        | 2,959          | 8.9  | 11.0         | 16.1         | 13.6         |
|   |   | 29           | 76<br>28  |          | 2,065          | -              | 1,916                        | 2,959<br>896   | 7.3  | 11.6         |              | 12.8         |
| Three                                   |   |              |           |          |                |                |                              |                |  |              |              |              |
| ThreeFour to Nine                       | 15<br>40                                    | 39           | 74        | 11<br>21 | 3,003          | 2,504<br>2,640 | 3,094                        | 1,328          | 13.5   | 14.8         | 14.8<br>23.8 | 15.9         |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|                                     | Total Electricity Consumption (billion kWh) |              |           |           | Build          | ings Usi     | orspace<br>ing Elec<br>quare fe | tricity        |                |              | ricity<br>Intensity<br>ıare foot |              |
|-------------------------------------|---|--------------|-----------|-----------|----------------|--------------|---------------------------------|----------------|----------------|--------------|----------------------------------|--------------|
|                                     | North-<br>east                              | Mid-<br>west | South     | West      | North-<br>east | Mid-<br>west | South                           | West           | North-<br>east | Mid-<br>west | South                            | West         |
| All Buildings*                      | 147   | 216          | 375       | 152       | 12,809         | 16,701       | 22,766                          | 11,030         | 11.5           | 12.9         | 16.5                             | 13.8         |
| Elevators and Escalators            |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| (more than one may apply)           |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| Any Elevators                       | 86  | 99           | 168       | 63        | 6,119          | 6,594        | 7,941                           | 3,841          | 14.1           | 15.0         | 21.2                             | 16.5         |
| Number of Elevators                 |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| One                                 | 18  | 37           | 36        | 13        | 1,567          | 3,009        | 2,467                           | 1,064          | 11.3           | 12.3         | 14.8                             | 11.8         |
| Two to Five                         | 38  | 41           | 70        | 23        | 2,971          | 2,695        | 3,094                           | 1,360          | 12.8           | 15.2         | 22.6                             | 16.6         |
| Six or More                         | 31  | 21           | 62        | 28        | 1,581          | 889          | 2,380                           | 1,418          | 19.3           | 23.2         | 25.9                             | 19.8         |
| Any Escalators                      | Q   | Q            | 29        | Q         | Q              | Q            | 1,002                           | Q              | Q              | Q            | 28.9                             | Q            |
| Number of Workers (main shift)      |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| Fewer than 5                        | 12  | 37           | 42        | 19        | 2,279          | 4,579        | 4,966                           | 2,236          | 5.1            | 8.0          | 8.5                              | 8.3          |
| 5 to 9                              | 9   | 19           | 33        | 12        | 1,085          | 1,463        | 2,576                           | 1,023          | 8.2            | 13.1         | 12.6                             | 11.9         |
| 10 to 19                            | 14  | 23           | 39        | 14        | 1,872          | 2,081        | 2,741                           | 1,109          | 7.2            | 10.8         | 14.3                             | 12.2         |
| 20 to 49                            | 21  | 37           | 68        | 27        | 2,314          | 2,856        | 3,883                           | 1,909          | 9.1            | 13.1         | 17.6                             | 13.9         |
| 50 to 99                            | 22  | 33           | 46        | 19        | 1,598          | 2,311        | 2,654                           | 1,370          | 13.5           | 14.1         | 17.2                             | 13.6         |
| 100 to 249                          | 23  | 29           | 59        | 24        | 1,331          | 1,609        | 2,534                           | 1,397          | 17.0           | 18.1         | 23.3                             | 17.1         |
| 250 or More                         | 48  | 38           | 88        | 39        | 2,329          | 1,800        | 3,413                           | 1,986          | 20.7           | 21.3         | 25.7                             | 19.6         |
| Weekly Operating Hours              |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| Fewer than 40                       | 3   | 7            | 12        | 5         | 863            | 2,046        | 2,099                           | 892            | 3.0            | 3.5          | 5.7                              | 5.1          |
| 40 to 48                            | 13  | 31           | 51        | 21        | 2,103          | 2,742        | 4,565                           | 2,161          | 6.3            | 11.3         | 11.2                             | 9.7          |
| 49 to 60                            | 27  | 52           | 67        | 29        | 3,098          | 4,595        | 5,553                           | 2,455          | 8.8            | 11.4         | 12.0                             | 11.8         |
| 61 to 84                            | 21  | 32           | 67        | 24        | 2,048          | 2,575        | 3,746                           | 1,944          | 10.4           | 12.6         | 18.0                             | 12.6         |
| 85 to 167                           | 24  | 42           | 66        | 21        | 1,317          | 2,008        | 2,370                           | 1,246          | 18.3           | 20.9         | 27.8                             | 17.2         |
| Open Continuously                   | 59  | 51           | 111       | 52        | 3,379          | 2,735        | 4,434                           | 2,332          | 17.4           | 18.7         | 25.1                             | 22.3         |
| Ownership and Occupancy             |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| Nongovernment Owned                 | 124   | 158          | 273       | 119       | 10 202         | 12 107       | 17,152                          | 8,460          | 12.0           | 13.1         | 15.9                             | 14.1         |
| Owner Occupied                      | 66  | 80           | 122       | 50        | 5,904          | 6,131        | 7,803                           | 3,617          | 11.2           | 13.1         | 15.7                             | 13.8         |
| Nonowner Occupied                   | 57  | 77           | 150       | 69        | 4,140          | 5,366        | 9,021                           | 4,732          | 13.8           | 14.3         | 16.7                             | 14.6         |
| Unoccupied                          | Q<br>Q                                      | Q            | 130<br>Q  | Q         | 4, 140<br>Q    | 5,300<br>Q   | 9,021<br>Q                      | 4,732<br>Q     | 13.6<br>Q      | 14.3<br>Q    | 10.7<br>Q                        | 14.0<br>Q    |
| Government Owned                    | 24  | 58           | 101       | 33        | 2,517          | 4,594        |                                 | 2,570          | 9.5            | 12.5         | بى<br>18.1                       | 12.8         |
| Federal                             | 24<br>Q                                     | 30<br>Q      | Q         | აა<br>3   | 2,517<br>Q     | 4,594<br>Q   | 5,614                           | 2,570<br>Q     | 9.5<br>Q       | 20.7         | 27.3                             | 8.9          |
|                                     |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| State<br>Local                      | 6<br>15                                     | 11<br>28     | 33<br>55  | 10<br>20  | 599<br>1,706   | 764<br>2,909 |                                 | 727<br>1,541   | 10.8<br>8.7    | 14.2<br>9.5  | 19.3<br>16.1                     | 13.4<br>13.2 |
| Vacancy Status                      |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| Completely Vacant                   | Q   | Q            | Q         | Q         | Q              | Q            | Q                               | Q              | Q              | Q            | Q                                | 0            |
| Mostly Vacant                       | Q   |              | Q         | Q         | Q              | Q            | Q                               |                | Q              | Q            | Q                                | Q<br>Q       |
| •                                   |   | Q<br>41      |           |           |                |              |                                 | Q<br>2.070     |                |              |                                  |              |
| Partially Vacant  Not At All Vacant | 40<br>107                                   | 173          | 61<br>313 | 27<br>124 |                |              | 3,919<br>18,499                 | 2,079<br>8,769 | 12.8<br>11.5   | 13.1<br>13.6 | 15.5<br>16.9                     | 13.2<br>14.1 |
| Number of Establishments            |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| One                                 | 92  | 162          | 265       | 108       | 7 006          | 12,134       | 16 560                          | 7,679          | 11.4           | 13.4         | 16.0                             | 14.1         |
|                                     |   |              |           |           |                |              |                                 |                |                |              |                                  |              |
| 2 to 5                              | 28  | 36           | 59        | 24        | 2,517          | 2,803        |                                 | 1,886          | 11.2           | 12.9         | 15.9                             | 12.8         |
| 6 to 10                             | 8   | 7            | 13        | 5         | 571            | 510          |                                 | 327            | 13.9           | 14.1         | 24.3                             | 16.1         |
| 11 to 20                            | Q   | Q            | 12        | Q         | Q              | Q            | 589                             | Q              | Q              | Q            | 19.7                             | Q            |
| More than 20                        | 13  | Q            |           | 9         | 696            | Q            | ,                               | 688            | 18.0           | Q            |                                  | 13.4         |
| Currently Unoccupied                | Q   | Q            | Q         | Q         | Q              | Q            | Q                               | Q              | Q              | Q            | Q                                | Q            |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|  | Total Electricity Consumption (billion kWh) |              |          |          | Build          | ings Usi       | orspace<br>ing Elect<br>quare fee | tricity        | Electricity Energy Intensity (kWh/square foot) |              |              |              |
|--|---|--------------|----------|----------|----------------|----------------|-----------------------------------|----------------|--|--------------|--------------|--------------|
|  | North-<br>east                              | Mid-<br>west | South    | West     | North-<br>east | Mid-<br>west   | South                             | West           | North-<br>east                                 | Mid-<br>west | South        | West         |
| All Buildings*   | 147   | 216          | 375      | 152      | 12,809         | 16,701         | 22,766                            | 11,030         | 11.5   | 12.9         | 16.5         | 13.8         |
| Predominant Exterior   |   |              |          |          |                |                |                                   |                |  |              |              |              |
| Wall Material  | 75  | 120          | 107      | ΕO       | 7 100          | 0 111          | 11 264                            | 4 604          | 10.5   | 12.2         | 16 E         | 10.0         |
| Brick, Stone or Stucco   |   | 120          | 187      | 59<br>36 | 7,198          |                | 11,364                            | 4,621          |  | 13.2         | 16.5         | 12.8         |
| Concrete (Block or Poured)   | 26  | 36           | 67<br>50 | 26       | 2,173          | 2,877          | 3,922                             | 1,765<br>1,899 | 12.0   | 12.5         | 17.0         | 15.0         |
| Concrete Panels  | 12  | 21<br>10     | 58<br>14 | 26       | 599            | 1,230          | 2,656                             | 698            | 19.7   | 17.3         | 21.9         | 13.6         |
| Siding or Shingles   | 8   |              |          | 12       | 1,179          | 1,063          | 1,035                             |                | 6.5  | 9.6          | 13.3         | 17.6         |
| Metal Panels   | 17  | 17           | 35       | 18       | 1,032          | 1,768          | 3,088                             | 1,489          | 16.5   | 9.5          | 11.3         | 12.4         |
| Window Glass   | Q   | Q            | Q        | Q        | Q              | Q              | Q                                 | Q              | Q  | Q            | Q            | Q            |
| Other No One Major Type  | Q<br>Q                                      | Q<br>Q       | Q<br>Q   | Q<br>Q   | Q<br>Q         | Q<br>Q         | Q<br>Q                            | Q<br>Q         | Q<br>Q   | Q<br>Q       | Q<br>Q       | Q<br>Q       |
| Predominant Roof Material  |   |              |          |          |                |                |                                   |                |  |              |              |              |
| Built-Up   | 46  | 71           | 128      | 60       | 4,025          | 5,149          | 7,227                             | 4,380          | 11.5   | 13.9         | 17.7         | 13.7         |
| Shingles (Not Wood)  | 23  | 32           | 46       | 20       | 1,995          | 3,119          | 3,272                             | 1,486          | 11.7   | 10.1         | 14.1         | 13.6         |
| Metal Surfacing  | 9   | 26           | 59       | 21       | 1,001          | 2,484          | 5,888                             | 1,860          | 9.4  | 10.3         | 10.0         | 11.3         |
| Synthetic or Rubber  | 61  | 65           | 103      | 32       | 4,116          | 4,440          | 4,282                             | 1,873          | 14.7   | 14.7         | 24.1         | 17.0         |
| Slate or Tile  | 4   | 3            | 16       | 8        | 480            | 302            | 1,036                             | 620            | 8.0  | 9.8          | 15.0         | 12.9         |
| Wooden Materials   | Q   | Q            | Q        | Q        | Q              | Q              | Q                                 | 244            | Q  | Q            | Q            | 10.9         |
| Concrete   | Q   | Q            | 8        | Q        | Q              | Q              | 426                               | Q              | Q  | Q            | 19.8         | Q            |
| Other  | Q   | Q            | Q        | Q        | Q              | Q              | Q                                 | Q              | Q  | Q            | Q            | Q            |
| No One Major Type  | Q   | Q            | Q        | Q        | Q              | Q              | Q                                 | Q              | Q  | Q            | Q            | Q            |
| Renovations in Buildings<br>Constructed Before 1980<br>(more than one may apply)<br>Any Type of Renovation |   |              |          |          |                |                |                                   |                |  |              |              |              |
| Since 1980   | 58  | 63           | 68       | 39       | 5,090          | 5,361          | 4,346                             | 2,841          | 11.5   | 11.8         | 15.7         | 13.6         |
| Addition or Annex  | 18  | 29           | 30       | 16       | 1,797          | 1,970          | 1,804                             | 979            | 9.8  | 14.6         | 16.9         | 16.0         |
| Reduction In Floorspace  | Q   | Q            | Q        | Q        | Q              | Q              | Q                                 | Q              | Q  | Q            | Q            | Q            |
| Cosmetic Improvements  | 48<br>28                                    | 50<br>27     | 48<br>30 | 31<br>17 | 3,938<br>2,676 | 3,879<br>2,236 | 3,002<br>1,850                    | 2,183<br>1,294 | 12.2<br>10.3                                   | 12.8<br>12.0 | 15.9<br>16.3 | 14.0<br>13.2 |
| Interior Wall  | 27  | 26           | 24       | 24       | 2 475          | 2 506          | 1 024                             | 1 507          | 10.0   | 12.0         | 16.1         | 15.0         |
| Re-Configuration HVAC Equipment Upgrade  | 27<br>40                                    | 36<br>42     | 31<br>44 | 24<br>28 | 2,475<br>3,027 | 2,586<br>3,332 | 1,934<br>2,582                    | 1,507<br>1.825 | 10.9<br>13.2                                   | 13.9<br>12.7 | 16.1<br>17.2 | 15.8<br>15.3 |
| Lighting Upgrade   | 42  | 38           | 33       | 28       | 3,350          |                |                                   | 1,775          | 12.4   | 12.7         | 15.8         | 15.6         |
| Window Replacement   | 27  | 21           | 14       | 12       | 2,750          | 1,772          | 913                               | 842            | 9.7  | 11.8         | 15.3         | 14.3         |
| Plumbing System Upgrade  | 26  | 23           | 22       | 21       | 2,730          | 1,772          | 1,364                             | 1,369          | 10.4   | 12.2         | 16.1         | 15.1         |
| Insulation Upgrade   | 15  | 14           | 14       | 7        | 1,370          | 1,212          | 855                               | 576            | 11.3   | 11.8         | 16.1         | 13.0         |
| Other Renovation   | Q   | Q            | Q        | Q        | 1,370<br>Q     | 1,212<br>Q     | 033<br>Q                          | 3/0<br>Q       | 11.3<br>Q                                      | 11.0<br>Q    | 10.1<br>Q    | 13.0<br>Q    |
| No Renovations Since 1980  | 34  | 54           | 69       | 33       | 4,314          | 5,594          |                                   | 3,051          | 7.9  | 9.7          | 13.3         | 10.7         |
| Building Newer than 1980   | 55  | 98           | 237      | 81       | 3,405          |                | 13,242                            | 5,138          | 16.2   | 17.1         | 17.9         | 15.7         |
| Energy Sources (more than  |   |              |          |          |                |                |                                   |                |  |              |              |              |
| one may apply)   |   |              | ^==      |          | 40.00-         | 40 =0 :        | 00 =05                            | 44.00-         |  |              |              | 40.5         |
| Electricity  | 147   | 216          | 375      |          | 12,809         | -              |                                   |                | 11.5   | 12.9         | 16.5         | 13.8         |
| Natural Gas  | 114   | 171          | 240      | 107      | 9,181          | -              | 13,306                            | 7,813          | 12.5   | 13.0         | 18.0         | 13.7         |
| Fuel Oil   | 70  | 50           | 86       | 43       | 6,080          | 2,817          | 4,122                             | 2,123          | 11.6   | 17.9         | 20.9         | 20.4         |
| District Heat  | 22  | 28           | 38       | 10       | 1,363          | 1,648          | 1,766                             | 667            | 16.4   | 17.2         | 21.3         | 14.8         |
| District Chilled Water   | 11  | 13           | 23       | 10       | 620            | 596            | 1,150                             | 487            | 17.1   | 21.7         | 20.2         | 19.6         |
| Propane  | 12  | 30           | 33       | 24       |                | 2,179          | 2,360                             | 1,173          | 9.0  | 13.9         | 14.0         | 20.1         |
| Other  | Q   | 7            | Q        | Q        | Q              | 487            | 303                               | 367            | Q  | 13.6         | 26.1         | 16.3         |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|   | Total Electricity Consumption (billion kWh) |              |           |          | Build          | ings Us         | orspace<br>ing Elec<br>quare fe | tricity        | Electricity Energy Intensity (kWh/square foot) |              |              |              |
|---|---|--------------|-----------|----------|----------------|-----------------|---------------------------------|----------------|--|--------------|--------------|--------------|
|   | North-<br>east                              | Mid-<br>west | South     | West     | North-<br>east | Mid-<br>west    | South                           | West           | North-<br>east                                 | Mid-<br>west | South        | West         |
| All Buildings*                          | 147   | 216          | 375       | 152      | 12,809         | 16,701          | 22,766                          | 11,030         | 11.5   | 12.9         | 16.5         | 13.8         |
| Space-Heating Energy Sources            |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Electricity                             | 66  | 89           | 228       | 73       | 4,405          | 6,223           | 13,058                          | 4,914          | 15.0   | 14.3         | 17.5         | 14.9         |
| Electricity Main                        | 21  | 46           | 153       | 45       | 1,253          | 2,545           | 9,084                           | 3,114          | 17.0   | 18.1         | 16.9         | 14.5         |
| Electricity Secondary                   | 45  | 43           | 75        | 28       | 3,152          | 3,677           | 3,975                           | 1,800          | 14.2   | 11.6         | 18.8         | 15.5         |
| Other Excluding Electricity             | 80  | 125          | 133       | 68       | 8,191          | 10,080          | 7,932                           | 5,188          | 9.8  | 12.4         | 16.8         | 13.1         |
| Buildings without Heating               | Q   | Q            | 13        | 11       | Q              | 398             | 1,776                           | 928            | Q  | 4.3          | 7.6          | 12.1         |
| Primary Space-Heating                   |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Energy Source                           |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Electricity                             | 21  | 46           | 153       | 45       | 1,253          | 2,545           |                                 | 3,114          | 17.0   | 18.1         | 16.9         | 14.5         |
| Natural Gas                             | 85  | 133          | 162       | 79       | 6,439          | 11,320          | 9,294                           | 5,911          | 13.2   | 11.7         | 17.4         | 13.4         |
| Fuel Oil                                | 17  | Q            | Q         | Q        | 3,250          | Q               | Q                               | Q              | 5.2  | Q            | Q            | Q            |
| District Heat                           | 20  | 28           | 35        | 8        | 1,205          | 1,531           | 1,614                           | 557            | 16.8   | 18.0         | 21.7         | 14.4         |
| Propane                                 | Q   | Q            | 6         | Q        | Q              | 560             | 674                             | 332            | Q  | 9.4          | 9.1          | Q            |
| Other                                   | Q   | Q            | Q         | Q        | Q              | Q               | Q                               | Q              | Q  | Q            | Q            | Q            |
| Cooling Energy Sources                  |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Electricity                             | 130   | 190          | 354       | 140      | 10,402         | 13,781          | 20,623                          | 9,515          | 12.5   | 13.8         | 17.2         | 14.7         |
| Other Excluding Electricity             | 11  | Q            | 17        | Q        | 552            | Q               | 930                             | Q              | 19.6   | Q            | 18.8         | Q            |
| Buildings without Cooling               | 7   | Q            | 3         | 6        | 1,855          | 2,232           | 1,214                           | 1,080          | 3.6  | 6.4          | 2.6          | 5.8          |
| Water-Heating Energy Sources            |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Electricity                             | 57  | 86           | 200       | 59       | 5,125          |                 | 11,882                          | 4,007          | 11.2   | 13.3         | 16.8         | 14.7         |
| Other Excluding Electricity             | 86  | 114          | 159       | 87       | 6,664          | 8,436           |                                 | 5,841          | 12.9   | 13.5         | 19.7         | 14.9         |
| Bldgs without Water Heating             | 4   | Q            | 16        | 6        | 1,020          | 1,788           | 2,853                           | 1,182          | 4.0  | 9.0          | 5.6          | 5.3          |
| Cooking Energy Sources                  |   |              | 440       |          |                |                 |                                 | 4 000          |  | 4= 0         |              |              |
| Electricity                             | 39  | 60           | 112       | 38       | 2,495          | 3,784           |                                 | 1,982          | 15.5   | 15.9         | 22.9         | 19.1         |
| Other Excluding Electricity             | 31  | 32           | 67        | 26       | 2,521          | 2,066           | ,                               | 1,507          | Q  | 15.5         | 22.3         | 17.1         |
| Buildings without Cooking               | 78  | 124          | 196       | 89       | 7,793          | 10,851          | 14,885                          | 7,541          | 10.0   | 11.4         | 13.2         | 11.8         |
| Energy End Uses (more than              |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| one may apply)                          |   |              | 201       |          | 40.500         |                 |                                 | 40.400         |  | 40.4         | 4= 0         |              |
| Buildings with Space Heating            |   | 214          | 361       |          |                |                 | 20,990                          |                | 11.6   | 13.1         | 17.2         | 14.0         |
| Buildings with Cooling                  |   | 202          | 371       |          |                |                 | 21,553                          |                | 12.9   | 13.9         |              | 14.7         |
| Buildings with Water Heating            | 143   | 200          | 359       |          | 11,789         | -               |                                 | 9,848          | 12.2   | 13.4         | 18.0         | 14.8         |
| Buildings with Cooking                  | 69  | 92           | 179       | 64       | 5,016          | 5,850           |                                 | 3,489          | 13.8   | 15.7         | 22.7         | 18.2         |
| Buildings with Manufacturing            | 13  | 10           | 8         | 10       | 1,013          | 798             | 642                             | 685            | 13.1   | 13.2         | 11.8         | 14.6         |
| Buildings with Electricity              |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Generation                              | 60  | 66           | 91        | 44       | 3,245          | 3,317           | 4,017                           | 2,241          | 18.5   | 20.0         | 22.5         | 19.6         |
| Percent of Floorspace Heated            |   |              |           |          |                |                 |                                 |                |  |              |              |              |
| Not Heated                              | Q   | Q            | 13        | 11       | Q              | 398             |                                 | 928            | Q  | 4.3          | 7.6          | 12.1         |
| 1 to 50                                 | 6   | 9            | 26        | 13       | 1,387          | 1,115           |                                 | 1,491          | 4.2  | 8.3          | 9.3          | 8.9          |
| 51 to 99                                | 15<br>126                                   | 21<br>183    | 51<br>284 | 29<br>99 | 1,539<br>9 671 | 1,727<br>13 461 | 2,891<br>15,263                 | 1,950<br>6,661 | 9.8<br>13.0                                    | 12.4<br>13.6 | 17.5<br>18.6 | 14.8<br>14.8 |
|   | 120   | 100          | 204       | 33       | 0,071          | 10,701          | 10,200                          | 0,001          | 10.0   | 10.0         | 10.0         | 14.0         |
| Percent of Floorspace Cooled Not Cooled | 7   | Q            | 3         | 6        | 1,855          | 2,232           | 1,214                           | 1,080          | 3.6  | 6.4          | 2.6          | 5.8          |
| 1 to 50                                 | 28  | 37           | 39        | 25       |                | 4,742           |                                 | 2,656          | 6.6  | 7.9          | 8.0          | 9.6          |
| 51 to 99                                | 49  | 58           | 73        | 38       | 3,101          | 3,761           |                                 | 2,446          | 15.8   | 15.4         | 18.8         | 15.7         |
|   |   |              |           |          |                | -               |                                 |                |  |              |              |              |
| 100                                     | 64  | 106          | 259       | 82       | 3,582          | 5,906           | 12,735                          | 4,849          | 17.8   | 17.8         | 20.3         | 16.9         |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|                                | Total Electricity Consumption (billion kWh) |              |        |         | Build          | ings Usi     | orspace<br>ing Elec<br>quare fee | tricity    | Electricity Energy Intensity (kWh/square foot) |              |        |           |
|--------------------------------|---|--------------|--------|---------|----------------|--------------|----------------------------------|------------|--|--------------|--------|-----------|
|                                | North-<br>east                              | Mid-<br>west | South  | West    | North-<br>east | Mid-<br>west | South                            | West       | North-<br>east                                 | Mid-<br>west | South  | West      |
| All Buildings*                 | 147   | 216          | 375    | 152     | 12,809         | 16,701       | 22,766                           | 11,030     | 11.5   | 12.9         | 16.5   | 13.8      |
| Percent Lit When Open          |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Zero                           | Q   | Q            | Q      | Q       | Q              | Q            | Q                                | Q          | Q  | Q            | Q      | Q         |
| 1 to 50                        | 11  | 17           | 26     | 12      | 2,750          | 2,753        | 3,189                            | 1,512      | 4.1  | 6.3          | 8.0    | 7.7       |
| 51 to 99                       | 49  | 65           | 102    | 45      | 3,599          | 5,299        | 6,134                            | 3,256      | 13.7   | 12.3         | 16.7   | 13.9      |
| 100                            | 86  | 132          | 245    | 94      | 6,051          | 7,781        | 12,874                           | 6,083      | 14.2   | 16.9         | 19.0   | 15.5      |
| Building Never Open/           |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Electricity Not Used           | Q   | Q            | Q      | Q       | Q              | Q            | Q                                | Q          | Q  | Q            | Q      | Q         |
| Percent Lit When Closed        |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Zero                           | 20  | 50           | 61     | 29      | 2,807          | 5,174        | 6,292                            | 3,112      | 7.1  | 9.6          | 9.6    | 9.4       |
| 1 to 50                        | 62  | 103          | 179    | 68      | 6,279          | 8,293        | 11,027                           | 5,349      | 9.9  | 12.5         | 16.2   | 12.7      |
| 51 to 100                      | Q   | 12           | 24     | Q       | Q              | 499          | 1,013                            | Q          | Q  | 23.9         | 23.6   | Q         |
| Building Never Closed/         |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Electricity Not Used           | 59  | 51           | 111    | 52      | 3,379          | 2,735        | 4,434                            | 2,332      | 17.4   | 18.7         | 25.1   | 22.3      |
| Heating Equipment (more        |   |              |        |         |                |              |                                  |            |  |              |        |           |
| than one may apply)            |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Heat Pumps                     | 25  | 16           | 85     | 27      | 1,213          | 1,058        | 4,942                            | 1,600      | 20.8   | 15.2         | 17.2   | 16.8      |
| Packaged Heat Pumps            | 17  | 12           | 57     | 19      | 744            | 738          | 2,928                            | 1,031      | 22.8   | 16.0         | 19.6   | 18.5      |
| Split-System Heat Pumps        | Q   | Q            | 28     | 6       | Q              | Q            | 1,862                            | 368        | Q  | Q            | 15.3   | 17.2      |
| Individual Room Heat Pumps     | Q   | Q            | 19     | 7       | Q              | Q            | 1,250                            | 538        | Q  | Q            | 15.5   | 12.1      |
| Furnaces                       | 33  | 82           | 71     | 37      | 3,596          | 7,219        | 5,715                            | 3,075      | 9.2  | 11.3         | 12.5   | 11.9      |
| Individual Space Heaters       | 35  | 50           | 56     | 24      | 2,786          | 4,169        | 3,603                            | 1,981      | 12.7   | 11.9         | 15.6   | 11.9      |
| District Heat                  | 20  | 28           | 36     | 9       | 1,245          | 1,623        | 1,683                            | 615        | 16.5   | 17.0         | 21.4   | 14.3      |
| Boilers                        | 71  | 74           | 94     | 56      | 6,228          | 6,141        | 4,393                            | 3,662      | 11.4   | 12.1         | 21.5   | 15.3      |
| Packaged Heating Units         | 50  | 62           | 151    | 48      | 2,912          | 3,666        | 8,130                            | 3,312      | 17.3   | 16.8         | 18.5   | 14.4      |
| Other                          | Q   | 14           | 21     | 8       | Q              | 803          | 1,379                            | 481        | Q  | 17.1         | 15.0   | 15.6      |
| Cooling Equipment (more        |   |              |        |         |                |              |                                  |            |  |              |        |           |
| than one may apply)            |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Residential-Type Central       |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Air Conditioners               | 22  | 45           | 52     | 15      | 2,391          | 3,609        | 3,854                            | 1,181      | 9.1  | 12.5         | 13.4   | 12.7      |
| Heat Pumps                     | 26  | 16           | 89     | 31      | 1,270          | 1,063        | 4,923                            | 1,785      | 20.1   | 14.8         | 18.0   | 17.1      |
| Packaged Heat Pumps            | 17  | 12           | 57     | 19      | 788            | 760          | 2,849                            | 1,030      | 21.7   | 15.7         | 20.1   | 18.5      |
| Split-System Heat Pumps        | Q   | Q            | 29     | 7       | Q              | Q            |                                  | 404        | Q  | Q            | 15.7   | 17.1      |
| Individual Room Heat Pumps     |   | Q            | 22     | 11      | Q              | Q            | 1,290                            | 734        | Q  | Q            | 17.1   | 14.5      |
| Individual Air Conditioners    | 31  | 35           | 51     | 23      | 3,687          | 3,488        |                                  | 1,749      | 8.3  | 10.1         | 14.1   | 13.2      |
| District Chilled Water         | 11  | 13           | 23     | 10      | 620            | 596          | 1,150                            | 487        | 17.1   | 21.7         | 20.2   | 19.6      |
| Central Chillers               | 37  | 52           | 115    | 40      | 1,852          | 2,842        | 4,854                            | 2,088      | 20.2   | 18.4         | 23.7   | 19.3      |
| Packaged Air Conditioning      |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Units                          | 83  | 121          | 176    | 82      | 6,000          | ,            | 10,401                           | 5,482      | 13.8   | 15.0         | 16.9   | 15.0      |
| Swamp Coolers Other            | Q<br>Q                                      | Q<br>Q       | Q<br>Q | 19<br>Q | Q<br>Q         | Q<br>Q       | Q<br>Q                           | 1,342<br>Q |  | 11.1<br>Q    | Q<br>Q | 13.8<br>Q |
| Main Equipment Replaced Since  | ~   | •            | ٦      | •       | •              | •            | •                                | •          | ~  | •            | ~      | ~         |
| 1990 (more than one may apply) |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Heating                        | 42  | 61           | 68     | 38      | 3,974          | 5,025        | 4,807                            | 2,588      | 10.6   | 12.2         | 14.2   | 14.8      |
| Cooling                        | 66  | 74           | 98     | 48      | 5,453          | 5,752        | 6,415                            | 3,374      | 12.1   | 12.9         | 15.3   | 14.1      |
| Water Heating Equipment        |   |              |        |         |                |              |                                  |            |  |              |        |           |
| Centralized System             | 94  | 133          | 209    | 80      | 7,770          | 9,709        | 11,537                           | 5,640      | 12.1   | 13.7         | 18.1   | 14.2      |
| Distributed System             | 23  | 29           | 66     | 24      | 2,325          | 2,670        | 4,564                            | 1,981      | 9.7  | 10.8         | 14.5   | 12.0      |
| Combination of Centralized     |   |              |        |         |                |              |                                  |            |  |              |        |           |
| and Distributed System         | 27  | 38           | 83     | 42      | 1,695          | 2,534        | 3,812                            | 2,227      | 15.9   | 15.2         | 21.8   | 18.9      |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|  | Total Electricity Consumption (billion kWh) |              |       |      | Build          | ings Usi     | orspace<br>ing Elec<br>quare fee | tricity    | Electricity Energy Intensity (kWh/square foot) |              |       |      |
|--|---|--------------|-------|------|----------------|--------------|----------------------------------|------------|--|--------------|-------|------|
|  | North-<br>east                              | Mid-<br>west | South | West | North-<br>east | Mid-<br>west | South                            | West       | North-<br>east                                 | Mid-<br>west | South | West |
| All Buildings*                                     | 147   | 216          | 375   | 152  | 12,809         | 16,701       | 22,766                           | 11,030     | 11.5   | 12.9         | 16.5  | 13.8 |
| Lighting Equipment Types (more than one may apply) |   |              |       |      |                |              |                                  |            |  |              |       |      |
| Incandescent                                       | 96  | 146          | 248   | 98   | 8 102          | 10 973       | 13,045                           | 6,408      | 11.9   | 13.3         | 19.0  | 15.3 |
| Standard Fluorescent                               |   | 211          | 363   | 148  | 12,159         |              | 21,222                           | ,          | 11.8   | 13.4         | 17.1  | 14.0 |
| Compact Fluorescent                                | 89  | 109          | 199   | 90   | 6,091          | 6,828        |                                  | 5,772      | 14.7   | 15.9         | 22.4  | 15.7 |
| High Intensity Discharge                           | 64  | 91           | 124   | 50   | 4,379          | 6,620        | -                                | 3,416      | 14.7   | 13.8         | 19.9  | 14.7 |
| Halogen  | 56  | 74           | 130   | 52   | 3,581          | 4,661        | 6,193                            | 3,268      | 15.7   | 15.9         | 21.1  | 16.1 |
| Other  | Q   | Q            | Q     | Q    | 0,501<br>Q     | 4,001<br>Q   | 0,193<br>Q                       | 3,200<br>Q | Q  | Q            | Q Q   | Q    |
| Refrigeration Equipment                            |   |              |       |      |                |              |                                  |            |  |              |       |      |
| (more than one may apply) <sup>a</sup>             |   |              |       |      |                |              |                                  |            |  |              |       |      |
| Any Refrigeration                                  | 137   | 192          | 348   | 135  | 10,842         | 14,082       | 19,103                           | 8,947      | 12.6   | 13.6         | 18.2  | 15.1 |
| Commercial Refrigeration                           | 89  | 118          | 237   | 79   | 5,936          | 7,122        | -                                | 4,072      | 15.1   | 16.6         | 24.6  | 19.5 |
| Walk-In Units                                      | 73  | 93           | 204   | 66   | 4,452          | 5,201        | 7,469                            | 3,132      | 16.5   | 17.9         | 27.4  | 21.0 |
| Cases or Cabinets                                  | 75  | 89           | 191   | 67   | 4,504          | 4,978        | 7,664                            | 3,277      | 16.8   | 17.8         | 24.9  | 20.6 |
| Residential-Type Units                             | 88  | 133          | 210   | 87   | 8.288          |              | 13,162                           | 6,642      | 10.6   | 12.4         | 16.0  | 13.1 |
| Vending Machines                                   | 96  | 134          | 256   | 94   | 6,559          |              | 13,534                           | 5,841      | 14.7   | 14.3         | 19.0  | 16.1 |
| No Refrigeration                                   | 11  | 24           | 26    | 17   | 1,967          | 2,619        | 3,663                            | 2,083      | 5.5  | 9.1          | 7.1   | 8.3  |
| Office Equipment (more                             |   |              |       |      |                |              |                                  |            |  |              |       |      |
| than one may apply)                                |   |              |       |      |                |              |                                  |            |  |              |       |      |
| Computers  | 141   | 199          | 347   | 145  | 11,518         | 14,415       | 19,715                           | 9,980      | 12.2   | 13.8         | 17.6  | 14.5 |
| With Flat Screen Monitors                          | 93  | 102          | 191   | 80   | 5,995          | 6,346        | 9,135                            | 4,940      | 15.5   | 16.1         | 20.9  | 16.3 |
| Dedicated Servers                                  | 113   | 142          | 241   | 100  | 8,143          | 9,252        | 12,649                           | 6,294      | 13.9   | 15.3         | 19.1  | 16.0 |
| Laser Printers                                     | 76  | 104          | 188   | 86   | 7,095          | 8,463        | 11,566                           | 5,888      | 10.7   | 12.3         | 16.3  | 14.6 |
| Inkjet Printers                                    | 95  | 124          | 225   | 89   | 6,415          | 8,305        | 11,480                           | 6,009      | 14.9   | 14.9         | 19.6  | 14.9 |
| FAX Machines                                       | 138   | 183          | 335   | 136  |                |              | 18,782                           | 9,123      | 12.3   | 13.8         | 17.8  | 14.9 |
| Photocopiers                                       | 126   | 160          | 285   | 121  |                |              | 16,312                           | 8,193      | 12.7   | 13.5         | 17.5  | 14.8 |
| Number of Computers                                |   |              |       |      |                |              |                                  |            |  |              |       |      |
| None   | 7   | 17           | 28    | 8    | 1,291          | 2,286        | 3,052                            | 1,051      | 5.2  | 7.2          | 9.0   | 7.2  |
| 1 to 4   | 17  | 44           | 70    | 22   | 2,081          | 3,743        | 4,419                            | 2,151      | 7.9  | 11.7         | 15.9  | 10.4 |
| 5 to 9   | 10  | 23           | 30    | 17   | 1,604          | 1,938        | 2,538                            | 1,099      | 6.3  | 12.0         | 11.7  | 15.5 |
| 10 to 19   | 14  | 23           | 31    | 16   | 1,321          | 1,690        |                                  | 1,196      | 10.2   | 13.5         | 13.0  | 13.3 |
| 20 to 49   | 20  | 24           | 50    | 25   | 1,504          | 1,932        | 2,425                            | 1,554      | 13.5   | 12.6         | 20.4  | 16.4 |
| 50 to 99   | 10  | 16           | 36    | 14   | 1,157          | 1,049        |                                  | 1,068      | Q  | 15.2         | 17.2  | 12.9 |
| 100 to 249   | 19  | 26           | 44    | 19   | 1,260          | 1,851        | 2,262                            | 1,317      | 14.8   | 14.0         | 19.3  | 14.8 |
| 250 or More  | 52  | 43           | 86    | 31   | 2,590          | 2,213        | 3,565                            | 1,595      | 19.9   | 19.5         | 24.2  | 19.1 |
| Number of Dedicated Servers                        |   |              |       |      |                |              |                                  |            |  |              |       |      |
| None   | 35  | 74           | 133   | 52   | 4,666          | 7,449        | 10,117                           | 4,736      | 7.4  | 9.9          | 13.2  | 10.9 |
| 1 to 4   | 57  | 89           | 136   | 59   | 5,247          | 6,567        | 8,208                            | 4,093      | 10.9   | 13.6         | 16.6  | 14.4 |
| 5 to 9   | 15  | 16           | 31    | 12   | 914            | 966          | 1,313                            | 671        | 16.1   | 16.5         | 23.6  | 17.6 |
| 10 to 19   | 11  | 15           | 29    | 9    | 578            | 773          | 1,126                            | 552        | 19.0   | 19.2         | 25.8  | 15.5 |
| 20 to 49   | Q   | 9            | 29    | 7    | Q              | 334          | 1,265                            | 491        | Q  | 27.4         | 23.2  | 15.2 |
| 50 or More   | 22  | 13           | 16    | Q    | 912            | Q            | 737                              | Q          | 24.5   | 21.0         | 21.0  | Q    |
| Number of Photocopiers                             |   |              |       |      |                |              |                                  |            |  |              |       |      |
| None   | 22  | 56           | 90    | 31   | 2,915          | 4,843        | 6,454                            | 2,838      | 7.4  | 11.5         | 13.9  | 11.0 |
| One  | 28  | 45           | 68    | 32   | 3,027          | 4,235        | 5,460                            | 2,753      | 9.2  | 10.6         | 12.5  | 11.8 |
| 2 to 4   | 29  | 52           | 92    | 35   | 2,944          | 4,026        | 5,518                            | 2,594      | 9.8  | 12.8         | 16.6  | 13.5 |
| 5 to 9   | 22  | 21           | 38    | 14   | 1,518          | 1,401        | 1,782                            | 814        | 14.7   | 14.7         | 21.1  | 17.5 |
| 10 or More   | 47  | 43           | 87    | 39   | 2,404          | 2,196        | 3,553                            | 2,032      | 19.4   | 19.6         | 24.6  | 19.3 |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|  | Total Electricity Consumption (billion kWh) |              |           |          | Build          | ings Usi       | orspace<br>ing Elec<br>quare fee | tricity        |                |              | ricity<br>ntensity<br>iare foot |              |
|--|---|--------------|-----------|----------|----------------|----------------|----------------------------------|----------------|----------------|--------------|---------------------------------|--------------|
|  | North-<br>east                              | Mid-<br>west | South     | West     | North-<br>east | Mid-<br>west   | South                            | West           | North-<br>east | Mid-<br>west | South                           | West         |
| All Buildings*   | 147   | 216          | 375       | 152      | 12,809         | 16,701         | 22,766                           | 11,030         | 11.5           | 12.9         | 16.5                            | 13.8         |
| Energy-Related Space Functions (more than one may apply)   |   |              |           |          |                |                |                                  |                |                |              |                                 |              |
| Commercial Food Preparation Activities with Large  | 69  | 92           | 179       | 63       | 5,016          | 5,850          | 7,880                            | 3,478          | 13.8           | 15.7         | 22.7                            | 18.2         |
| Amounts of Hot Water   | 55  | 80           | 146       | 61       | 3,922          | 5,225          | 6,903                            | 3,432          | 13.9           | 15.3         | 21.2                            | 17.8         |
| Separate Computer Area   | 93  | 99           | 183       | 79       | 5,925          | 6,482          |                                  | 5,070          | 15.6           | 15.3         | 19.5                            | 15.6         |
| HVAC Conservation Features   |   |              |           |          |                |                |                                  |                |                |              |                                 |              |
| (more than one may apply) Variable Air-Volume System   | 67  | 86           | 158       | 60       | 3,780          | 5,001          | 7,348                            | 3,468          | 17.8           | 17.3         | 21.5                            | 17.2         |
| Economizer Cycle   | 82  | 106          | 153       | 73       | 4,141          | 5,884          | ,                                | 4,452          | 17.8           | 18.0         | 23.0                            | 16.3         |
| HVAC Maintenance   | 137   | 188          | 330       | 137      | ,              | 13,116         | ,                                | 9,347          | 12.4           | 14.3         | 18.7                            | 14.7         |
| Energy Management and  | 101   | 100          | 000       | 101      | 11,011         | 10,110         | 11,011                           | 0,017          |                | 1 1.0        | 10.7                            |              |
| Control System (EMCS)  | 53  | 57           | 120       | 50       | 3,002          | 3,799          | 5,802                            | 3,027          | 17.7           | 15.1         | 20.6                            | 16.4         |
| Window and Interior Lighting<br>Features (more than one<br>may apply)                              |   |              |           |          |                |                |                                  |                |                |              |                                 |              |
| Multipaned Windows   | 112   | 169          | 227       | 85       | 9,276          | 11,649         | 12,273                           | 5,529          | 12.1           | 14.5         | 18.5                            | 15.4         |
| Tinted Window Glass  | 78  | 112          | 218       | 85       | 4,944          |                | 11,832                           | 5,616          | 15.7           | 15.5         | 18.4                            | 15.1         |
| Reflective Window Glass<br>External Overhangs  | 27  | 37           | 66        | 23       | 1,661          | 2,165          |                                  | 1,694          | 16.5           | 16.9         | 22.1                            | 13.3         |
| or Awnings   | 36  | 65           | 126       | 55       | 2,672          | 4,205          | -                                | 3,545          | 13.4           | 15.6         | 18.6                            | 15.4         |
| Skylights or Atriums   | 34  | 46           | 71        | 38       | 2,892          | 3,250          | 3,914                            | 2,453          | 11.9           | 14.2         | 18.0                            | 15.4         |
| Daylighting Sensors  | 6   | 15           | 14        | 25       | 428            | 815            | 674                              | 951            | 15.1           | 17.8         | 21.4                            | 26.3         |
| Specular Reflectors  | 84  | 116          | 163       | 72       | 5,834          | 7,709          |                                  | 4,703          | 14.4           | 15.0         | 20.8                            | 15.4         |
| Electronic Ballasts  Energy Management and Control System (EMCS)                                   | 122   | 180          | 301       | 129      | 9,200          | 12,610         | 16,459                           | 8,525          | 13.1           | 14.3         | 18.3                            | 15.2         |
| For Lighting   | 18  | 22           | 30        | 21       | 849            | 1,292          | 1,471                            | 1,169          | 21.3           | 17.1         | 20.6                            | 17.7         |
| Equipment Usage Reduced<br>When Building Not In Full Use<br>(more than one may apply) <sup>a</sup> |   |              |           |          |                |                |                                  |                |                |              |                                 |              |
| Heating  | 104   | 126          | 231       | 106      | 0.510          | 10 803         | 14,655                           | 7 630          | 10.9           | 11.5         | 15.7                            | 13.9         |
| Cooling  | 103   | 128          | 253       | 111      |                |                | 16,094                           | 7,829          | 11.7           | 12.2         | 15.7                            | 14.2         |
| Lighting   | 81  | 160          | 249       | 98       |                |                | 17,115                           | 8,282          | 9.3            | 12.4         | 14.6                            | 11.8         |
| Office Equipment   | 34  | 58           | 82        | 36       | 4,269          | 5,412          |                                  | 3,291          | 8.1            | 10.7         | 12.8                            | 11.0         |
| Annual Consumption (kilowatthours)   |   |              |           |          |                |                |                                  |                |                |              |                                 |              |
| 10,000 or Less   | 1   | 1            | . 1       | 1        | 752            | 929            | 729                              | 451            | 1.1            | 1.1          | 1.7                             | 1.8          |
| 10,001 to 50,000   | 6   | 12           | 17        | 9        | 1,800          | 2,277          | 3,386                            | 1,765          | 3.6            | 5.5          | 5.0                             | 5.1          |
| 50,001 to 100,000  | 9   | 11           | 21        | 10       | 1,547          | 1,466          |                                  | 1,000          | 6.0            | 7.7          | 8.7                             | 9.7          |
| 100,001 to 500,000   | 26  | 59           | 83        | 41       | 2,910          | 4,795          | -                                | 3,004          | 8.8            | 12.4         | 15.4                            | 13.7         |
| 500,001 to 1,000,000<br>1,000,001 to 5,000,000   | 13<br>46                                    | 21           | 48        | 14<br>44 | 1,285          | 1,794          | -                                | 886<br>2.435   | 10.5           | 11.7         | 17.5<br>23.7                    | 15.9         |
| Over 5,000,000   | 46  | 69<br>42     | 111<br>92 | 34       | 2,570<br>1,944 | 3,512<br>1,929 |                                  | 2,435<br>1,489 | 17.7<br>23.8   | 19.5<br>21.9 | 23.7<br>27.6                    | 18.0<br>22.7 |
| Over 0,000,000   | 40  | 42           | 92        | 34       | 1,944          | 1,929          | 5,550                            | 1,409          | 23.0           | 21.9         | 21.0                            | 22.1         |

Table C15. Electricity Consumption and Conditional Energy Intensity by Census Region for Non-Mall Buildings, 2003

|   | Total Electricity<br>Consumption<br>(billion kWh) |              |           |          | Build           | ings Usi        | orspace<br>ing Elect<br>quare fee | tricity     | Electricity Energy Intensity (kWh/square foot) |              |       |           |  |
|---|---|--------------|-----------|----------|-----------------|-----------------|-----------------------------------|-------------|--|--------------|-------|-----------|--|
|   | North-<br>east                                    | Mid-<br>west | South     | West     | North-<br>east  | Mid-<br>west    | South                             | West        | North-<br>east                                 | Mid-<br>west | South | West      |  |
| All Buildings*  | 147   | 216          | 375       | 152      | 12,809          | 16,701          | 22,766                            | 11,030      | 11.5   | 12.9         | 16.5  | 13.8      |  |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 120<br>31   | 198<br>16    | 331<br>36 | 142<br>Q | 11,159<br>1,741 | 15,631<br>1,047 | 20,579<br>1,790                   | 10,484<br>Q | 10.8<br>17.9                                   | 12.7<br>15.6 |       | 13.6<br>Q |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals. Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|                               |                |                        |                 |                |                | E            | Electricit   | tv Expe      | nditures       | (dollars     | 3)           |              |
|-------------------------------|----------------|------------------------|-----------------|----------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|                               |                | lectricity<br>(million | y Expendollars) | ditures        |                | per l        |              | , II         |                |              | are Foot     |              |
|                               | North-<br>east | Mid-<br>west           | South           | West           | North-<br>east | Mid-<br>west | South        | West         | North-<br>east | Mid-<br>west | South        | West         |
| All Buildings*                | 14,262         | 14,172                 | 25,540          | 15,057         | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Building Floorspace           |                |                        |                 |                |                |              |              |              |                |              |              |              |
| (Square Feet)                 |                |                        |                 |                |                |              |              |              |                |              |              |              |
| 1,001 to 5,000                | 1,617          | 2,401                  | 4,142           | 2,188          | 0.12           | 0.08         | 0.08         | 0.12         | 1.62           | 1.39         | 1.78         | 1.69         |
| 5,001 to 10,000               | 1,202          | 1,212                  | 2,721           | 2,160          | 0.12           | 0.08         | 0.08         | 0.12         | 1.11           | 0.84         |              | 1.78         |
| 10,001 to 25,000              | 1,795          | 2,145                  | 3,763           | 2,299          | 0.10           | 0.07         | 0.08         | 0.10         | 0.92           | 0.69         | 0.88         | 1.11         |
| 25,001 to 50,000              | 1,168          | 2,042                  | 2,864           | 1,797          | 0.10           | 0.07         | 0.07         | 0.10         | 0.90           | 0.82         |              | 1.12         |
| 50,001 to 100,000             | 2,130          | 1,777                  | 3,190           | 1,620          | 0.09           | 0.06         | 0.06         | 0.10         | 1.04           | 0.79         | 0.93         | 1.25         |
| 100,001 to 200,000            | 2,286          | 1,963                  | 3,810           | 1,440          | 0.09           | 0.06         | 0.06         | 0.08         | 1.08           | 0.86         | 1.11         | 1.22         |
| 200,001 to 500,000            | 1,985          | 1,497                  | 2,312           | 1,530          | 0.08           | 0.05         | 0.06         | 0.10         | 1.11           | 0.68         | 1.21         | 1.31         |
| Over 500,000                  | 2,079          | 1,135                  | 2,738           | 2,025          | 0.09           | 0.06         | 0.06         | 0.09         | 1.34           | 0.94         | 1.42         | 1.66         |
| Principal Building Activity   |                |                        |                 |                | 2.42           |              |              |              |                |              |              |              |
| Education                     | 1,273          | 1,388                  | 3,940           | 1,510          | 0.10           | 0.07         | 0.07         | 0.09         | 0.76           | 0.55         | 0.99         | 0.91         |
| Food Sales                    | Q              | 1,069                  | 1,741           | Q              | Q              | 0.07         | 0.07         | Q            |                | 3.51         | 3.60         | Q            |
| Food Service                  | Q              | 1,017                  | 2,637           | 976            | Q              | 0.08         | 0.07         | 0.12         | Q              | 2.24         |              | 3.69         |
| Health Care                   |                | 1,057                  | 1,822           | 1,131          | 0.08           | 0.06         | 0.06         | 0.09         | 1.63           | 1.32         |              | 2.04         |
| Inpatient                     | 631            | 606                    | 1,387           | 574            | 0.08           | 0.05         | 0.05         | 0.08         | 1.76           | 1.38         |              | 2.12         |
| Outpatient                    | Q              | 451                    | 436             | 558            | Q              | 0.07         | 0.08         | 0.10         | Q              | 1.25         | 0.99         | 1.97         |
| Lodging                       | 882            | 953                    | 1,910           | 1,543          | 0.10           | 0.06         | 0.07         | 0.10         | Q              | 0.83         | 1.13         | 1.42         |
| Retail (Other Than Mall)      |                | 877                    | 2,198           | 1,408          | 0.12           | 0.07         | 0.07         | 0.10         | 1.03           | 1.00         |              | 1.46         |
| Office                        | 4,890          | 3,556                  | 4,788           | 3,816          | 0.10           | 0.07         | 0.07         | 0.10         | 1.62           | 1.19         | 1.27         | 1.57         |
| Public Assembly               | 628            | 731                    | 1,370           | Q              | 0.10           | 0.07         | 0.07         | 0.11         | Q              | 0.72         |              | Q            |
| Public Order and Safety       |                | Q                      | Q               | Q              | Q              | Q            | Q            | Q            | Q              | Q            |              | Q            |
| Religious Worship             |                | 369                    | 869             | 207            | 0.11           | 0.08         | 0.09         | 0.11         | 0.29           | 0.33         |              | 0.40         |
| Service                       |                | 961                    | 1,266           | 679            | 0.11           | 0.07         | Q            | 0.09         | 0.79           | 0.76         |              | 1.03         |
| Warehouse and Storage         | 763            | 1,522                  | 1,736           | 1,013          | 0.09           | 0.06         | 0.07         | 0.09         | 0.52           | 0.53         | 0.48         | 0.68         |
| Other                         | 1,333          | 330                    | Q               | Q              | 0.09           | 0.06         | Q            | Q            |                | 1.08         | Q            | Q            |
| Vacant                        | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            | Q              | Q            | Q            | Q            |
| Year Constructed              | 000            | 000                    | _               | •              | 0.00           | 0.00         | 0.00         | •            | 0.74           | 0.44         | 0.04         | •            |
| Before 1920                   | 990            | 669                    | Q               | Q              | 0.09           | 80.0         | 0.08         | Q            | 0.71           | 0.44         |              | Q            |
| 1920 to 1945                  | 1,827          | 1,403                  | 904             | 989            | 0.11           | 0.06         | 0.08         | 0.12         |                | 0.72         |              | 1.07         |
| 1946 to 1959                  | 1,747          | 1,195                  | 1,601           | 1,186          | 0.10           | 0.07         | 0.07         | 0.10         | 0.84           | 0.60         |              | 1.18         |
| 1960 to 1969                  | 2,063          | 1,485                  | 2,421           | 1,745          | 0.09           | 0.07         | 0.07         | 0.10         | 1.19           | 0.67         |              | 1.10         |
| 1970 to 1979                  | 2,479          | 2,982                  |                 | 2,906          | 0.10           | 0.06         | 0.07         | 0.09         | 1.44           | 0.92         |              | 1.40         |
| 1980 to 1989                  | 2,331          | 2,365                  | 5,787           | 3,419          | 0.09           | 0.07         | 0.07         | 0.10         | 1.70           | 1.23         |              | 1.53         |
| 1990 to 1999<br>2000 to 2003  | 1,819<br>1,006 | 2,890<br>1,183         | 6,962<br>3,177  | 3,565<br>1,006 | 0.09<br>0.09   | 0.06<br>0.06 | 0.07<br>0.07 | 0.10<br>0.09 |                | 1.10<br>0.99 | 1.14<br>1.27 | 1.80<br>1.08 |
| Climate Zone: 30-Year Average |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Under 2,000 CDD and           |                |                        |                 |                |                |              |              |              |                |              |              |              |
| More than 7,000 HDD           | 2,516          | 4,189                  | N               | 2,429          | 0.11           | 0.07         | N            | 0.07         | 1.06           | 0.76         | N            | 0.96         |
| 5,500-7,000 HDD               | 5,413          | 8,791                  | N               | -              | 0.11           | 0.07         | N            | 0.07         | 1.00           | 0.70         | N            | 1.02         |
| 4,000-5,499 HDD               | 6,333          | 1,191                  | 4,868           | 2,095<br>Q     | 0.09           | 0.07         | 0.07         | 0.07         |                | 0.76         |              | 1.02         |
| Fewer than 4,000 HDD          | 0,333<br>N     | 1, 19 1<br>N           | 9,940           |                | 0.10<br>N      | 0.00<br>N    | 0.07         | 0.10         | 1.25<br>N      | 0.76<br>N    | 1.00         | 1.59         |
| 2,000 CDD or More and         | IN             | IN                     | 3,340           | 0,211          | 14             | IN           | 0.00         | 0.13         | 11             | IN           | 1.00         | 1.55         |
| Fewer than 4,000 HDD          | N              | N                      | 10,732          | 1,301          | N              | N            | 0.07         | 0.09         | N              | N            | 1.23         | 2.34         |
| Number of Floors              |                |                        |                 |                |                |              |              |              |                |              |              |              |
| One                           | 3,780          | 5,312                  | 11,585          | 6,131          | 0.10           | 0.07         | 0.07         | 0.10         | 1.22           | 0.90         | 1.04         | 1.26         |
| Two                           | 2,788          | 3,821                  | 5,470           | 3,987          | 0.10           | 0.07         | 0.07         | 0.10         | 0.92           | 0.74         | 1.12         | 1.35         |
| Three                         | 1,473          | 1,988                  | 1,854           | 1,073          | 0.10           | 0.07         | 0.07         | 0.09         | 0.71           | 0.79         | 0.97         | 1.20         |
| Four to Nine                  | 3,813          | 2,364                  | 4,214           | 2,126          | 0.09           | 0.06         | 0.06         | 0.10         | 1.27           | 0.90         | 1.36         | 1.60         |
| Ten or More                   | 2,408          | 687                    | 2,416           | 1,740          | 0.09           | 0.06         | 0.06         | 0.09         | 1.47           | 1.24         | 1.38         | 1.74         |
|                               |                |                        |                 |                |                |              |              |              |                |              |              |              |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|                                | Total E        | lectricity   | y Expen  | ditures |                | <u> </u>     | Electrici | ty Exper | nditures       | (dollars     | )        |          |
|--------------------------------|----------------|--------------|----------|---------|----------------|--------------|-----------|----------|----------------|--------------|----------|----------|
|                                |                | (million     | dollars) |         |                | per          | kWh       |          |                | per Squ      | are Foot | <u> </u> |
|                                | North-<br>east | Mid-<br>west | South    | West    | North-<br>east | Mid-<br>west | South     | West     | North-<br>east | Mid-<br>west | South    | West     |
| All Buildings*                 | 14,262         | 14,172       | 25,540   | 15,057  | 0.10           | 0.07         | 0.07      | 0.10     | 1.11           | 0.85         | 1.12     | 1.37     |
| Elevators and Escalators       |                |              |          |         |                |              |           |          |                |              |          |          |
| (more than one may apply)      |                |              |          |         |                |              |           |          |                |              |          |          |
| Any Elevators                  | 7,917          | 6,121        | 10,195   | 5,994   | 0.09           | 0.06         | 0.06      | 0.09     | 1.29           | 0.93         | 1.28     | 1.56     |
| Number of Elevators            |                |              |          |         |                |              |           |          |                |              |          |          |
| One                            | 1,752          | 2,372        | 2,487    | 1,101   | 0.10           | 0.06         | 0.07      | 0.09     | 1.12           | 0.79         | 1.01     | 1.03     |
| Two to Five                    | 3,435          | 2,579        | 4,094    | 2,232   | 0.09           | 0.06         | 0.06      | 0.10     | 1.16           | 0.96         | 1.32     | 1.64     |
| Six or More                    | 2,730          | 1,170        | 3,614    | 2,662   | 0.09           | 0.06         | 0.06      | 0.09     | 1.73           | 1.32         | 1.52     | 1.88     |
| Any Escalators                 | Q              | Q            | 1,732    | Q       | Q              | Q            | 0.06      | Q        | Q              | Q            | 1.73     | Q        |
| Number of Workers (main shift) |                |              |          |         |                |              |           |          |                |              |          |          |
| Fewer than 5                   | 1,405          | 2,523        | 3,610    | 1,966   | 0.12           | 0.07         | 0.09      | 0.11     | 0.62           | 0.55         | 0.73     | 0.88     |
| 5 to 9                         | 1,088          | 1,441        | 2,633    | 1,228   | 0.12           | 0.08         | 0.08      | 0.10     | 1.00           | 0.98         | 1.02     | 1.20     |
| 10 to 19                       | 1,436          | 1,664        | 3,022    | 1,525   | 0.11           | 0.07         | 0.08      | 0.11     | 0.77           | 0.80         | 1.10     | 1.38     |
| 20 to 49                       | 2,216          | 2,576        | 4,556    | 2,619   | 0.10           | 0.07         | 0.07      | 0.10     | 0.96           | 0.90         | 1.17     | 1.37     |
| 50 to 99                       | 1,868          | 1,991        | 2,930    | 1,742   | 0.09           | 0.06         |           | 0.09     | 1.17           | 0.86         | 1.10     | 1.27     |
| 100 to 249                     | 2,013          | 1,729        | 3,595    | 2,431   | 0.09           | 0.06         | 0.06      | 0.10     | 1.51           | 1.07         | 1.42     | 1.74     |
| 250 or More                    | 4,236          | 2,248        | 5,194    | 3,546   | 0.09           | 0.06         | 0.06      | 0.09     | 1.82           | 1.25         | 1.52     | 1.79     |
| Weekly Operating Hours         |                |              |          |         |                |              |           |          |                |              |          |          |
| Fewer than 40                  | 290            | 616          | 1,009    | 574     | 0.11           | 0.09         | 0.08      | 0.13     | 0.34           | 0.30         | 0.48     | 0.64     |
| 40 to 48                       | 1,369          | 2,162        | 3,885    | 2,161   | 0.10           | 0.07         | 0.08      | 0.10     | 0.65           | 0.79         | 0.85     | 1.00     |
| 49 to 60                       | 2,814          | 3,345        | 4,891    | 3,181   | 0.10           | 0.06         | 0.07      | 0.11     | 0.91           | 0.73         | 0.88     | 1.30     |
| 61 to 84                       | 2,270          | 2,313        | 4,660    | 2,315   | 0.11           | 0.07         | 0.07      | 0.09     | 1.11           | 0.90         | 1.24     | 1.19     |
| 85 to 167                      | 2,214          | 2,739        | 4,300    | 1,934   | 0.09           | 0.07         | 0.07      | 0.09     | 1.68           | 1.36         | 1.81     | 1.55     |
| Open Continuously              | 5,304          | 2,997        | 6,794    | 4,892   | 0.09           | 0.06         | 0.06      | 0.09     | 1.57           | 1.10         | 1.53     | 2.10     |
| Ownership and Occupancy        |                |              |          |         |                |              |           |          |                |              |          |          |
| Nongovernment Owned            | 12,035         | 10,805       | 19,030   | 12,251  | 0.10           | 0.07         | 0.07      | 0.10     | 1.17           | 0.89         | 1.11     | 1.45     |
| Owner Occupied                 | 6,390          | 5,387        | 8,364    | 5,299   | 0.10           | 0.07         | 0.07      | 0.11     | 1.08           | 0.88         | 1.07     | 1.47     |
| Nonowner Occupied              | 5,578          | 5,337        | 10,619   | 6,912   | 0.10           | 0.07         | 0.07      | 0.10     | 1.35           | 0.99         | 1.18     | 1.46     |
| Unoccupied                     | Q              | Q            | Q        | Q       | Q              | Q            | Q         | Q        | Q              | Q            | Q        | Q        |
| Government Owned               | 2,227          | 3,366        | 6,510    | 2,806   | 0.09           | 0.06         | 0.06      | 0.09     | 0.88           | 0.73         | 1.16     | 1.09     |
| Federal                        | Q              | 876          | 843      | 228     | Q              | 0.05         | Q         | 0.09     | Q              | 0.95         | 1.63     | 0.76     |
| State                          | 604            | 637          | 1,876    | 856     | 0.09           | 0.06         | 0.06      | 0.09     | 1.01           | 0.83         | 1.11     | 1.18     |
| Local                          | 1,411          | 1,853        | 3,791    | 1,722   | 0.10           | 0.07         | 0.07      | 0.08     | 0.83           | 0.64         | 1.11     | 1.12     |
| Vacancy Status                 |                |              |          |         |                |              |           |          |                |              |          |          |
| Completely Vacant              | Q              | Q            | Q        | Q       | Q              | Q            | Q         | Q        | Q              | Q            | Q        | Q        |
| Mostly Vacant                  | Q              |              |          | Q       | Q              | Q            |           |          |                |              |          | Q        |
| Partially Vacant               | 3,828          | 2,668        | 4,126    | 2,588   | 0.10           | 0.07         | 0.07      | 0.09     |                | 0.86         | 1.05     | 1.24     |
| Not At All Vacant              | ,              |              | 21,359   |         | 0.10           | 0.07         |           | 0.10     |                |              |          | 1.41     |
| Number of Establishments       |                |              |          |         |                |              |           |          |                |              |          |          |
| One                            | 8.786          | 10,689       | 18,435   | 10,467  | 0.10           | 0.07         | 0.07      | 0.10     | 1.10           | 0.88         | 1.11     | 1.36     |
| 2 to 5                         | 2,681          | 2,359        | 3,847    | 2,552   | 0.10           | 0.07         |           | 0.11     | 1.07           | 0.84         | 1.04     | 1.35     |
| 6 to 10                        | 738            | 451          | 905      | 537     | 0.09           | 0.06         |           | 0.10     |                | 0.88         |          | 1.64     |
| 11 to 20                       | Q              | Q            | 726      | Q       | Q              | Q            |           | Q        |                |              |          | Q        |
| More than 20                   | 1,315          | Q            | 1,578    | Q       | 0.11           | Q            |           |          |                |              |          | Q        |
| Currently Unoccupied           | Q              |              | -        | Q       | Q              |              |           |          |                |              |          |          |
|                                | _              | _            | ~        | _       | ~              | _            | _         | _        | _              | _            | _        | _        |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|  |                |                        | _               |                |                | E            | Electricit   | y Exper      | nditures       | (dollars     | )            |              |
|--|----------------|------------------------|-----------------|----------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|  |                | lectricity<br>(million | y Expendollars) | ditures        |                | per l        | kWh          |              |                | per Squ      | are Foot     |              |
|  | North-<br>east | Mid-<br>west           | South           | West           | North-<br>east | Mid-<br>west | South        | West         | North-<br>east | Mid-<br>west | South        | West         |
| All Buildings*   | 14,262         | 14,172                 | 25,540          | 15,057         | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Predominant Exterior Wall Material   |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Brick, Stone or Stucco   | 7,324          | 7.970                  | 12,771          | 6,068          | 0.10           | 0.07         | 0.07         | 0.10         | 1.02           | 0.87         | 1.12         | 1.31         |
| Concrete (Block or Poured)   |                | 2,399                  | 4,721           | 2,692          | 0.10           | 0.07         | 0.07         | 0.10         | 1.20           | 0.83         | 1.20         | 1.53         |
| Concrete Panels  | 946            | 1,256                  | 3,739           | 2,476          | 0.08           | 0.06         | 0.06         | 0.10         | 1.58           | 1.02         | 1.41         | 1.30         |
| Siding or Shingles   | 828            | 772                    | 1,035           | 1,372          | 0.11           | 0.08         | 0.08         | 0.11         | 0.70           | 0.73         | 1.00         | 1.97         |
| Metal Panels   | 1,594          | 1,115                  | 2,352           | 1,665          | 0.09           | 0.07         | 0.07         | 0.09         | 1.55           | 0.63         | 0.76         | 1.12         |
| Window Glass   | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            |                | Q            | Q            | Q            |
| Other  | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            | Q              | Q            | Q            | Q            |
| No One Major Type  | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            |                | Q            | Q            | Q            |
| Predominant Roof Material Built-Up   | 4,819          | 4,676                  | 8,720           | E 055          | 0.10           | 0.07         | 0.07         | 0.10         | 1.20           | 0.91         | 1.21         | 1.36         |
| Shingles (Not Wood)  | 2,118          | 2,334                  | 3,417           | 5,955<br>2,395 | 0.10           | 0.07         | 0.07         | 0.10         | 1.20           | 0.91         | 1.04         | 1.61         |
| Metal Surfacing  | 935            | 1,665                  | 4,411           | 1,826          | 0.09           | 0.07         | 0.07         | 0.12         | 0.93           | 0.73         | 0.75         | 0.98         |
| Synthetic or Rubber  | 5,439          | 4,259                  | 6,280           | 2,656          | 0.10           | 0.00         | 0.07         | 0.03         | 1.32           | 0.07         | 1.47         | 1.42         |
| Slate or Tile  | 432            | 234                    | 1,108           | 1,042          | 0.03           | 0.07         | 0.00         | 0.00         | 0.90           | 0.30         | 1.07         | 1.68         |
| Wooden Materials   | Q              | 234<br>Q               | 1,100<br>Q      | 1,042<br>Q     | Q              | 0.00<br>Q    | 0.07<br>Q    | 0.10         | 0.50<br>Q      | 0.70<br>Q    | 1.07<br>Q    | 1.05         |
| Concrete   | Q              | Q                      | Q               | Q              | Q              | Q            | 0.07         | 0.10<br>Q    |                | Q            | 1.43         | 1.03<br>Q    |
| Other  | Q              | Q                      | Q               | Q              | Q              | Q            | 0.07<br>Q    | Q            |                | Q            | 1.43<br>Q    | Q            |
| No One Major Type  | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            |                | Q            | Q            | Q            |
| Renovations in Buildings<br>Constructed Before 1980<br>(more than one may apply)<br>Any Type of Renovation |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Since 1980   | 5,738          | 4,126                  | 4,606           | 3,359          | 0.10           | 0.07         | 0.07         | 0.09         | 1.13           | 0.77         | 1.06         | 1.18         |
| Addition or Annex  | 1,715          | 1,728                  | 2,008           | 1,051          | 0.10           | 0.06         | 0.07         | 0.07         | 0.95           | 0.88         | 1.11         | 1.07         |
| Reduction In Floorspace  | 1,7 10<br>Q    | 1,7 <u>2</u> 0         | 2,000<br>Q      | 1,001<br>Q     | Q. 10          | Q.00         | Q.07         | 0.07<br>Q    |                | 0.00<br>Q    | Q            | 1.07<br>Q    |
| Cosmetic Improvements  | 4,825          | 3,153                  | 3,155           | 2,712          | 0.10           | 0.06         | 0.07         | 0.09         | 1.23           | 0.81         | 1.05         | 1.24         |
| Wall or Roof Replacement   | 2,888          | 1,684                  | 2,041           | 1,516          | 0.10           | 0.06         | 0.07         | 0.09         | 1.08           | 0.75         | 1.10         | 1.17         |
| Interior Wall  | _,             | .,                     | _,              | .,             |                |              |              |              |                |              |              |              |
| Re-Configuration   | 2,713          | 2,284                  | 1,999           | 2,038          | 0.10           | 0.06         | 0.06         | 0.09         | 1.10           | 0.88         | 1.03         | 1.35         |
| HVAC Equipment Upgrade   | 4,033          | 2,721                  | 2,815           | 2,253          | 0.10           | 0.06         | 0.06         | 0.08         | 1.33           | 0.82         | 1.09         | 1.23         |
| Lighting Upgrade   | 3,879          | 2,420                  | 2,105           | 2,338          | 0.09           | 0.06         | 0.06         | 0.08         | 1.16           | 0.79         | 1.01         | 1.32         |
| Window Replacement   | 2,893          | 1,348                  | 927             | 999            | 0.11           | 0.06         | 0.07         | 0.08         | 1.05           | 0.76         | 1.01         | 1.19         |
| Plumbing System Upgrade  | 2,738          | 1,493                  | 1,368           | 1,761          | 0.10           | 0.06         | 0.06         | 0.09         | 1.09           | 0.79         | 1.00         | 1.29         |
| Insulation Upgrade   | 1,569          | 912                    | 918             | 666            | 0.10           | 0.06         | 0.07         | 0.09         | 1.15           | 0.75         | 1.07         | 1.16         |
| Other Renovation   | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            | Q              | Q            | Q            | Q            |
| No Renovations Since 1980  | 3,367          | 3,607                  | 5,008           | 3,708          | 0.10           | 0.07         | 0.07         | 0.11         | 0.78           | 0.64         | 0.97         | 1.22         |
| Building Newer than 1980   | 5,157          | 6,438                  | 15,926          | 7,990          | 0.09           | 0.07         | 0.07         | 0.10         | 1.51           | 1.12         | 1.20         | 1.56         |
| Energy Sources (more than  |                |                        |                 |                |                |              |              |              |                |              |              |              |
| one may apply)   | 44.000         | 14 470                 | 05.540          | 15.057         | 0.40           | 0.07         | 0.07         | 0.40         | 4 4 4          | 0.05         | 4 40         | 4.07         |
| Electricity  | -              | -                      | 25,540          | -              | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Natural Gas  |                |                        | 15,835          | -              | 0.09           | 0.07         | 0.07         | 0.10         | 1.18           | 0.87         | 1.19         | 1.33         |
| Fuel Oil   | 6,541          | 2,918                  | ,               | 3,835          | 0.09           | 0.06         | 0.06         | 0.09         | 1.08           | 1.04         | 1.29         | 1.81         |
| District Heat  | 2,131          | 1,400                  | 2,141           | 847            | 0.10           | 0.05         | 0.06         | 0.09         | 1.56           | 0.85         | 1.21         | 1.27         |
| District Chilled Water   | 825<br>1,201   | 726<br>1,662           | 1,311<br>2,194  | 805<br>2,177   | 0.08<br>0.10   | 0.06<br>0.05 | 0.06<br>0.07 | 0.08<br>0.09 | 1.33<br>0.89   | 1.22<br>0.76 | 1.14<br>0.93 | 1.65<br>1.86 |
| Other  | 1,201<br>Q     | 423                    | 445             | 472            | 0.10<br>Q      | 0.05         | 0.07         | 0.09         | 0.69<br>Q      | 0.76         | 1.47         | 1.28         |
| Ou 101   | Q              | 423                    | 443             | 412            | Q              | 0.00         | 0.00         | 0.00         | Q              | 0.07         | 1.4/         | 1.20         |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|   | Total E         | lectricity                             | y Expen         | ditures        |                | <u> </u>     | Electricit   | y Expe       | nditures       | (dollars     | )            |              |
|---|-----------------|--|-----------------|----------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|   |                 | (million                               | dollars)        |                |                | per          | kWh          |              |                | per Squ      | are Foot     | :            |
|   | North-<br>east  | Mid-<br>west                           | South           | West           | North-<br>east | Mid-<br>west | South        | West         | North-<br>east | Mid-<br>west | South        | West         |
| All Buildings*                            | 14,262          | 14,172                                 | 25,540          | 15,057         | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Space-Heating Energy Sources              |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Electricity                               | 6,290           | 5,821                                  | 15,827          | 6,927          | 0.10           | 0.07         | 0.07         | 0.09         | 1.43           | 0.94         | 1.21         | 1.41         |
| Electricity Main                          | 2,071           | 3,002                                  | 11,093          | 4,361          | 0.10           | 0.07         | 0.07         | 0.10         | 1.65           | 1.18         | 1.22         | 1.40         |
| Electricity Secondary                     | 4,220           | 2,819                                  | 4,734           | 2,566          | 0.09           | 0.07         | 0.06         | 0.09         | 1.34           | 0.77         | 1.19         | 1.43         |
| Other Excluding Electricity               | 7,864           | 8,207                                  |                 | 6,694          | 0.10           | 0.07         | 0.06         | 0.10         | 0.96           | 0.81         | 1.09         | 1.29         |
| Buildings without Heating                 | Q               | 144                                    | -               | 1,436          | Q              | 0.08         | 0.08         | 0.13         | Q              | 0.36         | 0.61         | 1.55         |
| Primary Space-Heating<br>Energy Source    |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Electricity                               | 2,071           | 3,002                                  | 11,093          | 4,361          | 0.10           | 0.07         | 0.07         | 0.10         | 1.65           | 1.18         | 1.22         | 1.40         |
| Natural Gas                               | 8,025           | 9,099                                  | 10,595          | 7,635          | 0.09           | 0.07         | 0.07         | 0.10         | 1.25           | 0.80         | 1.14         | 1.29         |
| Fuel Oil                                  | 1,837           | Q                                      | Q               | Q              | 0.11           | Q            | Q            | Q            | 0.57           | Q            | Q            | Q            |
| District Heat                             | 1,929           | 1,344                                  |                 | 666            | 0.10           | 0.05         | 0.06         | 0.08         | 1.60           | 0.88         | 1.22         | 1.19         |
| Propane                                   | 0,0 <u>2</u> 0  | ,,,, , , , , , , , , , , , , , , , , , | 471             | Q              | Q              | 0.07         | 0.08         | 0.13         | Q              | 0.71         | 0.70         | Q            |
| Other                                     | Q               | Q                                      |                 | Q              | Q              | Q            | Q            | Q            |                | Q            |              | Q            |
| Cooling Energy Sources                    |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Electricity                               | 12,509          | 12,768                                 | 24,260          | 13,865         | 0.10           | 0.07         | 0.07         | 0.10         | 1.20           | 0.93         | 1.18         | 1.46         |
| Other Excluding Electricity               | 1,012           | Q                                      | 1,001           | Q              | 0.09           | Q            | 0.06         | Q            | 1.83           | Q            | 1.08         | Q            |
| Buildings without Cooling                 | 741             | Q                                      | -               | 708            | 0.11           | 0.05         | 0.09         | 0.11         | 0.40           | 0.33         | 0.23         | 0.66         |
| Water-Heating Energy Sources              |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Electricity                               | 5,313           |  | 13,738          | 5,545          | 0.09           | 0.07         | 0.07         | 0.09         | 1.04           | 0.88         | 1.16         | 1.38         |
| Other Excluding Electricity               | 8,482           | 7,608                                  | 10,368          | 8,770          | 0.10           | 0.07         | 0.07         | 0.10         | 1.27           | 0.90         | 1.29         | 1.50         |
| Bldgs without Water Heating               | 467             | 862                                    | 1,434           | 742            | 0.11           | 0.05         | 0.09         | 0.12         | 0.46           | 0.48         | 0.50         | 0.63         |
| Cooking Energy Sources                    | 0.407           | 2 000                                  | 7 470           | 2 000          | 0.00           | 0.00         | 0.07         | 0.00         | 4 40           | 4.00         | 4.50         | 4.55         |
| Electricity                               | 3,487           | 3,802                                  | -               | 3,080          | 0.09           | 0.06         | 0.07         | 0.08         | 1.40           | 1.00         | 1.53         | 1.55         |
| Other Excluding Electricity               | 2,788           | 2,111                                  | 4,282           | 2,751          | 0.09           | 0.07         | 0.06         | 0.11         | Q              | 1.02         | 1.44         | 1.83         |
| Buildings without Cooking                 | 7,987           | 8,259                                  | 13,783          | 9,226          | 0.10           | 0.07         | 0.07         | 0.10         | 1.02           | 0.76         | 0.93         | 1.22         |
| Energy End Uses (more than one may apply) |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Buildings with Space Heating              | 14,154          | 14,028                                 | 24,449          | 13,621         | 0.10           | 0.07         | 0.07         | 0.10         | 1.12           | 0.86         | 1.16         | 1.35         |
| Buildings with Cooling                    |                 |  | 25,261          |                | 0.10           | 0.07         | 0.07         | 0.10         | 1.23           | 0.93         | 1.17         | 1.44         |
| Buildings with Water Heating              |                 |  | 24,106          |                | 0.10           | 0.07         | 0.07         | 0.10         | 1.17           | 0.89         | 1.21         | 1.45         |
| Buildings with Cooking                    | 6,275           |  | 11,758          | 5,832          | 0.09           | 0.06         | 0.07         | 0.09         | 1.25           | 1.01         | 1.49         | 1.67         |
| Buildings with Manufacturing              | 1,166           | 673                                    | 468             | 810            | 0.09           | 0.06         | 0.06         | 0.08         | 1.15           | 0.84         | 0.73         | 1.18         |
|   | 1,100           | 0/3                                    | 400             | 010            | 0.09           | 0.00         | 0.00         | 0.00         | 1.13           | 0.04         | 0.73         | 1.10         |
| Buildings with Electricity Generation     | 5,398           | 3,882                                  | 5,483           | 3,916          | 0.09           | 0.06         | 0.06         | 0.09         | 1.66           | 1.17         | 1.36         | 1.75         |
| Percent of Floorspace Heated              |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Not Heated                                | Q               | 144                                    | 1,092           | 1,436          | Q              | 0.08         | 0.08         | 0.13         | Q              | 0.36         | 0.61         | 1.55         |
| 1 to 50                                   | 694             |  | ,               | 1,458          | 0.12           | 0.06         | 0.08         | 0.13         | 0.50           | 0.53         | 0.67         | 0.98         |
|   |                 |  |                 |                |                |              |              |              |                |              |              |              |
| 51 to 99<br>100                           | 1,486<br>11,974 | 1,492<br>11,941                        | 3,469<br>19,082 | 2,649<br>9,515 | 0.10<br>0.10   | 0.07<br>0.07 | 0.07<br>0.07 | 0.09<br>0.10 | 0.97<br>1.24   | 0.86<br>0.89 | 1.20<br>1.25 | 1.36<br>1.43 |
| Percent of Floorspace Cooled              |                 |  |                 |                |                |              |              |              |                |              |              |              |
| Not Cooled                                | 741             | Q                                      | 279             | 708            | 0.11           | 0.05         | 0.09         | 0.11         | 0.40           | 0.33         | 0.23         | 0.66         |
| 1 to 50                                   | 2,897           | 2,623                                  |                 | 2,561          | 0.10           | 0.03         | 0.03         | 0.10         | 0.48           | 0.55         | 0.23         | 0.96         |
| 51 to 99                                  | 4,663           | 3,749                                  | -               | 3,476          | 0.10           | 0.06         | 0.07         | 0.09         | 1.50           | 1.00         | 1.29         | 1.42         |
| 100                                       |                 |  | 17,413          |                |                | 0.00         |              | 0.03         | 1.66           |              | 1.23         | 1.71         |
| 100                                       | 5,961           | 7,052                                  | 17,413          | 0,313          | 0.09           | 0.07         | 0.07         | 0.10         | 1.00           | 1.18         | 1.3/         | 1./ 1        |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|   |                |              |                 |         |                | E            | Electricit | у Ехреі   | nditures       | (dollars     | )        |           |
|---|----------------|--------------|-----------------|---------|----------------|--------------|------------|-----------|----------------|--------------|----------|-----------|
|   |                |              | y Expendollars) | ditures |                | per l        |            | ,         |                | •            | are Foot |           |
|   | North-<br>east | Mid-<br>west | South           | West    | North-<br>east | Mid-<br>west | South      | West      | North-<br>east | Mid-<br>west | South    | West      |
| All Buildings*  | 14,262         | 14,172       | 25,540          | 15,057  | 0.10           | 0.07         | 0.07       | 0.10      | 1.11           | 0.85         | 1.12     | 1.37      |
| Percent Lit When Open   |                |              |                 |         |                |              |            |           |                |              |          |           |
| Zero  | Q              | Q            | Q               | Q       | Q              | Q            | Q          | Q         | Q              | Q            | Q        | Q         |
| 1 to 50   | 1,262          | 1,342        | 2,026           | 1,312   | 0.11           | 0.08         | 0.08       | 0.11      | 0.46           | 0.49         | 0.64     | 0.87      |
| 51 to 99  | 4,757          | 4,383        | 7,016           | 4,737   | 0.10           | 0.07         | 0.07       | 0.10      | 1.32           | 0.83         | 1.14     | 1.45      |
| 100   | 8,146          | 8,308        | 16,362          | 8,947   | 0.09           | 0.06         | 0.07       | 0.09      | 1.35           | 1.07         | 1.27     | 1.47      |
| Building Never Open/  |                |              |                 |         |                |              |            |           |                |              |          |           |
| Electricity Not Used  | Q              | Q            | Q               | Q       | Q              | Q            | Q          | Q         | Q              | Q            | Q        | Q         |
| Percent Lit When Closed   | 0.404          | 0.000        | 4 750           | 0.000   | 0.44           | 0.07         | 0.00       | 0.40      | 0.70           | 0.00         | 0.70     | 0.00      |
| Zero  | 2,124          | 3,236        | 4,759           | 2,986   | 0.11           | 0.07         | 0.08       | 0.10      |                | 0.63         | 0.76     | 0.96      |
| 1 to 50   | 6,272          | 7,204        |                 | 6,877   | 0.10           | 0.07         | 0.07       | 0.10      |                | 0.87         | 1.13     | 1.29      |
| 51 to 100<br>Building Never Closed/                             | Q              | 735          | 1,544           | Q       | Q              | 0.06         | 0.06       | Q         | Q              | 1.47         | 1.52     | Q         |
| Electricity Not Used  | 5,304          | 2,997        | 6,794           | 4,892   | 0.09           | 0.06         | 0.06       | 0.09      | 1.57           | 1.10         | 1.53     | 2.10      |
| Heating Equipment (more   |                |              |                 |         |                |              |            |           |                |              |          |           |
| than one may apply)   |                |              |                 |         |                |              |            |           |                |              |          |           |
| Heat Pumps  | 2,297          | 967          | 5,781           | 2,585   | 0.09           | 0.06         | 0.07       | 0.10      | 1.89           | 0.91         | 1.17     | 1.62      |
| Packaged Heat Pumps   | 1,538          | 698          | 3,932           | 1,761   | 0.09           | 0.06         | 0.07       | 0.10      | 2.07           | 0.91         | 1.17     | 1.71      |
| Split-System Heat Pumps   | 1,556<br>Q     | Q            | 1,893           | 676     | 0.09<br>Q      | 0.00<br>Q    | 0.07       | 0.09      | 2.07<br>Q      | 0.94<br>Q    | 1.02     | 1.84      |
| Individual Room Heat Pumps                                      |                | Q            | 1,288           | 586     | Q              | Q            | 0.07       | 0.09      | Q              | Q            | 1.02     | 1.09      |
| Furnaces  | 3,399          | 5,811        | 5,220           | 3,456   | 0.10           | 0.07         | 0.07       | 0.09      | 0.95           | 0.81         | 0.91     | 1.12      |
| Individual Space Heaters  | 3,394          | 3,244        | 3,804           | 1,944   | 0.10           | 0.07         | 0.07       | 0.08      | 1.22           | 0.78         | 1.06     | 0.98      |
| District Heat   | 1,953          | 1,368        | 2,033           | 696     | 0.10           | 0.05         | 0.06       | 0.08      | 1.57           | 0.76         | 1.21     | 1.13      |
| Boilers   | 6,441          | 4,822        | 5,657           | 5,124   | 0.09           | 0.06         | 0.06       | 0.09      | 1.03           | 0.79         | 1.29     | 1.40      |
| Packaged Heating Units  | 4,895          | 3,893        |                 | 5,032   | 0.10           | 0.06         | 0.07       | 0.11      | 1.68           | 1.06         | 1.29     | 1.52      |
| Other   | Q              | 846          | 1,372           | 530     | Q              | 0.06         | 0.07       | 0.07      | Q              | 1.05         | 1.00     | 1.10      |
| Cooling Equipment (more   |                |              |                 |         |                |              |            |           |                |              |          |           |
| than one may apply)   |                |              |                 |         |                |              |            |           |                |              |          |           |
| Residential-Type Central  |                |              |                 |         |                |              |            |           |                |              |          |           |
| Air Conditioners  | 2,372          | 3,158        | 3,733           | 1,484   | 0.11           | 0.07         | 0.07       | 0.10      | 0.99           | 0.87         | 0.97     | 1.26      |
| Heat Pumps  | 2,357          | 948          | 5,922           | 2,833   | 0.09           | 0.06         | 0.07       | 0.09      | 1.86           | 0.89         | 1.20     | 1.59      |
| Packaged Heat Pumps   | 1,585          | 707          | 3,904           | 1,713   | 0.09           | 0.06         | 0.07       | 0.09      | 2.01           | 0.93         | 1.37     | 1.66      |
| Split-System Heat Pumps   | Q              | Q            | 1,946           | 709     | Q              | Q            | 0.07       | 0.10      |                | Q            | 1.04     | 1.76      |
| Individual Room Heat Pumps                                      |                | Q            | 1,404           | 890     | Q              | Q            | 0.06       | 0.08      |                | Q            | 1.09     | 1.21      |
| Individual Air Conditioners                                     | 3,052          | 2,295        | 3,551           | 2,370   | 0.10           | 0.07         | 0.07       | 0.10      |                | 0.66         | 0.98     | 1.36      |
| District Chilled Water  | 825            | 726          | 1,311           | 805     | 0.08           | 0.06         | 0.06       | 0.08      | 1.33           | 1.22         | 1.14     | 1.65      |
| Central Chillers  | 3,297          | 3,104        | 6,855           | 3,810   | 0.09           | 0.06         | 0.06       | 0.09      | 1.78           | 1.09         | 1.41     | 1.83      |
| Packaged Air Conditioning                                       | 7 000          | 7 007        | 10.054          | 0.000   | 0.00           | 0.07         | 0.07       | 0.40      | 4.00           | 0.00         | 4 40     | 4 47      |
| Units   | 7,826          | ,            | 12,354          | 8,080   | 0.09           | 0.07         | 0.07       | 0.10      |                | 0.99         | 1.19     | 1.47      |
| Swamp Coolers Other   | Q<br>Q         | Q<br>Q       | Q<br>Q          |         | Q<br>Q         | Q<br>Q       | Q<br>Q     | 0.09<br>Q |                | 0.72<br>Q    | Q<br>Q   | 1.18<br>Q |
| Main Equipment Replaced Since<br>1990 (more than one may apply) |                |              |                 |         |                |              |            |           |                |              |          |           |
| Heating   | 4,204          | 4,210        | 4,857           | 3,355   | 0.10           | 0.07         | 0.07       | 0.09      | 1.06           | 0.84         | 1.01     | 1.30      |
| Cooling   | 6,456          | 5,032        |                 | 4,440   | 0.10           | 0.07         | 0.07       | 0.09      |                | 0.87         | 1.06     | 1.32      |
| Water Heating Equipment   |                |              |                 |         |                |              |            |           |                |              |          |           |
| Centralized System  | 9,178          | 9,057        | 14,452          | 8,184   | 0.10           | 0.07         | 0.07       | 0.10      | 1.18           | 0.93         | 1.25     | 1.45      |
| Distributed System  | 2,171          | 1,913        | 4,624           | 2,545   | 0.10           | 0.07         | 0.07       | 0.11      | 0.93           | 0.72         | 1.01     | 1.29      |
| Combination of Centralized                                      |                |              |                 |         |                |              |            |           |                |              |          |           |
| and Distributed System  | 2,446          | 2,340        | 5,030           | 3,586   | 0.09           | 0.06         | 0.06       | 0.09      | 1.44           | 0.92         | 1.32     | 1.61      |
|   |                |              |                 |         |                |              |            |           |                |              |          |           |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

| -  |                |                        |                 |                |                |              | Electricit   | y Exper      | nditures       | (dollars     | )            |              |
|--|----------------|------------------------|-----------------|----------------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|  |                | lectricity<br>(million | y Expendollars) | ditures        |                | per l        | kWh          |              |                | per Squ      | are Foot     |              |
|  | North-<br>east | Mid-<br>west           | South           | West           | North-<br>east | Mid-<br>west | South        | West         | North-<br>east | Mid-<br>west | South        | West         |
| All Buildings*   | 14,262         | 14,172                 | 25,540          | 15,057         | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Lighting Equipment Types (more than one may apply)             |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Incandescent   | 9,289          |                        | 16,344          | 9,110          | 0.10           | 0.07         | 0.07         | 0.09         | 1.15           | 0.88         | 1.25         | 1.42         |
| Standard Fluorescent   | 13,843         |                        | 24,616          | 14,647         | 0.10           | 0.07         | 0.07         | 0.10         | 1.14           | 0.88         | 1.16         | 1.38         |
| Compact Fluorescent  | 8,449          |                        | 12,475          | 8,685          | 0.09           | 0.06         | 0.06         | 0.10         | 1.39           | 1.02         | 1.40         | 1.50         |
| High Intensity Discharge                                       | 5,868          | 5,483                  | 7,765           | 4,534          | 0.09           | 0.06         | 0.06         | 0.09         | 1.34           | 0.83         | 1.25         | 1.33         |
| Halogen  | 5,246          | 4,700                  | 8,179           | 4,887          | 0.09           | 0.06         | 0.06         | 0.09         | 1.46           | 1.01         | 1.32         | 1.50         |
| Other  | Q              | Q                      | Q               | Q              | Q              | Q            | Q            | Q            | Q              | Q            | Q            | Q            |
| Refrigeration Equipment (more than one may apply) <sup>a</sup> |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Any Refrigeration  |                |                        | 23,481          | 13,170         | 0.10           | 0.07         | 0.07         | 0.10         | 1.20           | 0.90         | 1.23         | 1.47         |
| Commercial Refrigeration                                       | 8,341          |                        | 15,318          | 7,318          | 0.09           | 0.06         | 0.06         | 0.09         | 1.40           | 1.07         | 1.59         | 1.80         |
| Walk-In Units  | 6,819          | ,                      | 12,980          | 6,049          | 0.09           | 0.06         | 0.06         | 0.09         | 1.53           | 1.14         | 1.74         | 1.93         |
| Cases or Cabinets  | 6,839          |                        | 12,538          | 6,241          | 0.09           | 0.06         | 0.07         | 0.09         | 1.52           | 1.15         | 1.64         | 1.90         |
| Residential-Type Units   | 8,440          |                        | 14,274          | 8,455          | 0.10           | 0.07         | 0.07         | 0.10         | 1.02           | 0.81         | 1.08         | 1.27         |
| Vending Machines<br>No Refrigeration                           | 8,631<br>1,256 | 8,400<br>1,472         | 16,462<br>2,059 | 8,550<br>1,887 | 0.09<br>0.12   | 0.06<br>0.06 | 0.06<br>0.08 | 0.09<br>0.11 | 1.32<br>0.64   | 0.89<br>0.56 | 1.22<br>0.56 | 1.46<br>0.91 |
| Office Equipment (more   |                |                        |                 |                |                |              |              |              |                |              |              |              |
| than one may apply)  |                |                        |                 |                |                |              |              |              |                |              |              |              |
| Computers  |                | -                      | 23,341          |                | 0.10           | 0.07         | 0.07         | 0.10         | 1.17           | 0.90         | 1.18         | 1.43         |
| With Flat Screen Monitors                                      | 8,588          | -                      | 12,181          | 7,835          | 0.09           | 0.06         | 0.06         | 0.10         | 1.43           | 1.01         | 1.33         | 1.59         |
| Dedicated Servers  | 10,454         | ,                      | 15,375          | 10,055         | 0.09           | 0.06         | 0.06         | 0.10         | 1.28           | 0.98         | 1.22         | 1.60         |
| Laser Printers   | 7,450          |                        | 12,900          | 8,681          | 0.10           | 0.07         | 0.07         | 0.10         | 1.05           | 0.83         | 1.12         | 1.47         |
| Inkjet Printers  | 8,773          |                        | 14,537          | 8,582          | 0.09           | 0.06         | 0.06         | 0.10         | 1.37           | 0.97         | 1.27         | 1.43         |
| FAX Machines   |                |                        | 22,367          | 13,345         | 0.10           | 0.07         | 0.07         | 0.10         | 1.18           | 0.91         | 1.19         | 1.46         |
| Photocopiers   | 11,694         | 10,371                 | 18,560          | 11,784         | 0.09           | 0.06         | 0.07         | 0.10         | 1.18           | 0.87         | 1.14         | 1.44         |
| Number of Computers None                                       | 816            | 1,190                  | 2,200           | 815            | 0.12           | 0.07         | 0.08         | 0.11         | 0.63           | 0.52         | 0.72         | 0.78         |
| 1 to 4   | 1,926          | 3,029                  | 5,576           | 2,386          | 0.12           | 0.07         | 0.08         | 0.11         | 0.93           | 0.81         | 1.26         | 1.11         |
| 5 to 9   | 1,115          | 1,625                  | 2,294           | 1,572          | 0.11           | 0.07         | 0.08         | 0.09         | 0.70           | 0.84         | 0.90         | 1.43         |
| 10 to 19   | 1,300          | 1,562                  |                 | 1,693          | 0.10           | 0.07         | 0.07         | 0.11         | 0.98           | 0.92         | 0.91         | 1.42         |
| 20 to 49   | 1,861          | 1,666                  | 3,105           | 2,690          | 0.09           | 0.07         | 0.06         | 0.11         | 1.24           | 0.86         | 1.28         | 1.73         |
| 50 to 99   | 1,024          | 975                    | 2,288           | 1,376          | 0.10           | 0.06         | 0.06         | 0.10         | Q              | 0.93         | 1.09         | 1.29         |
| 100 to 249   | 1,640          | 1,573                  | 2,752           | 1,710          | 0.09           | 0.06         | 0.06         | 0.09         | 1.30           | 0.85         | 1.22         | 1.30         |
| 250 or More  | 4,580          | 2,551                  | 5,140           | 2,814          | 0.09           | 0.06         | 0.06         | 0.09         | 1.77           | 1.15         | 1.44         | 1.76         |
| Number of Dedicated Servers                                    | 0.5==          |                        | 40.4==          | <b>-</b>       |                |              | •            |              | •              |              |              |              |
| None   | 3,808          | ,                      | 10,165          | 5,002          | 0.11           | 0.07         | 0.08         | 0.10         | 0.82           | 0.69         | 1.00         | 1.06         |
| 1 to 4   | 5,303          | 5,860                  | 9,075           | 5,836          | 0.09           | 0.07         | 0.07         | 0.10         | 1.01           | 0.89         | 1.11         | 1.43         |
| 5 to 9   | 1,268          | 1,021                  | 1,915           | 1,404          | 0.09           | 0.06         | 0.06         | 0.12         |                | 1.06         | 1.46         | 2.09         |
| 10 to 19   | 991            | 883                    | 1,708           | 875            | 0.09           | 0.06         | 0.06         | 0.10         | 1.72           | 1.14         | 1.52         | 1.59         |
| 20 to 49<br>50 or More   | Q<br>2,207     | 521<br>771             | 1,799<br>879    | 679<br>Q       | Q<br>0.10      | 0.06<br>0.06 | 0.06<br>0.06 | 0.09<br>Q    | Q<br>2.42      | 1.56<br>1.26 | 1.42<br>1.19 | 1.38<br>Q    |
| Number of Photocopiers   |                |                        |                 |                |                |              |              |              |                |              |              |              |
| None   | 2,568          | 3,800                  | 6,980           | 3,273          | 0.12           | 0.07         | 0.08         | 0.10         | 0.88           | 0.78         | 1.08         | 1.15         |
| One  | 2,624          |                        | 5,066           | 3,199          | 0.09           | 0.07         | 0.07         | 0.10         | 0.87           | 0.76         | 0.93         | 1.16         |
| 2 to 4   | 2,852          | 3,318                  | 5,946           | 3,440          | 0.10           | 0.06         | 0.06         | 0.10         | 0.97           | 0.82         | 1.08         | 1.33         |
| 5 to 9   | 2,016          | 1,244                  | 2,332           | 1,546          | 0.09           | 0.06         | 0.06         | 0.11         | 1.33           | 0.89         | 1.31         | 1.90         |
| 10 or More   | 4,201          | 2,601                  | 5,217           | 3,599          | 0.09           | 0.06         | 0.06         | 0.09         | 1.75           | 1.18         | 1.47         | 1.77         |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|  | Ī              |                        |                  |         |                |              |              |              |                |              |              |              |
|--|----------------|------------------------|------------------|---------|----------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------|
|  |                |                        |                  |         |                | E            | Electricit   | у Ехреі      | nditures       | (dollars     | )            |              |
|  |                | lectricity<br>(million | y Expendollars)  | ditures |                | per l        | kWh          |              |                | per Squ      | are Foot     |              |
|  | North-<br>east | Mid-<br>west           | South            | West    | North-<br>east | Mid-<br>west | South        | West         | North-<br>east | Mid-<br>west | South        | West         |
| All Buildings*   | 14,262         | 14,172                 | 25,540           | 15,057  | 0.10           | 0.07         | 0.07         | 0.10         | 1.11           | 0.85         | 1.12         | 1.37         |
| Energy-Related Space Functions (more than one may apply) |                |                        |                  |         |                |              |              |              |                |              |              |              |
| Commercial Food Preparation Activities with Large        | 6,275          | 5,913                  | 11,757           | 5,826   | 0.09           | 0.06         | 0.07         | 0.09         | 1.25           | 1.01         | 1.49         | 1.68         |
| Amounts of Hot Water                                     | 4,965          | 4,982                  | 9,268            | 5,495   | 0.09           | 0.06         | 0.06         | 0.09         | 1.27           | 0.95         | 1.34         | 1.60         |
| Separate Computer Area                                   | 8,286          | 6,100                  | 11,405           | 7,516   | 0.09           | 0.06         | 0.06         | 0.09         | 1.40           | 0.94         | 1.21         | 1.48         |
| HVAC Conservation Features (more than one may apply)     |                |                        |                  |         |                |              |              |              |                |              |              |              |
| Variable Air-Volume System                               | 6,051          | 5,320                  | 9,769            | 5,587   | 0.09           | 0.06         | 0.06         | 0.09         | 1.60           | 1.06         | 1.33         | 1.61         |
| Economizer Cycle   | 7,496          | 6,479                  | 9,250            | 6,438   | 0.09           | 0.06         | 0.06         | 0.09         | 1.81           | 1.10         | 1.39         | 1.45         |
| HVAC Maintenance   | 13,086         | 11,958                 | 21,800           | 13,577  | 0.10           | 0.06         | 0.07         | 0.10         | 1.18           | 0.91         | 1.24         | 1.45         |
| Energy Management and                                    | 4 000          | 0.545                  | 7.504            | 4.540   | 0.00           | 0.00         | 0.00         | 0.00         | 4.00           | 0.00         | 4.00         | 4.40         |
| Control System (EMCS)                                    | 4,893          | 3,545                  | 7,501            | 4,512   | 0.09           | 0.06         | 0.06         | 0.09         | 1.63           | 0.93         | 1.29         | 1.49         |
| Window and Interior Lighting Features (more than one     |                |                        |                  |         |                |              |              |              |                |              |              |              |
| may apply) Multipaned Windows                            | 10 700         | 11,096                 | 14 720           | 7,250   | 0.10           | 0.07         | 0.06         | 0.09         | 1.15           | 0.95         | 1.20         | 1.31         |
| Tinted Window Glass                                      | 7,034          | ,                      | 14,726           | 8,621   | 0.10           | 0.07         | 0.00         | 0.09         | 1.13           | 0.95         | 1.23         | 1.54         |
| Reflective Window Glass                                  | 2,767          | 2,275                  |                  | 2,026   | 0.10           | 0.06         | 0.06         | 0.09         | 1.67           | 1.05         | 1.41         | 1.20         |
| External Overhangs                                       | •              | ,                      | •                | •       |                |              |              |              |                |              |              |              |
| or Awnings   | 3,544          | 4,181                  | 8,637            | 5,436   | 0.10           | 0.06         | 0.07         | 0.10         | 1.33           | 0.99         | 1.28         | 1.53         |
| Skylights or Atriums                                     | 3,178          | 2,872                  | ,                | 3,595   | 0.09           | 0.06         | 0.06         | 0.09         | 1.10           | 0.88         | 1.11         | 1.47         |
| Daylighting Sensors                                      | Q<br>7.700     | 845                    | 936              | 2,487   | Q              | 0.06         | 0.06         | 0.10         | Q              | 1.04         | 1.39         | 2.61         |
| Specular Reflectors  Electronic Ballasts                 | 7,792          |                        | 10,254<br>19,990 | 6,947   | 0.09           | 0.06<br>0.06 | 0.06<br>0.07 | 0.10<br>0.10 | 1.34<br>1.24   | 0.92<br>0.92 | 1.30<br>1.21 | 1.48<br>1.49 |
| Energy Management and Control System (EMCS)              | 11,340         | 11,500                 | 19,990           | 12,741  | 0.09           | 0.00         | 0.07         | 0.10         | 1.24           | 0.92         | 1.21         | 1.49         |
| For Lighting   | 1,685          | 1,342                  | 1,948            | 1,947   | 0.09           | 0.06         | 0.06         | 0.09         | 1.99           | 1.04         | 1.32         | 1.67         |
| Equipment Usage Reduced<br>When Building Not In Full Use |                |                        |                  |         |                |              |              |              |                |              |              |              |
| (more than one may apply) <sup>a</sup>                   |                |                        |                  |         |                |              |              |              |                |              |              |              |
| Heating  | 10,079         |                        | 15,958           |         | 0.10           | 0.07         | 0.07         | 0.10         | 1.06           | 0.79         | 1.09         | 1.37         |
| Cooling<br>Lighting                                      | 10,034         |                        | 17,611<br>17,810 | 9,881   | 0.10<br>0.10   | 0.07<br>0.07 | 0.07<br>0.07 | 0.10<br>0.10 | 1.14<br>0.95   | 0.84<br>0.84 | 1.09<br>1.04 | 1.43<br>1.19 |
| Office Equipment   | 3,575          | 3,837                  |                  | 3,759   | 0.10           | 0.07         | 0.07         | 0.10         | 0.84           | 0.71         | 0.98         | 1.14         |
| Annual Consumption                                       |                |                        |                  |         |                |              |              |              |                |              |              |              |
| (kilowatthours) 10,000 or Less                           | 111            | 109                    | 144              | 113     | 0.14           | 0.11         | 0.40         | 0.14         | O 1E           | 0.12         | 0.20         | 0.25         |
| 10,000 or Less   | 873            | 1,108                  | 1,621            | 1,066   | 0.14           | 0.11<br>0.09 | 0.12<br>0.10 | 0.14<br>0.12 |                | 0.12         | 0.20         | 0.25         |
| 50,001 to 100,000  | 1,130          | 885                    | 1,867            | 1,173   | 0.14           | 0.08         | 0.10         | 0.12         | 0.49           | 0.60         | 0.46         | 1.17         |
| 100,001 to 500,000                                       | 2,936          | 4,502                  | 6,472            | 4,143   | 0.11           | 0.08         | 0.08         | 0.10         | 1.01           | 0.94         | 1.20         | 1.38         |
| 500,001 to 1,000,000                                     | 1,301          | 1,397                  | 3,448            | 1,589   | 0.10           | 0.07         | 0.07         | 0.11         | 1.01           | 0.78         | 1.24         | 1.79         |
| 1,000,001 to 5,000,000                                   | 3,983          | 3,922                  | 6,703            | 3,928   | 0.09           | 0.06         | 0.06         | 0.09         | 1.55           | 1.12         | 1.43         | 1.61         |
| Over 5,000,000   | 3,928          | 2,248                  | 5,286            | 3,046   | 0.08           | 0.05         | 0.06         | 0.09         | 2.02           | 1.17         | 1.58         | 2.05         |

Table C16. Electricity Expenditures by Census Region for Non-Mall Buildings, 2003

|   |                 |                 |                 |             | Electricity Expenditures (dollars) |              |              |           |                |              |          |           |
|---|-----------------|-----------------|-----------------|-------------|------------------------------------|--------------|--------------|-----------|----------------|--------------|----------|-----------|
|   |                 | •               | y Expendollars) |             |                                    | per l        | kWh          |           |                | per Squ      | are Foot |           |
| ,   | North-<br>east  | Mid-<br>west    | South           | West        | North-<br>east                     | Mid-<br>west | South        | West      | North-<br>east | Mid-<br>west | South    | West      |
| All Buildings*  | 14,262          | 14,172          | 25,540          | 15,057      | 0.10                               | 0.07         | 0.07         | 0.10      | 1.11           | 0.85         | 1.12     | 1.37      |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 11,785<br>2,841 | 12,978<br>1,086 |                 | 14,070<br>Q | 0.10<br>0.09                       | 0.07<br>0.07 | 0.07<br>0.07 | 0.10<br>Q | 1.06<br>1.63   | 0.83<br>1.04 |          | 1.34<br>Q |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals. Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|                               | Total Electricity Consumption (billion kWh)  East |                    |                          | Building       | Floorspaces Using Eleon | ectricity                | Ene            | Electricity<br>ergy Intens | -                        |
|-------------------------------|---|--------------------|--------------------------|----------------|-------------------------|--------------------------|----------------|----------------------------|--------------------------|
|                               | New<br>England                                    | Middle<br>Atlantic | East<br>North<br>Central | New<br>England | Middle<br>Atlantic      | East<br>North<br>Central | New<br>England | Middle<br>Atlantic         | East<br>North<br>Central |
| All Buildings*                | 32  | 116                | 153                      | 2,942          | 9,867                   | 11,373                   | 10.8           | 11.7                       | 13.5                     |
| Building Floorspace           |   |                    |                          |                |                         |                          |                |                            |                          |
| (Square Feet)                 |   | •                  | 00                       | 0.45           | 050                     | 000                      | 40.7           | 40.0                       | 00.0                     |
| 1,001 to 5,000                | 4   | 9                  | 20                       | 345            | 652                     | 908                      | 12.7           | 13.8                       | 22.0                     |
| 5,001 to 10,000               | 3   | 7                  | 8                        | 350            | 732                     | 781                      | 7.7            | 9.6                        | 10.7                     |
| 10,001 to 25,000              | Q   | 16                 | 20                       | Q              | 1,390                   | 1,934                    | Q              | 11.2                       | 10.5                     |
| 25,001 to 50,000              | Q   | 8                  | 16                       | Q              | 944                     | 1,534                    | Q              | 8.5                        | 10.4                     |
| 50,001 to 100,000             | Q   | 15                 | 21                       | Q              | 1,524                   | 1,618                    | Q              | 10.2                       | 12.9                     |
| 100,001 to 200,000            | Q   | 17                 | 26                       | Q              | 1,703                   | 1,671                    | Q              | 10.1                       | 15.5                     |
| 200,001 to 500,000            | Q   | 22                 | 24                       | Q              | 1,673                   | 1,801                    | Q              | 13.1                       | 13.1                     |
| Over 500,000                  | Q   | 22                 | 18                       | Q              | 1,248                   | 1,126                    | Q              | 17.3                       | 16.4                     |
| Principal Building Activity   |   | 40                 | 40                       |                |                         | 4 000                    |                | •                          |                          |
| Education                     | Q   | 12                 | 16                       | Q              | 1,384                   | 1,990                    | Q              | 8.4                        | 7.9                      |
| Food Sales                    | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q                          | Q                        |
| Food Service                  | Q   | Q                  | 10                       | Q              | Q                       | 248                      | Q              | Q                          | 38.5                     |
| Health Care                   | Q   | 9                  | 13                       | Q              | 464                     | 551                      | Q              | 20.2                       | 24.2                     |
| Inpatient                     | Q   | 8                  | 9                        | Q              | 310                     | 316                      | Q              | 24.8                       | 27.9                     |
| Outpatient                    | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q                          | Q                        |
| Lodging                       | Q   | Q                  | 8                        | Q              | Q                       | 548                      | Q              | Q                          | 14.7                     |
| Retail (Other Than Mall)      | Q   | 5                  | 7                        | Q              | 419                     | 544                      | Q              | 10.9                       | 12.3                     |
| Office                        | 9   | 40                 | 42                       | 578            | 2,434                   | 2,190                    | 16.3           | 16.6                       | 18.9                     |
| Public Assembly               | Q   | 5                  | 8                        | Q              | 769                     | 635                      | Q              | Q                          | 12.3                     |
| Public Order and Safety       | Q   | Q                  | Q                        | Q              | Q                       | Q<br>700                 | Q              | Q                          | Q                        |
| Religious Worship             | Q   | 1                  | 3                        | Q              | 474                     | 720                      | Q              | 3.2                        | 4.3                      |
| Service                       | Q   | 5                  | 9                        | Q              | 620                     | 775                      | Q              | 7.5                        | 12.0                     |
| Warehouse and Storage         | Q   | 8                  | 21                       | Q              | 1,070                   | 1,931                    | Q              | 7.4                        | 10.8                     |
| Other                         | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q                          | Q                        |
| Vacant                        | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q                          | Q                        |
| Year Constructed              |   |                    |                          |                |                         |                          |                |                            |                          |
| Before 1920                   | 3   | 8                  | 6                        | 444            | 945                     | 994                      | 6.0            | Q                          | 5.8                      |
| 1920 to 1945                  | 3   | 14                 | Q                        | 611            | 1,861                   | 1,494                    | 5.6            | 7.4                        | 12.5                     |
| 1946 to 1959                  | Q   | 15                 | 12                       | Q              | 1,734                   | 1,444                    | Q              | 8.8                        | 8.6                      |
| 1960 to 1969                  | Q   | 16                 | 14                       | Q              | 1,393                   | 1,380                    | 17.4           | 11.4                       | 10.2                     |
| 1970 to 1979                  | 6   | 20                 | 32                       | 450            | 1,273                   | 2,198                    | 12.5           | 15.9                       | 14.5                     |
| 1980 to 1989                  | Q   | 20                 | 27                       | Q              | 1,109                   | 1,459                    | Q              | 18.1                       | 18.8                     |
| 1990 to 1999                  | Q   | 15                 | 30                       | Q              | 1,130                   | 1,606                    | Q              | 13.3                       | 18.6                     |
| 2000 to 2003                  | Q   | Q                  | 13                       | Q              | Q                       | 799                      | Q              | Q                          | 16.6                     |
| Climate Zone: 30-Year Average |   |                    |                          |                |                         |                          |                |                            |                          |
| Under 2,000 CDD and           | 7   | ^                  | 20                       | ^              | 1 117                   | 2 000                    | 7 4            | 11.0                       | 40.0                     |
| More than 7,000 HDD           | 7   | Q<br>24            | 32                       | Q<br>1 003     | 1,417                   | 3,008                    | 7.1            | 11.6                       | 10.6                     |
| 5,500-7,000 HDD               | 25<br>N   | 34                 | 122<br>N                 | 1,993          | 3,373                   | 8,365                    | 12.5           | 10.1                       | 14.5                     |
| 4,000-5,499 HDD               | N   | 65<br>N            | N                        | N              | 5,077                   | N                        | N              | 12.8                       | N                        |
| Fewer than 4,000 HDD          | N   | N                  | N                        | N              | N                       | N                        | N              | N                          | N                        |
| Fewer than 4,000 HDD          | N   | N                  | N                        | N              | N                       | N                        | N              | N                          | N                        |
| ,                             |   |                    |                          |                |                         |                          |                | _                          |                          |
| Number of Floors              | -   | 24                 | F 4                      | 500            | 0.504                   | 2 774                    | 40.0           | 40.0                       | 440                      |
| One                           | 7<br>4  | 31                 | 54<br>35                 | 522<br>742     | 2,564                   | 3,774                    | 13.9           | 12.2                       | 14.3                     |
| Three                         | 4   | 23                 | 35                       | 742<br>755     | 2,274                   | 3,228                    | 5.6<br>5.2     | 10.0                       | 10.9                     |
| ThreeFour to Nine             | 14  | 11<br>27           | 22<br>32                 | 755<br>793     | 1,310<br>2,210          | 1,805<br>2,061           | 5.2<br>17.4    | 8.5<br>12.1                | 12.1<br>15.4             |
|                               |   |                    |                          |                |                         |                          |                |                            |                          |
| Ten or More                   | Q   | 24                 | 11                       | Q              | 1,510                   | 506                      | Q              | 15.8                       | 20.8                     |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|                                | Total Electricity Consumption (billion kWh)  East |                    |                          | Building       | Floorspaces Using Eleon | ectricity                | Ene            | Electricity<br>ergy Intens<br>n/square f | sity                     |
|--------------------------------|---|--------------------|--------------------------|----------------|-------------------------|--------------------------|----------------|--|--------------------------|
|                                | New<br>England                                    | Middle<br>Atlantic | East<br>North<br>Central | New<br>England | Middle<br>Atlantic      | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                       | East<br>North<br>Central |
| All Buildings*                 | 32  | 116                | 153                      | 2,942          | 9,867                   | 11,373                   | 10.8           | 11.7                                     | 13.5                     |
| Elevators and Escalators       |   |                    |                          |                |                         |                          |                |  |                          |
| (more than one may apply)      |   |                    |                          |                |                         |                          |                |  |                          |
| Any Elevators                  | 19  | 67                 | 76                       | 1,375          | 4,744                   | 4,967                    | 13.7           | 14.2                                     | 15.4                     |
| Number of Elevators            |   |                    |                          | .,             | .,                      | .,                       |                |  |                          |
| One                            | Q   | 12                 | 26                       | Q              | 1,068                   | 2,149                    | Q              | 11.1                                     | 12.1                     |
| Two to Five                    | Q   | 28                 | 32                       | 723            | 2,248                   | 2,051                    | 14.1           | 12.4                                     | 15.7                     |
| Six or More                    | Q   | 28                 | 18                       | Q              | 1,428                   | 766                      | Q              | 19.5                                     | 23.7                     |
| Any Escalators                 | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
|                                |   |                    |                          |                |                         |                          |                |  |                          |
| Number of Workers (main shift) |   |                    |                          |                |                         |                          |                |  |                          |
| Fewer than 5                   | 3   | 8                  | 27                       | 754            | 1,525                   | 2,973                    | 4.6            | 5.3                                      | 8.9                      |
| 5 to 9                         | 3   | 6                  | 12                       | 401            | 684                     | 866                      | 7.0            | 8.9                                      | 13.3                     |
| 10 to 19                       | Q   | 10                 | 14                       | Q              | 1,463                   | 1,214                    | Q              | Q  | 11.8                     |
| 20 to 49                       | Q   | 17                 | 25                       | Q              | 1,964                   | 1,980                    | Q              | 8.8                                      | 12.6                     |
| 50 to 99                       | Q   | 17                 | 20                       | Q              | 1,110                   | 1,570                    | Q              | 15.3                                     | 13.0                     |
| 100 to 249                     | Q   | 15                 | 22                       | Q              | 1,034                   | 1,212                    | Q              |  | 18.1                     |
| 250 or More                    | Q   | 42                 | 34                       | Q              | 2,087                   | 1,558                    | Q              | 20.3                                     | 21.6                     |
| Weekly Operating Hours         |   |                    |                          |                |                         |                          |                |  |                          |
| Fewer than 40                  | Q   | 2                  | 4                        | Q              | 665                     | 1,427                    | Q              | 3.5                                      | 3.1                      |
| 40 to 48                       | 3   | 10                 | 22                       | 431            | 1,672                   | 1,742                    | 6.7            | 6.2                                      | 12.6                     |
| 49 to 60                       | 7   | 21                 | 39                       | 837            | 2,261                   | 3,322                    | 7.8            | 9.2                                      | 11.9                     |
| 61 to 84                       | 5   | 17                 | 21                       | 494            | 1,554                   | 1,737                    | 9.5            | 10.7                                     | 12.4                     |
| 85 to 167                      | Q   | 20                 | 32                       | Q              | 1,078                   | 1,450                    | Q.5            | 18.7                                     | 22.1                     |
| Open Continuously              | 13  | 45                 | 34                       | 742            | 2,638                   | 1,695                    | 17.9           | 17.2                                     | 20.1                     |
| •                              |   |                    |                          |                | •                       | ,                        |                |  |                          |
| Ownership and Occupancy        |   |                    |                          |                |                         |                          |                |  |                          |
| Nongovernment Owned            | 26  | 97                 | 106                      | 2,260          | 8,032                   | 7,793                    | 11.7           | 12.1                                     | 13.7                     |
| Owner Occupied                 | 17  | 49                 | 53                       | 1,587          | 4,317                   | 3,715                    | 10.9           | 11.3                                     | 14.2                     |
| Nonowner Occupied              | 9   | 48                 | 53                       | 646            | 3,493                   | 3,520                    | 14.2           | 13.7                                     | 15.1                     |
| Unoccupied                     | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| Government Owned               | 5   | 19                 | 47                       | 682            | 1,835                   | 3,580                    | 7.6            | 10.2                                     | 13.1                     |
| Federal                        | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| State                          | Q   | Q                  | 9                        | Q              | Q                       | 536                      | Q              | Q  | 15.9                     |
| Local                          | Q   | 13                 | 21                       | Q              | 1,360                   | 2,199                    | Q              | 9.5                                      | 9.4                      |
| Vacancy Status                 |   |                    |                          |                |                         |                          |                |  |                          |
| Completely Vacant              | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| Mostly Vacant                  | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              |  | Q                        |
| Partially Vacant               | 11  | 29                 | 31                       | 1,022          | 2,073                   | 2,251                    | 10.3           |  | 13.9                     |
| Not At All Vacant              | 21  | 86                 | 121                      | 1,781          | 7,447                   | 8,436                    | 11.8           | 11.5                                     |                          |
| Number of Establishments       |   |                    |                          |                |                         |                          |                |  |                          |
| One                            | 20  | 72                 | 117                      | 1,761          | 6,235                   | 8,199                    | 11.1           | 11.5                                     | 14.3                     |
| 2 to 5                         | 6   | 23                 | 24                       | 615            | 1,901                   | 1,833                    | 9.1            | 11.8                                     | 13.2                     |
| 6 to 10                        | Q   | 5                  | Q                        | Q              | 411                     | Q                        | Q              | 11.4                                     | Q                        |
| 11 to 20                       | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| More than 20                   | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| Currently Unoccupied           | Q   | Q                  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
|                                |   |                    |                          |                |                         |                          |                |  |                          |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|  | Co             | al Electric<br>ensumption<br>illion kWh | n                        | Building                | l Floorspac<br>s Using El<br>on square | ectricity                | Ene            | Electricity<br>ergy Intens<br>n/square f | sity                     |
|--|----------------|---|--------------------------|-------------------------|--|--------------------------|----------------|--|--------------------------|
|  | New<br>England | Middle<br>Atlantic                      | East<br>North<br>Central | New<br>England          | Middle<br>Atlantic                     | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                       | East<br>North<br>Central |
| All Buildings*   | 32             | 116                                     | 153                      | 2,942                   | 9,867                                  | 11,373                   | 10.8           | 11.7                                     | 13.5                     |
| Predominant Exterior   |                |   |                          |                         |  |                          |                |  |                          |
| Wall Material  |                |   |                          |                         |  |                          |                |  |                          |
| Brick, Stone or Stucco   | 17             | 58                                      | 95                       | 1,541                   | 5,657                                  | 7,033                    | 11.0           | 10.3                                     | 13.5                     |
| Concrete (Block or Poured)   | Q              | 23                                      | 22                       | Q                       | 1,890                                  | 1,875                    | Q              | 12.2                                     | 11.8                     |
| Concrete Panels  | Q              | Q                                       | 14                       | Q                       | Q                                      | 855                      | Q              | Q  | 16.6                     |
| Siding or Shingles   | 4              | 3                                       | 5                        | 764                     | 415                                    | 425                      | 5.6            | 8.0                                      | 10.6                     |
| Metal Panels   | Q              | 13                                      | 8                        | Q                       | 848                                    | 618                      | Q              | 15.4                                     | 12.4                     |
| Window Glass   | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  | C                        |
| Other  | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  |                          |
| No One Major Type  | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  | C                        |
| Predominant Roof Material  | _              |   |                          |                         |  | 0.04=                    | •              | 40 :                                     |                          |
| Built-Up   | 5              | 41                                      | 52                       | 704                     | 3,321                                  | 3,812                    | 6.9            | 12.4                                     | 13.6                     |
| Shingles (Not Wood)  | 5              | 18                                      | 21                       | 668                     | 1,326                                  | 2,002                    | 7.6            | 13.7                                     | 10.6                     |
| Metal Surfacing  | Q              | 8                                       | 13                       | Q                       | 763                                    | 997                      | Q              | 11.0                                     | 13.3                     |
| Synthetic or Rubber  | 18             | 42                                      | 50                       | 1,018                   | 3,097                                  | 3,450                    | 18.1           | 13.6                                     | 14.3                     |
| Slate or Tile  | Q              | 3                                       | 2                        | Q                       | 398                                    | 236                      | Q              | 6.5                                      | 10.2                     |
| Wooden Materials   | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  | Q                        |
| Concrete   | Q              | Q                                       |                          | Q                       | Q                                      | Q                        |                | Q  |                          |
| Other No One Major Type  | Q<br>Q         | Q<br>Q                                  | Q<br>Q                   | Q<br>Q                  | Q<br>Q                                 | Q<br>Q                   | Q<br>Q         | Q<br>Q                                   | Q<br>Q                   |
| Renovations in Buildings Constructed Before 1980 (more than one may apply) Any Type of Renovation Since 1980 | 12             | 46                                      | 43                       | 1,445                   | 3,645                                  | 3,416                    | 8.6            | 12.6                                     | 12.5                     |
| Addition or Annex  | Q              | 16                                      | 18                       | 1, <del>14</del> 3<br>Q | 1,395                                  | 1,243                    | 0.0<br>Q       | 11.5                                     | 14.3                     |
| Reduction In Floorspace  | Q              | Q                                       | Q                        | Q                       | 1,555<br>Q                             | 1, <u>2</u> 43           | Q              | Q Q                                      | Q                        |
| Cosmetic Improvements  | 9              | 39                                      | 33                       | 943                     | 2,996                                  | 2,354                    | 9.9            | 12.9                                     | 14.0                     |
| Wall or Roof Replacement   | 6              | 21                                      | 18                       | 720                     | 1,955                                  | 1,365                    | 8.7            | 10.9                                     | 13.3                     |
| Interior Wall  | · ·            |   |                          |                         | .,000                                  | .,000                    | 0              |  |                          |
| Re-Configuration   | 7              | 20                                      | 26                       | 639                     | 1.836                                  | 1,709                    | 10.8           | 10.9                                     | 14.9                     |
| HVAC Equipment Upgrade   | 8              | 32                                      | 28                       | 739                     | 2,287                                  | 2,136                    | 10.6           | 14.1                                     | 13.3                     |
| Lighting Upgrade   | 9              | 32                                      | 26                       | 853                     | 2,497                                  | 1,985                    | 10.9           | 12.9                                     | 12.9                     |
| Window Replacement   | 6              | 20                                      | 15                       | 688                     | 2,061                                  | 1,264                    | 9.2            | 9.8                                      | 11.8                     |
| Plumbing System Upgrade  | 7              | 19                                      | 16                       | 633                     | 1,878                                  | 1,177                    | 10.8           | 10.3                                     | 13.7                     |
| Insulation Upgrade   | Q              | 12                                      | 9                        | 356                     | 1,014                                  | 700                      | Q              | 11.8                                     | 12.5                     |
| Other Renovation   | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  |                          |
| No Renovations Since 1980  | 7              | 27                                      | 40                       | 752                     | 3,561                                  | 4,094                    | 9.0            | 7.6                                      |                          |
| Building Newer than 1980   | Q              | 43                                      |                          | 744                     | 2,661                                  | 3,863                    | 16.9           | 16.0                                     | 18.3                     |
| Energy Sources (more than  |                |   |                          |                         |  |                          |                |  |                          |
| one may apply)   |                |   |                          |                         |  |                          |                |  |                          |
| Electricity  | 32             | 116                                     | 153                      | 2,942                   | 9,867                                  | 11,373                   | 10.8           | 11.7                                     |                          |
| Natural Gas  | 21             | 93                                      | 125                      | 1,465                   | 7,716                                  | 9,568                    | 14.4           | 12.1                                     | 13.1                     |
| Fuel Oil   | 15             | 56                                      | 36                       | 1,577                   | 4,502                                  | 1,856                    | 9.3            | 12.4                                     | 19.4                     |
| District Heat  | Q              | 17                                      | 25                       | Q                       | 1,082                                  | 1,420                    | Q              | 15.7                                     | 17.7                     |
| District Chilled Water   | Q              | 10                                      | 12                       | Q                       | 583                                    | 569                      | Q              | 16.8                                     |                          |
| Propane  | 6              | 7                                       |                          | 850                     | 505                                    | Q                        | 6.7            | 12.9                                     |                          |
| Other  | Q              | Q                                       | Q                        | Q                       | Q                                      | Q                        | Q              | Q  | Q                        |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|   | Co             | al Electric<br>nsumption<br>illion kWh | n                        | Building       | Floorspaces Using Eleon | ectricity                | Ene            | Electricity<br>rgy Intens<br>n/square f | sity                     |
|---|----------------|--|--------------------------|----------------|-------------------------|--------------------------|----------------|---|--------------------------|
|   | New<br>England | Middle<br>Atlantic                     | East<br>North<br>Central | New<br>England | Middle<br>Atlantic      | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                      | East<br>North<br>Central |
| All Buildings*                            | 32             | 116                                    | 153                      | 2,942          | 9,867                   | 11,373                   | 10.8           | 11.7                                    | 13.5                     |
| Space-Heating Energy Sources              |                |  |                          |                |                         |                          |                |   |                          |
| Electricity                               | 16             | 50                                     | 58                       | 1,132          | 3,273                   | 3,895                    | 14.6           | 15.1                                    | 14.9                     |
| Electricity Main                          | Q              | 18                                     | 30                       | Q              | 1,127                   | 1,487                    | Q              | 16.3                                    | 20.3                     |
| Electricity Secondary                     | Q              | 31                                     | 28                       | 1,006          | 2,146                   | 2,408                    | 13.5           | 14.5                                    | 11.6                     |
| Other Excluding Electricity               | 15             | 66                                     | 94                       | 1,687          | 6,504                   | 7,302                    | 8.7            | 10.1                                    | 12.9                     |
| Buildings without Heating                 | Q              | Q                                      | Q                        | Q              | Q                       | Q                        | Q              | Q                                       | Q                        |
| Primary Space-Heating<br>Energy Source    |                |  |                          |                |                         |                          |                |   |                          |
| Electricity                               | Q              | 18                                     | 30                       | Q              | 1,127                   | 1,487                    | Q              | 16.3                                    | 20.3                     |
| Natural Gas                               | 14             | 71                                     | 95                       | 1,061          | 5,377                   | 8,228                    | 13.5           | 13.1                                    | 11.6                     |
| Fuel Oil                                  | 8              | 9                                      | Q                        | 1,161          | 2,089                   | Q                        | 6.7            | Q                                       | Q                        |
| District Heat                             | Q              | 15                                     | 25                       | Q              | 970                     | 1,319                    | Q              | 16.0                                    | 18.8                     |
| Propane                                   | Q              | Q                                      | Q                        | Q              | Q                       | Q                        | Q              | Q                                       | Q                        |
| Other                                     | Q              | Q                                      | Q                        | Q              | Q                       | Q                        | Q              | Q                                       | Q                        |
| Cooling Energy Sources                    |                |  |                          |                |                         |                          |                |   |                          |
| Electricity                               | 27             | 103                                    | 131                      | 1,946          | 8,456                   | 9,157                    | 13.9           | 12.2                                    | 14.3                     |
| Other Excluding Electricity               | Q              | Q                                      | Q                        | Q              | Q                       | Q                        | Q              | Q                                       | Q                        |
| Buildings without Cooling                 | 4              | 3                                      | Q                        | 920            | 935                     | 1,598                    | 3.8            | 3.3                                     | 7.7                      |
| Water-Heating Energy Sources Electricity  | 15             | 42                                     | 57                       | 1,439          | 3,686                   | 4,086                    | 10.6           | 11.4                                    | 13.9                     |
| Other Excluding Electricity               | 16             | 70                                     | 84                       | 1,285          | 5,379                   | 6,106                    | 12.1           | 13.1                                    | 13.7                     |
| Bldgs without Water Heating               | Q              | 3                                      | Q                        | Q              | 803                     | Q                        | Q              | 4.1                                     | 10.7                     |
| Cooking Energy Sources                    |                |  |                          |                |                         |                          |                |   |                          |
| Electricity                               | 7              | 32                                     | 46                       | 537            | 1,958                   | 2,934                    | 12.5           | 16.3                                    | 15.8                     |
| Other Excluding Electricity               | 4              | 27                                     | 23                       | 401            | 2,120                   | 1,444                    | 9.6            | Q                                       | 15.7                     |
| Buildings without Cooking                 | 21             | 57                                     | 84                       | 2,003          | 5,789                   | 6,995                    | 10.5           | 9.9                                     | 12.1                     |
| Energy End Uses (more than one may apply) |                |  |                          |                |                         |                          |                |   |                          |
| Buildings with Space Heating              | 31             | 115                                    | 152                      | 2,819          | 9,778                   | 11,197                   | 11.1           | 11.8                                    | 13.6                     |
| Buildings with Cooling                    | 28             | 113                                    | 141                      | 2,021          | 8,932                   | 9,775                    | 13.9           | 12.6                                    | 14.4                     |
| Buildings with Water Heating              | 31             | 112                                    | 141                      | 2,724          | 9,065                   | 10,193                   | 11.3           | 12.4                                    | 13.8                     |
| Buildings with Cooking                    | 11             | 59                                     | 69                       | 938            | 4,078                   | 4,378                    | 11.3           | 14.4                                    | 15.8                     |
| Buildings with Manufacturing              | Q              | 11                                     | 8                        | Q              | 679                     | 489                      | Q              | 16.2                                    | 16.4                     |
| Buildings with Electricity                |                |  |                          |                |                         |                          |                |   |                          |
| Generation                                | 9              | 51                                     | 52                       | 567            | 2,678                   | 2,558                    | 16.2           | 19.1                                    | 20.4                     |
| Percent of Floorspace Heated              |                |  |                          |                |                         |                          |                |   |                          |
| Not Heated                                | Q              | Q                                      | Q                        | Q              | Q                       | Q                        | Q              | Q                                       | Q                        |
| 1 to 50                                   | Q              | 4                                      | Q                        | Q              | 899                     | 759                      | Q              | 4.7                                     | 9.0                      |
| 51 to 99                                  | 3              | 12                                     | 15                       | 418            | 1,120                   | 1,214                    | 8.2            | 10.4                                    | 12.2                     |
| 100                                       | 26             | 99                                     | 130                      | 1,913          | 7,758                   | 9,225                    | 13.7           | 12.8                                    | 14.1                     |
| Percent of Floorspace Cooled              |                |  |                          |                |                         |                          |                |   |                          |
| Not Cooled                                | 4              | 3                                      | Q                        | 920            | 935                     | 1,598                    | 3.8            | 3.3                                     | 7.7                      |
| 1 to 50                                   | 6              | 22                                     | 25                       | 922            | 3,349                   | 3,171                    | 6.6            | 6.6                                     | 7.8                      |
| 51 to 99                                  | 11             | 38                                     | 39                       | 550            | 2,551                   | 2,436                    | 19.4           | 15.0                                    | 16.0                     |
|   | 11             | 52                                     | 77                       |                |                         | 4,169                    | 20.7           |   | 18.6                     |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|  | Co             | al Electrici<br>nsumption<br>illion kWh | n                        | Building       | Floorspaces Using Eleon square | ectricity                | Ene            | Electricity<br>ergy Intens<br>n/square f | sity                     |
|--|----------------|---|--------------------------|----------------|--------------------------------|--------------------------|----------------|--|--------------------------|
|  | New<br>England | Middle<br>Atlantic                      | East<br>North<br>Central | New<br>England | Middle<br>Atlantic             | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                       | East<br>North<br>Central |
| All Buildings*   | 32             | 116                                     | 153                      | 2,942          | 9,867                          | 11,373                   | 10.8           | 11.7                                     | 13.5                     |
| Percent Lit When Open  |                |   |                          | _              |                                |                          |                |  |                          |
| Zero   | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| 1 to 50  | 3              | 8                                       | 10                       | 953            | 1,796                          | 1,575                    | 3.3            |  | 6.5                      |
| 51 to 99   | 11             | 39                                      | 47                       | 1,070          | 2,529                          | 3,641                    | 9.9            | 15.3                                     | 12.8                     |
| 100  | 18             | 68                                      | 95                       | 830            | 5,221                          | 5,418                    | 21.5           | 13.1                                     | 17.6                     |
| Building Never Open/   |                |   |                          |                |                                |                          |                |  |                          |
| Electricity Not Used   | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Percent Lit When Closed  |                |   |                          |                |                                |                          |                |  |                          |
| Zero   | 4              | 16                                      | 34                       | 721            | 2,086                          | 3,237                    | 5.7            | 7.5                                      | 10.5                     |
| 1 to 50  | 13             | 49                                      | 76                       | 1,400          | 4,880                          | 6,101                    | 9.5            | 10.1                                     | 12.5                     |
| 51 to 100  | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Building Never Closed/   |                |   |                          |                |                                |                          |                |  |                          |
| Electricity Not Used   | 13             | 45                                      | 34                       | 742            | 2,638                          | 1,695                    | 17.9           | 17.2                                     | 20.1                     |
| Heating Equipment (more  |                |   |                          |                |                                |                          |                |  |                          |
| than one may apply)  |                |   |                          |                |                                |                          |                |  |                          |
| Heat Pumps   | Q              | 21                                      | 12                       | Q              | 1,019                          | 719                      | Q              | 20.5                                     | 16.3                     |
| Packaged Heat Pumps  | Q              | 16                                      | 9                        | Q              | 656                            | 541                      | Q              | 24.1                                     | 16.8                     |
| Split-System Heat Pumps  | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Individual Room Heat Pumps   |                | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Furnaces   | 9              | 24                                      | 50                       | 990            | 2,606                          | 4,561                    | 8.8            | 9.3                                      | 10.9                     |
| Individual Space Heaters   | 11             | 25                                      | 30                       | 1,011          | 1,775                          | 2,544                    | 10.5           | 13.9                                     | 11.7                     |
|  |                | 15                                      |                          |                | -                              | ,                        |                |  |                          |
| District Heat  | Q              |   | 25                       | Q<br>4 405     | 1,000                          | 1,420                    | Q              | 15.5                                     | 17.7                     |
| Boilers  | 16             | 55                                      | 56                       | 1,465          | 4,763                          | 4,466                    | 11.0           | 11.5                                     | 12.4                     |
| Packaged Heating Units Other   | 15<br>Q        | 36<br>Q                                 | 45<br>7                  | 615<br>Q       | 2,297<br>Q                     | 2,531<br>419             | 23.8<br>Q      | 15.5<br>Q                                | 17.6<br>17.1             |
| Cooling Equipment (more than one may apply) Residential-Type Central       |                |   |                          |                |                                |                          |                |  |                          |
| Air Conditioners   | Q              | 17                                      | 27                       | Q              | 2,100                          | 2,040                    | Q              | 8.1                                      | 13.2                     |
| Heat Pumps   | Q              | 21                                      | 12                       | Q              | 1,008                          | 746                      | Q              | 20.4                                     | 15.8                     |
| Packaged Heat Pumps  | ō              | 15                                      | 9                        | Q              | 646                            | 563                      | Q              | 23.9                                     | 16.3                     |
| Split-System Heat Pumps  | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Individual Room Heat Pumps   | Q              | Q                                       | Q                        | Q              | Q                              | Q                        | Q              | Q  | Q                        |
| Individual Air Conditioners  | 8              | 22                                      |                          | 925            | 2,762                          | 2,199                    | 9.1            | 8.0                                      | 10.3                     |
| District Chilled Water   | Q              | 10                                      | 12                       | Q              | 583                            | 569                      | Q              | 16.8                                     | 21.4                     |
| Central Chillers   | 6              | 31                                      | 41                       | 383            | 1,469                          | 2,074                    | 16.6           | 21.1                                     | 19.7                     |
| Packaged Air Conditioning  | U              | 31                                      | 71                       | 303            | 1,403                          | 2,074                    | 10.0           | 21.1                                     | 13.7                     |
| o o  | 10             | G.E.                                    | 0.0                      | 070            | E 100                          | E EOE                    | 20.5           | 10.6                                     | 15.0                     |
| Units  | 18             | 65                                      | 82                       | 872            | 5,128                          | 5,505                    | 20.5           | 12.6                                     | 15.0                     |
| Swamp Coolers Other  | Q<br>Q         | Q<br>Q                                  | Q<br>Q                   | Q<br>Q         | Q<br>Q                         | Q<br>Q                   | Q<br>Q         |  | Q<br>Q                   |
| Main Equipment Replaced Since<br>1990 (more than one may apply)<br>Heating | 9              | 33                                      |                          | 1,013          | 2,961                          | 3,271                    | 8.4            | 11.3                                     | 12.4                     |
| Cooling  | 14             |   |                          | 1,100          | 4,353                          | 3,700                    | 12.7           | 12.0                                     | 14.1                     |
| Water Heating Equipment  |                |   |                          |                |                                |                          |                |  |                          |
| Centralized System   | 18             | 76                                      | 95                       | 1,839          | 5,930                          | 6,680                    | 9.7            | 12.8                                     | 14.2                     |
| Distributed System   | Q              | 18                                      | 19                       | 1,000<br>Q     | 1,815                          | 1,750                    | Q.7            | 9.7                                      | 10.9                     |
| Combination of Centralized   | Q              | 10                                      | 19                       | Q              | 1,013                          | 1,730                    | Q              | 9.1                                      | 10.9                     |
|  | ^              | 10                                      | 27                       | 0              | 1 210                          | 1 760                    | ^              | 111                                      | 15 1                     |
| and Distributed System   | Q              | 19                                      | 27                       | Q              | 1,319                          | 1,763                    | Q              | 14.4                                     | 15.1                     |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|   | Co             | al Electrici<br>onsumption<br>illion kWh | n                        | Building       | Floorspaces Using Eleon | ectricity                | Ene            | Electricity<br>ergy Intens<br>n/square f | -                        |
|---|----------------|--|--------------------------|----------------|-------------------------|--------------------------|----------------|--|--------------------------|
|   | New<br>England | Middle<br>Atlantic                       | East<br>North<br>Central | New<br>England | Middle<br>Atlantic      | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                       | East<br>North<br>Central |
| All Buildings*  | 32             | 116                                      | 153                      | 2,942          | 9,867                   | 11,373                   | 10.8           | 11.7                                     | 13.5                     |
| Lighting Equipment Types (more than one may apply) Incandescent | 24             | 72                                       | 101                      | 1,996          | 6,105                   | 7,211                    | 12.1           | 11.8                                     | 13.9                     |
| Standard Fluorescent  | 31             | 113                                      | 150                      | 2,724          | 9,435                   | 10,701                   | 11.4           | 11.9                                     | 14.0                     |
| Compact Fluorescent   | 22             | 68                                       | 78                       | 1,474          | 4,616                   | 4,845                    | 14.8           | 14.7                                     | 16.1                     |
| High Intensity Discharge  | 16             | 49                                       | 72                       | 1,021          | 3,358                   | 5,104                    | 15.3           | 14.5                                     | 14.1                     |
| Halogen   | 14             |  | 52                       | 769            | 2,812                   | 3,259                    | 18.3           | 15.0                                     | 16.0                     |
| Other   | Q              | Q  | Q                        | 709<br>Q       | 2,012<br>Q              | 3,239<br>Q               | 10.3<br>Q      | 13.0<br>Q                                | 10.0<br>Q                |
| Otilei  | Q              | Q  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| Refrigeration Equipment   |                |  |                          |                |                         |                          |                |  |                          |
| (more than one may apply) <sup>a</sup>                          |                |  |                          |                |                         |                          |                |  |                          |
| Any Refrigeration   | 30             | 107                                      | 136                      | 2,474          | 8,367                   | 9,538                    | 12.0           | 12.8                                     | 14.2                     |
| Commercial Refrigeration  | 20             | 70                                       | 89                       | 1,107          | 4,830                   | 5,286                    | 17.8           | 14.5                                     | 16.9                     |
| Walk-In Units   | 17             | 56                                       | 70                       | 889            | 3,563                   | 3,860                    | 19.2           | 15.8                                     | 18.0                     |
| Cases or Cabinets   | 18             | 58                                       | 67                       | 849            | 3,656                   | 3,702                    | 20.9           | 15.8                                     | 18.1                     |
| Residential-Type Units  | 20             | 67                                       | 92                       | 2,037          | 6,251                   | 7,247                    | 10.0           | 10.8                                     | 12.7                     |
| Vending Machines  | 23             | 73                                       | 98                       | 1,569          | 4,990                   | 6,583                    | 14.7           | 14.7                                     | 14.8                     |
| No Refrigeration  | 2              | 9  | Q                        | 467            | 1,500                   | 1,835                    | 4.3            | 5.9                                      | 9.8                      |
| Office Equipment (more than one may apply)                      |                |  |                          |                |                         |                          |                |  |                          |
| Computers   | 30             | 110                                      | 141                      | 2,521          | 8,996                   | 9,882                    | 12.1           | 12.3                                     | 14.3                     |
| With Flat Screen Monitors                                       | 19             | 73                                       | 74                       | 1,156          | 4,839                   | 4,584                    | 16.6           | 15.2                                     | 16.2                     |
| Dedicated Servers   | 24             | 89                                       | 99                       | 1,656          | 6,486                   | 6,456                    | 14.4           | 13.7                                     | 15.4                     |
| Laser Printers  | 15             | 61                                       | 72                       | 1,569          | 5,526                   | 5,678                    | 9.4            | 11.1                                     | 12.8                     |
| Inkjet Printers   | 19             | 77                                       | 86                       | 1,204          | 5,211                   | 5,817                    | 15.6           | 14.7                                     | 14.7                     |
| FAX Machines  | 29             | 109                                      | 129                      | 2,367          | 8,806                   | 9,138                    | 12.1           | 12.4                                     | 14.1                     |
| Photocopiers  | 25             | 100                                      | 114                      | 1,869          | 8,024                   | 8,273                    | 13.6           | 12.5                                     | 13.8                     |
| Number of Computers   |                |  |                          |                |                         |                          |                |  |                          |
| None  | 1              | 6  | 12                       | Q              | 871                     | 1,491                    | 2.9            | 6.4                                      | 8.2                      |
| 1 to 4  | 6              | 11                                       | 32                       | 570            | 1,511                   | 2,536                    | 10.1           | 7.1                                      | 12.5                     |
| 5 to 9  | Q              |  | 13                       | Q              | 1,087                   | 1,112                    | Q              | 7.4                                      | 11.7                     |
| 10 to 19  | Q              | 10                                       | 14                       | Q              | 992                     | 1,069                    | Q              | 10.6                                     | 13.4                     |
| 20 to 49  | Q              | 16                                       | 14                       | Q              | 1,182                   | 1,196                    | Q              | 13.6                                     | 12.1                     |
| 50 to 99  | Q              |  | 11                       | Q              | 1,018                   | 744                      | Q              | Q  | 14.8                     |
| 100 to 249  | Q              |  | 18                       | Q              | 1,054                   | 1,221                    | Q              | 14.0                                     | 14.7                     |
| 250 or More   | Q              | 42                                       | 39                       | 439            | 2,151                   | 2,005                    | 21.4           | 19.6                                     | 19.3                     |
| Number of Dedicated Servers                                     |                |  |                          |                |                         |                          |                |  |                          |
| None  | 8              | 27                                       | 54                       | 1,285          | 3,381                   | 4,917                    | 6.1            | 7.9                                      | 11.0                     |
| 1 to 4  | 12             | 45                                       | 55                       | 1,028          | 4,219                   | 4,202                    | 11.9           | 10.7                                     | 13.0                     |
| 5 to 9  | Q              | 12                                       | 12                       | Q              | 604                     | 754                      | Q              | 19.4                                     | 16.2                     |
| 10 to 19  | Q              | Q  | 12                       | Q              | Q                       | 647                      | Q              | Q  | 18.6                     |
| 20 to 49  | Q              | Q  | Q                        | Q              | Q                       | Q                        | Q              | Q  | Q                        |
| 50 or More  | Q              | 19                                       | 12                       | Q              | 815                     | Q                        | Q              | 23.1                                     | 21.0                     |
| Number of Photocopiers  |                |  |                          |                |                         |                          |                |  |                          |
| None  | 6              | 15                                       | 40                       | 1,072          | 1,843                   | 3,100                    | 5.9            | 8.3                                      | 12.8                     |
| One   | 6              | 22                                       | 27                       | 683            | 2,344                   | 2,620                    | 8.8            | 9.4                                      | 10.3                     |
| 2 to 4  | 8              | 21                                       | 35                       | 643            | 2,302                   | 2,745                    | 12.9           | 8.9                                      | 12.9                     |
| 5 to 9  | Q              |  | 15                       | Q              | 1,250                   | 1,013                    | Q              | 13.2                                     | 14.6                     |
| 10 or More  | Q              |  | 36                       | Q              | 2,128                   | 1,894                    | Q              | 19.5                                     | 19.2                     |
|   | -              | -  |                          | _              | ,                       | ,                        | _              |  |                          |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|  | Co             | al Electrici<br>nsumption | n                        | Building       | Floorspaces Using Eleon  | ectricity                | Electricity<br>Energy Intensity<br>(kWh/square foot) |                    |                          |
|--|----------------|---------------------------|--------------------------|----------------|--------------------------|--------------------------|--|--------------------|--------------------------|
|  | New<br>England | Middle<br>Atlantic        | East<br>North<br>Central | New<br>England | Middle<br>Atlantic       | East<br>North<br>Central | New<br>England                                       | Middle<br>Atlantic | East<br>North<br>Central |
| All Buildings*   | 32             | 116                       | 153                      | 2,942          | 9,867                    | 11,373                   | 10.8   | 11.7               | 13.5                     |
| Energy-Related Space Functions                                       |                |                           |                          |                |                          |                          |  |                    |                          |
| (more than one may apply)  | 4.4            | 50                        | 00                       | 000            | 4.070                    | 4.070                    | 44.0   |                    | 45.0                     |
| Commercial Food Preparation  | 11             | 59                        | 69                       | 938            | 4,078                    | 4,378                    | 11.3   | 14.4               | 15.8                     |
| Activities with Large Amounts of Hot Water                           | 15             | 40                        | 56                       | 995            | 2,927                    | 3,546                    | 15.2   | 13.5               | 15.7                     |
| Separate Computer Area   | 17             | 75                        | 73                       | 1,045          | 4,880                    | 4,759                    | 16.6   | 15.5               | 15.7                     |
| Separate Computer Area   | 17             | 73                        | 73                       | 1,043          | 4,000                    | 4,739                    | 10.0   | 13.4               | 13.3                     |
| HVAC Conservation Features   |                |                           |                          |                |                          |                          |  |                    |                          |
| (more than one may apply)  | 0              | <b>5</b> 4                | 0.4                      | 500            | 2 400                    | 2.000                    | 22.5   | 40.0               | 17.4                     |
| Variable Air-Volume System  Economizer Cycle                         | Q<br>17        | 54<br>65                  | 64<br>79                 | 592<br>824     | 3,188<br>3,317           | 3,660<br>4,350           | 22.5<br>20.3   | 16.9<br>19.6       | 17.4<br>18.2             |
| HVAC Maintenance   | 29             | 109                       | 140                      | 2,311          | 8,736                    | 9,415                    | 12.5   | 12.4               | 14.9                     |
| Energy Management and  | 23             | 103                       | 140                      | 2,011          | 0,730                    | 3,413                    | 12.5   | 12.4               | 14.5                     |
| Control System (EMCS)  | 8              | 45                        | 42                       | 429            | 2,573                    | 2,835                    | 19.0   | 17.4               | 14.7                     |
| Window and Interior Lighting   |                |                           |                          |                |                          |                          |  |                    |                          |
| Features (more than one  |                |                           |                          |                |                          |                          |  |                    |                          |
| may apply)   |                |                           |                          |                |                          |                          |  |                    |                          |
| Multipaned Windows   | 27             | 85                        | 120                      | 2,292          | 6,983                    | 7,925                    | 11.8   | 12.2               | 15.2                     |
| Tinted Window Glass  | 16             | 61                        | 86                       | 803            | 4,141                    | 5,307                    | 20.1   | 14.8               | 16.2                     |
| Reflective Window Glass  | Q              | 23                        | 26                       | Q              | 1,436                    | 1,454                    | Q  | 15.9               | 17.9                     |
| External Overhangs   |                | 00                        | 40                       | F-7-7          | 0.000                    | 0.500                    | 40.0   | 40.5               | 40.7                     |
| or Awnings<br>Skylights or Atriums                                   | 8<br>5         | 28<br>30                  | 42<br>34                 | 577<br>476     | 2,096<br>2,416           | 2,522<br>2,322           | 13.0<br>10.3   | 13.5<br>12.2       | 16.7<br>14.6             |
| Daylighting Sensors  | Q              | Q                         | 11                       | 470<br>Q       | 2,410<br>Q               | 608                      | 10.3<br>Q  |                    | 17.7                     |
| Specular Reflectors  | 19             | 65                        | 89                       | 1,390          | 4,444                    | 5,813                    | 13.5   | 14.7               | 15.4                     |
| Electronic Ballasts  | 28             | 94                        | 128                      | 2,162          | 7,125                    | 8,623                    | 12.9   | 13.2               | 14.8                     |
| Energy Management and  |                | •                         |                          | _,             | .,0                      | 0,020                    |  |                    |                          |
| Control System (EMCS)  |                |                           |                          |                |                          |                          |  |                    |                          |
| For Lighting   | Q              | 17                        | 17                       | Q              | 758                      | 988                      | Q  | 21.9               | 17.2                     |
| Equipment Usage Reduced  |                |                           |                          |                |                          |                          |  |                    |                          |
| When Building Not In Full Use (more than one may apply) <sup>a</sup> |                |                           |                          |                |                          |                          |  |                    |                          |
|  | 17             | 87                        | 88                       | 1,768          | 7,751                    | 7,580                    | 9.5  | 11.2               | 11.7                     |
| Cooling  | 17             | 86                        | 91                       | 1,766          | 7,751                    | 7,360                    | 9.5<br>11.5  | 11.2               | 11.7                     |
| Lighting   | 18             | 63                        | 117                      | 2,067          | 6,639                    | 8,846                    | 8.8  | 9.5                | 13.2                     |
| Office Equipment   | 6              | 28                        | 42                       | 847            | 3,422                    | 3,645                    | 7.2  | 8.3                | 11.4                     |
| Annual Consumption   |                |                           |                          |                |                          |                          |  |                    |                          |
| (kilowatthours)  | ^              | ^                         | ^                        | ^              | ^                        | ^                        | ^  | 4.4                | 0.0                      |
| 10,000 or Less<br>10,001 to 50,000                                   | Q              | 0                         | 0                        | Q<br>638       | Q<br>1 162               | Q<br>1 273               | Q  |                    | 0.9                      |
| 50,001 to 100,000  | 2<br>Q         | 4<br>7                    | 7<br>6                   | 638<br>Q       | 1,162<br>1,319           | 1,273<br>886             | 3.2<br>Q   | 3.8<br>5.3         | 5.2<br>7.1               |
| 100,001 to 500,000   | 7              | 19                        | 40                       | 606            | 2,304                    | 3,293                    | 10.9   | 5.3<br>8.3         | 12.1                     |
| 500,001 to 1,000,000   | Q              | 10                        | 14                       | Q              | 2,30 <del>4</del><br>967 | 1,107                    | 10.9<br>Q  |                    | 12.1                     |
| 1,000,001 to 5,000,000   | 10             | 35                        | 48                       | 672            | 1,899                    | 2,564                    | 15.4   | 18.5               | 18.9                     |
| Over 5,000,000   | Q              | 40                        | 38                       | Q              | 1,770                    | 1,751                    | Q  | 22.5               | 21.8                     |

Table C17. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 1

|   | Total Electricity<br>Consumption<br>(billion kWh) |                    |                          | Building       | Floorspac<br>s Using El<br>on square | ectricity                | Electricity<br>Energy Intensity<br>(kWh/square foot) |                    |                          |  |
|---|---|--------------------|--------------------------|----------------|--------------------------------------|--------------------------|--|--------------------|--------------------------|--|
|   | New<br>England                                    | Middle<br>Atlantic | East<br>North<br>Central | New<br>England | Middle<br>Atlantic                   | East<br>North<br>Central | New<br>England                                       | Middle<br>Atlantic | East<br>North<br>Central |  |
| All Buildings*  | 32  | 116                | 153                      | 2,942          | 9,867                                | 11,373                   | 10.8   | 11.7               | 13.5                     |  |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 24<br>9   | 96<br>22           | 139<br>13                | 2,399<br>589   | 8,760<br>1,151                       | 10,536<br>789            | 10.1<br>14.7   | 11.0<br>19.5       | 13.2<br>15.9             |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|  |                          |   | ,                        | 1                        |                         | 1                        | 1                        |                            |                          |
|--|--------------------------|---|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|----------------------------|--------------------------|
|  | Co                       | al Electric<br>ensumption<br>illion kWh | n                        | Building                 | Floorspaces Using Eleon | ectricity                | Ene                      | Electricity<br>ergy Intens | sity                     |
|  | West<br>North<br>Central | South<br>Atlantic                       | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic       | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic          | East<br>South<br>Central |
| All Buildings*                                       | 62                       | 210                                     | 50                       | 5,328                    | 12,097                  | 3,220                    | 11.7                     | 17.4                       | 15.5                     |
| Building Floorspace<br>(Square Feet)                 |                          |   |                          |                          |                         |                          |                          |                            |                          |
| ` '  | 10                       | 26                                      | 7                        | 821                      | 1,157                   | 472                      | 12.4                     | 22.9                       | 15.5                     |
| 1,001 to 5,000<br>5,001 to 10,000                    | 7                        | 18                                      | 4                        | 666                      | 1,137                   | 359                      | 10.7                     | 13.9                       | 12.0                     |
| 10,001 to 25,000                                     | 8                        | 27                                      | 11                       | 1,164                    | 2,207                   | 791                      | 7.3                      | 12.2                       | 14.2                     |
| 25,001 to 50,000                                     | 15                       | 24                                      | 5                        | 949                      | 1,672                   | 442                      | 16.1                     | 14.4                       | 10.9                     |
|  | 15<br>8                  | 24<br>25                                |                          |                          |                         |                          |                          |                            |                          |
| 50,001 to 100,000                                    | 8                        |   | 10                       | 642                      | 1,470                   | 650                      | 12.8                     | 16.7                       | 14.8                     |
| 100,001 to 200,000                                   |                          | 39                                      | Q                        | 614                      | 2,087                   | Q                        | 12.3                     | 18.9                       | Q                        |
| 200,001 to 500,000                                   | Q                        | 22                                      |                          | Q                        | 1,072                   | Q                        | Q                        | 20.4                       | Q                        |
| Over 500,000   | Q                        | 29                                      | Q                        | Q                        | 1,123                   | Q                        | Q                        | 25.6                       | Q                        |
| Principal Building Activity                          | _                        | •                                       |                          |                          |                         |                          |                          | 400                        |                          |
| Education  | 5                        | 39                                      | Q                        | 549                      | 2,445                   | Q                        | 8.8                      | 16.0                       | Q                        |
| Food Sales   | Q                        | Q                                       | Q                        | Q                        | Q                       | Q                        | Q                        | Q                          | Q                        |
| Food Service   | Q                        | 20                                      | Q                        | Q                        | 433                     | Q                        | Q                        | 45.7                       | Q                        |
| Health Care  | 5                        | 17                                      | 5                        | 247                      | 749                     | 219                      | 20.8                     | 23.4                       | 24.2                     |
| Inpatient  | Q                        | 15                                      | Q                        | Q                        | 469                     | Q                        | Q                        | 31.3                       | Q                        |
| Outpatient   | Q                        | 3                                       | Q                        | Q                        | 280                     | Q                        | Q                        | 10.1                       | Q                        |
| Lodging  | 7                        | 17                                      | Q                        | 595                      | 939                     | Q                        | 11.3                     | 18.0                       | Q                        |
| Retail (Other Than Mall)                             | 6                        | 16                                      | 4                        | 337                      | 897                     | 353                      | 17.3                     | 17.7                       | 11.9                     |
| Office   | 12                       | 35                                      | 9                        | 799                      | 1,958                   | 481                      | 14.9                     | 18.0                       | 18.8                     |
| Public Assembly                                      | Q                        | 9                                       | Q                        | Q                        | 440                     | Q                        | Q                        | 20.4                       | Q                        |
| Public Order and Safety                              | Q                        | Q                                       | Q                        | Q                        | Q                       | Q                        | Q                        | Q                          | Q                        |
| Religious Worship                                    | 2                        | 5                                       | Q                        | 395                      | 721                     | Q                        | 3.9                      | 6.4                        | Q                        |
| Service  | 4                        | Q                                       | Q                        | 484                      | 753                     | Q                        | 9.0                      | 16.9                       | Q                        |
| Warehouse and Storage                                | 6                        | 16                                      | Q                        | 918                      | 1,733                   | Q                        | 6.9                      | 9.1                        | Q                        |
| OtherVacant  | Q<br>Q                   | Q<br>Q                                  | Q<br>Q                   | Q<br>Q                   | Q<br>Q                  | Q<br>Q                   | Q<br>Q                   | Q<br>Q                     | Q<br>Q                   |
| vacant   | Q                        | Q                                       | Q                        | Q                        | Q                       | Q                        | Q                        | Q                          | Q                        |
| Year Constructed                                     |                          |   |                          |                          |                         |                          |                          |                            |                          |
| Before 1920  | 3                        | Q                                       | Q                        | 541                      | Q                       | Q                        | 4.8                      | 8.9                        | Q                        |
| 1920 to 1945   | 4                        | 5                                       | Q                        | 459                      | 630                     | Q                        | 9.6                      | 8.2                        | Q                        |
| 1946 to 1959   | 4                        | 16                                      | Q                        | 561                      | 1,074                   | Q                        | 7.7                      | 14.4                       | Q                        |
| 1960 to 1969   | 8                        | 19                                      | 6                        | 844                      | 1,379                   | 449                      | 10.0                     | 14.0                       | 14.0                     |
| 1970 to 1979   | 15                       | 30                                      | 12                       | 1,039                    | 1,423                   | 784                      | 14.3                     | 21.1                       | 15.3                     |
| 1980 to 1989   | 8                        | 45                                      |                          | 457                      | 2,373                   | 423                      | 16.5                     | 19.1                       | 21.8                     |
| 1990 to 1999<br>2000 to 2003                         | 15<br>6                  | 66<br>26                                | 10<br>Q                  | 1,032<br>394             | 3,620<br>1,258          | 693<br>Q                 | 14.3<br>14.0             | 18.2<br>20.9               | 14.8<br>Q                |
|  | ŭ                        | 20                                      | •                        | 001                      | 1,200                   | •                        | 11.0                     | 20.0                       | •                        |
| Climate Zone: 30-Year Average<br>Under 2,000 CDD and |                          |   |                          |                          |                         |                          |                          |                            |                          |
| More than 7,000 HDD                                  | 31                       | N                                       | N                        | 2,479                    | N                       | N                        | 12.4                     | N                          | N                        |
| 5,500-7,000 HDD                                      | Q                        | N                                       | N                        | Q                        | N                       | N                        | 9.6                      | N                          | N                        |
| 4,000-5,499 HDD                                      | 19                       | 48                                      | Q                        | 1,558                    | 2,613                   | Q                        | 12.4                     | 18.2                       | 19.0                     |
| Fewer than 4,000 HDD                                 | N                        | 107                                     | Q                        | N                        | 6,293                   | Q                        | N                        | 17.0                       | 12.6                     |
| 2,000 CDD or More and                                |                          |   |                          |                          |                         |                          |                          |                            |                          |
| Fewer than 4,000 HDD                                 | N                        | 56                                      | Q                        | N                        | 3,190                   | Q                        | N                        | 17.6                       | 19.6                     |
| Number of Floors                                     |                          |   |                          |                          |                         |                          |                          |                            |                          |
| One  | 26                       | 81                                      | 20                       | 2,099                    | 5,612                   | 1,489                    | 12.5                     | 14.5                       | 13.7                     |
| Two  | 21                       | 47                                      | 14                       | 1,902                    | 2,680                   | 864                      | 11.1                     | 17.6                       | 16.1                     |
| Three  | 7                        | 17                                      | 5                        | 699                      | 1,043                   | 421                      | 10.1                     | 15.9                       | 12.4                     |
| Four to Nine   | 7                        |   | 8                        | 579                      | 2,003                   | 355                      | 12.5                     | 24.1                       | 22.6                     |
| Ten or More  | Q                        | 17                                      | Q                        | Q                        | 759                     | Q                        | Q                        | 22.4                       | Q                        |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|  | Co                       | al Electrici<br>nsumption | n                        | Building                 | Floorspaces Using Eleon | ectricity                | Ene                      | Electricity<br>ergy Intens<br>n/square f | sity                     |
|--|--------------------------|---------------------------|--------------------------|--------------------------|-------------------------|--------------------------|--------------------------|--|--------------------------|
|  | West<br>North<br>Central | South<br>Atlantic         | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic       | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                        | East<br>South<br>Central |
| All Buildings*                                     | 62                       | 210                       | 50                       | 5,328                    | 12,097                  | 3,220                    | 11.7                     | 17.4                                     | 15.5                     |
| Elevators and Escalators (more than one may apply) |                          |                           |                          |                          |                         |                          |                          |  |                          |
| Any Elevators                                      | 22                       | 101                       | 18                       | 1,627                    | 4,612                   | 923                      | 13.6                     | 21.8                                     | 19.9                     |
| Number of Elevators                                |                          |                           |                          | .,0                      | .,                      | 0_0                      |                          |  |                          |
| One  | 11                       | 23                        | 6                        | 860                      | 1,475                   | 369                      | 12.7                     | 15.4                                     | 17.2                     |
| Two to Five  | 9                        | 43                        |                          | 644                      | 1,900                   | Q                        | 13.5                     | 22.8                                     | <u>.</u>                 |
| Six or More  | Q                        | 35                        | Q                        | Q                        | 1,237                   | Q                        | Q                        | 28.1                                     | G                        |
| Any Escalators                                     | Q                        | Q                         | Q                        | Q                        | Q                       | Q                        | Q                        | Q  | Q                        |
| Number of Workers (main shift)                     |                          |                           |                          |                          |                         |                          |                          |  |                          |
| Fewer than 5                                       | 10                       | 23                        | 7                        | 1,606                    | 2,375                   | 933                      | 6.2                      | 9.7                                      | 7.7                      |
| 5 to 9   | 8                        | 14                        | 7                        | 598                      | 1,264                   | 476                      | 12.7                     | 11.3                                     | 15.7                     |
| 10 to 19   | 8                        | 21                        | 5                        | 867                      | 1,392                   | 350                      | 9.5                      | 15.0                                     | 14.5                     |
| 20 to 49   | 13                       | 31                        | 14                       | 876                      | 1,773                   | 701                      | 14.4                     | 17.5                                     | 19.7                     |
| 50 to 99   | 12                       | 27                        | Q                        | 742                      | 1,611                   | Q                        | 16.3                     | 16.9                                     | Q                        |
| 100 to 249   | Q                        | 42                        | Q                        | Q                        | 1,737                   | Q                        | Q                        | 24.0                                     | Q                        |
| 250 or More  | 5                        | 52                        |                          | 242                      | 1,943                   | 211                      | 19.3                     | 26.8                                     | 26.9                     |
| Weekly Operating Hours                             |                          |                           |                          |                          |                         |                          |                          |  |                          |
| Fewer than 40                                      | 3                        | 7                         | 2                        | 619                      | 1,134                   | 308                      | 4.3                      | 6.0                                      | 5.6                      |
| 40 to 48   | 9                        | 24                        |                          | 1,001                    | 2,107                   | 770                      | 9.1                      | 11.2                                     | 13.8                     |
| 49 to 60   | 13                       | 37                        | Q                        | 1,273                    | 3,071                   | 610                      | 10.0                     | 11.9                                     | 12.7                     |
| 61 to 84   | 11                       | 37                        | 10                       | 837                      | 1,926                   | 593                      | 13.1                     | 19.1                                     | 17.3                     |
| 85 to 167  | 10                       | 40                        | Q                        | 558                      | 1,370                   | Q                        | 17.9                     | 28.8                                     | Q                        |
| Open Continuously                                  | 17                       | 67                        | 16                       | 1,040                    | 2,488                   | 769                      | 16.3                     | 26.9                                     | 20.4                     |
| Ownership and Occupancy                            |                          |                           |                          |                          |                         |                          |                          |  |                          |
| Nongovernment Owned                                | 52                       | 148                       | 35                       | 4,314                    | 8,895                   | 2,308                    | 12.0                     | 16.6                                     | 15.3                     |
| Owner Occupied                                     | 28                       | 71                        | 14                       | 2,416                    | 4,141                   | 962                      | 11.5                     | 17.2                                     | 14.5                     |
| Nonowner Occupied                                  | 24                       | 76                        | 21                       | 1,846                    | 4,572                   | 1,335                    | 12.9                     | 16.7                                     | 16.0                     |
| Unoccupied   | Q                        | Q                         | Q                        | ,,,,,,,                  | ,,5,7 <u>2</u><br>Q     | ,,555<br>Q               | Q                        | Q  | C                        |
| Government Owned                                   | 11                       | 62                        | 15                       | 1,014                    | 3,202                   | 912                      | 10.5                     | 19.5                                     | 16.1                     |
| Federal  | Q                        | Q                         | Q                        | Q                        | Q                       | Q                        | Q                        | 29.3                                     | Q                        |
| State  | Õ                        | 14                        | 8                        | ã                        | 726                     | 485                      | Q                        | 19.6                                     | 17.5                     |
| Local  | 7                        | 36                        | 5                        | 710                      | 2,071                   | 369                      | 10.0                     | 17.5                                     | 13.4                     |
| Vacancy Status                                     |                          |                           |                          |                          |                         |                          |                          |  |                          |
| Completely Vacant                                  | Q                        | Q                         | Q                        | Q                        | Q                       | Q                        | Q                        | Q  | Q                        |
| Mostly Vacant                                      | Q                        | Q                         | N                        | Q                        | Q                       | N                        | Q                        | Q  | N                        |
| Partially Vacant                                   | 9                        | 27                        |                          | 854                      | 1,939                   | 358                      | 11.0                     | 14.1                                     | 12.7                     |
| Not At All Vacant                                  | 52                       | 182                       |                          | 4,329                    | 9,961                   | 2,851                    | 12.1                     | 18.3                                     | 15.9                     |
| Number of Establishments                           |                          |                           |                          |                          |                         |                          |                          |  |                          |
| One  | 45                       | 151                       | 37                       | 3,936                    | 8,797                   | 2,587                    | 11.5                     | 17.2                                     | 14.5                     |
| 2 to 5   | 12                       | 37                        | 8                        | 970                      | 2,139                   | 385                      | 12.2                     | 17.2                                     | 20.3                     |
| 6 to 10  | Q                        | Q                         | Q                        | Q                        | 2,100<br>Q              | Q                        | Q                        | Q  | 20.0<br>Q                |
|  |                          | Q                         | Q                        | Q                        | Q                       | Q                        | Q                        | Q  | Q                        |
| 11 to 20   | , ,                      |                           |                          |                          |                         |                          |                          |  |                          |
| 11 to 20   | Q<br>Q                   | Q                         |                          | Q                        | Q                       | Q                        | Q                        | Q  | Q                        |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|  | Co                       | al Electric<br>ensumptio<br>illion kWh | n                        | Building                 | l Floorspac<br>s Using El<br>on square | ectricity                | Ene                      | Electricity<br>ergy Intens<br>h/square f | sity                     |
|--|--------------------------|--|--------------------------|--------------------------|--|--------------------------|--------------------------|--|--------------------------|
|  | West<br>North<br>Central | South<br>Atlantic                      | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                      | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                        | East<br>South<br>Central |
| All Buildings*   | 62                       | 210                                    | 50                       | 5,328                    | 12,097                                 | 3,220                    | 11.7                     | 17.4                                     | 15.5                     |
| Predominant Exterior   |                          |  |                          |                          |  |                          |                          |  |                          |
| Wall Material  | 00                       | 00                                     | 00                       | 0.070                    | 0.004                                  | 4 740                    | 40.0                     | 40.5                                     | 45.0                     |
| Brick, Stone or Stucco   | 26                       | 99                                     | 26                       | 2,078                    | 6,021                                  | 1,746                    | 12.3                     |  | 15.0                     |
| Concrete (Block or Poured)   | 14                       | 38                                     | 11                       | 1,002                    | 2,355                                  | 631                      | 13.8                     |  | 18.2                     |
| Concrete Panels  | 7                        | 38                                     | Q                        | 375                      | 1,416                                  | Q                        | 19.1                     | 26.9                                     | Q                        |
| Siding or Shingles   | 6                        | 8                                      | Q                        | 638                      | 638                                    | Q                        | 9.0                      |  | Q                        |
| Metal Panels   | 9                        | 21                                     | Q                        | 1,150                    | 1,345                                  | 530                      | 8.0                      |  | Q                        |
| Window Glass   | Q                        | Q                                      |                          | Q                        | Q                                      | Q                        | Q                        |  | Q                        |
| Other  | Q<br>Q                   | Q<br>Q                                 | Q<br>N                   | Q<br>Q                   | Q<br>Q                                 | Q<br>N                   | Q<br>Q                   |  | Q<br>N                   |
| No One Major Type  | Q                        | Q                                      | IN                       | Q                        | Q                                      | IN                       | Q                        | Q  | IN                       |
| Predominant Roof Material  |                          |  |                          |                          |  |                          |                          |  |                          |
| Built-Up   | 20                       | 72                                     |                          | 1,338                    | 4,119                                  | 762                      | 14.8                     |  | 19.7                     |
| Shingles (Not Wood)  | 10                       | 26                                     | 9                        | 1,116                    | 1,864                                  | 638                      | 9.2                      |  | 13.8                     |
| Metal Surfacing  | 12                       | 28                                     | 11                       | 1,488                    | 2,456                                  | 1,012                    | 8.3                      |  | 10.7                     |
| Synthetic or Rubber  | 16                       | 60                                     | 13                       | 990                      | 2,449                                  | 638                      | 16.1                     | 24.4                                     | 20.3                     |
| Slate or Tile  | Q                        | 9                                      | Q                        | Q                        | 604                                    | Q                        | Q                        |  | Q                        |
| Wooden Materials   | Q                        | Q                                      | Q                        | Q                        | Q                                      | Q                        | Q                        |  | Q                        |
| Concrete   | Q                        | Q                                      | N                        | Q                        | Q                                      | N                        | Q                        |  | N<br>N                   |
| Other  No One Major Type   | Q<br>Q                   | Q<br>Q                                 | N<br>N                   | Q<br>Q                   | Q<br>Q                                 | N<br>N                   | Q<br>Q                   |  | N<br>N                   |
| Renovations in Buildings<br>Constructed Before 1980<br>(more than one may apply)<br>Any Type of Renovation |                          |  |                          |                          |  |                          |                          |  |                          |
| Since 1980   | 21                       | 39                                     | 12                       | 1,945                    | 2,304                                  | 884                      | 10.7                     |  | 13.8                     |
| Addition or Annex  | 11                       | 14                                     |                          | 727                      | 884                                    | 392                      | 15.0                     |  | 16.2                     |
| Reduction In Floorspace  | Q                        | Q                                      |                          | Q                        | Q                                      | Q                        | Q                        |  | Q                        |
| Cosmetic Improvements  | 17                       | 25                                     | 10                       | 1,525                    | 1,497                                  | 677                      | 10.9                     |  | 14.8                     |
| Wall or Roof Replacement   | 9                        | 18                                     | 6                        | 871                      | 961                                    | 340                      | 9.8                      | 18.3                                     | 17.4                     |
| Interior Wall  | 10                       | 40                                     | •                        | 077                      | 4 000                                  | 204                      | 44 7                     | 47.0                                     | 40.0                     |
| Re-Configuration   | 10<br>14                 | 18<br>27                               | 6<br>8                   | 877                      | 1,036                                  | 334<br>464               | 11.7                     |  | 18.0                     |
| HVAC Equipment Upgrade   | 12                       |  | o<br>7                   | 1,197<br>1,074           | 1,559                                  | 440                      | 11.6<br>11.5             | 17.5<br>15.5                             | 17.0<br>16.6             |
| Lighting Upgrade Window Replacement  | 6                        | 8                                      | Q                        | 508                      | 1,186<br>505                           | _                        | 11.5                     |  | 10.0<br>Q                |
| Plumbing System Upgrade  | 7                        | 12                                     |                          | 721                      | 782                                    | Q<br>Q                   | 9.8                      |  | Q                        |
| Insulation Upgrade   | 6                        | 7                                      |                          | 512                      | 468                                    | Q                        | 10.9                     |  | Q                        |
| Other Renovation   | N                        | ,<br>Q                                 |                          | N                        | Q                                      | Q                        | 10.9<br>N                | 13.0<br>Q                                | Q                        |
| No Renovations Since 1980  | 14                       | 34                                     |                          | 1,500                    | 2,542                                  | 885                      | 9.2                      |  | 14.1                     |
| Building Newer than 1980   | 28                       | 137                                    |                          | 1,883                    | 7,251                                  | 1,452                    | 14.8                     |  | 17.5                     |
| Energy Sources (more than  |                          |  |                          |                          |  |                          |                          |  |                          |
| one may apply)   |                          |  |                          |                          |  |                          |                          |  |                          |
| Electricity  | 62                       |  |                          | 5,328                    | 12,097                                 | 3,220                    | 11.7                     |  | 15.5                     |
| Natural Gas  | 46                       | 122                                    |                          | 3,593                    | 6,326                                  | 2,281                    | 12.8                     |  | 15.7                     |
| Fuel Oil   | 14                       | 52                                     |                          | 961                      | 2,639                                  | 341                      | 14.8                     |  | 22.9                     |
| District Heat  | Q                        | 29                                     | Q                        | Q                        | 1,243                                  | Q                        | Q                        |  | Q                        |
| District Chilled Water   | Q                        | 15                                     |                          | Q                        | 667                                    | Q                        | Q                        |  | Q                        |
| Propane  | 10                       |  |                          | 991                      | 1,548                                  | Q                        | 9.9                      |  | 8.5                      |
| Other  | Q                        | Q                                      | Q                        | Q                        | Q                                      | Q                        | Q                        | Q  | Q                        |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|   | Co                       | al Electric<br>nsumption | n                        | Building                 | Floorspac<br>s Using Ele<br>on square | ectricity                | Ene                      | Electricity<br>rgy Intens<br>n/square f | sity                     |
|---|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------------------|--------------------------|--------------------------|---|--------------------------|
|   | West<br>North<br>Central | South<br>Atlantic        | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                     | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                       | East<br>South<br>Central |
| All Buildings*                            | 62                       | 210                      | 50                       | 5,328                    | 12,097                                | 3,220                    | 11.7                     | 17.4                                    | 15.5                     |
| Space-Heating Energy Sources              |                          |                          |                          |                          |                                       |                          |                          |   |                          |
| Electricity                               | 31                       | 135                      | 23                       | 2,328                    | 7,347                                 | 1,411                    | 13.2                     | 18.4                                    | 16.4                     |
| Electricity Main                          | 16                       | 86                       | 15                       | 1,058                    | 4,968                                 | 791                      | 15.0                     | 17.3                                    | 19.0                     |
| Electricity Secondary                     | 15                       | 49                       | 8                        | 1,269                    | 2,379                                 | 620                      | 11.7                     | 20.5                                    | 13.2                     |
| Other Excluding Electricity               | 31                       | 66                       | 26                       | 2,778                    | 3,662                                 | 1,645                    | 11.3                     | 18.0                                    | 15.7                     |
| Buildings without Heating                 | Q                        | 9                        | Q                        | Q                        | 1,087                                 | Q                        | Q                        | 8.5                                     | Q                        |
| Primary Space-Heating<br>Energy Source    |                          |                          |                          |                          |                                       |                          |                          |   |                          |
| Electricity                               | 16                       | 86                       | 15                       | 1,058                    | 4,968                                 | 791                      | 15.0                     | 17.3                                    | 19.0                     |
| Natural Gas                               | 37                       | 79                       | 27                       | 3,091                    | 4,175                                 | 1,817                    | 12.0                     | 18.9                                    | 14.8                     |
| Fuel Oil                                  | Q                        | Q                        | Q                        | Q                        | Q                                     | Q                        | Q                        | Q                                       | Q                        |
| District Heat                             | Q                        | 27                       | Q                        | Q                        | 1,149                                 | Q                        | Q                        | 23.3                                    | Q                        |
| Propane                                   | Q                        | 5                        | Q                        | 496                      | 456                                   | Q                        | 8.7                      | 10.8                                    | Q                        |
| Other                                     | Q                        | Q                        | Q                        | Q                        | Q                                     | Q                        | Q                        | Q                                       | Q                        |
| Cooling Energy Sources                    | 00                       | 400                      | 40                       | 4 005                    | 40.000                                | 0.000                    | 40.0                     | 40.0                                    | 40.0                     |
| Electricity                               | 60                       | 198                      | 46                       | 4,625                    | 10,969                                | 2,820                    | 12.9                     | 18.0                                    | 16.3                     |
| Other Excluding Electricity               | Q                        | Q                        | Q                        | Q                        | 505                                   | Q                        | Q                        | 22.0                                    | Q                        |
| Buildings without Cooling                 | 2                        | 1                        | Q                        | 634                      | 623                                   | Q                        | 3.1                      | 2.1                                     | Q                        |
| Water-Heating Energy Sources Electricity  | 29                       | 126                      | 26                       | 2,391                    | 7,033                                 | 1,581                    | 12.3                     | 17.9                                    | 16.4                     |
| Other Excluding Electricity               | 30                       | 77                       | 22                       | 2,329                    | 3,681                                 | 1,277                    | 12.8                     | 20.9                                    | 17.3                     |
| Bldgs without Water Heating               | Q                        | 8                        | Q                        | 608                      | 1,383                                 | 363                      | 5.6                      | 5.5                                     | 5.3                      |
| Cooking Energy Sources                    |                          |                          |                          |                          |                                       |                          |                          |   |                          |
| Electricity                               | 14                       | 62                       | 13                       | 850                      | 2,611                                 | 665                      | 16.0                     | 23.6                                    | 19.1                     |
| Other Excluding Electricity               | 9                        | 37                       | 7                        | 622                      | 1,587                                 | 390                      | 15.2                     | 23.1                                    | 18.2                     |
| Buildings without Cooking                 | 39                       | 112                      | 30                       | 3,856                    | 7,899                                 | 2,165                    | 10.2                     | 14.2                                    | 14.0                     |
| Energy End Uses (more than one may apply) |                          |                          |                          |                          |                                       |                          |                          |   |                          |
| Buildings with Space Heating              | 62                       | 201                      | 49                       | 5,106                    | 11,009                                | 3,056                    | 12.2                     | 18.3                                    | 16.0                     |
| Buildings with Cooling                    | 60                       | 209                      | 49                       | 4,694                    | 11,474                                | 2,985                    | 12.9                     | 18.2                                    | 16.5                     |
| Buildings with Water Heating              | 59                       | 203                      | 48                       | 4,720                    | 10,714                                | 2,858                    | 12.5                     | 18.9                                    | 16.8                     |
| Buildings with Cooking                    | 23                       | 98                       | 20                       | 1,472                    | 4,198                                 | 1,055                    | 15.6                     | 23.4                                    | 18.7                     |
| Buildings with Manufacturing              | Q                        | Q                        | Q                        | Q                        | Q                                     | Q                        | Q                        | Q                                       | Q                        |
| Buildings with Electricity                |                          |                          |                          |                          |                                       |                          |                          |   |                          |
| Generation                                | 14                       | 52                       | 8                        | 760                      | 2,396                                 | 324                      | 18.4                     | 21.7                                    | 24.9                     |
| Percent of Floorspace Heated              |                          |                          |                          |                          | ,                                     |                          |                          |   |                          |
| Not Heated                                | Q                        | 9                        | Q                        | Q                        | 1,087                                 | Q                        | Q                        | 8.5                                     | Q                        |
| 1 to 50                                   | 2                        | 15                       | Q                        | 356                      | 1,105                                 | 353                      | 6.8                      | 13.7                                    | 10.8                     |
| 51 to 99                                  | 7<br>53                  | 30<br>156                | 6<br>39                  | 513<br>4,236             | 1,864<br>8,041                        | 309<br>2,394             | 12.8<br>12.5             | 15.9<br>19.4                            | 20.7<br>16.2             |
| Percent of Floorenses Cooled              |                          |                          |                          | -                        | -                                     | •                        |                          |   |                          |
| Percent of Floorspace Cooled Not Cooled   | 2                        | 1                        | 0                        | 634                      | 623                                   | 0                        | 2 1                      | 2.1                                     | ^                        |
| 1 to 50                                   | 13                       | 1<br>25                  | Q                        | 634<br>1,571             |                                       | Q<br>472                 | 3.1<br>8.0               | 10.2                                    | Q<br>9.2                 |
| 51 to 99                                  | 19                       | 46                       | Q<br>9                   | 1,325                    | 2,418<br>2,624                        | 472                      | 14.4                     | 17.4                                    | 9.2<br>19.0              |
|   |                          |                          |                          |                          | / 0/4                                 |                          |                          |   |                          |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|   | Co                       | al Electric<br>onsumption<br>illion kWh | n                        | Building                 | Floorspaces Using Eleon square | ectricity                | Ene                      | Electricity<br>ergy Intens<br>n/square f | sity                     |
|---|--------------------------|---|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--|--------------------------|
|   | West<br>North<br>Central | South<br>Atlantic                       | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic              | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                        | East<br>South<br>Central |
| All Buildings*  | 62                       | 210                                     | 50                       | 5,328                    | 12,097                         | 3,220                    | 11.7                     | 17.4                                     | 15.5                     |
| Percent Lit When Open   |                          |   | _                        | _                        | _                              | _                        |                          | _  |                          |
| Zero  | Q                        |   | Q                        | Q                        | Q                              | Q                        | Q                        | Q  | Q                        |
| 1 to 50   | 7                        |   | 4                        | 1,178                    | 1,313                          | 505                      | 6.1                      | 7.8                                      | 8.2                      |
| 51 to 99  | 18                       | 58                                      | 14                       | 1,658                    | 3,293                          | 913                      | 11.2                     | 17.7                                     | 15.5                     |
| 100   | 36                       | 141                                     | 32                       | 2,362                    | 7,210                          | 1,730                    | 15.4                     | 19.5                                     | 18.3                     |
| Building Never Open/  |                          |   |                          |                          |                                |                          |                          |  |                          |
| Electricity Not Used  | Q                        | Q                                       | Q                        | Q                        | Q                              | Q                        | Q                        | Q  | Q                        |
| Percent Lit When Closed   |                          |   |                          |                          |                                |                          |                          |  |                          |
| Zero  | 15                       |   | 5                        | 1,936                    | 3,431                          | 623                      | 8.0                      |  | 8.8                      |
| 1 to 50   | 27                       | 93                                      | 26                       | 2,192                    | 5,687                          | 1,682                    | 12.3                     | 16.4                                     | 15.5                     |
| 51 to 100   | Q                        | 13                                      | Q                        | Q                        | 491                            | Q                        | Q                        | 26.4                                     | Q                        |
| Building Never Closed/  |                          |   |                          |                          |                                |                          |                          |  |                          |
| Electricity Not Used  | 17                       | 67                                      | 16                       | 1,040                    | 2,488                          | 769                      | 16.3                     | 26.9                                     | 20.4                     |
| Heating Equipment (more   |                          |   |                          |                          |                                |                          |                          |  |                          |
| than one may apply)   |                          |   |                          |                          |                                |                          |                          |  |                          |
| Heat Pumps  | 4                        |   | 9                        | 339                      | 3,677                          | 542                      | 12.9                     | 17.5                                     | 16.8                     |
| Packaged Heat Pumps   | Q                        | 45                                      | Q                        | Q                        | 2,145                          | Q                        | Q                        | 20.8                                     | Q                        |
| Split-System Heat Pumps   | Q                        | 23                                      | Q                        | Q                        | 1,459                          | Q                        | Q                        | 15.7                                     | Q                        |
| Individual Room Heat Pumps  | Q                        | 16                                      | Q                        | Q                        | 1,039                          | Q                        | Q                        | 15.3                                     | Q                        |
| Furnaces  | 32                       | 34                                      | 9                        | 2,657                    | 2,772                          | 895                      | 12.0                     | 12.4                                     | 10.3                     |
| Individual Space Heaters  | 20                       | 38                                      | 7                        | 1,625                    | 2,148                          | 563                      | 12.3                     | 17.9                                     | 12.6                     |
| District Heat   | Q                        | 27                                      | Q                        | Q                        | 1,173                          | Q                        | Q                        | 23.3                                     | Q                        |
| Boilers   | 19                       | 47                                      | 18                       | 1,675                    | 2,135                          | 786                      | 11.2                     | 21.9                                     | 22.6                     |
| Packaged Heating Units  | 17                       | 78                                      | 20                       | 1,135                    | 3,917                          | 1,215                    | 15.0                     | 20.0                                     | 16.4                     |
| Other   | 7                        | 12                                      | Q                        | 383                      | 902                            | Q                        | 17.0                     | 13.8                                     | Q                        |
| Cooling Equipment (more than one may apply) Residential-Type Central Air Conditioners | 18                       | 32                                      | 6                        | 1,568                    | 1,843                          | 489                      | 11.5                     | 17.4                                     | 12.1                     |
|   | 4                        | 52<br>67                                |                          | -                        |                                |                          |                          |  |                          |
| Heat Pumps  | Q                        | 43                                      | 11                       | 317                      | 3,742                          | 586                      | 12.5                     | 18.0<br>20.6                             | 18.6<br>19.2             |
| Packaged Heat Pumps   |                          |   | Q                        | Q                        | 2,104                          | Q                        | Q                        |  |                          |
| Split-System Heat Pumps   | Q                        |   | Q                        | Q                        | 1,494                          | Q                        | Q                        | 16.2                                     | Q                        |
| Individual Room Heat Pumps  | Q                        |   | Q                        | Q                        | 1,079                          | Q                        | Q                        | 17.1                                     | Q                        |
| Individual Air Conditioners   | 13                       |   | 7                        | 1,289                    | 2,218                          | 610                      | 9.7                      | 15.7                                     | 11.5                     |
| District Chilled Water  | Q                        | 15                                      | Q                        | Q                        | 667                            | Q                        | Q                        | 22.9                                     | Q                        |
| Central Chillers  | 11                       | 63                                      | 13                       | 768                      | 2,489                          | 594                      | 14.8                     | 25.1                                     | 21.2                     |
| Packaged Air Conditioning   |                          |   |                          |                          |                                |                          |                          |  | 40-                      |
| Units   | 39                       |   | 26                       | 2,581                    | 5,520                          | 1,555                    | 15.1                     | 17.4                                     | 16.7                     |
| Swamp Coolers Other   | N<br>Q                   | Q<br>Q                                  | Q<br>Q                   | N<br>Q                   | Q<br>Q                         | Q<br>Q                   | N<br>Q                   | Q<br>Q                                   | Q<br>Q                   |
| Main Equipment Replaced Since 1990 (more than one may apply) Heating Cooling          | 21<br>22                 | 34                                      | 12                       | 1,754<br>2,052           | 2,250<br>3,111                 | 886<br>1,059             | 11.8<br>10.7             | 14.9<br>15.6                             | 13.6<br>16.0             |
| -   |                          |   | • •                      | -,                       | 2,                             | ,0                       |                          |  |                          |
| Water Heating Equipment Centralized System  | 38                       | 106                                     | 32                       | 3,029                    | 5,649                          | 1,890                    | 12.4                     | 18.7                                     | 16.7                     |
|   | 36<br>10                 |   | 32<br>7                  |                          |                                | 469                      |                          | 15.8                                     | 14.1                     |
| Distributed System  Combination of Centralized  | 10                       | 30                                      | ,                        | 920                      | 2,432                          | 409                      | 10.5                     | 10.0                                     | 14.1                     |
|   | 12                       | ۲0                                      | 10                       | 771                      | 2 622                          | 499                      | 15.3                     | 22.2                                     | 19.7                     |
| and Distributed System  | 12                       | 58                                      | 10                       | 771                      | 2,633                          | 499                      | 15.3                     | 22.2                                     | 19.7                     |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|   | Co                       | al Electrici<br>onsumption<br>illion kWh | n                        | Building                 | Floorspaces Using Eleon square | ectricity                | Ene                      | Electricity<br>ergy Intens<br>n/square f | sity                     |
|---|--------------------------|--|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--|--------------------------|
|   | West<br>North<br>Central | South<br>Atlantic                        | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic              | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                        | East<br>South<br>Central |
| All Buildings*  | 62                       | 210                                      | 50                       | 5,328                    | 12,097                         | 3,220                    | 11.7                     | 17.4                                     | 15.5                     |
| Lighting Equipment Types (more than one may apply) Incandescent | 45                       | 138                                      | 32                       | 3,762                    | 7,028                          | 1,984                    | 12.1                     | 19.6                                     | 16.2                     |
| Standard Fluorescent  | 61                       | 203                                      | 49                       | 5,006                    | 11,245                         | 3,022                    | 12.1                     | 18.0                                     | 16.1                     |
|   |                          |  |                          | ,                        |                                |                          |                          |  |                          |
| Compact Fluorescent   | 31                       | 114                                      | 26                       | 1,983                    | 4,856                          | 1,262                    | 15.7                     | 23.4                                     | 20.8                     |
| High Intensity Discharge  | 19                       | 84                                       | 13                       | 1,515                    | 4,053                          | 706                      | 12.8                     | 20.7                                     | 18.2                     |
| Halogen   | 22                       | 83                                       | 12                       | 1,402                    | 3,474                          | 620                      | 15.7                     | 24.0                                     | 19.0                     |
| Other   | N                        | Q  | Q                        | N                        | Q                              | Q                        | N                        | Q  | Q                        |
| Refrigeration Equipment   |                          |  |                          |                          |                                |                          |                          |  |                          |
| (more than one may apply) <sup>a</sup>                          |                          |  |                          |                          |                                |                          |                          |  |                          |
| Any Refrigeration   | 57                       | 198                                      | 47                       | 4,544                    | 10,256                         | 2,829                    | 12.5                     | 19.3                                     | 16.7                     |
| Commercial Refrigeration  | 29                       | 137                                      | 27                       | 1,835                    | 5,426                          | 1,145                    | 15.8                     | 25.2                                     | 23.2                     |
| Walk-In Units   | 24                       | 121                                      | 23                       | 1,341                    | 4,324                          | 862                      | 17.6                     | 27.9                                     | 27.1                     |
| Cases or Cabinets   | 22                       | 106                                      | 23                       | 1,276                    | 4,246                          | 993                      | 17.0                     | 25.1                                     | 22.9                     |
| Residential-Type Units  | 41                       | 118                                      | 26                       | 3,545                    | 7,043                          | 1,834                    | 11.7                     | 16.8                                     | 14.4                     |
| Vending Machines  | 37                       | 145                                      | 35                       | 2,817                    | 7,066                          | 2,056                    | 13.1                     | 20.5                                     | 17.0                     |
| No Refrigeration  | 6                        | 12                                       | Q                        | 784                      | 1,841                          | 392                      | 7.4                      | 6.5                                      | Q                        |
| Office Equipment (more than one may apply) Computers            | 58                       | 193                                      | 47                       | 4,533                    | 10,483                         | 2,724                    | 12.8                     | 18.4                                     | 17.3                     |
| With Flat Screen Monitors                                       | 28                       | 103                                      | 25                       | 1,762                    | 4,768                          | 1,314                    | 15.7                     | 21.6                                     | 19.2                     |
| Dedicated Servers   | 43                       | 137                                      | 31                       | 2,796                    | 6,839                          | 1,606                    | 15.2                     | 20.0                                     | 19.3                     |
| Laser Printers  | 32                       |  | 29                       | 2,784                    | 6,059                          | 1,813                    | 11.4                     | 17.6                                     | 15.8                     |
| Inkjet Printers   | 38                       | 125                                      | 27                       | 2,489                    | 6,138                          | 1,502                    | 15.3                     | 20.4                                     | 18.2                     |
| FAX Machines  | 55                       | 187                                      | 45                       | 4,157                    | 9,973                          | 2,551                    | 13.2                     | 18.8                                     | 17.5                     |
| Photocopiers  | 46                       | 164                                      | 36                       | 3,586                    | 8,821                          | 2,211                    | 13.0                     | 18.6                                     | 16.3                     |
| Number of Computers   |                          |  |                          |                          |                                |                          |                          |  |                          |
| None  | 4                        | 17                                       | 3                        | 795                      | 1,613                          | 496                      | 5.4                      | 10.8                                     | 5.8                      |
| 1 to 4  | 12                       |  | 13                       | 1,207                    | 2,124                          | 807                      | 10.0                     | 16.6                                     | 16.0                     |
| 5 to 9  | 10                       |  | 6                        | 826                      | 1,154                          | 520                      | 12.5                     | 12.3                                     | 12.3                     |
| 10 to 19  | 8                        | 17                                       | Q                        | 621                      | 1,321                          | 0<br>0                   | 13.6                     | 13.2                                     | 0                        |
| 20 to 49  | 10                       | 25                                       | 10                       | 736                      | 1,207                          | 437                      | 13.5                     | 20.7                                     | 23.3                     |
|   |                          |  |                          |                          |                                |                          |                          |  |                          |
| 50 to 99  | Q                        |  | Q                        | Q                        | 1,265                          | Q                        | Q<br>10.0                | 18.1                                     | Q                        |
| 100 to 249<br>250 or More                                       | 8<br>4                   | 26<br>52                                 | Q<br>Q                   | 630<br>208               | 1,353<br>2,059                 | Q<br>Q                   | 12.8<br>21.4             | 19.6<br>25.1                             | Q<br>Q                   |
|   |                          |  |                          |                          | ,                              |                          |                          |  |                          |
| Number of Dedicated Servers                                     | 00                       | 7.                                       | 40                       | 0.500                    | E 050                          | 4.045                    | 7.0                      | 440                                      | 44.0                     |
| None  | 20                       |  | 19                       | 2,532                    | 5,258                          | 1,615                    | 7.8                      | 14.0                                     | 11.8                     |
| 1 to 4  | 35                       |  | 25                       | 2,366                    | 4,155                          | 1,272                    | 14.6                     | 17.3                                     | 19.5                     |
| 5 to 9  | Q                        |  | Q                        | Q                        | 966                            | Q                        | Q                        | 24.0                                     | Q                        |
| 10 to 19  | Q                        |  | Q                        | Q                        | 837                            | Q                        | Q                        | 26.2                                     | Q                        |
| 20 to 49  | Q<br>Q                   |  | Q<br>Q                   | Q<br>Q                   | 524<br>Q                       | Q<br>Q                   | Q<br>Q                   | 21.9<br>22.2                             | Q<br>Q                   |
|   | Q                        | Q  | Q                        | Q                        | Q                              | Q                        | Q                        | 22.2                                     | Q                        |
| Number of Photocopiers  | 40                       | 40                                       | 4.4                      | 4 740                    | 2.070                          | 1 000                    | 0.0                      | 140                                      | 40.0                     |
| None  | 16                       |  | 14                       | 1,742                    | 3,276                          | 1,009                    | 9.2                      | 14.0                                     | 13.8                     |
| One   | 18                       | 37                                       | 10                       | 1,615                    | 2,611                          | 1,016                    | 11.1                     | 14.2                                     | 10.2                     |
| 2 to 4  | 16                       | 53                                       | 14                       | 1,281                    | 3,060                          | 659                      | 12.7                     | 17.4                                     | 20.5                     |
| 5 to 9  | 6                        | 22                                       | Q                        | 388                      | 1,124                          | Q                        | 14.8                     | 19.9                                     | Q                        |
| 10 or More  | 7                        | 52                                       | 7                        | 302                      | 2,026                          | 284                      | 21.7                     | 25.6                                     | 24.0                     |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|  | Co                       | al Electrici<br>Insumption | n                        | Building                 | l Floorspac<br>s Using El<br>on square | ectricity                | Electricity Energy Intensity (kWh/square foot) |                   |                          |
|--|--------------------------|----------------------------|--------------------------|--------------------------|--|--------------------------|--|-------------------|--------------------------|
|  | West<br>North<br>Central | South<br>Atlantic          | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic                      | East<br>South<br>Central | West<br>North<br>Central                       | South<br>Atlantic | East<br>South<br>Central |
| All Buildings*   | 62                       | 210                        | 50                       | 5,328                    | 12,097                                 | 3,220                    | 11.7   | 17.4              | 15.5                     |
| Energy-Related Space Functions (more than one may apply)   |                          |                            |                          |                          |  |                          |  |                   |                          |
| Commercial Food Preparation  | 23                       | 98                         | 20                       | 1,472                    | 4,196                                  | 1,055                    | 15.6   | 23.4              | 18.7                     |
| Activities with Large  | 23                       | 90                         | 20                       | 1,412                    | 4,190                                  | 1,055                    | 13.0   | 23.4              | 10.7                     |
| Amounts of Hot Water   | 24                       | 94                         | 16                       | 1,678                    | 4,178                                  | 949                      | 14.3   | 22.4              | 17.2                     |
| Separate Computer Area   | 26                       | 106                        | 20                       | 1,723                    | 5,236                                  | 1,028                    | 15.1   | 20.3              | 19.1                     |
| HVAC Conservation Features   |                          |                            |                          |                          |  |                          |  |                   |                          |
| (more than one may apply)  |                          |                            |                          |                          |  |                          |  |                   |                          |
| Variable Air-Volume System   | 23                       | 86                         | 18                       | 1,342                    | 3,818                                  | 788                      | 16.8   | 22.6              | 22.5                     |
| Economizer Cycle   | 26                       | 90                         | 17                       | 1,533                    | 3,815                                  | 828                      | 17.2   |                   | 21.0                     |
| HVAC Maintenance   | 47                       | 187                        | 41                       | 3,701                    | 9,547                                  | 2,258                    | 12.8   | 19.6              | 18.0                     |
| Energy Management and  |                          |                            |                          | -, -                     | -,-                                    | ,                        |  |                   |                          |
| Control System (EMCS)  | 16                       | 70                         | 11                       | 965                      | 3,426                                  | 542                      | 16.2   | 20.4              | 20.4                     |
| Window and Interior Lighting Features (more than one may apply) Multipaned Windows                 | 49                       | 131                        | 30                       | 3,724                    | 7,178                                  | 1,678                    | 13.1   | 18.3              | 17.8                     |
| Tinted Window Glass  | 26                       | 127                        | 21                       | 1,925                    | 6,495                                  | 1,167                    | 13.5   |                   | 18.3                     |
| Reflective Window Glass  | 11                       | 33                         | 7                        | 711                      | 1,655                                  | 255                      | 14.8   | 19.9              | 28.8                     |
| External Overhangs   |                          | 00                         | •                        |                          | 1,000                                  | 200                      | 11.0   | 10.0              | 20.0                     |
| or Awnings   | 23                       | 71                         | 18                       | 1,684                    | 3,812                                  | 1,016                    | 13.8   | 18.6              | 17.8                     |
| Skylights or Atriums   | 12                       | 35                         | 7                        | 929                      | 1,828                                  | 429                      | 13.2   |                   | 16.9                     |
| Daylighting Sensors  | Q                        | 8                          | Q                        | Q                        | 448                                    | Q                        | Q  |                   | Q                        |
| Specular Reflectors  | 26                       | 99                         | 14                       | 1,896                    | 4,553                                  | 785                      | 13.9   | 21.8              | 17.8                     |
| Electronic Ballasts<br>Energy Management and<br>Control System (EMCS)                              | 52                       | 171                        | 37                       | 3,987                    | 8,835                                  | 2,177                    | 13.0   | 19.3              | 17.0                     |
| For Lighting   | Q                        | 15                         | Q                        | Q                        | 810                                    | Q                        | Q  | 18.5              | Q                        |
| Equipment Usage Reduced<br>When Building Not In Full Use<br>(more than one may apply) <sup>a</sup> |                          |                            |                          |                          |  |                          |  |                   |                          |
| Heating  | 37                       | 128                        | 31                       | 3,314                    | 7,843                                  | 2,124                    | 11.2   | 16.3              | 14.4                     |
| Cooling  | 37                       | 140                        | 33                       | 3,323                    | 8,678                                  | 2,175                    | 11.1   | 16.2              | 15.0                     |
| Lighting   | 43                       | 137                        | 33                       | 4,037                    | 9,061                                  | 2,340                    | 10.6   |                   | 13.9                     |
| Office Equipment   | 16                       | 50                         | 10                       | 1,767                    | 3,468                                  | 703                      | 9.3  | 14.3              | 13.9                     |
| Annual Consumption (kilowatthours)   |                          |                            |                          | 400                      | 222                                    | _                        | 4.0  |                   |                          |
| 10,000 or Less   | 1                        | 1                          | Q                        | 430                      | 302                                    | Q                        | 1.2  |                   | Q                        |
| 10,001 to 50,000   | 6                        | 8                          | 3                        | 1,004                    | 1,684                                  | 546                      | 5.9  | 4.8               | 5.8                      |
| 50,001 to 100,000  | 5                        | 11                         | 4                        | 580                      | 1,284                                  | 376                      | 8.5  | 9.0<br>15.6       | 10.8                     |
| 100,001 to 500,000<br>500,001 to 1,000,000   | 19                       | 43                         | 13                       | 1,502                    | 2,743                                  | 871                      | 12.9   | 15.6              | 15.1                     |
| 1,000,001 to 5,000,000   | 7<br>20                  | 29<br>61                   | Q<br>15                  | 687<br>948               | 1,454<br>2,661                         | Q<br>587                 | 10.8<br>21.3                                   |                   | Q<br>25.9                |
| Over 5,000,000   | 20<br>Q                  | 57                         | 15<br>7                  | 946<br>Q                 | 1,968                                  | 247                      | 21.3<br>Q                                      |                   | 28.5                     |
| Over 3,000,000   | Q                        | 5/                         | 1                        | Q                        | 1,908                                  | 247                      | Q  | 29.2              | ∠0.5                     |

Table C18. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 2

|   | Total Electricity Consumption (billion kWh) |                   |                          | Building                 | Floorspaces Using Eleon | ectricity                | Electricity Energy Intensity (kWh/square foot) |                   |                          |  |
|---|---|-------------------|--------------------------|--------------------------|-------------------------|--------------------------|--|-------------------|--------------------------|--|
|   | West<br>North<br>Central                    | South<br>Atlantic | East<br>South<br>Central | West<br>North<br>Central | South<br>Atlantic       | East<br>South<br>Central | West<br>North<br>Central                       | South<br>Atlantic | East<br>South<br>Central |  |
| All Buildings*  | 62  | 210               | 50                       | 5,328                    | 12,097                  | 3,220                    | 11.7   | 17.4              | 15.5                     |  |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 59<br>Q                                     | 193<br>Q          | 48<br>Q                  | 5,095<br>Q               | 11,510<br>Q             | 3,167<br>Q               | 11.5<br>Q                                      | 16.8<br>31.3      | 15.3<br>Q                |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

| <del></del>                                   |                          |                           | 1       |                          |                                | 1         |                          |                            |         |
|---|--------------------------|---------------------------|---------|--------------------------|--------------------------------|-----------|--------------------------|----------------------------|---------|
|   | Co                       | al Electrici<br>nsumption | n       | Building                 | Floorspaces Using Eleon square | ectricity | Ene                      | Electricity<br>ergy Intens | -       |
|   | West<br>South<br>Central | Moun-<br>tain             | Pacific | West<br>South<br>Central | Moun-<br>tain                  | Pacific   | West<br>South<br>Central | Moun-<br>tain              | Pacific |
| All Buildings*                                | 114                      | 56                        | 96      | 7,449                    | 3,633                          | 7,397     | 15.3                     | 15.4                       | 13.0    |
| Building Floorspace                           |                          |                           |         |                          |                                |           |                          |                            |         |
| (Square Feet)                                 | 17                       | 7                         | 10      | 606                      | 427                            | 0.57      | 24.1                     | 15.7                       | 14.0    |
| 1,001 to 5,000                                | 17                       | 7<br>5                    | 12      | 696                      | 437                            | 857       | 24.1                     | 15.7                       | 14.0    |
| 5,001 to 10,000                               | 11                       |                           | 14      | 787                      | 404                            | 810       | 13.4                     | 12.0                       | 16.9    |
| 10,001 to 25,000                              | 11                       | 10                        | 13      | 1,267                    | 831                            | 1,232     | 8.9                      | 11.7                       | 10.3    |
| 25,001 to 50,000                              | 12                       | 7                         | 12      | 897                      | 511                            | 1,088     | 13.6                     | 13.2                       | 11.0    |
| 50,001 to 100,000                             | 16                       | 5                         | 12      | 1,314                    | 374                            | 922       | 12.1                     | 12.7                       | 13.3    |
| 100,001 to 200,000                            | 20                       | Q                         | 13      | 1,096                    | Q                              | 895       | 18.2                     | Q                          | 14.5    |
| 200,001 to 500,000                            | 12                       | 5                         | 11      | 659                      | Q                              | 827       | 18.4                     | 14.3                       | 13.5    |
| Over 500,000                                  | Q                        | Q                         | 9       | Q                        | Q                              | 766       | Q                        | Q                          | 12.4    |
| Principal Building Activity                   | 45                       | •                         | 4.4     | 4 400                    | 0.40                           | 4.007     | 40.0                     | 0.4                        | 40.7    |
| Education                                     | 15                       | 6                         | 11      | 1,198                    | 640                            | 1,027     | 12.8                     | 9.4                        | 10.7    |
| Food Sales                                    | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| Food Service                                  | Q                        | Q                         | 7       | Q                        | Q                              | 232       | Q                        | Q                          | 31.8    |
| Health Care                                   | 8                        | 6                         | 6       | 309                      | 230                            | 323       | 27.5                     | 25.8                       | 20.1    |
| Inpatient                                     | 7                        | Q                         | Q       | 235                      | Q                              | Q         | 29.7                     | Q                          | Q       |
| Outpatient                                    | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| Lodging                                       | Q                        | Q                         | 8       | Q                        | 438                            | 649       | Q                        | Q                          | 11.9    |
| Retail (Other Than Mall)                      | 9                        | Q                         | 10      | 594                      | Q                              | 753       | 15.8                     | Q                          | 13.4    |
| Office  | 27                       | 10                        | 26      | 1,343                    | 629                            | 1,796     | 19.9                     | 16.3                       | 14.6    |
| Public Assembly                               | Q                        | Q                         | Q       | Q                        | Q                              | 464       | Q                        | Q                          | Q       |
| Public Order and Safety                       | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| Religious Worship                             | 4                        | Q                         | Q       | 467                      | Q                              | Q         | 8.1                      | Q                          | Q       |
| Service                                       | Q                        | Q                         | 3       | Q                        | Q                              | 319       | Q                        | Q                          | 8.0     |
| Warehouse and Storage                         | 7                        | Q                         | 6       | 1,581                    | Q                              | 1,000     | 4.3                      | Q                          | 5.9     |
| Other   | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| Vacant  | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| Year Constructed                              |                          |                           |         |                          |                                |           |                          |                            |         |
| Before 1920                                   | Q                        | Q                         | Q       | Q                        | Q                              | Q         | Q                        | Q                          | Q       |
| 1920 to 1945                                  | Q                        | Q                         | 7       | Q                        | Q                              | 783       | Q                        | Q                          | 9.1     |
| 1946 to 1959                                  | 4                        | 3                         | 9       | 455                      | 255                            | 750       | 9.3                      | 13.4                       | 11.3    |
| 1960 to 1969                                  | 8                        | 7                         | 10      | 675                      | 592                            | 1,000     | 12.5                     | 12.4                       | 10.2    |
| 1970 to 1979                                  | 22                       | 15                        | 16      | 1,307                    | 924                            | 1,156     | 16.5                     | 16.7                       | 13.7    |
| 1980 to 1989                                  | 34                       | 13                        | 22      | 1,840                    | 688                            | 1,541     | 18.4                     | 19.4                       | 14.6    |
| 1990 to 1999                                  | 28                       | 11                        | 24      | 1,792                    | 612                            | 1,367     | 15.6                     | 17.2                       | 17.4    |
| 2000 to 2003                                  | 13                       | 4                         | 7       | 907                      | 292                            | 638       | 14.2                     | 12.7                       | 11.0    |
| Climate Zone: 30-Year Average                 |                          |                           |         |                          |                                |           |                          |                            |         |
| Under 2,000 CDD and                           |                          | _                         |         |                          |                                |           |                          |                            |         |
| More than 7,000 HDD                           | N                        | 27                        | Q       | N                        | 2,081                          | Q         | N                        | 13.1                       | 14.7    |
| 5,500-7,000 HDD                               | N                        | 16                        | Q       | N                        | 1,075                          | Q         | N                        | 14.8                       | 15.1    |
| 4,000-5,499 HDD                               | Q                        | N                         | Q       | Q                        | N                              | 693       | Q                        | N                          | 14.0    |
| Fewer than 4,000 HDD                          | 27                       | N                         | 63      | 1,891                    | N                              | 5,187     | 14.3                     | N                          | 12.1    |
| 2,000 CDD or More and<br>Fewer than 4,000 HDD | 82                       | 13                        | Q       | 5,153                    | 476                            | Q         | 16.0                     | 26.8                       | Q       |
| . 5.701 than 4,000 Fibb                       | 02                       | 13                        | Q       | 5,155                    | 470                            | Q         | 10.0                     | 20.0                       | Q       |
| Number of Floors                              |                          | _                         |         |                          |                                |           | a =                      |                            |         |
| One   | 54                       | 23                        |         | 4,026                    | 1,830                          | 3,020     | 13.4                     | 12.4                       | 12.4    |
| Two   | 17                       | 14                        | 26      | 1,330                    | 990                            | 1,969     | 12.9                     | 14.5                       | 13.2    |
| Three   | . 7                      | Q                         | 9       | 453                      | Q                              | 715       | 14.4                     | Q                          | 12.3    |
| Four to Nine                                  | 17                       | 7                         |         | 736                      | 338                            | 990       | 23.5                     | 20.5                       | 14.4    |
| Ten or More                                   | 19                       | Q                         | 10      | 904                      | Q                              | Q         | 21.6                     | Q                          | 14.1    |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|                                | Co                       | al Electrici<br>nsumption | n       | Building                 | Floorspac<br>s Using El<br>on square | ectricity  | Ene                      | Electricity<br>ergy Intensi<br>n/square f | sity      |
|--------------------------------|--------------------------|---------------------------|---------|--------------------------|--------------------------------------|------------|--------------------------|---|-----------|
|                                | West<br>South<br>Central | Moun-<br>tain             | Pacific | West<br>South<br>Central | Moun-<br>tain                        | Pacific    | West<br>South<br>Central | Moun-<br>tain                             | Pacific   |
| All Buildings*                 | 114                      | 56                        | 96      | 7,449                    | 3,633                                | 7,397      | 15.3                     | 15.4                                      | 13.0      |
| Elevators and Escalators       |                          |                           |         |                          |                                      |            |                          |   |           |
| (more than one may apply)      |                          |                           |         |                          |                                      |            |                          |   |           |
| Any Elevators                  | 49                       | 23                        | 40      | 2,407                    | 1,069                                | 2,772      | 20.4                     | 22.0                                      | 14.4      |
| Number of Elevators            |                          |                           |         | -                        | -                                    | ·          |                          |   |           |
| One                            | 7                        | 5                         | 7       | 623                      | 414                                  | 649        | 11.8                     | 13.1                                      | 11.0      |
| Two to Five                    | 19                       | 5                         | 17      | 808                      | 275                                  | 1,085      | 24.0                     | 19.6                                      | 15.9      |
| Six or More                    | 22                       | Q                         | 15      | 975                      | Q                                    | 1,039      | 22.8                     | Q   | 14.9      |
| Any Escalators                 | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| ,                              | _                        | _                         |         |                          |                                      | _          |                          |   | _         |
| Number of Workers (main shift) |                          |                           |         |                          |                                      |            |                          |   |           |
| Fewer than 5                   | 12                       | 7                         | 12      | 1,658                    | 724                                  | 1,512      | 7.1                      | 9.8                                       | 7.6       |
| 5 to 9                         | 11                       | 4                         | 8       | 835                      | 345                                  | 678        | 13.0                     | 11.2                                      | 12.2      |
| 10 to 19                       | 13                       | 5                         | 8       | 999                      | 428                                  | 681        | 13.3                     | 12.2                                      | 12.2      |
| 20 to 49                       | 24                       | 10                        | 17      | 1,408                    | 645                                  | 1,264      | 16.7                     | 14.7                                      | 13.5      |
| 50 to 99                       | 14                       | 7                         | 12      | 840                      | 558                                  | 812        | 17.2                     | 11.9                                      | 14.7      |
| 100 to 249                     | 10                       | 6                         | 18      | 451                      | 311                                  | 1,086      | 22.9                     | 19.5                                      | 16.5      |
| 250 or More                    | 30                       | Q                         | 21      | 1,259                    | Q                                    | 1,364      | 23.8                     | 28.2                                      | 15.6      |
|                                |                          |                           |         |                          |                                      |            |                          |   |           |
| Weekly Operating Hours         |                          |                           | _       |                          |                                      |            |                          |   |           |
| Fewer than 40                  | 4                        | 1                         | 3       | 656                      | 270                                  | 623        | 5.4                      | 4.4                                       | 5.4       |
| 40 to 48                       | 17                       | 8                         | 13      | 1,688                    | 783                                  | 1,378      | 10.1                     | 10.6                                      | 9.1       |
| 49 to 60                       | 22                       | 7                         | 22      | 1,872                    | 712                                  | 1,744      | 12.0                     | 10.2                                      | 12.5      |
| 61 to 84                       | 20                       | 9                         | 16      | 1,227                    | 592                                  | 1,352      | 16.5                     | 14.5                                      | 11.7      |
| 85 to 167                      | 22                       | Q                         | 15      | 829                      | Q                                    | 901        | 26.8                     | Q   | 16.8      |
| Open Continuously              | 29                       | 24                        | 28      | 1,177                    | 931                                  | 1,401      | 24.4                     | 26.0                                      | 19.8      |
| Ownership and Occupancy        |                          |                           |         |                          |                                      |            |                          |   |           |
| Nongovernment Owned            | 90                       | 41                        | 78      | 5,949                    | 2,569                                | 5,891      | 15.1                     | 16.0                                      | 13.3      |
| Owner Occupied                 | 37                       | 13                        |         | 2,700                    | 976                                  | 2,641      | 13.1                     | 13.0                                      | 14.1      |
| •                              |                          | 28                        |         |                          |                                      |            |                          |   |           |
| Nonowner Occupied              | 53                       |                           | 41      | 3,114                    | 1,582                                | 3,149      | 16.9                     | 18.0                                      | 12.9      |
| Unoccupied                     | Q                        | Q                         | Q       | Q<br>4 500               | Q<br>4.004                           | Q<br>4 507 | Q<br>10.0                | Q<br>12.0                                 | Q<br>12.0 |
| Government Owned               | 24                       | 15                        | 18      | 1,500                    | 1,064                                | 1,507      | 16.3                     | 13.9                                      | 12.0      |
| Federal                        | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| State                          | Q                        | Q                         | 6       | Q                        | Q                                    | 565        | Q                        | Q   | 11.3      |
| Local                          | 14                       | 10                        | 11      | 961                      | 681                                  | 861        | 14.1                     | 14.3                                      | 12.4      |
| Vacancy Status                 |                          |                           |         |                          |                                      |            |                          |   |           |
| Completely Vacant              | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| Mostly Vacant                  | Q                        | Q                         |         | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| Partially Vacant               | 29                       | 12                        |         | 1,623                    | 750                                  | 1,329      | 17.7                     | 15.3                                      | 12.0      |
| Not At All Vacant              | 85                       | 44                        |         | 5,687                    | 2,855                                | 5,914      | 15.0                     | 15.5                                      | 13.4      |
| Number of Establishments       |                          |                           |         |                          |                                      |            |                          |   |           |
| One                            | 76                       | 42                        | 66      | 5,186                    | 2,767                                | 4,912      | 14.7                     | 15.0                                      | 13.5      |
| 2 to 5                         | 14                       | 8                         |         | 1,193                    | 524                                  | 1,362      | 12.1                     | 14.4                                      | 12.2      |
| 6 to 10                        | Q                        | Q                         | 3       | ,,,oo                    | Q                                    | 211        | Q                        | Q   | 13.3      |
| 11 to 20                       | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| More than 20                   | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| Currently Unoccupied           | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |
| Carrently Onloccupied          | Q                        | Q                         | Q       | Q                        | Q                                    | Q          | Q                        | Q   | Q         |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|  | Co                       | al Electric<br>nsumptio<br>illion kWh | n       | Building                 | Floorspaces Using El | ectricity | Ene                      | Electricity<br>rgy Intens<br>n/square f | sity    |
|--|--------------------------|---------------------------------------|---------|--------------------------|----------------------|-----------|--------------------------|---|---------|
|  | West<br>South<br>Central | Moun-<br>tain                         | Pacific | West<br>South<br>Central | Moun-<br>tain        | Pacific   | West<br>South<br>Central | Moun-<br>tain                           | Pacific |
| All Buildings*   | 114                      | 56                                    | 96      | 7,449                    | 3,633                | 7,397     | 15.3                     | 15.4                                    | 13.0    |
| Predominant Exterior   |                          |                                       |         |                          |                      |           |                          |   |         |
| Wall Material  |                          |                                       |         |                          |                      |           |                          |   |         |
| Brick, Stone or Stucco   | 62                       | 20                                    | 39      | 3,597                    | 1,551                | 3,070     | 17.1                     | 13.2                                    | 12.6    |
| Concrete (Block or Poured)   | 17                       | 8                                     | 18      | 937                      | 450                  | 1,315     | 18.4                     | 17.7                                    | 14.0    |
| Concrete Panels  | 17                       | Q                                     | 12      | 1,114                    | Q                    | 1,204     | 15.6                     | 19.6                                    | 10.1    |
| Siding or Shingles   | 4                        | Q                                     | 9       | 281                      | Q                    | 461       | 14.4                     | 12.0                                    | Q       |
| Metal Panels   | 8                        | 8                                     | 10      | 1,212                    | 604                  | 885       | 6.3                      | 13.3                                    | 11.8    |
| Window Glass   | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       |         |
| Other  | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       |         |
| No One Major Type  | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       | Q       |
| Predominant Roof Material  |                          |                                       |         |                          |                      |           |                          |   |         |
| Built-Up   | 40                       | 26                                    | 34      | 2,346                    | 1,421                | 2,959     | 17.1                     | 18.1                                    | 11.6    |
| Shingles (Not Wood)  | 11                       | 5                                     | 15      | 769                      | 475                  | 1,011     | 14.3                     | 10.1                                    | 15.2    |
| Metal Surfacing  | 20                       | 10                                    | 11      | 2,420                    | 903                  | 958       | 8.3                      | 10.8                                    | 11.7    |
| Synthetic or Rubber  | 30                       | 12                                    | 19      | 1,194                    | 664                  | 1,209     | 25.3                     | 18.6                                    | 16.1    |
| Slate or Tile  | Q                        | Q                                     | 6       | Q                        | Q                    | 552       | Q                        | Q                                       | 11.7    |
|  | Q                        | Q<br>Q                                | Q       | Q                        | Q                    | Q         | Q                        | Q                                       | Q       |
| Other  | Q<br>Q                   | Q                                     | Q<br>Q  | Q<br>Q                   | Q<br>Q               | Q<br>Q    | Q<br>Q                   | Q<br>Q                                  |         |
| No One Major Type  | Q                        | N<br>N                                | Q       | Q                        | N                    | Q         | Q                        | N                                       | Q       |
| Renovations in Buildings<br>Constructed Before 1980<br>(more than one may apply)<br>Any Type of Renovation |                          |                                       |         |                          |                      |           |                          |   |         |
| Since 1980   | 18                       | 17                                    | 21      | 1,157                    | 1,095                | 1,746     | 15.1                     | 15.9                                    | 12.1    |
| Addition or Annex  | 10                       | 9                                     | 6       | 529                      | 551                  | 428       | 19.0                     | 16.8                                    | 15.0    |
| Reduction In Floorspace  | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       | Q       |
| Cosmetic Improvements  | 13                       | 12                                    | 18      | 828                      | 718                  | 1,465     | 15.5                     | 17.2                                    |         |
| Wall or Roof Replacement Interior Wall   | 7                        | 7                                     | 10      | 549                      | 504                  | 789       | 12.1                     | 13.6                                    | 13.0    |
| Re-Configuration   | 8                        | 12                                    | 12      | 564                      | 637                  | 870       | 13.4                     | 18.7                                    | 13.6    |
|  | 9                        | 14                                    | 14      | 559                      | 776                  | 1,049     | 16.4                     | 18.3                                    | 13.0    |
| HVAC Equipment UpgradeLighting Upgrade   | 7                        | 14                                    | 14      | 463                      | 733                  | 1,049     | 15.5                     | 18.6                                    | 13.1    |
| Window Replacement   | Q                        | 5                                     | 7       | 403<br>Q                 | 332                  | 510       | 13.3<br>Q                | 16.2                                    |         |
| Plumbing System Upgrade  | Q                        | 10                                    | 11      | Q                        | 517                  | 852       | Q                        | 19.4                                    |         |
| Insulation Upgrade   | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       |         |
| Other Renovation   | N                        | Q                                     | Q       | N                        | Q                    | Q         | N                        | Q                                       | Q       |
| No Renovations Since 1980  | 22                       | 11                                    | 22      | 1,752                    | 945                  | 2,106     | 12.6                     | 11.5                                    |         |
| Building Newer than 1980   | 75                       | 28                                    | 53      | 4,540                    | 1,593                | 3,545     | 16.4                     | 17.3                                    |         |
| Energy Sources (more than  |                          |                                       |         |                          |                      |           |                          |   |         |
| one may apply)   |                          |                                       |         |                          |                      |           |                          |   |         |
| Electricity  | 114                      | 56                                    | 96      | 7,449                    | 3,633                | 7,397     | 15.3                     | 15.4                                    | 13.0    |
| Natural Gas  | 82                       | 44                                    | 64      | 4,698                    | 2,797                | 5,016     | 17.5                     | 15.6                                    | 12.7    |
| Fuel Oil   | 26                       | Q                                     | 27      | 1,141                    | 626                  | 1,497     | 22.9                     | 26.0                                    | 18.0    |
| District Heat  | Q                        | Q                                     | 6       | Q                        | Q                    | 413       | Q                        | Q                                       | 14.1    |
| District Chilled Water   | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       | Q       |
| Propane  | Q                        | Q                                     | 13      | Q                        | 555                  | 618       | Q                        | 18.8                                    | 21.3    |
| Other  | Q                        | Q                                     | Q       | Q                        | Q                    | Q         | Q                        | Q                                       | Q       |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|   | Co                       | al Electrici<br>nsumption | n       | Building                 | Floorspaces Using Ele | ectricity  | Ene                      | Electricity<br>rgy Intens<br>/square f | -         |
|---|--------------------------|---------------------------|---------|--------------------------|-----------------------|------------|--------------------------|--|-----------|
|   | West<br>South<br>Central | Moun-<br>tain             | Pacific | West<br>South<br>Central | Moun-<br>tain         | Pacific    | West<br>South<br>Central | Moun-<br>tain                          | Pacific   |
| All Buildings*                            | 114                      | 56                        | 96      | 7,449                    | 3,633                 | 7,397      | 15.3                     | 15.4                                   | 13.0      |
| Space-Heating Energy Sources              |                          |                           |         |                          |                       |            |                          |  |           |
| Electricity                               | 70                       | 26                        | 47      | 4,300                    | 1,389                 | 3,526      | 16.2                     | 18.5                                   | 13.5      |
| Electricity Main                          | 52                       | 14                        | 32      | 3,325                    | 789                   | 2,325      | 15.7                     | 17.2                                   | 13.7      |
| Electricity Secondary                     | 18                       | Q                         | 16      | 975                      | 599                   | 1,201      | 18.1                     | 20.2                                   | 13.1      |
| Other Excluding Electricity               | 41                       | 27                        | 41      | 2,624                    | 2,136                 | 3,052      | 15.7                     | 12.7                                   | 13.3      |
| Buildings without Heating                 | Q                        | Q                         | 8       | Q                        | Q                     | 820        | Q                        | Q                                      | 10.0      |
| Primary Space-Heating<br>Energy Source    |                          |                           |         |                          |                       |            |                          |  |           |
| Electricity                               | 52                       | 14                        | 32      | 3,325                    | 789                   | 2,325      | 15.7                     | 17.2                                   | 13.7      |
| Natural Gas                               | 56                       | 34                        | 45      | 3,303                    | 2,277                 | 3,633      | 17.0                     | 14.8                                   | 12.5      |
| Fuel Oil                                  | N                        | Q                         | Q       | N                        | Q                     | Q          | N                        | Q                                      | Q         |
| District Heat                             | Q                        | Q                         | 5       | Q                        | Q                     | 362        | Q                        | Q                                      | 13.3      |
| Propane                                   | Q                        | Q                         | Q       | Q                        | Q                     | Q          | Q                        | Q                                      | Q         |
| Other                                     | N                        | Q                         | Q       | N                        | Q                     | Q          | N                        | Q                                      | Q         |
| Cooling Energy Sources                    |                          |                           |         |                          |                       |            |                          |  |           |
| Electricity                               | 110                      | 52                        | 88      | 6,834                    | 3,186                 | 6,328      | 16.1                     | 16.4                                   | 13.9      |
| Other Excluding Electricity               | Q                        | Q                         | Q       | Q                        | Q                     | Q          | Q                        | Q                                      | Q         |
| Buildings without Cooling                 | Q                        | 2                         | 4       | Q                        | 366                   | 715        | Q                        | 5.6                                    | 5.9       |
| Water-Heating Energy Sources Electricity  | 48                       | 20                        | 39      | 3,267                    | 1,236                 | 2,771      | 14.8                     | 16.3                                   | 14.0      |
| Other Excluding Electricity               | 60                       | 35                        | 52      | 3,074                    | 2,187                 | 3,655      | 19.4                     | 15.9                                   | 14.3      |
| Bldgs without Water Heating               | 6                        | Q                         | 5       | 1,108                    | 2,107<br>Q            | 972        | 5.7                      | 13.9<br>Q                              | 5.4       |
| Cooking Energy Sources                    |                          |                           |         |                          |                       |            |                          |  |           |
| Electricity                               | 38                       | 18                        | 20      | 1,623                    | 791                   | 1,192      | 23.4                     | 23.1                                   | 16.4      |
| Other Excluding Electricity               | 23                       | 6                         | 20      | 1,005                    | 418                   | 1,089      | 22.7                     | 14.1                                   | 18.3      |
| Buildings without Cooking                 | 53                       | 32                        |         | 4,821                    | 2,424                 | 5,117      | 11.1                     | 13.1                                   | 11.1      |
| Energy End Uses (more than one may apply) |                          |                           |         |                          |                       |            |                          |  |           |
| Buildings with Space Heating              | 111                      | 53                        | 88      | 6,924                    | 3,525                 | 6,577      | 16.0                     | 15.0                                   | 13.4      |
| Buildings with Cooling                    | 113                      | 54                        | 92      | 7,094                    | 3,267                 | 6,683      | 16.0                     | 16.5                                   | 13.8      |
| Buildings with Water Heating              | 108                      | 55                        | 91      | 6,341                    | 3,422                 | 6,426      | 17.0                     | 16.0                                   | 14.2      |
| Buildings with Cooking                    | 61                       | 24                        | 39      | 2,628                    | 1,209                 | 2,280      | 23.1                     | 20.0                                   | 17.3      |
| Buildings with Manufacturing              | Q                        | Q                         | Q       | 2,020<br>Q               | 1,203<br>Q            | 2,200<br>Q | Q                        | 20.0<br>Q                              | 17.3<br>Q |
| Buildings with Electricity                | Q                        | Q                         | Q       | Q                        | Q                     | Q          | Q                        | Q                                      | Q         |
| Generation                                | 30                       | 18                        | 26      | 1,297                    | 738                   | 1,504      | 23.4                     | 24.9                                   | 17.1      |
| Percent of Floorspace Heated              |                          |                           |         |                          |                       |            |                          |  |           |
| Not Heated                                | Q                        | Q                         | 8       | Q                        | Q                     | 820        | Q                        | Q                                      | 10.0      |
| 1 to 50                                   | 7                        | Q                         | 12      | 1,379                    | Q                     | 1,257      | 5.4                      | Q                                      | 9.3       |
| 51 to 99                                  | 14                       | 11                        | 18      | 718                      | 569                   | 1,381      | 20.2                     | 19.7                                   | 12.7      |
| 100                                       | 89                       | 40                        | 59      | 4,828                    | 2,721                 | 3,940      | 18.5                     | 14.7                                   | 14.9      |
| Percent of Floorspace Cooled              |                          |                           |         |                          |                       |            |                          |  |           |
| Not Cooled                                | Q                        | 2                         | 4       | Q                        | 366                   | 715        | Q                        | 5.6                                    | 5.9       |
| 1 to 50                                   | 10                       | 10                        | 15      | 2,025                    | 918                   | 1,738      | 5.0                      | 11.2                                   | 8.7       |
| 51 to 99                                  | 19                       | 16                        |         | 820                      | 886                   | 1,559      | 23.2                     | 17.7                                   | 14.5      |
|   |                          |                           |         |                          |                       | ,          |                          |  |           |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|   | Co                       | al Electrici<br>nsumption | n          | Building                 | Floorspaces Using Electric Square | ectricity      | Ene                      | Electricity<br>rgy Intens<br>/square f | -            |
|---|--------------------------|---------------------------|------------|--------------------------|-----------------------------------|----------------|--------------------------|--|--------------|
|   | West<br>South<br>Central | Moun-<br>tain             | Pacific    | West<br>South<br>Central | Moun-<br>tain                     | Pacific        | West<br>South<br>Central | Moun-<br>tain                          | Pacific      |
| All Buildings*  | 114                      | 56                        | 96         | 7,449                    | 3,633                             | 7,397          | 15.3                     | 15.4                                   | 13.0         |
| Percent Lit When Open   | _                        |                           | _          |                          | _                                 | _              | _                        | _                                      | _            |
| Zero  | Q                        | Q                         | Q          | Q                        | Q                                 | Q              | Q                        | Q                                      | Q            |
| 1 to 50   | 11                       | 3                         | 9          | 1,371                    | 382                               | 1,130          | 8.1                      | 6.7                                    | 8.0          |
| 51 to 99  | 30                       | 17                        | 29         | 1,928                    | 1,095                             | 2,161          | 15.5                     | 15.2                                   | 13.3         |
| 100   | 73                       | 37                        | 58         | 3,933                    | 2,136                             | 3,947          | 18.5                     | 17.1                                   | 14.7         |
| Building Never Open/  |                          |                           |            |                          |                                   |                |                          |  |              |
| Electricity Not Used  | Q                        | Q                         | Q          | Q                        | Q                                 | Q              | Q                        | Q                                      | Q            |
| Percent Lit When Closed   |                          |                           |            |                          |                                   |                |                          |  |              |
| Zero  | 18                       | 10                        | 19         | 2,239                    | 1,118                             | 1,994          | 7.9                      | 8.9                                    | 9.6          |
| 1 to 50   | 60                       | 21                        | 47         | 3,658                    | 1,526                             | 3,823          | 16.3                     | 13.5                                   | 12.4         |
| 51 to 100   | 8                        | Q                         | Q          | 374                      | Q                                 | Q              | 22.0                     | Q                                      | Q            |
| Building Never Closed/  |                          |                           |            |                          |                                   |                |                          |  |              |
| Electricity Not Used  | 29                       | 24                        | 28         | 1,177                    | 931                               | 1,401          | 24.4                     | 26.0                                   | 19.8         |
| Heating Equipment (more   |                          |                           |            |                          |                                   |                |                          |  |              |
| than one may apply)   |                          |                           |            |                          |                                   |                |                          |  |              |
| Heat Pumps  | 12                       | Q                         | 17         | 722                      | Q                                 | 1,268          | 16.2                     | Q                                      | 13.4         |
| Packaged Heat Pumps   | Q                        | Q                         | 10         | Q                        | Q                                 | 741            | Q                        | Q                                      | 13.6         |
| Split-System Heat Pumps   | Q                        | Q                         | 5          | Q                        | Q                                 | 305            | Q                        | Q                                      | 16.9         |
| Individual Room Heat Pumps  | Q                        | Q                         | Q          | Q                        | Q                                 | Q              | Q                        | Q                                      | Q            |
| Furnaces  | 28                       | 14                        | 22         | 2,048                    | 1,302                             | 1,773          | 13.6                     | 11.0                                   | 12.6         |
| Individual Space Heaters  | 11                       | 9                         | 15         | 893                      | 692                               | 1,773          | 12.1                     | 13.1                                   | 11.3         |
|   |                          | Q                         | 5          |                          |                                   |                |                          |  |              |
| District Heat   | Q                        |                           |            | Q<br>4.470               | Q<br>4.050                        | 362            | Q                        | Q<br>47.4                              | 13.3         |
| Boilers   | 30                       | 23                        | 33         | 1,472                    | 1,359                             | 2,302          | 20.3                     | 17.1                                   | 14.2         |
| Packaged Heating Units Other  | 52<br>Q                  | 12<br>Q                   | 35<br>Q    | 2,998<br>Q               | 748<br>Q                          | 2,564<br>Q     | 17.5<br>Q                | 16.6<br>Q                              | 13.7<br>Q    |
| Cooling Equipment (more than one may apply) Residential-Type Central Air Conditioners | 14                       | 4                         | 11         | 1,523                    | 341                               | 841            | 8.9                      | 11.7                                   | 13.1         |
| Heat Pumps  | 10                       | Q                         | 18         | 595                      | 430                               | 1,355          | 17.4                     | 30.1                                   | 13.1         |
| Packaged Heat Pumps   | Q                        | Q                         | 10         | 293<br>Q                 | 430<br>Q                          | 742            | 17.4<br>Q                | 30.1<br>Q                              | 13.4         |
| ě i   |                          |                           |            |                          |                                   |                |                          |  |              |
| Split-System Heat Pumps   | Q                        | Q                         | 6          | Q                        | Q                                 | 322            | Q                        | Q                                      | 17.2         |
| Individual Room Heat Pumps  | Q                        | Q                         | 6          | Q                        | Q<br>700                          | 546            | Q                        | Q                                      | 11.3         |
| Individual Air Conditioners   | 9                        | 11                        | 12         | 806                      | 730                               | 1,019          | 11.7                     | 15.7                                   | 11.5         |
| District Chilled Water  | Q                        | Q                         | Q          | Q                        | Q                                 | Q              | Q                        | Q                                      | Q            |
| Central Chillers  | 40                       | 15                        | 25         | 1,771                    | 621                               | 1,466          | 22.7                     | 24.8                                   | 16.9         |
| Packaged Air Conditioning   | E 4                      | 21                        | <b>5</b> 0 | 2 225                    | 1 655                             | 2 026          | 16.0                     | 10.7                                   | 12.5         |
| Units   | 54                       | 31                        | 52         | 3,325                    | 1,655                             | 3,826          | 16.2                     | 18.7                                   | 13.5         |
| Swamp Coolers Other   | Q<br>Q                   | 11<br>Q                   | 8<br>Q     | Q<br>Q                   | 874<br>Q                          | 468<br>Q       | Q<br>Q                   | 12.3<br>Q                              | 16.6<br>Q    |
| Main Equipment Replaced Since 1990 (more than one may apply) Heating                  | 23                       | 21<br>24                  | 17<br>23   | 1,670<br>2,245           | 1,133<br>1,356                    | 1,455<br>2,018 | 13.5<br>14.6             | 18.9<br>18.0                           | 11.6<br>11.5 |
| -   | 30                       |                           | _0         | _,0                      | ,,550                             | _,0.0          |                          |  | 0            |
| Water Heating Equipment Centralized System  | 72                       | 25                        | 55         | 3,998                    | 1,928                             | 3,712          | 17.9                     | 12.8                                   | 14.9         |
|   | 21                       | 25<br>9                   | 15         |                          | -                                 |                | 17.9                     |  | 14.9         |
| Distributed System  | 21                       | 9                         | 15         | 1,664                    | 566                               | 1,415          | 12.8                     | 15.4                                   | 10.7         |
| Combination of Centralized  | 4-                       | 0.4                       | 04         | 070                      | 000                               | 4 000          | 00.4                     | 00.4                                   | 45.0         |
| and Distributed System  | 15                       | 21                        | 21         | 679                      | 928                               | 1,299          | 22.1                     | 23.1                                   | 15.9         |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|  |                          | •                         |          |                          |                                | J              |                          |   |              |
|--|--------------------------|---------------------------|----------|--------------------------|--------------------------------|----------------|--------------------------|---|--------------|
|  | Co                       | al Electrici<br>nsumption | n        | Building                 | Floorspaces Using Eleon square | ectricity      | Ene                      | Electricity<br>rgy Intens<br>/square fo | -            |
|  | West<br>South<br>Central | Moun-<br>tain             | Pacific  | West<br>South<br>Central | Moun-<br>tain                  | Pacific        | West<br>South<br>Central | Moun-<br>tain                           | Pacific      |
| All Buildings*                         | 114                      | 56                        | 96       | 7,449                    | 3,633                          | 7,397          | 15.3                     | 15.4                                    | 13.0         |
| Lighting Equipment Types               |                          |                           |          |                          |                                |                |                          |   |              |
| (more than one may apply)              |                          |                           |          |                          |                                |                |                          |   |              |
| Incandescent                           | 78                       | 41                        | 57       | 4,033                    | 2,443                          | 3,965          | 19.2                     | 16.6                                    | 14.5         |
| Standard Fluorescent                   | 111                      | 55                        | 93       | 6,955                    | 3,534                          | 7,066          | 16.0                     | 15.4                                    | 13.2         |
| Compact Fluorescent                    | 59                       | 32                        | 59       | 2,764                    | 1,748                          | 4,024          | 21.5                     | 18.2                                    | 14.6         |
| High Intensity Discharge               | 27                       | 15                        | 35       | 1,470                    | 977                            | 2,438          | 18.5                     | 15.8                                    | 14.2         |
| Halogen                                | 35                       | 20                        | 33       | 2,099                    | 993                            | 2,275          | 16.9                     | 20.1                                    | 14.3         |
| Other                                  | Q                        | Q                         | Q        | Q                        | Q                              | Q              | Q                        | Q                                       | Q            |
| Refrigeration Equipment                |                          |                           |          |                          |                                |                |                          |   |              |
| (more than one may apply) <sup>a</sup> |                          |                           |          |                          |                                |                |                          |   |              |
| Any Refrigeration                      | 103                      | 51                        | 84       | 6,018                    | 3,028                          | 5,919          | 17.1                     | 16.7                                    | 14.3         |
| Commercial Refrigeration               | 73                       | 32                        | 47       | 3,067                    | 1,398                          | 2,674          | 24.0                     | 23.2                                    | 17.6         |
| Walk-In Units                          | 60                       | 26                        | 40       | 2,284                    | 1,073                          | 2,059          | 26.4                     | 24.3                                    | 19.2         |
| Cases or Cabinets                      | 61                       | 27                        | 40       | 2,425                    | 1,093                          | 2,185          | 25.3                     | 24.8                                    | 18.5         |
| Residential-Type Units                 | 66                       | 32                        | 55       | 4,285                    | 2,232                          | 4,410          | 15.4                     | 14.3                                    | 12.5         |
| Vending Machines                       | 76                       | 39                        | 56       | 4,412                    | 2,058                          | 3,783          | 17.3                     | 18.9                                    | 14.7         |
| No Refrigeration                       | 12                       | 5                         | 12       | 1,431                    | 605                            | 1,478          | 8.1                      | 8.9                                     | 8.0          |
| Office Equipment (more                 |                          |                           |          |                          |                                |                |                          |   |              |
| than one may apply)                    | 407                      | 50                        | 00       | 0.507                    | 0.000                          | 0.000          | 40.5                     | 40.4                                    | 40.7         |
| Computers                              | 107                      | 53                        | 92       | 6,507                    | 3,282                          | 6,698          | 16.5                     | 16.1                                    | 13.7         |
| With Flat Screen Monitors              | 62                       | 27                        | 53       | 3,053                    | 1,365                          | 3,575          | 20.4                     | 19.8                                    | 14.9         |
| Dedicated Servers                      | 74                       | 36                        | 65       | 4,204                    | 1,959                          | 4,335          | 17.5                     | 18.2                                    | 14.9         |
| Laser Printers                         | 53                       | 33                        | 53       | 3,694                    | 2,165                          | 3,723          | 14.3                     | 15.2                                    | 14.3         |
| Inkjet Printers                        | 72                       | 33                        | 57<br>95 | 3,840                    | 1,901                          | 4,108          | 18.8                     | 17.2<br>17.0                            | 13.8         |
| FAX MachinesPhotocopiers               | 103<br>84                | 51<br>46                  | 85<br>75 | 6,258<br>5,281           | 2,983<br>2,753                 | 6,140<br>5,439 | 16.4<br>16.0             | 16.9                                    | 13.9<br>13.7 |
| Number of Computers                    |                          |                           |          |                          |                                |                |                          |   |              |
| None                                   | 7                        | 3                         | 4        | 942                      | 351                            | 699            | 7.7                      | 9.0                                     | 6.3          |
| 1 to 4                                 | 22                       | 8                         | 14       | 1,488                    | 707                            | 1,444          | 15.1                     | 11.5                                    | 9.9          |
| 5 to 9                                 | 9                        | 7                         | 10       | 864                      | 450                            | 649            | 10.4                     | 16.6                                    | 14.8         |
| 10 to 19                               | 11                       | 5                         | 11       | 910                      | 371                            | 825            | 11.6                     | 14.0                                    | 13.0         |
| 20 to 49                               | 14                       | 8                         | 17       | 780                      | 548                            | 1,006          | 18.3                     | 14.6                                    | 17.4         |
| 50 to 99                               | 9                        | Q                         | 10       | 490                      | Q                              | 784            | 17.6                     | Q                                       | 12.9         |
| 100 to 249                             | 13                       | 8                         | 12       | 660                      | 448                            | 869            | 19.2                     | 17.5                                    | 13.4         |
| 250 or More                            | 30                       | Q                         | 18       | 1,315                    | 473                            | 1,122          | 22.4                     | 26.3                                    | 16.1         |
| Number of Dedicated Servers            |                          |                           |          |                          |                                |                |                          |   |              |
| None                                   | 41                       | 20                        | 32       | 3,245                    | 1,674                          | 3,062          | 12.5                     | 12.0                                    | 10.3         |
| 1 to 4                                 | 40                       | 23                        | 36       | 2,782                    | 1,428                          | 2,665          | 14.2                     | 15.8                                    | 13.6         |
| 5 to 9                                 | Q                        | Q                         | 11       | 2,7 32<br>Q              | 1, 1 <u>2</u> 3                | 601            | Q                        | Q                                       | 18.3         |
| 10 to 19                               | Q                        | Q                         | 6        | Q                        | Q                              | 414            | Q                        | Q                                       | 15.4         |
| 20 to 49                               | Q                        | Q                         | Q        | Q                        | Q                              | Q              | Q                        | Q                                       | Q            |
| 50 or More                             | Q                        | Q                         | Q        | Q                        | Q                              | Q              | Q                        | Q                                       | Q            |
| Number of Photocopiers                 |                          |                           |          |                          |                                |                |                          |   |              |
| None                                   | 30                       | 10                        | 22       | 2,169                    | 880                            | 1,958          | 13.8                     | 10.8                                    | 11.1         |
| One                                    | 21                       | 12                        | 21       | 1,833                    | 995                            | 1,757          | 11.5                     | 11.9                                    | 11.8         |
| 2 to 4                                 | 25                       | 13                        | 22       | 1,799                    | 887                            | 1,706          | 13.8                     | 14.9                                    | 12.7         |
| 5 to 9                                 | Q                        | Q                         | 12       | ,,, 30<br>Q              | Q                              | 634            | Q                        | Q                                       | 18.6         |
| 10 or More                             | 29                       | 19                        | 20       | 1,243                    | 690                            | 1,341          | 23.0                     | 27.4                                    | 15.2         |
|  |                          |                           |          |                          |                                | ,              |                          |   |              |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|  | Co                       | al Electrici<br>nsumption<br>illion kWh | n       | Building                 | Floorspac<br>s Using Ele<br>on square | ectricity | Ene                      | Electricity<br>rgy Intens<br>/square f | -       |
|--|--------------------------|---|---------|--------------------------|---------------------------------------|-----------|--------------------------|--|---------|
|  | West<br>South<br>Central | Moun-<br>tain                           | Pacific | West<br>South<br>Central | Moun-<br>tain                         | Pacific   | West<br>South<br>Central | Moun-<br>tain                          | Pacific |
| All Buildings*   | 114                      | 56                                      | 96      | 7,449                    | 3,633                                 | 7,397     | 15.3                     | 15.4                                   | 13.0    |
| Energy-Related Space Functions   |                          |   |         |                          |                                       |           |                          |  |         |
| (more than one may apply)  |                          |   |         |                          |                                       |           |                          |  |         |
| Commercial Food Preparation  | 61                       | 24                                      | 39      | 2,628                    | 1,209                                 | 2,269     | 23.1                     | 20.0                                   | 17.3    |
| Activities with Large  |                          |   |         |                          |                                       |           |                          |  |         |
| Amounts of Hot Water   | 36                       | 26                                      | 35      | 1,776                    | 1,384                                 | 2,048     | 20.5                     | 19.0                                   | 17.1    |
| Separate Computer Area   | 58                       | 30                                      | 49      | 3,132                    | 1,607                                 | 3,462     | 18.4                     | 18.6                                   | 14.3    |
| <b>HVAC Conservation Features</b>  |                          |   |         |                          |                                       |           |                          |  |         |
| (more than one may apply)  |                          |   |         |                          |                                       |           |                          |  |         |
| Variable Air-Volume System   | 54                       | 25                                      | 35      | 2,743                    | 1,236                                 | 2,232     | 19.7                     | 20.0                                   | 15.7    |
| Economizer Cycle   | 45                       | 29                                      | 44      | 1,988                    | 1,383                                 | 3,069     | 22.6                     | 21.1                                   | 14.2    |
| HVAC Maintenance   | 102                      | 50                                      | 88      | 5,836                    | 3,065                                 | 6,282     | 17.5                     | 16.2                                   | 14.0    |
| Energy Management and  |                          |   |         |                          |                                       |           |                          |  |         |
| Control System (EMCS)  | 38                       | 18                                      | 31      | 1,834                    | 857                                   | 2,170     | 21.0                     | 21.4                                   | 14.5    |
| Window and Interior Lighting   |                          |   |         |                          |                                       |           |                          |  |         |
| Features (more than one  |                          |   |         |                          |                                       |           |                          |  |         |
| may apply)   |                          |   |         |                          |                                       |           |                          |  |         |
| Multipaned Windows   | 65                       | 42                                      | 43      | 3,416                    | 2,649                                 | 2,880     | 19.2                     | 15.8                                   | 15.0    |
| Tinted Window Glass  | 70                       | 33                                      | 52      | 4,170                    | 1,617                                 | 3,999     | 16.7                     | 20.2                                   | 13.1    |
| Reflective Window Glass  | 26                       | 7                                       | 16      | 1,098                    | 489                                   | 1,206     | 23.8                     | 13.7                                   | 13.2    |
| External Overhangs   |                          |   |         |                          |                                       |           |                          |  |         |
| or Awnings   | 37                       | 24                                      | 31      | 1,921                    | 1,521                                 | 2,025     | 19.2                     | 15.5                                   | 15.4    |
| Skylights or Atriums   | 29                       | 19                                      | 19      | 1,656                    | 1,001                                 | 1,452     | 17.4                     | 18.5                                   | 13.3    |
| Daylighting Sensors  | Q                        | Q                                       | 15      | Q                        | Q                                     | 674       | Q                        | Q                                      | 22.6    |
| Specular Reflectors  | 50                       | 28                                      | 45      | 2,533                    | 1,307                                 | 3,396     | 19.7                     | 21.2                                   | 13.2    |
| Electronic Ballasts  | 93                       | 48                                      | 81      | 5,446                    | 2,905                                 | 5,621     | 17.1                     | 16.6                                   | 14.5    |
| Energy Management and  |                          |   |         |                          |                                       |           |                          |  |         |
| Control System (EMCS)  |                          |   |         |                          |                                       |           |                          |  |         |
| For Lighting   | 14                       | Q                                       | 16      | 629                      | Q                                     | 923       | 22.9                     | Q                                      | 17.2    |
| Equipment Usage Reduced<br>When Building Not In Full Use<br>(more than one may apply) <sup>a</sup> |                          |   |         |                          |                                       |           |                          |  |         |
| Heating  | 72                       | 36                                      | 70      | 4,688                    | 2,456                                 | 5,183     | 15.4                     | 14.8                                   | 13.4    |
| Cooling  | 80                       | 40                                      | 70      | 5,241                    | 2,430                                 | 5,380     | 15.4                     | 16.1                                   | 13.4    |
| Lighting   | 80                       | 31                                      | 66      | 5,715                    | 2,449                                 | 5,674     | 14.0                     | 11.9                                   | 11.7    |
| Office Equipment   | 23                       | 12                                      | 24      | 2,255                    | 1,030                                 | 2,260     | 10.2                     | 11.7                                   | 10.7    |
| Annual Consumption (kilowatthours)   |                          |   |         |                          |                                       |           |                          |  |         |
| 10,000 or Less   | Q                        | Q                                       | 1       | Q                        | Q                                     | 292       | Q                        | Q                                      | 1.8     |
| 10,001 to 50,000   | 6                        | 3                                       | 6       | 1,156                    | 564                                   | 1,201     | 5.0                      | 5.4                                    | 4.9     |
| 50,001 to 100,000  | 6                        | 3                                       |         | 788                      | 299                                   | 701       | 7.4                      | 9.4                                    | 9.9     |
| 100,001 to 500,000   | 27                       | 16                                      | 25      | 1,788                    | 1,146                                 | 1,858     | 15.3                     | 14.2                                   | 13.4    |
| 500,001 to 1,000,000   | 12                       | Q                                       | 10      | 923                      | ,, Q                                  | 657       | 12.9                     | Q                                      | 15.2    |
| 1,000,001 to 5,000,000   | 35                       | 12                                      | 32      | 1,443                    | 665                                   | 1,770     | 24.3                     | 18.1                                   | 17.9    |
| Over 5,000,000   | 28                       | Q                                       | 16      | 1,123                    | Q                                     | 918       | 24.7                     | 30.4                                   | 17.9    |

Table C19. Electricity Consumption and Conditional Energy Intensity by Census Division for Non-Mall Buildings, 2003: Part 3

|   | Co                       | al Electrici<br>nsumption<br>Ilion kWh | n       | Building                 | Floorspac<br>s Using El<br>on square | ectricity | Ene                      | Electricity<br>rgy Intens<br>n/square f | sity      |
|---|--------------------------|--|---------|--------------------------|--------------------------------------|-----------|--------------------------|---|-----------|
|   | West<br>South<br>Central | Moun-<br>tain                          | Pacific | West<br>South<br>Central | Moun-<br>tain                        | Pacific   | West<br>South<br>Central | Moun-<br>tain                           | Pacific   |
| All Buildings*  | 114                      | 56                                     | 96      | 7,449                    | 3,633                                | 7,397     | 15.3                     | 15.4                                    | 13.0      |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 89 5<br>23 0             |  | 88<br>Q | 5,901<br>1,335           | , ,                                  |           | 15.1<br>16.9             | 15.3<br>Q                               | 12.7<br>Q |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

| Tron-Man Bananigs, 20       |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
|-----------------------------|-----------|-----------|-------------------|-----------|-----------|------------|----------------|---------------------------------|---------------------|-------------|--|--------|-----------|------|-----------|
|                             |           | Co        | I Electi<br>nsump | tion      |           | Ві         | uildings       | Floorspa<br>Using E<br>n square | lectricit           | у           | Electricity<br>Energy Intensity<br>(kWh/square foot) |        |           |      |           |
|                             | Zone<br>1 | Zone<br>2 | Zone<br>3         | Zone<br>4 | Zone<br>5 | Zone<br>1  | Zone<br>2      | Zone<br>3                       | Zone<br>4           | Zone<br>5   | Zone<br>1  | Zone 2 | Zone<br>3 |      | Zone<br>5 |
| All Buildings*              | 120       | 224       | 166               | 219       |           |            | 17,076         |                                 |                     |             | 11.5   | 13.1   | 14.6      |      | 17.3      |
| Building Floorspace         |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
| (Square Feet)               |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
| 1,001 to 5,000              | 19        | 26        | 14                | 31        | 23        | 1,204      | 1,595          | 918                             | 1,759               | 871         | 15.7   | 16.5   | 14.9      | 17.8 | 26.3      |
| 5,001 to 10,000             | 11        | 17        | 12                | 24        | 13        | 1,124      | 1,547          | 950                             | 1,738               | 839         | 9.9  | 10.9   | 12.8      | 13.7 | 15.3      |
| 10,001 to 25,000            | 18        | 29        | 23                | 25        | 24        | 2,183      | 3,140          | 1,402                           | ,                   | 1,823       | 8.3  | 9.2    | 16.1      | 9.0  | 13.3      |
| 25,001 to 50,000            | 18        | 24        | 15                | 25        | 22        | 1,451      | 2,199          | 1,272                           |                     | 1,435       | 12.2   | 10.8   | 11.6      | 12.3 | 15.1      |
| 50,001 to 100,000           | 15        | 32        | 24                | 28        | 19        | 1,295      | 2,199          | 1,823                           |                     | 1,327       | 11.8   | 12.6   | 13.2      | 13.8 | 14.3      |
| 100,001 to 200,000          | 15        | 40        | 24                | 41        | 22        | 1,295      | 2,641          | 1,752                           |                     | 1,160       | 12.4   | 15.3   | 13.5      | 17.9 | 18.8      |
| 200,001 to 500,000          | 14        | 27        | 21                | 25        | 19        | 1,115      | -              | 1,619                           | 1,432               | 942         | 12.4   | 13.7   | 13.1      | 17.8 | 20.0      |
| Over 500,000                | Q         | 29        | 34                | 20        | 20        | 1,115<br>Q | 1,943<br>1,463 | 1,639                           | 1,432               | 893         | 12.0   | 19.8   | 20.9      | 17.8 | 22.1      |
| Principal Building Activity |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
| Education                   | 13        | 23        | 16                | 31        | 27        | 1,537      | 2,800          | 1,401                           | 2,435               | 1,698       | 8.2  | 8.0    | 11.1      | 12.7 | 16.0      |
| Food Sales                  | 12        | Q         | Q                 | Q         | Q         | 271        | Q              | Q                               | Q                   | Q           | 43.0   | Q      | Q         | Q    | Q         |
| Food Service                | 7         | 12        | Q                 | 20        | 17        | 227        | 400            | Q                               | 440                 | 366         | 29.3   | 30.6   | Q         | 45.7 | 46.3      |
| Health Care                 | 10        | 18        | 11                | 20        | 14        | 475        | 784            | 564                             | 844                 | 496         | 20.6   | 23.3   | 19.2      | 23.7 | 27.6      |
| Inpatient                   | 6         | 12        | 8                 | 17        | 9         | 262        | 450            | 323                             | 592                 | 278         | 23.7   | 27.7   | 23.3      | 28.2 | 34.0      |
| Outpatient                  | 4         | 6         | 3                 | 3         | Q         | 213        | 334            | 240                             | 252                 | Q           | 16.7   | 17.4   | 13.7      | 13.4 | Q         |
| Lodging                     | 8         | 21        | 12                | 18        | 10        | 768        | 1,314          | 1,132                           | 1,275               | 608         | 10.1   | 15.9   | Q         | 14.0 | 16.7      |
| Retail (Other Than Mall)    | 10        | 10        | 10                | 16        | 15        | 710        | 865            | 695                             | 1,454               | 592         | 14.2   | 11.0   | 14.8      | 11.3 | 25.9      |
| Office                      | 22        | 58        | 53                | 39        | 38        | 1,593      | 3,165          | 3,125                           | 2,341               | 1,985       | 13.9   | 18.2   | 17.1      | 16.8 | 19.2      |
| Public Assembly             | 8         | 8         | 6                 | 18        | 9         | 876        | 818            | 806                             | 906                 | 529         | 9.1  | 9.5    | Q         | 19.7 | 17.0      |
| Public Order and Safety     | Q         | Q         | Q                 | Q         | Q         | Q          | Q              | Q                               | Q                   | Q<br>Q      | Q  | Q      | Q         | Q    | 17.0<br>Q |
| Religious Worship           | 1         | 5         | 2                 | 5         | 5         | 408        | 1,320          | 499                             | 1,039               | 488         | 3.0  | 3.5    | 4.9       | 4.8  | 10.1      |
| Service                     | 10        | 11        | Q                 | 7         | Q         | 911        | 1,179          | 639                             | 946                 | Q           | 10.6   | 9.6    | Q         |      | Q         |
| Warehouse and Storage       | 11        | 24        | 11                | 16        |           | 1,564      | 2,539          | 1,426                           | 2,186               |             | 7.0  | 9.6    | 7.9       | 7.5  | 5.0       |
| Other                       | Q         | 11        | Q                 | Q         | Q         | 1,004<br>Q | 467            | 1,420<br>Q                      | 2,100<br>Q          | 1,7 10<br>Q | Q  | 24.6   | Q         | Q    | Q         |
| Vacant                      | Q         | Q         | Q                 | Q         | Q         | Q          | Q              | Q                               | Q                   | Q           | Q  | Q Q    | Q         | Q    | Q         |
| Year Constructed            |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
| Before 1920                 | 6         | 8         | Q                 | 2         | Q         | 1,212      | 1,387          | 731                             | 277                 | Q           | 5.2  | 5.6    | Q         | 8.4  | Q         |
| 1920 to 1945                | 8         | 23        | 16                | 9         | Q         | 1,070      | 2,076          | 1,924                           | 1,169               | Q           | 7.8  | 11.0   | 8.4       | 7.5  | Q         |
| 1946 to 1959                | 9         | 22        | 14                | 17        | 6         | 1,053      | 2,435          | 1,369                           | 1,462               | 519         | 8.5  | 9.0    | 10.0      | 11.8 | 11.2      |
| 1960 to 1969                | 16        | 25        | 20                | 19        | 16        | 1,405      | 2.302          | 1,504                           |                     | 1,001       | 11.1   | 10.8   | 13.1      | 10.5 | 16.4      |
| 1970 to 1979                | 33        | 44        | 34                | 34        | 24        | 2,215      | 2,967          | 1,726                           | ,                   | 1,233       | 14.8   | 14.7   | 19.4      |      | 19.1      |
| 1980 to 1989                | 13        | 47        | 31                | 54        | 38        | 1,003      | 2,339          | 1,664                           | -                   | 2,097       | 12.8   | 20.0   | 18.8      | 17.9 | 18.3      |
| 1990 to 1999                | 26        | 39        | 27                | 63        | 47        | 1,750      | 2,457          | 1,560                           |                     | 2,661       | 15.1   | 15.8   | 17.2      | 17.3 | 17.6      |
| 2000 to 2003                | 8         | 17        | 17                | 20        | 23        | 684        | 1,114          | 898                             |                     | 1,298       | 12.2   | 15.4   | 19.1      | 15.1 | 18.1      |
| Census Region and Division  |           |           |                   |           |           |            |                |                                 |                     |             |  |        |           |      |           |
| Northeast                   | 23        | 59        | 65                | N         | N         | 2,365      | 5,366          | 5,077                           | N                   | N           | 9.8  | 11.0   | 12.8      | N    | N         |
| New England                 | 7         | 25        | N                 | N         | N         | Q          | 1,993          | N                               | N                   | N           | 7.1  | 12.5   | N         | N    | N         |
| Middle Atlantic             | Q         | 34        | 65                | N         | N         | 1,417      | 3,373          | 5,077                           | N                   | N           | 11.6   | 10.1   | 12.8      | N    | N         |
| Midwest                     | 62        | 134       | 19                | N         | N         | 5,488      | 9,655          | 1,558                           | N                   | N           | 11.4   | 13.9   | 12.4      |      | N         |
| East North Central          | 32        | 122       | N                 | N         | N         | 3,008      | 8,365          | N                               | N                   | N           | 10.6   | 14.5   | N         | N    | N         |
| West North Central          | 31        | Q         | 19                | N         | N         | 2,479      | Q              | 1,558                           | N                   | N           | 12.4   | 9.6    | 12.4      | N    | N         |
| South                       | N.        | N         | 72                | 156       | 146       | 2, o       | N              | 4,047                           |                     | 8,734       | N N  | N.O    | 17.8      | 15.7 | 16.7      |
| South Atlantic              | N         | N         | 48                | 107       | 56        | N          | N              | 2,613                           |                     | 3,190       | N  | N      | 18.2      |      | 17.6      |
| East South Central          | N         | N         | Q                 | Q         | Q         | N          | N              | 2,010<br>Q                      | 0, <u>2</u> 00<br>Q | Q, 100      | N  | N      | 19.0      | 12.6 | 19.6      |
| West South Central          | N         | N         | Q                 | 27        | 82        | N          | N              | Q                               | 1,891               |             | N  | N      | Q         | 14.3 | 16.0      |
| West                        | 34        | 31        | Q                 | 63        | 15        | 2,541      | 2,055          | 693                             | 5,187               | 555         | 13.3   |        | 14.0      | 12.1 | 27.1      |
| Mountain                    | 27        | 16        | N                 | N         | 13        | 2,081      | 1,075          | N                               | N                   | 476         | 13.1   | 14.8   | N         | N    | 26.8      |
| Pacific                     | Q         | Q         | Q                 | 63        | Q         | Q          | Q              | 693                             | 5,187               | Q           | 14.7   | 15.1   | 14.0      |      | Q         |
|                             |           |           |                   |           |           |            |                |                                 | -                   |             |  |        |           |      | •         |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

| Non-Mail Buildings, 20                             | 103       |           |                   |           |           |                |                |                                 |                |                | l            |             |                                |              |              |
|--|-----------|-----------|-------------------|-----------|-----------|----------------|----------------|---------------------------------|----------------|----------------|--------------|-------------|--------------------------------|--------------|--------------|
|  |           | Co        | I Electi<br>nsump | tion      |           | В              | uildings       | Floorspa<br>Using E<br>n square | lectricit      | у              |              | Ener        | lectrici<br>gy Inte<br>/square | nsity        |              |
|  | Zone<br>1 | Zone<br>2 | Zone<br>3         | Zone<br>4 | Zone<br>5 | Zone<br>1      | Zone<br>2      | Zone<br>3                       | Zone<br>4      | Zone<br>5      | Zone<br>1    | Zone<br>2   | Zone<br>3                      | Zone<br>4    | Zone<br>5    |
| All Buildings*                                     | 120       | 224       | 166               | 219       | 161       | 10,393         | 17,076         | 11,375                          | 15,172         | 9,290          | 11.5         | 13.1        | 14.6                           | 14.5         | 17.3         |
| Number of Floors                                   |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| One  | 46        | 80        | 46                | 92        | 71        | 3,565          | 6,112          | 3,064                           |                | 4,571          | 12.8         | 13.1        | 14.9                           | 12.1         | 15.5         |
| Two  | 33        | 50        | 36                | 50        | 34        | 3,122          | 4,845          | 2,592                           |                | 2,177          | 10.5         | 10.3        | 13.8                           | 15.3         | 15.5         |
| Three  | 15        | 27        | 14                |           | 7         | 1,645          | 2,568          | 1,223                           | 1,473          | 471            | 9.0          | 10.4        | 11.6                           | 14.4         | 14.7         |
| Four to Nine                                       | 20<br>6   | 44<br>23  | 40                | 43<br>14  | 27<br>22  | 1,731          | 2,505          | 2,744                           |                | 1,103          | 11.8         | 17.5        | 14.6                           | 21.5<br>16.1 | 24.8         |
| Ten or More  | 0         | 23        | 31                | 14        | 22        | 330            | 1,047          | 1,752                           | 850            | 968            | 18.1         | 22.4        | 17.6                           | 10.1         | 22.6         |
| Elevators and Escalators (more than one may apply) |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| Any Elevators                                      | 48        | 107       | 96                | 94        | 71        | 4,029          | 6,378          | 5,728                           | 4.954          | 3,406          | 11.8         | 16.8        | 16.8                           | 19.0         | 20.9         |
| Number of Elevators                                | .5        |           |                   | • •       |           | .,0=0          | =,0.0          | -,. <b>-</b> 0                  | .,             | -,             |              |             |                                |              | _5.5         |
| One  | 18        | 32        | 20                | 19        | 15        | 1,696          | 2,573          | 1,539                           | 1,259          | 1,041          | 10.4         | 12.6        | 13.2                           | 14.9         | 14.1         |
| Two to Five  | 21        | 44        | 33                | 46        | 27        | 1,906          | 2,470          | 2,282                           | 2,263          | 1,199          | 11.2         | 17.7        | 14.6                           | 20.3         | 22.7         |
| Six or More  | 9         | 31        | 42                | 29        | 29        | 427            | 1,336          | 1,908                           | 1,431          | 1,166          | 20.5         | 23.5        | 22.2                           | 20.5         | 25.0         |
| Any Escalators                                     | Q         | Q         | Q                 | Q         | Q         | Q              | Q              | 788                             | Q              | Q              | Q            | Q           | 23.3                           | Q            | Q            |
| Neverland (Manhama (main altifu)                   |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| Number of Workers (main shift)                     | 45        | 0.7       | 40                | 00        | 40        | 0.470          | 4.500          | 4 000                           | 0.554          | 4 044          | 0.0          | 7.0         | 0.4                            | 7.0          | 40.0         |
| Fewer than 5                                       | 15        | 37        | 13                |           | 18        | 2,470          | 4,599          | 1,626                           | 3,554<br>1,627 | 1,811          | 6.2          | 7.9<br>12.7 | 8.1<br>11.2                    | 7.3          | 10.0         |
| 5 to 9   | 11<br>15  | 19<br>21  | 11                | 18<br>21  | 14        | 1,035          | 1,529          | 1,013                           | ,              | 944            | 10.2         |             |                                | 10.8         | 14.6         |
| 10 to 19<br>20 to 49                               | 27        | 31        | 13<br>30          | 37        | 19<br>27  | 1,374<br>2,014 | 2,155<br>2,709 | 1,359<br>2,132                  |                | 1,317<br>1,635 | 11.1<br>13.6 | 9.8<br>11.6 | 9.5<br>14.1                    | 13.0<br>15.1 | 14.3<br>16.7 |
| 50 to 99   | 19        | 31        | 21                | 31        | 16        | 1,673          | 2,709          | 1,316                           | 1,812          |                | 11.5         | 14.2        | 16.1                           | 17.2         | 16.7         |
| 100 to 249   | 15        | 32        | 22                |           | 21        | 996            | 1,561          | 1,434                           | 2,109          | 771            | 14.9         | 20.6        | 15.2                           | 21.6         | 26.7         |
| 250 or More  | 17        | 53        | 56                |           | 46        | 832            | 2,357          | 2,495                           |                | 1,845          |              | 22.3        | 22.5                           | 20.6         | 25.2         |
|  |           |           |                   |           |           |                |                | •                               |                |                |              |             |                                |              |              |
| Weekly Operating Hours                             |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| Fewer than 40                                      | 3         | 7         | 3                 |           | 6         | 877            | 2,116          | 592                             | 1,539          | 776            | 3.2          | 3.1         | 5.5                            | 4.7          | 8.4          |
| 40 to 48   | 12        | 34        | 17                | 30        | 24        | 1,505          | 3,142          | 1,983                           | ,              | 1,926          | 8.0          | 10.7        | 8.4                            |              | 12.6         |
| 49 to 60   | 26        | 48        | 28                |           | 34        | 3,094          | 4,105          | 2,377                           | 3,589          |                | 8.4          | 11.8        | 11.8                           | 10.8         | 13.4         |
| 61 to 84   | 20        | 32        | 29                | 39        | 26        | 1,578          | 2,887          | 1,897                           |                | 1,405          |              | 11.0        | 15.2                           | 15.2         | 18.7         |
| 85 to 167  | 27        | 36        | 29                | 36        | 26        | 1,517          | 1,665          | 1,386                           | -              | 1,040          | 17.7         | 21.6        | 21.0                           | 26.7         | 24.7         |
| Open Continuously                                  | 32        | 67        | 60                | 69        | 44        | 1,822          | 3,162          | 3,140                           | 3,151          | 1,605          | 17.4         | 21.3        | 19.2                           | 22.0         | 27.6         |
| Ownership and Occupancy                            |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| Nongovernment Owned                                | 93        | 163       | 129               | 169       | 120       | 7,846          | 12,091         | 9,079                           | 11,859         | 7,136          | 11.8         | 13.5        | 14.2                           | 14.3         | 16.8         |
| Owner Occupied                                     |           | 82        | 64                | 78        | 54        | 3,884          | 6,481          | 4,791                           | 5,434          | 2,865          | 10.5         | 12.7        | 13.4                           | 14.3         | 18.8         |
| Nonowner Occupied                                  | 52        | 80        | 64                | 91        | 66        | 3,797          | 4,937          | 4,179                           | 6,208          | 4,137          | 13.7         | 16.2        | 15.4                           | 14.7         | 15.8         |
| Unoccupied   | Q         | Q         | Q                 | Q         | Q         | Q              | Q              | Q                               | Q              | Q              |              | Q           | Q                              | Q            | Q            |
| Government Owned                                   | 27        | 61        | 37                | 50        | 41        | 2,547          | 4,985          | 2,296                           | 3,313          | 2,154          | 10.5         | 12.2        | 16.2                           | 15.1         | 19.2         |
| Federal  | 2         | Q         | Q                 |           | Q         | 167            | Q              | Q                               | Q              | Q              | 12.3         | 17.8        | 28.5                           | Q            | Q            |
| State  | 9         | 10        | 10                | 20        | Q         | 696            | 709            | 692                             | 1,247          | Q              | 12.8         | 14.1        | 14.4                           |              | Q            |
| Local  | 16        | 30        | 15                | 28        | 29        | 1,683          | 3,141          | 1,178                           | 1,921          | 1,634          | 9.3          | 9.7         | 12.9                           | 14.3         | 17.7         |
| Vacancy Status                                     |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| Completely Vacant                                  | Q         | Q         | Q                 | Q         | Q         | Q              | Q              | Q                               | Q              | Q              | Q            | Q           | Q                              | Q            | Q            |
| Mostly Vacant                                      | Q         | Q         | Q                 |           | Q         | Q              | Q              | Q                               | Q              | Q              |              | Q           | Q                              |              | 11.5         |
| Partially Vacant                                   | 24        | 45        | 37                |           | 35        | 2,275          |                | 2,576                           |                | 1,997          |              | 14.0        |                                |              | 17.4         |
| Not At All Vacant                                  | 94        | 177       | 128               | 192       |           | 7,621          |                |                                 | 12,806         |                | 12.4         | 13.5        | 14.9                           | 15.0         | 17.6         |
| Number of Establishments                           |           |           |                   |           |           |                |                |                                 |                |                |              |             |                                |              |              |
| One  | 83        | 169       | 111               | 161       | 103       |                | 12,392         |                                 | 11,322         |                | 12.0         | 13.6        | 14.5                           | 14.2         | 16.9         |
| 2 to 5   | 26        | 32        | 28                | 38        | 22        | 2,257          | 2,774          | 1,887                           | 2,422          | 1,582          |              | 11.6        | 14.9                           | 15.9         | 14.1         |
| 6 to 10  | 5         | 9         | 5                 | Q         | Q         | 401            | 540            | 341                             | Q              | Q              |              | 16.5        | 14.7                           | Q            | Q            |
| 11 to 20   | Q         | Q         | Q                 |           | Q         | Q              | Q              | Q                               | 387            | Q              |              | Q           | Q                              | 17.3         | Q            |
| More than 20                                       | Q         | Q         | 15                |           |           | Q              |                | 812                             | Q              |                |              | Q           |                                |              | 24.4         |
| Currently Unoccupied                               | Q         | Q         | Q                 | Q         | Q         | Q              | Q              | Q                               | Q              | Q              | Q            | Q           | Q                              | Q            | Q            |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

|  | Total Electricity Consumption (billion kWh) |           |           |           |           | В         | uildings   | Floorspa<br>Using E<br>n square | lectricit | у         |              | Ener      | lectrici<br>gy Inte<br>/square | nsity     |           |
|--|---|-----------|-----------|-----------|-----------|-----------|------------|---------------------------------|-----------|-----------|--------------|-----------|--------------------------------|-----------|-----------|
|  | Zone<br>1                                   | Zone<br>2 | Zone<br>3 | Zone<br>4 | Zone<br>5 | Zone<br>1 | Zone<br>2  | Zone<br>3                       | Zone<br>4 | Zone<br>5 | Zone<br>1    | Zone<br>2 | Zone<br>3                      | Zone<br>4 | Zone<br>5 |
| All Buildings*                                   | 120   | 224       | 166       | 219       | 161       | 10,393    | 17,076     | 11,375                          | 15,172    | 9,290     | 11.5         | 13.1      | 14.6                           | 14.5      | 17.3      |
| Predominant Exterior Wall Material               |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| Brick, Stone or Stucco                           | 49  | 127       | 75        | 116       | 75        | 4,456     | 9,758      | 6,013                           | 8,064     | 4,003     | 11.0         | 13.0      | 12.5                           | 14.4      | 18.6      |
| Concrete (Block or Poured)                       | 27  | 29        | 33        | 33        | 33        | 2,001     | 2,589      | 1,831                           | 2,402     | 1,914     | 13.7         | 11.4      | 17.9                           | 13.7      | 17.0      |
| Concrete Panels                                  | 15  | 23        | 24        | 23        | 32        | 895       | 1,252      | 1,219                           | 1,357     |           | 16.8         | 18.5      | 20.1                           | 16.9      | 19.0      |
| Siding or Shingles                               | 10  | 11        | 4         | 14        | Q         | 1,221     | 1,266      | 432                             | 841       | Q         | 8.5          | 8.8       | 9.2                            | 16.9      | Q         |
| Metal Panels                                     | 15  | 20        | 17        | 28        | 7         | 1,552     | 1,444      | 1,233                           | 2,169     | 978       | 9.9          | 13.5      | 13.7                           | 13.0      | 7.2       |
| Window Glass                                     | Q   |           | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            |           | Q                              | Q         | Q         |
| Other  | Q   |           | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            |           | Q                              | Q         | Q         |
| No One Major Type                                | Q   | Q         | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            | Q         | Q                              | Q         | Q         |
| Predominant Roof Material Built-Up               | 42  | 72        | 55        | 73        | 64        | 3,271     | 5,072      | 3,848                           | 5.178     | 3,412     | 12.9         | 14.1      | 14.3                           | 14.0      | 18.7      |
| Shingles (Not Wood)                              | 16  |           | 26        | 35        | 14        | 1,735     | 3,254      | 1,478                           | 2,461     | 943       | 9.5          |           | 17.4                           | 14.1      | 14.3      |
| Metal Surfacing                                  | 20  |           | 18        | 34        | 21        | 2,263     | 1,989      | 1,539                           |           | 2,284     | 8.8          |           | 11.9                           | 10.7      | 9.1       |
| Synthetic or Rubber                              | 34  | 79        | 56        | 49        | 42        | 2,528     | 5,225      | 2,838                           | 2,556     |           | 13.5         |           | 19.9                           | 19.0      | 27.1      |
| Slate or Tile                                    | 2   | 4         | 5         | 13        | 7         | 145       | 478        | 447                             | 952       | 416       | 13.8         | 8.5       | 10.3                           | 13.1      | 17.3      |
| Wooden Materials                                 | Q   | Q         | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            | Q         | Q                              | Q         | Q         |
| Concrete   | Q   | Q         | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            | Q         | Q                              | Q         | Q         |
| Other  | Q   |           | Q         | Q         | Q         | Q         | Q          | Q                               | Q         |           | Q            |           | Q                              | Q         | Q         |
| No One Major Type                                | Q   | Q         | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            | Q         | Q                              | Q         | Q         |
| Renovations in Buildings Constructed Before 1980 |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| (more than one may apply)                        |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| Any Type of Renovation                           |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| Since 1980                                       | 42  | 67        | 54        | 41        | 25        | 3,792     | 5,370      | 4,011                           | 3,157     | 1,308     | 11.1         | 12.5      | 13.4                           | 13.0      | 19.0      |
| Addition or Annex                                | 24  |           | 18        | 14        | 10        | 1,800     | 1,798      | 1,489                           | 930       | 533       | 13.5         |           | 11.9                           | 14.9      | 18.6      |
| Reduction In Floorspace                          | Q   | Q         | Q         | Q         | Q         | Q         | Q          | Q                               | Q         | Q         | Q            | Q         | Q                              | Q         | Q         |
| Cosmetic Improvements                            | 34  | 50        | 41        | 31        | 19        | 2,780     | 3,719      | 3,110                           | 2,449     | 944       | 12.3         | 13.6      | 13.3                           | 12.8      | 19.6      |
| Wall or Roof Replacement                         | 20  | 27        | 27        | 17        | 11        | 1,722     | 2,178      | 2,280                           | 1,316     | 560       | 11.5         | 12.4      | 11.7                           | 13.2      | 19.0      |
| Interior Wall                                    |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| Re-Configuration                                 | 26  |           | 27        | 20        | 11        | 1,983     | 2,300      | 2,282                           | 1,388     |           | 13.1         | 14.8      | 11.9                           | 14.1      | 19.9      |
| HVAC Equipment Upgrade                           |   | 43        | 39        | 28        | 14        | 2,415     | 3,076      | 2,660                           |           |           | 12.7         |           |                                | 14.7      | 19.0      |
| Lighting Upgrade                                 | 32  |           | 33        | 23        | 12        | 2,492     | 3,124      | 2,353                           | 1,707     | 598       | 13.0         |           | 13.8                           | 13.3      | 19.7      |
| Window Replacement                               | 15  |           | 20        | 8         | Q         | 1,384     | 2,067      | 1,938                           | 650       |           | 10.8         |           | 10.5                           | 12.2      | Q         |
| Plumbing System Upgrade                          | 20<br>10                                    |           | 21        | 16        | Q         | 1,616     | 1,939      | 1,948                           | 1,204     | Q         | 12.7<br>10.9 |           | 10.9                           | 13.0      | Q         |
| Insulation Upgrade Other Renovation              | Q   |           | 14<br>Q   | 8<br>Q    | Q<br>N    | 907<br>Q  | 1,181<br>Q | 1,079<br>Q                      | 583<br>Q  |           | 10.9<br>Q    |           | 13.0<br>Q                      | 13.8<br>Q | Q<br>N    |
| No Renovations Since 1980                        | 30  |           | 38        | 41        | 28        | 3,163     | 5,796      | 3,242                           |           | 1,925     | 9.4          |           | 11.6                           | 10.2      | 14.3      |
| Building Newer than 1980                         |   |           | 75        | 137       | 109       | 3,438     | 5,910      | 4,122                           | -         | 6,057     | 13.9         |           | 18.2                           | 17.2      | 17.9      |
| Energy Sources (more than                        |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| one may apply)                                   |   |           |           |           |           |           |            |                                 |           |           |              |           |                                |           |           |
| Electricity                                      | 120   |           | 166       | 219       | 161       | -         | 17,076     | -                               | -         |           | 11.5         |           | 14.6                           | 14.5      | 17.3      |
| Natural Gas                                      | 94  | 175       | 118       | 155       | 91        | -         | 12,850     | ,                               | 10,509    | ,         | 12.3         |           | 14.6                           | 14.7      | 20.9      |
| Fuel Oil   | 30  |           | 70        | 45        | 40        | 2,499     | 4,037      | 4,628                           |           | 1,642     | 12.1         |           | 15.2                           | 19.3      | 24.2      |
| District Heat                                    | 11  | 32        | 23        | 23        | Q         | 825       | 1,784      | 1,349                           | 1,025     | Q         | 13.3         |           | 17.0                           | 22.0      | Q         |
| District Chilled Water                           | 6   |           | 9         | 13        | Q         | 350       | 698        | 514                             | 659       | 633       | 17.3         |           | 17.8                           | 19.2      | 22.7      |
| Propane  | 18<br>7                                     |           | 13        | 26        | 14        | 1,598     | 2,036      | 1,102                           | -         |           | 11.2         |           | 11.8                           | 18.5      | 15.4      |
| Other  | /   | Q         | Q         | Q         | Q         | 483       | 363        | Q                               | Q         | Q         | 13.6         | 12.5      | Q                              | Q         | 23.3      |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

|                                       | Total Electricity Consumption (billion kWh) |           |           |           |           | Ві             | uildings        | Floorspa<br>Using E<br>n square | lectricit      | у              |             | Ener         | lectrici<br>gy Inte<br>square | nsity        |             |
|---------------------------------------|---|-----------|-----------|-----------|-----------|----------------|-----------------|---------------------------------|----------------|----------------|-------------|--------------|-------------------------------|--------------|-------------|
|                                       | Zone<br>1                                   | Zone<br>2 | Zone<br>3 | Zone<br>4 | Zone<br>5 | Zone<br>1      | Zone<br>2       | Zone<br>3                       | Zone<br>4      | Zone<br>5      | Zone<br>1   | Zone<br>2    | Zone<br>3                     | Zone<br>4    | Zone<br>5   |
| All Buildings*                        | 120   | 224       | 166       | 219       | 161       | 10,393         | 17,076          | 11,375                          | 15,172         | 9,290          | 11.5        | 13.1         | 14.6                          | 14.5         | 17.3        |
| Space-Heating Energy Sources          |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Electricity                           | 52  | 97        | 92        | 106       | 109       | 3,945          | 6,180           | 5,080                           | ,              | 6,052          | 13.1        | 15.7         | 18.0                          | 14.5         | 18.0        |
| Electricity Main                      | 23  | 47        | 40        | 66        | 91        | 1,375          | 2,603           | 2,210                           | -              | 5,228          | 16.4        | 18.0         | 17.9                          | 14.3         | 17.5        |
| Electricity Secondary                 | 29  | 50        | 52        | 41        | 18        | 2,570          | 3,577           | 2,870                           | 2,763          | 824            | 11.3        | 14.1         | 18.1                          | 14.7         | 21.7        |
| Other Excluding Electricity           | 67  | 124       | 74        | 104       | 38        |                | 10,525          | 6,154                           |                | 1,938          | 10.9        | 11.8         | 12.0                          | 15.7         | 19.5        |
| Buildings without Heating             | Q   | Q         | Q         | 9         | 14        | Q              | 372             | Q                               | 1,207          | 1,300          | Q           | 6.6          | Q                             | 7.5          | 10.9        |
| Primary Space-Heating                 |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Energy Source                         | 23  | 47        | 40        | 66        | 91        | 1,375          | 2,603           | 2,210                           | 4 590          | 5 229          | 16.4        | 18.0         | 17.9                          | 14.3         | 17.5        |
| Electricity Natural Gas               | 23<br>76                                    | 132       | 90        | 116       | 45        | 6,513          | 10.640          | 5,617                           |                | 5,228<br>2,228 | 11.6        | 12.4         | 16.0                          | 14.5         | 20.3        |
| Fuel Oil                              | 6   | 7         | 8         | Q         | Q         | 962            | 1,211           | 0,017<br>Q                      | 7,505<br>Q     | 2,220<br>Q     | 6.0         | 5.9          | 10.0<br>Q                     | Q            | 11.8        |
| District Heat                         | 10  | 31        | 21        | 20        | Q         | 752            | 1,638           | 1,231                           | 883            | Q              | 13.0        | 18.7         | 17.3                          | 22.9         | Q           |
| Propane                               | 3   | 4         | Q         | Q         | Q         | Q              | 492             | Q                               | 423            | Q              | 8.6         | 8.4          | 10.1                          | Q            | Q           |
| Other                                 | Q   | Q         | Q         | Q         | N         | Q              | Q               | Q                               | Q              | N              | Q           | Q            | Q                             | Q            | N           |
| Cooling Energy Sources                |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Electricity                           | 107   | 197       | 154       | 206       | 150       | 8,205          | 13,843          | 10,319                          | 13,508         | 8,446          | 13.0        | 14.2         | 14.9                          | 15.2         | 17.8        |
| Other Excluding Electricity           | Q   | 11        | 11        | 8         | Q         | Q              | 667             | 626                             | 468            | Q              | Q           | 15.9         | 17.7                          | 18.0         | Q           |
| Buildings without Cooling             | 7   | Q         | 1         | 5         | Q         | 1,843          | 2,567           | 430                             | 1,195          | Q              | 4.0         | 6.3          | 3.0                           | 4.1          | Q           |
| Water-Heating Energy Sources          | 40  | 00        |           | 404       | 0.4       | 0.044          | 0.505           | 5 4 4 7                         | 0.005          | <b>5</b> 400   | 40.0        | 40.5         | 45.0                          | 45.0         | 4           |
| Electricity                           | 43  | 88        | 77        | 104       | 91        | 3,941          | 6,525           | 5,147                           | ,              | 5,192          | 10.8        | 13.5         | 15.0                          | 15.6         | 17.5        |
| Other Excluding Electricity           | 74<br>3                                     | 118<br>Q  | 87<br>2   | 104<br>11 | 61<br>9   | 5,533<br>919   | 8,621<br>1,931  | 5,637<br>591                    |                | 2,675<br>1,423 | 13.4<br>3.2 | 13.7<br>9.1  | 15.5<br>3.1                   | 16.0<br>5.4  | 22.8<br>6.5 |
|                                       | Ū   | •         | _         | •         | Ū         | 010            | 1,001           | 001                             | 1,000          | 1, 120         | 0.2         | 0.1          | 0.1                           | 0.1          | 0.0         |
| Cooking Energy Sources Electricity    | 32  | 70        | 45        | 52        | 50        | 2.123          | 4,210           | 2,235                           | 2 472          | 2,120          | 14.9        | 16.7         | 19.9                          | 21.0         | 23.8        |
| Other Excluding Electricity           | 17  | 32        | 39        | 40        | 27        | 1,179          | 2,160           | 2,501                           | ,              | 1,088          | 14.7        | 14.9         | Q                             | 18.4         | 24.4        |
| Buildings without Cooking             | 71  | 121       | 82        | 128       | 84        |                | 10,707          |                                 | 10,550         |                | 10.0        | 11.3         | 12.4                          | 12.1         | 13.8        |
| Energy End Uses (more than            |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| one may apply)                        |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Buildings with Space Heating          | 119   | 221       | 165       | 210       |           |                | 16,705          |                                 |                |                |             |              |                               |              | 18.4        |
| Buildings with Cooling                | 112   | 208       | 165       | 214       | 160       |                | 14,509          |                                 |                |                | 13.1        | 14.3         | 15.1                          | 15.3         | 17.9        |
| Buildings with Water Heating          | 117   | 206       | 164       | 209       | 152       | ,              | 15,145          |                                 | ,              | ,              | 12.3        | 13.6         | 15.3                          | 15.8         | 19.3        |
| Buildings with Cooking                | 49  | 102       | 84        | 91        | 77        | 3,302          | 6,369           |                                 |                | 3,208          | 14.9        | 16.1         | 17.7                          | 19.8         | 24.0        |
| Buildings with Manufacturing          | 9   | 12        | 11        | 8         | Q         | 855            | 729             | 772                             | 608            | Q              | 10.2        | 17.0         | 14.1                          | 13.3         | Q           |
| Buildings with Electricity Generation | 29  | 78        | 62        | 52        | 40        | 1,764          | 3,862           | 2,973                           | 2,583          | 1,639          | 16.4        | 20.2         | 20.9                          | 20.0         | 24.6        |
|                                       |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Percent of Floorspace Heated          | ^   | ^         | _         | 0         | 4.4       | ^              | 270             | ^                               | 1 207          | 1 200          | ^           | 6.0          | ^                             | 7 -          | 10.0        |
| Not Heated                            | Q<br>5                                      | Q<br>10   | Q<br>12   | 9<br>19   | 14        | Q<br>1 111     | 372             | Q<br>1,325                      |                | 1,300          | Q           | 6.6          | Q                             | 7.5          | 10.9        |
| 1 to 5051 to 99                       | 5<br>17                                     | 10<br>21  | 12<br>24  | 18<br>33  | 10<br>22  | 1,111          | 1,094           |                                 | -              | 1,455          | 4.4<br>12.1 | 8.9<br>12.0  | 9.4<br>13.8                   | 9.6          | 6.9<br>23.1 |
| 100                                   | 97  | 191       | 129       | 159       | 115       | 1,377<br>7,609 | 1,735<br>13,876 |                                 | 2,349<br>9,772 | 932<br>5,602   | 12.1        | 12.0<br>13.7 | 13.8<br>15.8                  | 14.1<br>16.3 | 20.6        |
| Percent of Floorspace Cooled          |   |           |           |           |           |                |                 |                                 |                |                |             |              |                               |              |             |
| Not Cooled                            | 7   | Q         | 1         | 5         | Q         | 1,843          | 2,567           | 430                             | 1,195          | Q              | 4.0         | 6.3          | 3.0                           | 4.1          | C           |
| 1 to 50                               | 29  | 35        | 24        | 32        | 11        | 3,133          | 4,642           | 3,422                           |                | 1,906          | 9.2         | 7.5          | 7.0                           | 9.2          | 5.7         |
| 51 to 99                              | 33  | 58        | 55        | 42        | 29        | 2,327          | 3,568           | 3,297                           |                | 1,215          | 14.1        | 16.4         | 16.8                          | 15.2         | 24.2        |
|                                       |   |           |           |           |           |                |                 | 4,227                           | 7,693          |                |             |              |                               |              |             |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

|   | Total Electricity Consumption (billion kWh) |           |           |           | В         | uildings   | Floorspa<br>Using E<br>n square | lectricit  | у         | Electricity Energy Intensity (kWh/square foot) |           |           |           |           |           |
|---|---|-----------|-----------|-----------|-----------|------------|---------------------------------|------------|-----------|--|-----------|-----------|-----------|-----------|-----------|
|   | Zone<br>1                                   | Zone<br>2 | Zone<br>3 | Zone<br>4 | Zone<br>5 | Zone<br>1  | Zone<br>2                       | Zone<br>3  | Zone<br>4 | Zone<br>5                                      | Zone<br>1 | Zone<br>2 | Zone<br>3 | Zone<br>4 | Zone<br>5 |
| All Buildings*  | 120   | 224       | 166       | 219       | 161       | 10,393     | 17,076                          | 11,375     | 15,172    | 9,290  | 11.5      | 13.1      | 14.6      | 14.5      | 17.3      |
| Percent Lit When Open   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Zero  | Q   | Q         | Q         | Q         | Q         | Q          | Q                               | Q          | Q         | Q  | Q         | Q         | Q         |           | Q         |
| 1 to 50   | 12  | 14        | 13        | 13        | 13        | 1,956      | 2,667                           | 2,132      | 2,066     | 1,382  | 5.9       | 5.4       | 6.3       | 6.4       | 9.6       |
| 51 to 99  | 40  | 62        | 54        | 54        | 52        | 3,666      | 4,929                           | 3,133      | 3,804     | 2,756  | 10.8      | 12.7      | 17.2      | 14.1      | 19.0      |
| 100   | 68  | 145       | 98        | 151       | 95        | 4,362      | 8,654                           | 5,924      | 8,979     | 4,870  | 15.5      | 16.8      | 16.6      | 16.9      | 19.4      |
| Building Never Open/  |   |           |           |           |           | ·          | •                               | •          | -         | •  |           |           |           |           |           |
| Electricity Not Used  | Q   | Q         | Q         | Q         | Q         | Q          | Q                               | Q          | Q         | Q  | Q         | Q         | Q         | Q         | Q         |
|   | ~   | ~         | ~         | ~         | ~         | ~          | ~                               | ~          | ~         | ~  | _         | _         | ~         | ~         | ~         |
| Percent Lit When Closed   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Zero  | 25  | 45        | 22        | 38        | 29        | 3,536      | 4,589                           | 2,252      | 4.370     | 2,637  | 7.2       | 9.8       | 9.7       | 8.6       | 11.2      |
| 1 to 50   | 56  | 103       | 74        | 105       | 75        | 4,772      | 8.916                           | 5,541      |           | 4,546  |           | 11.5      | 13.4      |           | 16.4      |
| 51 to 100   | Q   | Q         | Q         | 7         | 13        | 4,772<br>Q | 0,010<br>Q                      | Q,041      | 478       | 501  | Q         | Q         | Q         |           | 25.4      |
| Building Never Closed/  | Q   | Q         | Q         | ,         | 10        | · ·        | · ·                             | Q          | 470       | 001  | Q         | Q         | · ·       | 10.0      | 20.7      |
| Electricity Not Used  | 32  | 67        | 60        | 69        | 44        | 1,822      | 3,162                           | 3,140      | 2 151     | 1,605  | 17.4      | 21.3      | 19.2      | 22.0      | 27.6      |
| Liectricity Not Osed  | 32  | 01        | 00        | 03        | 77        | 1,022      | 3,102                           | 5,140      | 5, 151    | 1,000  | 17.4      | 21.5      | 13.2      | 22.0      | 21.0      |
| Heating Equipment (more   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
|   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| than one may apply)   | 10  | 20        | 40        | 46        | 20        | 707        | 1 171                           | 1.071      | 2 202     | 1 261  | 110       | 10.6      | 20.4      | 110       | 24.0      |
| Heat Pumps  | 10  | 29        | 40        | 46        | 29        | 727        | 1,471                           | 1,971      | -         | 1,361  | 14.2      | 19.6      | 20.1      | 14.0      | 21.0      |
| Packaged Heat Pumps   | 7   | 20        | 30        | 26        | 23        | 433        | 995                             | 1,267      | 1,749     | 997  | 15.0      | 19.8      | 24.0      | 14.7      | 23.0      |
| Split-System Heat Pumps   | Q   | Q         | Q         | 14        | 6         | Q          | Q                               | 686        | 1,140     | 419  |           | Q         | 20.6      | 12.3      | 15.5      |
| Individual Room Heat Pumps                                      | Q   | 10        | 10        | 14        | Q         | Q          | 497                             | 537        | 1,021     | Q  | Q         | 20.0      | 18.1      | 13.3      | Q         |
| Furnaces  | 50  | 70        | 32        | 48        | 25        | 4,576      | 6,411                           | 2,648      | 4,313     | 1,658  | 10.8      | 10.9      | 11.9      | 11.1      | 14.9      |
| Individual Space Heaters  | 31  | 48        | 45        | 30        | 12        | 3,014      | 3,582                           | 2,524      | 2,569     | 851  | 10.2      | 13.3      | 17.8      | 11.5      | 14.3      |
| District Heat   | 10  | 31        | 21        | 20        | Q         | 801        | 1,749                           | 1,266      | 918       | Q  | 12.9      | 17.9      | 16.9      | 22.3      | Q         |
| Boilers   | 47  | 86        | 69        | 63        | 31        | 4,060      | 6,835                           | 4,693      | 3,334     | 1,500  | 11.6      | 12.5      | 14.8      | 18.7      | 20.6      |
| Packaged Heating Units  | 32  | 68        | 57        | 86        | 67        | 2,126      | 3,708                           | 3,204      | 5,619     | 3,365  | 15.3      | 18.2      | 17.7      | 15.3      | 20.0      |
| Other   | 13  | 11        | Q         | 5         | 13        | 816        | 659                             | Q          | 525       | 750  | 15.6      | 16.1      | Q         | 10.5      | 17.3      |
| Cooling Equipment (more   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| than one may apply)   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Residential-Type Central  |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Air Conditioners  | 22  | 37        | 27        | 28        | 19        | 1,971      | 3,078                           | 2,207      | 2,056     | 1,723  | 11.2      | 12.2      | 12.2      | 13.7      | 10.8      |
| Heat Pumps  | 10  | 29        | 42        | 49        | 30        | 739        | 1,542                           | 1,998      |           | 1,365  | 14.0      | 18.7      | 20.9      | 14.5      | 22.2      |
| Packaged Heat Pumps   | 7   | 19        | 33        | 24        | 22        | 453        | 1,033                           | 1,337      | 1,679     | 924  | 14.6      | 18.9      | 24.6      | 14.6      | 23.8      |
| Split-System Heat Pumps   | Q   | Q         | Q         | 15        | 7         | Q          | Q                               | 703        | 1,127     | 458  | Q         | Q         | 20.6      | 13.0      | 15.5      |
| Individual Room Heat Pumps                                      | Q   | 10        | 10        | 17        | Q         | Q          | 510                             | 523        | 1,190     | Q  | Q         | 19.7      | 19.0      | 14.5      | Q         |
| Individual Air Conditioners                                     | 24  | 36        | 26        | 35        | 20        | 2,321      | 3,633                           | 2,786      | 2,565     | 1,253  | 10.2      | 10.0      | 9.2       | 13.8      | 15.6      |
| District Chilled Water  | 6   | 14        | 9         | 13        | Q         | 350        | 698                             | 514        | 659       | 633  |           | 20.2      | 17.8      | 19.2      | 22.7      |
| Central Chillers  | 24  | 57        | 55        | 58        | 51        | 1,604      | 2,658                           | 2,473      |           | 2,205  |           | 21.3      | 22.2      |           | 23.1      |
| Packaged Air Conditioning                                       |   |           |           |           |           | .,         | _,                              | _,         | _,        | _,   |           |           |           |           |           |
| Units   | 69  | 122       | 87        | 111       | 72        | 4,565      | 7,740                           | 6,076      | 7 703     | 3,884  | 15.1      | 15.8      | 14.4      | 14.5      | 18.6      |
| Swamp Coolers   | 7   | 5         | Q         | 6         | Q         | 515        | 468                             | 0,070<br>Q | 346       | 0,004<br>Q                                     |           |           | Q         |           | Q         |
| Other   | à   | Q         | Q         | Q         | Q         | Q          | Q                               | Q          | Q         | Q  |           | Q         | Q         |           | Q         |
| Main Equipment Replaced Since<br>1990 (more than one may apply) |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Heating   | 34  | 67        | 43        | 39        | 28        | 3,262      | 4,981                           | 3,202      | 3,195     | 1,754  | 10.3      | 13.4      | 13.3      | 12.3      | 15.7      |
| Cooling   | 41  | 85        | 69        | 49        | 43        | 3,555      | 5,895                           | 4,827      |           | 2,606  |           | 14.4      | 14.3      |           | 16.4      |
| Water Heating Equipment   |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| Centralized System  | 79  | 124       | 100       | 124       | 90        | 6,315      | 9,538                           | 6,774      | 7,444     | 4,585  | 12.5      | 12.9      | 14.7      | 16.6      | 19.6      |
| Distributed System  | 14  | 33        | 26        | 35        | 34        | 1,468      | 2,954                           | 2,015      | 3,009     | 2,094  | 9.8       | 11.0      | 12.8      | 11.6      | 16.1      |
| Combination of Centralized                                      |   |           |           |           |           |            |                                 |            |           |  |           |           |           |           |           |
| and Distributed System  | 23  | 50        | 39        | 50        | 28        | 1,691      | 2,654                           | 1,996      | 2,739     | 1,187  | 13.8      | 18.9      | 19.5      | 18.3      | 23.8      |
| •   |   |           |           |           |           | -          | -                               |            |           |  |           |           |           |           |           |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

| Non-Man Buildings, 20                              | U3  |            |            |            | 1         |                |                                 |                 |            |  | ı            |              |              |              |              |
|--|---|------------|------------|------------|-----------|----------------|---------------------------------|-----------------|------------|--|--------------|--------------|--------------|--------------|--------------|
|  | Total Electricity Consumption (billion kWh) |            |            |            | В         | uildings       | Floorspa<br>Using E<br>n square | lectricit       | у          | Electricity Energy Intensity (kWh/square foot) |              |              |              |              |              |
|  | Zone<br>1                                   | Zone<br>2  | Zone<br>3  | Zone<br>4  | Zone<br>5 | Zone<br>1      | Zone<br>2                       | Zone<br>3       | Zone<br>4  | Zone<br>5                                      | Zone<br>1    | Zone<br>2    | Zone<br>3    | Zone<br>4    | Zone<br>5    |
| All Buildings*                                     | 120   | 224        | 166        | 219        | 161       | 10,393         | 17,076                          | 11,375          | 15,172     | 9,290  | 11.5         | 13.1         | 14.6         | 14.5         | 17.3         |
| Lighting Equipment Types (more than one may apply) | 00  | 450        | 400        | 405        | 404       | 7.040          | 40 200                          | 0.400           | 7 020      | F 072  | 44.4         | 44.5         | 45.0         | 47.0         | 10.0         |
| Incandescent                                       | 80<br>117                                   | 150        | 123        | 135        | 101       | -              | 10,308                          | 8,192           |            | 5,073  | 11.4         | 14.5         | 15.0         | 17.0         | 19.9         |
| Standard Fluorescent Compact Fluorescent           | 117<br>66                                   | 218<br>114 | 163<br>109 | 212<br>122 | 155<br>77 | 9,783<br>4,667 | 6,835                           | 10,871<br>6,292 |            | 3,339  | 11.9<br>14.2 | 13.5<br>16.7 | 15.0<br>17.3 | 14.8<br>19.0 | 18.0<br>23.1 |
| High Intensity Discharge                           | 45  | 95         | 75         | 66         | 49        | 3,955          | 6,149                           | 4,385           | -          | 2,292  |              | 15.4         | 17.3         | 17.1         | 21.4         |
| Halogen  | 44  | 74         | 68         | 77         | 50        | 2,762          | 4,485                           | 3,903           |            | 2,435  |              | 16.5         | 17.4         | 18.7         | 20.5         |
| Other  | Q   | Q          | Q          | Q          | Q         | 2,702<br>Q     | 4,100<br>Q                      | 0,000<br>Q      | 4,117<br>Q | 2,100<br>Q                                     |              | Q            | 22.4         | 25.6         | Q            |
|  | _   | _          | _          | _          | ~         | ~              | _                               | ~               | _          | _  | ~            | _            |              | _0.0         | ~            |
| Refrigeration Equipment                            |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| (more than one may apply) <sup>b</sup>             |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| Any Refrigeration                                  | 109   | 202        | 156        | 198        | 148       | 8,673          | 14,438                          | 9,893           | 12,329     | 7,640  | 12.6         | 14.0         | 15.7         | 16.1         | 19.3         |
| Commercial Refrigeration                           | 65  | 131        | 104        | 128        | 96        | 4,106          | 7,355                           | 5,702           | 5,784      | 3,821  | 15.9         | 17.8         | 18.3         | 22.1         | 25.0         |
| Walk-In Units                                      | 54  | 106        | 86         | 112        | 79        | 3,188          | 5,353                           | 4,341           | 4,490      | 2,882  | 16.8         | 19.8         | 19.7         | 25.0         | 27.5         |
| Cases or Cabinets                                  | 51  | 105        | 86         | 100        | 81        | 2,950          | 5,523                           | 4,191           | 4,586      | 3,174  | 17.3         | 19.0         | 20.4         | 21.7         | 25.5         |
| Residential-Type Units                             | 75  | 135        | 99         | 115        | 94        | 6,713          | 10,957                          | 7,367           | 8,479      | 5,369  | 11.1         | 12.3         | 13.5         | 13.6         | 17.6         |
| Vending Machines                                   | 76  | 146        | 113        | 140        | 107       | 5,824          | 9,186                           | 6,729           |            | 5,375  | 13.1         | 15.9         | 16.8         | 17.0         | 19.9         |
| No Refrigeration                                   | 10  | 22         | 11         | 21         | 13        | 1,720          | 2,638                           | 1,482           | 2,843      | 1,649  | 6.1          | 8.4          | 7.2          | 7.4          | 8.2          |
| Office Equipment (more than one may apply)         |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| Computers  | 111   | 208        | 160        | 202        | 152       | 8,976          | 14,756                          | 10,556          |            |  | 12.4         | 14.1         | 15.2         | 15.4         | 18.4         |
| With Flat Screen Monitors                          | 52  | 112        | 109        | 107        | 85        | 3,629          | 6,548                           | 6,204           |            | 3,919  |              | 17.1         | 17.6         | 17.4         | 21.7         |
| Dedicated Servers                                  | 76  | 148        | 129        | 143        | 100       | 5,673          | 9,426                           | 7,813           | -          | 5,269  | 13.4         | 15.7         | 16.5         | 17.5         | 19.1         |
| Laser Printers                                     | 67  | 113        | 84         | 109        | 82        | 5,811          | 8,950                           | 5,910           |            | 4,666  | 11.6         | 12.6         | 14.2         | 14.2         | 17.5         |
| Inkjet Printers                                    | 74  | 120        | 108        | 131        | 99        | 5,523          | 7,781                           | 6,220           |            | 5,130  |              | 15.5         | 17.4         | 17.4         | 19.4         |
| FAX Machines                                       | 105   | 191        | 156        | 195        | 145       | 8,446          |                                 | 10,336          |            |  |              | 14.2         | 15.1         | 15.7         | 18.8         |
| Photocopiers                                       | 91  | 169        | 136        | 170        | 125       | 7,101          | 12,244                          | 9,222           | 10,780     | 0,020  | 12.7         | 13.8         | 14.8         | 15.7         | 18.3         |
| Number of Computers                                |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| None   | 9   | 16         | 6          | 18         | 9         | 1,417          | 2,320                           | 819             |            | 1,037  | 6.1          | 7.0          | 7.8          | 8.5          | 9.0          |
| 1 to 4   | 24  | 41         | 20         | 38         | 31        | 2,242          | 3,537                           | 1,801           |            | 1,608  | 10.6         | 11.5         | 10.9         | 12.0         | 19.0         |
| 5 to 9   | 14  | 21         | 12         | 16         | 17        | 1,392          | 1,946                           | 1,206           |            | 1,063  | 9.9          | 10.8         | 10.3         | 10.0         | 16.3         |
| 10 to 19   | 12  | 21         | 14         | 21         | 15        | 1,057          | 1,724                           | 1,032           |            | 1,228  |              |              | 14.0         | 13.3         | 12.1         |
| 20 to 49   | 18  | 25         | 24         | 36         | 17        | 1,239          | 2,045                           | 1,441           | 1,729      | 960  |              |              | 16.8         | 20.7         | 18.0         |
| 50 to 99   | 9   | 15         | 12         | 24         | 15        | 740            | 1,124                           | 1,078           | 1,547      | 887  |              | 13.7         | Q            | 15.6         | 17.1         |
| 100 to 249<br>250 or More                          | 17<br>17                                    | 24<br>60   | 21<br>57   | 28<br>38   | 18<br>39  | 1,266<br>1,040 | 1,554<br>2,825                  | 1,389<br>2,610  | 1,626      | 855<br>1,652                                   |              |              | 14.8<br>21.7 | 17.4<br>20.9 | 20.8<br>23.5 |
| 250 01 More  | 17  | 00         | 31         | 30         | 39        | 1,040          | 2,023                           | 2,010           | 1,037      | 1,032  | 10.7         | 21.3         | 21.7         | 20.9         | 23.3         |
| Number of Dedicated Servers                        |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| None   | 43  | 75         | 38         | 77         | 61        | 4,720          | 7,651                           | 3,563           | 7,015      | 4,021  | 9.2          | 9.8          | 10.6         | 10.9         | 15.1         |
| 1 to 4   | 55  | 82         | 62         | 88         | 55        | 4,305          | 6,249                           | 4,591           | 5,624      | 3,346  | 12.9         | 13.1         | 13.4         | 15.7         | 16.4         |
| 5 to 9   | 5   | 17         | Q          | 19         | Q         | 516            | 980                             | 1,078           | 884        | Q  | 9.0          | 16.9         | 21.7         | 21.5         | Q            |
| 10 to 19   | 7   | 18         | 9          | 17         | Q         | 412            | 965                             | 455             | 724        | 472  | 17.3         | 18.5         | 19.0         | 23.2         | 27.5         |
| 20 to 49   | Q   | Q          | 11         | 11         | Q         | Q              | Q                               | 586             | 604        | Q  |              |              | 18.4         | 18.9         | Q            |
| 50 or More   | Q   | 21         | 24         | Q          | Q         | Q              | 804                             | 1,102           | Q          | Q  | Q            | 26.6         | 22.0         | Q            | Q            |
| Number of Photocopiers                             |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |
| None   | 28  | 54         | 30         | 50         | 36        | 3,212          | 4,832                           | 2,153           | 4.392      | 2,462  | 8.8          | 11.3         | 13.9         | 11.3         | 14.6         |
| One  | 30  | 44         | 24         | 46         | 29        | 2,653          | 4,546                           | 2,337           |            | 2,133  |              | 9.6          | 10.3         | 12.2         | 13.8         |
| 2 to 4   | 30  | 48         | 35         | 54         | 40        | 2,655          | 3,694                           | 2,833           | -          | 2,345  |              |              | 12.4         | 15.1         | 17.0         |
| 5 to 9   | 11  | 23         | 17         | 27         | 17        | 863            | 1,386                           | 1,219           | 1,326      |  | 13.0         |              | Q            | 20.1         | 23.4         |
| 10 or More   | 20  | 54         | 60         | 43         | 39        | 1,010          | 2,619                           | 2,833           | 2,093      | 1,629  | 19.5         | 20.6         | 21.3         | 20.7         | 24.0         |
|  |   |            |            |            |           |                |                                 |                 |            |  |              |              |              |              |              |

Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

| <b>Zone 1</b> 120              | Zone<br>2  | Zone   | 7   | Total Electricity Consumption (billion kWh)  |   |  | Total Floorspace of Buildings Using Electricity (million square feet)  |   |   |  | Electricity Energy Intensity (kWh/square foot)  |   |   |  |
|--------------------------------|--|--|---|--|---|--|--|---|---|--|---|---|---|--|
| 120                            |  | 3  | Zone<br>4   | Zone<br>5  | Zone<br>1   | Zone<br>2  | Zone<br>3  | Zone<br>4   | Zone<br>5   | Zone<br>1  | Zone<br>2   | Zone<br>3   | Zone<br>4   | Zone<br>5  |
|                                | 224  | 166  | 219   | 161  | 10,393  | 17,076   | 11,375   | 15,172  | 9,290   | 11.5   | 13.1  | 14.6  | 14.5  | 17.3   |
| 49                             | 102  | 84   | 91  | 77   | 3,302   | 6,358  | 4,736  | 4,620   | 3,208   | 14.9   | 16.1  | 17.7  | 19.8  | 24.0   |
| 48<br>56                       | 88<br>113  | 68<br>102  | 90<br>110   | 48<br>74   | 3,451<br>3,713  | 5,260<br>7,143   | 4,091<br>5,988   |   | 2,200<br>3,763  | 13.9<br>15.1   | 16.7<br>15.8  | 16.7<br>17.0  | 20.0<br>17.6  | 21.9<br>19.6   |
| 4.4                            | 04   | 04   | 0.4   | 71   | 2 005   | A 050  | 4 00e  | 4 204   | 2 472   | 14.0   | 10 7  | 10.9  | 20.0  | 20.5   |
| 59<br>101                      | 112<br>204   | 96<br>149  | 89<br>190   | 57<br>148  | 3,804<br>8,035  | 5,533<br>14,309  | 4,736  | 4,630   | 2,406   | 15.5<br>12.6   | 20.2<br>14.2  | 20.3<br>15.6  | 19.2<br>16.5  |  |
| 34                             | 64   | 67   | 59  | 55   | 2,438   | 3,834  | 3,284  | 3,546   | 2,528   | 14.0   | 16.7  | 20.4  | 16.8  | 21.8   |
|                                |  |  |   |  |   |  |  |   |   |  |   |   |   |  |
| 100<br>52<br>17                | 173<br>124<br>38   | 115<br>98<br>36  | 128<br>121<br>32  | 77<br>99<br>30   | 8,065<br>3,628<br>1,259   | 11,659<br>7,501<br>2,139   | 7,843<br>5,333<br>1,733  | 7,836   | 5,328   | 12.4<br>14.2<br>13.7   | 14.8<br>16.5<br>17.5  | 14.7<br>18.3<br>20.5  | 17.7<br>15.4<br>15.8  | 19.6<br>18.6<br>22.6   |
| 37<br>29<br>9<br>57            | 73<br>52<br>18<br>125<br>177   | 36<br>10<br>88   | 41<br>13<br>101   | 52<br>30<br>11<br>65   | 2,639<br>2,163<br>574<br>4,446<br>8 390   | 4,497<br>3,557<br>837<br>7,579   | 2,985<br>2,573<br>413<br>5,238<br>8 922  | 2,575<br>618<br>5,892   | 1,640<br>426<br>2,961   | 13.9<br>13.6<br>15.5<br>12.8   | 16.2<br>14.7<br>21.8<br>16.4  | 15.8<br>14.2<br>24.2<br>16.9  | 16.5<br>15.9<br>20.6<br>17.1  | 22.1   |
|                                |  |  |   |  |   | •  |  |   |   |  |   |   |   |  |
|                                |  |  |   |  | 7.00  | 1,210  | 001  | 000   | 001   | 10.0   |   | 20.0  | 17.0  | 21.0   |
| 75<br>74<br>83<br>32           | 137<br>136<br>153<br>56  | 125<br>99  | 145<br>143  | 93<br>116<br>110<br>43   | 6,309   | 10,730   | 8,843<br>7,802   | 10,627<br>11,312  | 6,681<br>7,025  | 10.7<br>11.8<br>10.4<br>9.5  | 11.7<br>12.7<br>11.9<br>10.3  | 14.6<br>14.1<br>12.7<br>10.3  | 13.4<br>13.6<br>12.7<br>10.8  | 17.3<br>15.6   |
|                                |  |  |   |  |   |  |  |   |   |  |   |   |   |  |
| 1<br>7<br>10<br>38<br>10<br>36 | 1<br>12<br>11<br>54<br>21<br>69  | 7<br>26<br>20  | 16<br>52<br>23  | Q<br>7<br>8<br>39<br>23<br>46  | 636<br>1,589<br>1,081<br>3,073<br>1,022<br>2,225  | 1,052<br>2,594<br>1,506<br>4,313<br>1,715<br>3,545   | 306<br>1,270<br>1,340<br>2,698<br>1,261<br>2,269   | 1,672<br>3,648<br>1,456   | 862<br>2,380<br>1,282   | 1.3<br>4.6<br>9.1<br>12.5<br>10.2<br>16.3  | 1.1<br>4.5<br>7.3<br>12.5<br>12.0<br>19.5   | 1.7<br>5.6<br>5.6<br>9.7<br>15.8<br>22.2  | 1.7<br>4.6<br>9.4<br>14.3<br>15.9<br>20.3   | Q<br>5.8<br>8.8<br>16.3<br>17.8<br>24.7  |
|                                | 101<br>34<br>100<br>52<br>17<br>37<br>29<br>9<br>57<br>104<br>12<br>75<br>74<br>83<br>32 | 59 112<br>101 204<br>34 64<br>100 173<br>52 124<br>17 38<br>37 73<br>29 52<br>9 18<br>57 125<br>104 177<br>12 22<br>75 137<br>74 136<br>83 153<br>32 56<br>1 1 1<br>7 12<br>10 11<br>38 54<br>10 21<br>36 69 | 59 112 96 101 204 149  34 64 67  100 173 115 52 124 98 17 38 36  37 73 47 29 52 36 9 18 10 57 125 88 104 177 143  12 22 21  75 137 124 74 136 125 83 153 99 32 56 33  1 1 1 1 7 12 7 10 11 7 38 54 26 10 21 20 36 69 50 | 59         112         96         89           101         204         149         190           34         64         67         59           100         173         115         128           52         124         98         121           17         38         36         32           37         73         47         73           29         52         36         41           9         18         10         13           57         125         88         101           104         177         143         176           12         22         21         15           75         137         124         137           74         136         125         145           83         153         99         143           32         56         33         46           1         1         1         1           7         12         7         12           10         11         7         16           38         54         26         52           10         21 <td>59       112       96       89       57         101       204       149       190       148         34       64       67       59       55         100       173       115       128       77         52       124       98       121       99         17       38       36       32       30         37       73       47       73       52         29       52       36       41       30         9       18       10       13       11         57       125       88       101       65         104       177       143       176       133         12       22       21       15       21         75       137       124       137       93         74       136       125       145       116         83       153       99       143       110         32       56       33       46       43         1       1       1       1       Q         7       12       7       12       7         10       11       &lt;</td> <td>59       112       96       89       57       3,804         101       204       149       190       148       8,035         34       64       67       59       55       2,438         100       173       115       128       77       8,065         52       124       98       121       99       3,628         17       38       36       32       30       1,259         37       73       47       73       52       2,639         29       52       36       41       30       2,163         9       18       10       13       11       574         57       125       88       101       65       4,446         104       177       143       176       133       8,390         12       22       21       15       21       756         75       137       124       137       93       6,995         74       136       125       145       116       6,309         83       153       99       143       110       7,959         32       56       33<td>59       112       96       89       57       3,804       5,533         101       204       149       190       148       8,035       14,309         34       64       67       59       55       2,438       3,834         100       173       115       128       77       8,065       11,659         52       124       98       121       99       3,628       7,501         17       38       36       32       30       1,259       2,139         37       73       47       73       52       2,639       4,497         29       52       36       41       30       2,163       3,557         9       18       10       13       11       574       837         57       125       88       101       65       4,446       7,579         104       177       143       176       133       8,390       11,771         12       22       21       15       21       756       1,249         75       137       124       137       93       6,995       11,636         74       136</td><td>59         112         96         89         57         3,804         5,533         4,736           101         204         149         190         148         8,035         14,309         9,595           34         64         67         59         55         2,438         3,834         3,284           100         173         115         128         77         8,065         11,659         7,843           52         124         98         121         99         3,628         7,501         5,333           17         38         36         32         30         1,259         2,139         1,733           37         73         47         73         52         2,639         4,497         2,985           29         52         36         41         30         2,163         3,557         2,573           9         18         10         13         11         574         837         413           57         125         88         101         65         4,446         7,579         5,238           104         177         143         176         133         8,390         11,771</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630           101         204         149         190         148         8,035         14,309         9,595         11,542           34         64         67         59         55         2,438         3,834         3,284         3,546           100         173         115         128         77         8,065         11,659         7,843         7,244           52         124         98         121         99         3,628         7,501         5,333         7,836           17         38         36         32         30         1,259         2,139         1,733         2,051           37         73         47         73         52         2,639         4,497         2,985         4,416           29         52         36         41         30         2,163         3,557         2,573         2,575           9         18         10         13         11         574         837         413         618           57         125         88         101         65         4,446</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640           9         18         10         13         11         574         837</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640         1</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9         16.2           29         52         36         41</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637</td><td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3         19.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6         16.5           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4         16.8           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7         17.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3         15.4           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5         15.8           37         73         47         73</td></td> | 59       112       96       89       57         101       204       149       190       148         34       64       67       59       55         100       173       115       128       77         52       124       98       121       99         17       38       36       32       30         37       73       47       73       52         29       52       36       41       30         9       18       10       13       11         57       125       88       101       65         104       177       143       176       133         12       22       21       15       21         75       137       124       137       93         74       136       125       145       116         83       153       99       143       110         32       56       33       46       43         1       1       1       1       Q         7       12       7       12       7         10       11       < | 59       112       96       89       57       3,804         101       204       149       190       148       8,035         34       64       67       59       55       2,438         100       173       115       128       77       8,065         52       124       98       121       99       3,628         17       38       36       32       30       1,259         37       73       47       73       52       2,639         29       52       36       41       30       2,163         9       18       10       13       11       574         57       125       88       101       65       4,446         104       177       143       176       133       8,390         12       22       21       15       21       756         75       137       124       137       93       6,995         74       136       125       145       116       6,309         83       153       99       143       110       7,959         32       56       33 <td>59       112       96       89       57       3,804       5,533         101       204       149       190       148       8,035       14,309         34       64       67       59       55       2,438       3,834         100       173       115       128       77       8,065       11,659         52       124       98       121       99       3,628       7,501         17       38       36       32       30       1,259       2,139         37       73       47       73       52       2,639       4,497         29       52       36       41       30       2,163       3,557         9       18       10       13       11       574       837         57       125       88       101       65       4,446       7,579         104       177       143       176       133       8,390       11,771         12       22       21       15       21       756       1,249         75       137       124       137       93       6,995       11,636         74       136</td> <td>59         112         96         89         57         3,804         5,533         4,736           101         204         149         190         148         8,035         14,309         9,595           34         64         67         59         55         2,438         3,834         3,284           100         173         115         128         77         8,065         11,659         7,843           52         124         98         121         99         3,628         7,501         5,333           17         38         36         32         30         1,259         2,139         1,733           37         73         47         73         52         2,639         4,497         2,985           29         52         36         41         30         2,163         3,557         2,573           9         18         10         13         11         574         837         413           57         125         88         101         65         4,446         7,579         5,238           104         177         143         176         133         8,390         11,771</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630           101         204         149         190         148         8,035         14,309         9,595         11,542           34         64         67         59         55         2,438         3,834         3,284         3,546           100         173         115         128         77         8,065         11,659         7,843         7,244           52         124         98         121         99         3,628         7,501         5,333         7,836           17         38         36         32         30         1,259         2,139         1,733         2,051           37         73         47         73         52         2,639         4,497         2,985         4,416           29         52         36         41         30         2,163         3,557         2,573         2,575           9         18         10         13         11         574         837         413         618           57         125         88         101         65         4,446</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640           9         18         10         13         11         574         837</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640         1</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9         16.2           29         52         36         41</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637</td> <td>59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3         19.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6         16.5           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4         16.8           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7         17.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3         15.4           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5         15.8           37         73         47         73</td> | 59       112       96       89       57       3,804       5,533         101       204       149       190       148       8,035       14,309         34       64       67       59       55       2,438       3,834         100       173       115       128       77       8,065       11,659         52       124       98       121       99       3,628       7,501         17       38       36       32       30       1,259       2,139         37       73       47       73       52       2,639       4,497         29       52       36       41       30       2,163       3,557         9       18       10       13       11       574       837         57       125       88       101       65       4,446       7,579         104       177       143       176       133       8,390       11,771         12       22       21       15       21       756       1,249         75       137       124       137       93       6,995       11,636         74       136 | 59         112         96         89         57         3,804         5,533         4,736           101         204         149         190         148         8,035         14,309         9,595           34         64         67         59         55         2,438         3,834         3,284           100         173         115         128         77         8,065         11,659         7,843           52         124         98         121         99         3,628         7,501         5,333           17         38         36         32         30         1,259         2,139         1,733           37         73         47         73         52         2,639         4,497         2,985           29         52         36         41         30         2,163         3,557         2,573           9         18         10         13         11         574         837         413           57         125         88         101         65         4,446         7,579         5,238           104         177         143         176         133         8,390         11,771 | 59         112         96         89         57         3,804         5,533         4,736         4,630           101         204         149         190         148         8,035         14,309         9,595         11,542           34         64         67         59         55         2,438         3,834         3,284         3,546           100         173         115         128         77         8,065         11,659         7,843         7,244           52         124         98         121         99         3,628         7,501         5,333         7,836           17         38         36         32         30         1,259         2,139         1,733         2,051           37         73         47         73         52         2,639         4,497         2,985         4,416           29         52         36         41         30         2,163         3,557         2,573         2,575           9         18         10         13         11         574         837         413         618           57         125         88         101         65         4,446 | 59         112         96         89         57         3,804         5,533         4,736         4,630         2,406           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640           9         18         10         13         11         574         837 | 59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9           29         52         36         41         30         2,163         3,557         2,573         2,575         1,640         1 | 59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637         13.9         16.2           29         52         36         41 | 59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5           37         73         47         73         52         2,639         4,497         2,985         4,416         2,637 | 59         112         96         89         57         3,804         5,533         4,736         4,630         2,406         15.5         20.2         20.3         19.2           101         204         149         190         148         8,035         14,309         9,595         11,542         7,670         12.6         14.2         15.6         16.5           34         64         67         59         55         2,438         3,834         3,284         3,546         2,528         14.0         16.7         20.4         16.8           100         173         115         128         77         8,065         11,659         7,843         7,244         3,916         12.4         14.8         14.7         17.7           52         124         98         121         99         3,628         7,501         5,333         7,836         5,328         14.2         16.5         18.3         15.4           17         38         36         32         30         1,259         2,139         1,733         2,051         1,347         13.7         17.5         20.5         15.8           37         73         47         73 |

Energy Consumption Survey.

# Table C20. Electricity Consumption and Conditional Energy Intensity by Climate Zone<sup>a</sup> for Non-Mall Buildings, 2003

|   | Total Electricity<br>Consumption<br>(billion kWh) |           |           |           | Total Floorspace of Buildings Using Electricity (million square feet) |              |                 |               | y         | Electricity Energy Intensity (kWh/square foot) |              |              |              |           |              |
|---|---|-----------|-----------|-----------|---|--------------|-----------------|---------------|-----------|--|--------------|--------------|--------------|-----------|--------------|
|   | Zone<br>1   | Zone<br>2 | Zone<br>3 | Zone<br>4 | Zone<br>5   | Zone<br>1    | Zone<br>2       | Zone<br>3     | Zone<br>4 | Zone<br>5                                      | Zone<br>1    | Zone<br>2    | Zone<br>3    | Zone<br>4 | Zone<br>5    |
| All Buildings*  | 120   | 224       | 166       | 219       | 161   | 10,393       | 17,076          | 11,375        | 15,172    | 9,290  | 11.5         | 13.1         | 14.6         | 14.5      | 17.3         |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 109<br>Q  | 198<br>25 | 140<br>27 | 210<br>Q  | 134<br>23   | 9,635<br>784 | 15,515<br>1,500 | 10,370<br>987 |           | 7,707<br>1,341                                 | 11.3<br>14.2 | 12.8<br>16.5 | 13.5<br>26.9 | 14.4<br>Q | 17.4<br>17.1 |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> Climate zone (30-year average) definitions: Zone 1 = Under 2,000 CDD and more than 7,000 HDD; Zone 2 = Under 2,000 CDD and 5,500-7,000 HDD; Zone 3 = Under 2,000 CDD and 4,000-5,499 HDD; Zone 4 = Under 2,000 CDD and fewer than 4,000 HDD; Zone 5 = 2,000 CDD or more and fewer than 4,000 HDD. (See "Glossary" for definitions of CDD and HDD.)

<sup>&</sup>lt;sup>b</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|  | (                                    | otal Electric<br>Consumptic<br>billion kWh | on                                | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|--|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|  | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*                                       | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Principal Building Activity                          |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Education  | 9                                    | 55   | 45                                | 806                                  | 5,378                                      | 3,687                             | 11.1                                 | 10.2                                       | 12.2                              |
| Food Sales   | 36                                   | 24   | Q                                 | 747                                  | 467  | Q                                 | 48.8                                 | 51.1                                       | Q                                 |
| Food Service   | 47                                   | 16   | Q                                 | 986                                  | 664  | Q                                 | 47.8                                 | 24.5                                       | Q                                 |
| Health Care  | 6                                    | 17   | 50                                | 445                                  | 835  | 1,883                             | 13.1                                 | 20.5                                       | 26.3                              |
| Inpatient  | N                                    | Q  | 47                                | N                                    | Q  | 1,723                             | N                                    | Q  | 27.0                              |
| Outpatient   | 6                                    | 11   | Q                                 | 445                                  | 652  | Q                                 | 13.1                                 | 17.4                                       | Q                                 |
| Lodging  | 4                                    | 31   | 34                                | 260                                  | 2,274                                      | 2,563                             | 14.0                                 | 13.5                                       | 13.5                              |
| Retail (Other Than Mall)                             | 17                                   | 28   | 18                                | 1,363                                | 2,133                                      | 821                               | 12.2                                 | 12.9                                       | 21.5                              |
| Office   | 30                                   | 75   | 105                               | 2,320                                | 4,602                                      | 5,286                             | 12.9                                 | 16.4                                       | 19.9                              |
| Public Assembly                                      | 10                                   | 21   | 19                                | 850                                  | 1,851                                      | 1,233                             | 11.6                                 | 11.2                                       | Q                                 |
| Public Order and Safety                              | 2                                    | 6  | Q                                 | 231                                  | 390  | Q                                 | 10.4                                 | 14.9                                       | Q                                 |
| Religious Worship                                    | 5                                    | 11   | Q                                 | 1,160                                | 2,391                                      | Q                                 | 4.5                                  | 4.7  | Q                                 |
| Service  | 14                                   | 19   | Q                                 | 1,687                                | 1,862                                      | Q                                 | 8.2                                  | 10.2                                       | Q                                 |
| Warehouse and Storage                                | 7                                    | 25   | 40                                | 1,256                                | 4,482                                      | 3,687                             | 5.8                                  | 5.5  | 10.8                              |
| Other  | 2                                    | 11   | 25                                | 206                                  | 601  | 922                               | 9.6                                  | 19.1                                       | 27.6                              |
| Vacant   | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 | Q.0                                  | Q  | Q Q                               |
| Year Constructed                                     |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Before 1920  | 6                                    | 14   | 6                                 | 953                                  | 1,972                                      | 805                               | 6.7                                  | 7.3  | 7.0                               |
| 1920 to 1945   | 16                                   | 17   | 28                                | 1,491                                | 2,336                                      | 2,768                             | 10.7                                 | 7.4  | 10.0                              |
| 1946 to 1959   | 16                                   | 26   | 25                                | 1,465                                | 3,237                                      | 2,136                             | 10.7                                 | 8.1  | 11.9                              |
| 1960 to 1969   | 19                                   | 43   | 33                                | 1,545                                | 4,143                                      | 2,130                             | 12.5                                 | 10.4                                       | 14.1                              |
| 1970 to 1979   | 34                                   | 64   | 70                                | 2,208                                | 4,607                                      | 3,740                             | 15.2                                 | 13.9                                       | 18.7                              |
| 1980 to 1989   | 34                                   | 61   | 88                                | 1,769                                | ,  | 4,215                             | 19.4                                 | 14.7                                       | 20.9                              |
| 1990 to 1999   | 50                                   | 75   | 77                                | 2,252                                | 4,169                                      | 4,213                             | 22.1                                 | 13.0                                       | 19.1                              |
|  |                                      | 39   |                                   |                                      | 5,798                                      |                                   |                                      |  |                                   |
| 2000 to 2003   | 14                                   | 39   | 33                                | 860                                  | 2,524                                      | 1,915                             | 16.8                                 | 15.4                                       | 17.0                              |
| Census Region and Division                           | 00                                   |  | 70                                | 0.000                                | E 075                                      | - 4-4                             | 44.4                                 | 40.0                                       | 40.4                              |
| Northeast  | 23                                   | 53   | 72                                | 2,080                                | 5,275                                      | 5,454                             | 11.1                                 | 10.0                                       | 13.1                              |
| New England  | 7                                    | 14   | Q                                 | 696                                  | 1,416                                      | 829                               | 10.2                                 | 9.7  | 13.1                              |
| Middle Atlantic                                      | 16                                   | 39   | 61                                | 1,384                                | 3,859                                      | 4,624                             | 11.6                                 | 10.1                                       | 13.1                              |
| Midwest  | 46                                   | 89   | 81                                | 3,176                                | 7,841                                      | 5,684                             | 14.4                                 | 11.4                                       | 14.3                              |
| East North Central                                   | 28                                   | 57   | 68                                | 1,689                                | 5,086                                      | 4,598                             | 16.8                                 | 11.2                                       | 14.8                              |
| West North Central                                   | 17                                   | 32   | 13                                | 1,487                                | 2,755                                      | 1,086                             | 11.7                                 | 11.6                                       | 12.0                              |
| South  | 83                                   | 141  | 150                               | 4,778                                | 10,712                                     | 7,276                             | 17.5                                 | 13.1                                       | 20.7                              |
| South Atlantic                                       | 45                                   | 76   | 90                                | 2,464                                | 5,350                                      | 4,282                             | 18.1                                 | 14.1                                       | 21.0                              |
| East South Central                                   | 12                                   | 26   | 13                                | 832                                  | 1,884                                      | 505                               | 14.0                                 | 13.6                                       | 25.1                              |
| West South Central                                   | 27                                   | 39   | 48                                | 1,482                                | 3,478                                      | 2,489                             | 18.4                                 | 11.3                                       | 19.2                              |
| West   | 37                                   | 58   | 57                                | 2,509                                | 4,958                                      | 3,564                             | 14.9                                 | 11.7                                       | 15.9                              |
| Mountain   | 12                                   | 21   | 23                                | 841                                  | 1,716                                      | 1,076                             | 13.9                                 | 12.4                                       | 21.4                              |
| Pacific  | 26                                   | 37   | 34                                | 1,668                                | 3,242                                      | 2,488                             | 15.4                                 | 11.4                                       | 13.5                              |
| Climate Zone: 30-Year Average<br>Under 2,000 CDD and |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| More than 7,000 HDD                                  | 30                                   | 51   | 38                                | 2,327                                | 4,929                                      | 3,137                             | 12.9                                 | 10.4                                       | 12.3                              |
| 5,500-7,000 HDD                                      | 43                                   | 85   |                                   | 3,142                                | 7,887                                      | 6,047                             | 12.9                                 | 10.4                                       |                                   |
|  |                                      |  | 96                                |                                      |  |                                   |                                      |  | 15.9                              |
| 4,000-5,499 HDD                                      | 26                                   | 61   | 79                                | 1,868                                | 4,498                                      | 5,009                             | 13.8                                 | 13.7                                       | 15.8                              |
| Fewer than 4,000 HDD                                 | 55                                   | 78   | 86                                | 3,496                                | 6,886                                      | 4,790                             | 15.8                                 | 11.4                                       | 17.9                              |
| 2,000 CDD or More and<br>Fewer than 4,000 HDD        | 36                                   | 65   | 60                                | 1,709                                | 4,586                                      | 2,994                             | 20.9                                 | 14.2                                       | 20.2                              |
|  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|  |                                      | otal Electric<br>Consumption           | on                                | Buildin                              | al Floorspad<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | sity                              |
|--|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|  | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*                                     | 190                                  | 341                                    | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Number of Floors                                   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| One  | 142                                  | 139                                    | 53                                | 8,615                                | 12,365                                     | 3,955                             | 16.5                                 | 11.3                                       | 13.4                              |
| Two  | 38                                   | 115                                    | 50                                | 2,932                                | 9,121                                      | 3,925                             | 12.9                                 | 12.6                                       | 12.6                              |
| Three  | 9                                    | 44                                     | 31                                | 841                                  | 4,112                                      | 2,428                             | 10.2                                 | 10.7                                       | 12.8                              |
| Four to Nine                                       | Q                                    | 41                                     | 132                               | Q                                    | 3,069                                      | 6,841                             | Q                                    | 13.5                                       | 19.2                              |
| Ten or More  | N                                    | Q                                      | 94                                | N                                    | Q  | 4,828                             | N                                    | Q  | 19.5                              |
| Elevators and Escalators (more than one may apply) |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Any Elevators                                      | 4                                    | 116                                    | 296                               | 286                                  | 7,913                                      | 16,296                            | 14.6                                 | 14.7                                       | 18.2                              |
| Number of Elevators                                |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| One  | 4                                    | 67                                     | 32                                | 286                                  | 5,077                                      | 2,745                             | 14.6                                 | 13.3                                       | 11.7                              |
| Two to Five  | N                                    | 48                                     | 123                               | N                                    | 2,791                                      | 7,329                             | N                                    | 17.3                                       | 16.8                              |
| Six or More  | N                                    | Q                                      | 140                               | N                                    | Q  | 6,222                             | N                                    | Q  | 22.6                              |
| Any Escalators                                     | Q                                    | Q                                      | 56                                | Q                                    | Q  | 2,257                             | Q                                    | Q  | 24.6                              |
| Number of Workers (main shift)                     |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Fewer than 5                                       | 75                                   | 22                                     | Q                                 | 7,169                                | 5,485                                      | Q                                 | 10.5                                 | 4.0  | Q                                 |
| 5 to 9   | 45                                   | 25                                     | Q                                 | 2,618                                | 3,202                                      | Q                                 | 17.3                                 | 8.0  | Q                                 |
| 10 to 19   | 41                                   | 44                                     | Q                                 | 1,798                                | 4,940                                      | Q                                 | 22.9                                 | 8.8  | Q                                 |
| 20 to 49   | 22                                   | 110                                    | 22                                | 844                                  | 7,872                                      | 2,247                             | 25.6                                 | 14.0                                       | 9.6                               |
| 50 to 99   | Q                                    | 74                                     | 42                                | Q                                    | 4,492                                      | 3,368                             | Q                                    | 16.4                                       | 12.6                              |
| 100 to 249   | Q                                    | 55                                     | 76                                | Q                                    | 2,377                                      | 4,455                             | Q                                    | 23.1                                       | 17.0                              |
| 250 or More  | N                                    | 11                                     | 202                               | N                                    | 419  | 9,109                             | N                                    | 25.7                                       | 22.2                              |
| Weekly Operating Hours                             |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Fewer than 40                                      | 13                                   | 10                                     | Q                                 | 2,586                                | 2,415                                      | Q                                 | 5.2                                  | 4.1  | Q                                 |
| 40 to 48   | 32                                   | 59                                     | 25                                | 3,364                                | 6,136                                      | 2,071                             | 9.5                                  | 9.7  | 12.2                              |
| 49 to 60   | 34                                   | 75                                     | 66                                | 2,888                                | 8,031                                      | 4,783                             | 11.9                                 | 9.4  | 13.7                              |
| 61 to 84   | 33                                   | 65                                     | 47                                | 1,555                                | 5,209                                      | 3,547                             | 21.5                                 | 12.5                                       | 13.3                              |
| 85 to 167  | 48                                   | 57                                     | 48                                | 1,121                                | 2,889                                      | 2,932                             | 42.7                                 | 19.8                                       | 16.4                              |
| Open Continuously                                  | 29                                   | 74                                     | 171                               | 1,029                                | 4,107                                      | 7,745                             | 28.1                                 | 17.9                                       | 22.0                              |
| Ownership and Occupancy                            |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Nongovernment Owned                                | 172                                  | 253                                    | 248                               | 11,073                               | 21,731                                     | 15,208                            | 15.6                                 | 11.7                                       | 16.3                              |
| Owner Occupied                                     | 73                                   |  | 132                               | 5,456                                | 10,662                                     | 7,336                             | 13.3                                 |  | 18.0                              |
| Nonowner Occupied                                  | 99                                   | 139                                    | 115                               | 5,424                                |  | 7,339                             | 18.3                                 |  | 15.7                              |
| Unoccupied   | Q                                    |  | Q                                 | Q, . <u></u> ,                       |  | Q                                 |                                      |  | Q                                 |
| Government Owned                                   | 17                                   | 87                                     | 111                               | 1,470                                | 7,055                                      | 6,770                             | 11.8                                 |  | 16.4                              |
| Federal  | Q                                    | 6                                      | 32                                | ,,,,,o<br>Q                          | 402  | 1,466                             | Q                                    |  | 21.7                              |
| State  | 3                                    |  | 34                                | 302                                  |  | 1,751                             | 10.4                                 |  | 19.3                              |
| Local  | 13                                   |  | 46                                | 1,085                                | 4,920                                      | 3,553                             | 12.2                                 |  | 12.8                              |
| Vacancy Status                                     |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Completely Vacant                                  | Q                                    | Q                                      | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
| Mostly Vacant                                      | Q                                    |  | Q                                 | Q                                    |  | Q                                 |                                      |  | Q                                 |
| Partially Vacant                                   | 13                                   | 49                                     | 106                               | 1,275                                |  | 6,420                             | 10.6                                 |  | 16.6                              |
| Not At All Vacant                                  | 176                                  | 290                                    | 252                               | 11,042                               |  | 14,794                            | 15.9                                 |  | 17.0                              |
| 1101/11/11 Vacant                                  | 170                                  | 230                                    | 202                               | 11,042                               | 20,720                                     | 17,134                            | 10.8                                 | 14.4                                       | 17.0                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|   |                                      | otal Electric<br>Consumptic<br>billion kWh | on                                | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|---|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|   | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*  | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Number of Establishments  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| One   | 166                                  | 252  | 208                               | 10,331                               | 20,970                                     | 13,077                            |                                      | 12.0                                       | 15.9                              |
| 2 to 5  | 23                                   | 58   | 67                                | 1,908                                | 5,307                                      | 3,705                             |                                      | 10.9                                       | 18.1                              |
| 6 to 10   | Q                                    | 16   | 17                                | Q                                    |  | 872                               |                                      |  | 19.4                              |
| 11 to 20  | Q                                    | 10   | 19                                | Q                                    |  | 1,325                             |                                      | 15.4                                       | 14.4                              |
| More than 20  | Q                                    | Q  | 47                                | Q                                    |  | 2,305                             |                                      | Q  | 20.4                              |
| Currently Unoccupied  | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
| Predominant Exterior Wall Material  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Brick, Stone or Stucco  | 101                                  | 180  | 161                               | 5,658                                | 15,715                                     | 10,922                            | 17.8                                 | 11.5                                       | 14.7                              |
| Concrete (Block or Poured)  | 33                                   | 70   | 52                                | 2,003                                | 5,347                                      | 3,388                             | 16.7                                 | 13.1                                       | 15.3                              |
| Concrete Panels   | Q                                    | 30   | 82                                | Q                                    | 1,843                                      | 4,270                             | Q                                    | 16.2                                       | 19.2                              |
| Siding or Shingles  | 28                                   | 12   | Q                                 | 2,129                                | 1,555                                      | Q                                 | 13.1                                 | 7.4  | Q                                 |
| Metal Panels  | 19                                   | 41   | 27                                | 2,242                                | 3,737                                      | 1,398                             | 8.3                                  | 11.0                                       | 19.5                              |
| Window Glass  | Q                                    | Q  | 15                                | Q                                    | Q  | 762                               | Q                                    | Q  | 20.0                              |
| Other   | Q                                    | Q  | 13                                | Q                                    |  | 770                               |                                      |  | 17.3                              |
| No One Major Type   | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
| Predominant Roof Material   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Built-Up  | 54                                   | 117  | 134                               | 2,678                                | 9,269                                      | 8,834                             |                                      | 12.6                                       | 15.2                              |
| Shingles (Not Wood)   | 50                                   | 53   | 18                                | 3,736                                | 4,849                                      | 1,286                             |                                      | 11.0                                       | 14.2                              |
| Metal Surfacing   | 31                                   | 60   | 24                                | 3,446                                | 6,247                                      | 1,541                             |                                      | 9.6  | 15.6                              |
| Synthetic or Rubber   | 33                                   | 84   | 144                               | 1,342                                | 5,667                                      | 7,701                             |                                      |  | 18.7                              |
| Slate or Tile   | 13                                   | 13   | 5                                 | 751                                  | 1,296                                      | 391                               |                                      |  | 12.0                              |
| Wooden Materials  | 4                                    | Q<br>6                                     | Q                                 | 330                                  |  | Q                                 |                                      |  | Q                                 |
| Other   | Q<br>Q                               | Q  | Q<br>Q                            | Q<br>Q                               |  | Q<br>Q                            |                                      | 14.2<br>Q                                  | Q<br>Q                            |
| No One Major Type   | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |                                      | Q  | Q                                 |
| Renovations in Buildings Constructed Before 1980 (more than one may apply) Any Type of Renovation |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Since 1980  | 36                                   | 95   | 98                                | 2,893                                | 7,830                                      | 6,916                             | 12.3                                 | 12.1                                       | 14.2                              |
| Addition or Annex   | 9                                    | 37   | 46                                | 668                                  | 2,805                                      | 3,079                             |                                      | 13.2                                       | 14.2                              |
| Reduction In Floorspace   | Q                                    | Q  | Q                                 | Q                                    | 2,003<br>Q                                 | 0,073<br>Q                        |                                      | Q  | Q                                 |
| Cosmetic Improvements   | 27                                   | 73   | 76                                | 2,091                                | 5,806                                      | 5,105                             |                                      | 12.6                                       | 15.0                              |
| Wall or Roof Replacement  | 13                                   | 33   | 55                                | 1,162                                | 2,989                                      | 3,904                             |                                      | 11.2                                       | 14.1                              |
| Interior Wall   |                                      |  |                                   | •                                    | ,  | •                                 |                                      |  |                                   |
| Re-Configuration  | 15                                   | 42   | 61                                | 1,164                                | 3,222                                      | 4,115                             | 12.7                                 | 12.9                                       | 14.9                              |
| HVAC Equipment Upgrade  | 15                                   | 60   | 80                                | 1,173                                | 4,662                                      | 4,931                             | 12.7                                 | 12.8                                       | 16.2                              |
| Lighting Upgrade  | 13                                   | 59   | 67                                | 1,202                                | 4,417                                      | 4,654                             | 11.0                                 | 13.4                                       | 14.5                              |
| Window Replacement  | 9                                    | 32   | 32                                | 871                                  | 2,772                                      | 2,633                             |                                      | 11.7                                       | 12.1                              |
| Plumbing System Upgrade   | 10                                   | 30   | 51                                | 888                                  | 2,735                                      | 3,519                             |                                      | 11.1                                       | 14.6                              |
| Insulation Upgrade  | 6                                    | 21   | 25                                | 638                                  | 1,655                                      | 1,719                             |                                      | 12.4                                       | 14.5                              |
| Other Renovation  | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |                                      | Q  | Q                                 |
| No Renovations Since 1980   |                                      | .71  | 63                                | 4,769                                | 8,465                                      | 4,903                             |                                      | 8.3  | 12.9                              |
| Building Newer than 1980  | 99                                   | 175  | 198                               | 4,881                                | 12,491                                     | 10,159                            | 20.2                                 | 14.0                                       | 19.5                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|   | (                                    | otal Electric<br>Consumptic<br>billion kWh | n                                 | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|---|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|   | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*                            | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Energy Sources (more than one may apply)  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Electricity                               | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Natural Gas                               | 112                                  | 243  | 279                               | 6,775                                | 19,761                                     | 16,926                            | 16.5                                 |  | 16.5                              |
| Fuel Oil                                  | 112                                  | 52   | 186                               | 1,302                                | 3,532                                      | 10,328                            | 9.4                                  | 14.8                                       | 18.0                              |
| District Heat                             | Q                                    | 20   | 77                                | 1,302<br>Q                           | 1,232                                      | 4,111                             | 9.4<br>Q                             | 16.4                                       | 18.8                              |
| District Chilled Water                    | Q                                    | 13   | 43                                | Q                                    | 694  | 2,111                             | Q                                    |  | 20.2                              |
| Propane                                   | 21                                   | 30   | 48                                | 1,522                                | 2,577                                      | 2,968                             | 14.1                                 | 11.7                                       | 16.0                              |
| Other                                     | 3                                    | 10   | 9                                 | 409                                  | 583  | 388                               | 8.0                                  | 17.7                                       | 23.4                              |
| <b>5415</b> 1                             | Ū                                    | 10   | Ü                                 | 100                                  | 000  | 000                               | 0.0                                  |  | 20.1                              |
| Space-Heating Energy Sources              |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Electricity                               | 89                                   | 181  | 185                               | 4,927                                | 13,154                                     | 10,519                            | 18.1                                 | 13.8                                       | 17.6                              |
| Electricity Main                          | 69                                   | 118  | 79                                | 3,465                                | 7,876                                      | 4,656                             | 19.8                                 | 15.0                                       | 17.0                              |
| Electricity Secondary                     | 20                                   | 63   | 106                               | 1,462                                | 5,279                                      | 5,863                             | 14.0                                 | 12.0                                       | 18.1                              |
| Other Excluding Electricity               | 88                                   | 152  | 166                               | 6,496                                | 14,011                                     | 10,885                            | 13.6                                 | 10.9                                       | 15.3                              |
| Buildings without Heating                 | 12                                   | 7  | Q                                 | 1,120                                | 1,621                                      | Q                                 | 10.9                                 | 4.3  | Q                                 |
| Primary Space-Heating<br>Energy Source    |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Electricity                               | 69                                   | 118  | 79                                | 3,465                                | 7,876                                      | 4,656                             | 19.8                                 | 15.0                                       | 17.0                              |
| Natural Gas                               | 86                                   | 182  | 191                               | 5,739                                | 15,927                                     | 11,297                            | 14.9                                 | 11.4                                       | 16.9                              |
| Fuel Oil                                  | 8                                    | 6  | 9                                 | 913                                  | 1,268                                      | Q                                 | 8.3                                  |  | Q                                 |
| District Heat                             | Q                                    | 18   | 72                                | Q                                    | 1,112                                      | 3,695                             | Q                                    |  | 19.4                              |
| Propane                                   | 13                                   | 6  | Q                                 | 999                                  | 858  | Q                                 | 13.2                                 |  | Q                                 |
| Other                                     | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
| Cooling Energy Sources                    |                                      |  | 0.40                              | 40.000                               |  | 40                                | 4= 0                                 |  |                                   |
| Electricity                               | 178                                  | 324  | 312                               | 10,360                               | 25,385                                     | 18,575                            | 17.2                                 |  | 16.8                              |
| Other Excluding Electricity               | Q                                    | 9  | 36                                | Q                                    | 644  | 1,920                             | Q                                    |  | 18.7                              |
| Buildings without Cooling                 | 11                                   | 8  | Q                                 | 2,142                                | 2,757                                      | Q                                 | 5.2                                  | 2.8  | 7.7                               |
| Water-Heating Energy Sources              |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Electricity                               | 88                                   | 163  | 152                               | 5,669                                | 12,392                                     |                                   |                                      | 13.1                                       |                                   |
| Other Excluding Electricity               | 83                                   | 167  | 196                               | 4,423                                | 13,317                                     | 11,233                            | 18.7                                 | 12.5                                       | 17.4                              |
| Bldgs without Water Heating               | 19                                   | 11   | Q                                 | 2,451                                | 3,078                                      | Q                                 | 7.8                                  | 3.6  | Q                                 |
| Cooking Energy Sources                    |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Electricity                               | 40                                   | 74   | 135                               | 1,114                                | 4,754                                      | 7,292                             | 35.8                                 | 15.5                                       | 18.5                              |
| Other Excluding Electricity               | 33                                   | 46   | 76                                | 1,019                                | 3,286                                      | 4,771                             | 32.4                                 | 13.9                                       | 16.0                              |
| Buildings without Cooking                 | 117                                  | 221  | 148                               | 10,410                               | 20,746                                     | 9,914                             | 11.2                                 | 10.7                                       | 14.9                              |
| Energy End Uses (more than one may apply) |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Buildings with Space Heating              | 178                                  | 334  | 351                               | 11,423                               | 27,165                                     | 21,403                            | 15.5                                 | 12.3                                       | 16.4                              |
| Buildings with Cooling                    | 179                                  | 333  | 348                               | 10,401                               | 26,030                                     | 20,495                            | 17.2                                 |  | 17.0                              |
| Buildings with Water Heating              | 171                                  | 330  | 347                               | 10,092                               | 25,708                                     | 20,663                            | 16.9                                 | 12.8                                       | 16.8                              |
| Buildings with Cooking                    | 73                                   | 119  | 211                               | 2,133                                | 8,041                                      | 12,063                            | 34.2                                 | 14.8                                       | 17.5                              |
| Buildings with Manufacturing              | 3                                    | 18   | 21                                | 330                                  | 1,326                                      | 1,482                             | 9.4                                  | 13.2                                       | 14.0                              |
| Buildings with Electricity                |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Generation                                | Q                                    | 65   | 192                               | Q                                    | 3,074                                      | 9,547                             | Q                                    | 21.3                                       | 20.1                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|   | C                                    | otal Electric<br>Consumptic            | n                                 | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|---|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|   | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*                              | 190                                  | 341                                    | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Percent of Floorspace Heated                |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Not Heated                                  | 12                                   | 7                                      | Q                                 | 1,120                                | 1,621                                      | Q                                 | 10.9                                 | 4.3  | Q                                 |
| 1 to 50                                     | 15                                   | 27                                     | 13                                | 1,612                                | 3,499                                      | 1,718                             | 9.2                                  | 7.8  | 7.5                               |
| 51 to 99                                    | 23                                   | 39                                     | 53                                | 1,455                                | 3,286                                      | 3,365                             | 16.1                                 | 11.9                                       | 15.8                              |
| 100   | 139                                  | 267                                    | 285                               | 8,355                                | 20,380                                     | 16,320                            | 16.7                                 | 13.1                                       | 17.5                              |
| Percent of Floorspace Cooled                |                                      |  | _                                 |                                      |  |                                   |                                      |  |                                   |
| Not Cooled                                  | 11                                   | 8                                      | Q                                 | 2,142                                | 2,757                                      | Q                                 |                                      | 2.8  | 7.7                               |
| 1 to 50                                     | 28                                   | 64                                     | 38                                | 2,894                                | 8,811                                      | 4,877                             |                                      | 7.2  | 7.9                               |
| 51 to 99                                    | 37                                   | 79                                     | 102                               | 1,775                                | 5,265                                      | 6,170                             | 21.0                                 | 15.0                                       | 16.5                              |
| 100   | 113                                  | 190                                    | 208                               | 5,731                                | 11,953                                     | 9,447                             | 19.8                                 | 15.9                                       | 22.0                              |
| Percent Lit When Open                       | 0                                    | 0                                      | 0                                 | 0                                    | 0  | 0                                 | 0                                    | 0  | 0                                 |
| Zero  | Q                                    | Q                                      | Q                                 | Q<br>2.405                           | Q<br>5.000                                 | Q<br>2.040                        | Q                                    | Q  | Q                                 |
| 1 to 50                                     | 20<br>44                             | 31                                     | 15                                | 2,495                                | 5,662                                      | 2,046                             | 8.1                                  | 5.4  | 7.4                               |
| 51 to 99                                    | 123                                  | 105<br>203                             | 113<br>231                        | 3,154<br>6,390                       | 8,556<br>13,779                            | 6,579<br>12,620                   | 14.1<br>19.3                         | 12.3<br>14.8                               | 17.1<br>18.3                      |
| Building Never Open/                        | 123                                  | 203                                    | 231                               | 0,390                                | 13,779                                     | 12,020                            | 19.5                                 | 14.0                                       | 10.5                              |
| Electricity Not Used                        | Q                                    | Q                                      | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
|   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Percent Lit When Closed                     |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Zero  | 57                                   | 66                                     | 36                                | 5,839                                | 8,570                                      | 2,976                             | 9.8                                  | 7.7  | 12.0                              |
| 1 to 50                                     | 95                                   | 181                                    | 137                               | 5,314                                | 15,218                                     | 10,415                            | 17.8                                 | 11.9                                       | 13.1                              |
| 51 to 100                                   | 9                                    | 20                                     | 16                                | 361                                  | 891  | 841                               | 23.9                                 | 22.8                                       | 19.6                              |
| Building Never Closed/ Electricity Not Used | 29                                   | 74                                     | 171                               | 1,029                                | 4,107                                      | 7,745                             | 28.1                                 | 17.9                                       | 22.0                              |
| Hasting Familian and (many                  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Heating Equipment (more than one may apply) |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Heat Pumps                                  | 21                                   | 65                                     | 68                                | 1,147                                | 4,074                                      | 3,593                             | 18.2                                 | 15.9                                       | 18.8                              |
| Packaged Heat Pumps                         | 15                                   | 41                                     | 50                                | 686                                  | 2,402                                      | 2,354                             | 21.2                                 | 17.0                                       | 21.2                              |
| Split-System Heat Pumps                     | 6                                    | 18                                     | Q                                 | 420                                  | 1,293                                      | 868                               | 13.4                                 | 13.7                                       | 19.0                              |
| Individual Room Heat Pumps                  | Q                                    | 18                                     | 24                                | Q                                    | 1,113                                      | 1,509                             | Q                                    | 16.5                                       | 15.9                              |
| Furnaces                                    | 75                                   | 95                                     | 54                                | 5,783                                | 9,501                                      | 4,320                             | 12.9                                 | 10.0                                       | 12.4                              |
| Individual Space Heaters                    | 25                                   | 68                                     | 72                                | 2,329                                | 5,696                                      | 4,515                             | 10.7                                 | 11.9                                       | 16.0                              |
| District Heat                               | Q                                    | 19                                     | 73                                | Q                                    | 1,162                                      | 3,903                             | Q                                    | 16.1                                       | 18.8                              |
| Boilers                                     | 16                                   | 100                                    | 180                               | 1,234                                | 8,490                                      | 10,699                            | 12.7                                 | 11.8                                       | 16.8                              |
| Packaged Heating Units Other                | 66<br>7                              | 130<br>20                              | 114<br>22                         | 2,758<br>529                         | 8,541<br>1,325                             | 6,722<br>1,388                    | 24.1<br>12.7                         | 15.2<br>15.3                               | 17.0<br>16.0                      |
| Otilei                                      | ,                                    | 20                                     | 22                                | 529                                  | 1,323                                      | 1,300                             | 12.7                                 | 13.3                                       | 10.0                              |
| Cooling Equipment (more than one may apply) |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Residential-Type Central                    |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Air Conditioners                            | 41                                   | 56                                     | 36                                | 3,091                                | 5,245                                      | 2,699                             | 13.4                                 | 10.7                                       | 13.3                              |
| Heat Pumps                                  | 22                                   | 65                                     | 73                                | 1,239                                | 4,036                                      | 3,766                             | 18.0                                 | 16.2                                       | 19.3                              |
| Packaged Heat Pumps                         | 15                                   | 42                                     | 49                                | 761                                  | 2,370                                      | 2,295                             | 19.8                                 | 17.6                                       | 21.2                              |
| Split-System Heat Pumps                     | 7                                    | 18                                     | Q                                 | 436                                  | 1,289                                      | 880                               | 15.0                                 | 13.7                                       | 18.9                              |
| Individual Room Heat Pumps                  | Q                                    | 18                                     | 31                                | Q                                    | 1,096                                      | 1,774                             | Q                                    | 16.5                                       | 17.5                              |
| Individual Air Conditioners                 | 20                                   | 59                                     | 61                                | 1,984                                | 5,999                                      | 4,576                             | 10.2                                 | 9.9  | 13.3                              |
| District Chilled Water                      | Q                                    | 13                                     | 43                                | Q                                    | 694  | 2,111                             | Q                                    | 19.0                                       | 20.2                              |
| Central Chillers                            | Q                                    | 54                                     | 189                               | Q                                    | 2,907                                      | 8,666                             | Q                                    | 18.7                                       | 21.8                              |
| Packaged Air Conditioning                   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Units                                       | 102                                  | 196                                    | 164                               | 4,698                                | 14,256                                     | 11,016                            | 21.8                                 | 13.7                                       | 14.9                              |
| Swamp Coolers                               | 6                                    | 10                                     | Q                                 | 385                                  | 776  | Q                                 | 16.4                                 | 12.7                                       | Q                                 |
| Other                                       | Q                                    | Q                                      | 13                                | Q                                    | Q  | 700                               | Q                                    | Q  | 18.1                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|  | C                                    | otal Electric<br>Consumptic<br>billion kWh | n                                 | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|--|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|  | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*   | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Main Equipment Replaced Since<br>1990 (more than one may apply)<br>Heating | 49                                   | 97   | 63                                | 3,374                                | 8,613                                      | 4,406                             | 14.6                                 | 11.3                                       | 14.4                              |
| Cooling  | 61                                   | 117  | 108                               | 3,903                                | 10,012                                     | 7,080                             | 15.7                                 |  | 15.2                              |
| Water Heating Equipment  | 400                                  | 000  | 474                               | 7 504                                | 40.700                                     | 40.000                            | 47.0                                 | 40.4                                       | 40.7                              |
| Centralized System  Distributed System  Combination of Centralized         | 136<br>31                            | 208<br>63                                  | 171<br>48                         | 7,591<br>2,263                       | 16,799<br>5,582                            | 10,266<br>3,695                   | 17.9<br>13.6                         |  | 16.7<br>12.9                      |
| and Distributed System   | Q                                    | 58   | 128                               | Q                                    | 3,327                                      | 6,702                             | Q                                    | 17.6                                       | 19.1                              |
| Lighting Equipment Types (more than one may apply)                         |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Incandescent   | 93                                   | 218  | 277                               | 5,979                                | 16,896                                     | 15,653                            | 15.6                                 |  | 17.7                              |
| Standard Fluorescent   | 181                                  | 330  | 354                               | 11,305                               | 27,126                                     | 21,256                            | 16.0                                 |  | 16.6                              |
| Compact Fluorescent  | 47                                   | 169  | 272                               | 2,232                                | 10,936                                     | 14,403                            | 21.2                                 |  | 18.9                              |
| High Intensity Discharge   | 17                                   | 105  | 208                               | 998                                  | 7,559                                      | 12,086                            | 16.8                                 |  | 17.2                              |
| Halogen  | 30                                   | 102  | 181                               | 1,385                                | 6,585                                      | 9,734                             |                                      |  | 18.6                              |
| Other  | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 | Q                                    | Q  | Q                                 |
| Refrigeration Equipment  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| (more than one may apply) <sup>a</sup>                                     |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Any Refrigeration  | 164                                  | 308  | 340                               | 9,071                                | 23,752                                     | 20,150                            | 18.1                                 | 13.0                                       | 16.9                              |
| Commercial Refrigeration   | 100                                  | 160  | 263                               | 2,716                                | 9,350                                      | 14,702                            | 36.9                                 |  | 17.9                              |
| Walk-In Units  | 86                                   | 118  | 233                               | 1,824                                | 5,937                                      | 12,493                            | 47.1                                 | 19.8                                       | 18.6                              |
| Cases or Cabinets  | 85                                   | 127  | 210                               | 2,216                                | 7,057                                      | 11,151                            | 38.5                                 |  | 18.8                              |
| Residential-Type Units   | 80                                   | 207  | 231                               | 6,783                                | 17,774                                     | 14,328                            | 11.8                                 |  | 16.1                              |
| Vending Machines   | 41                                   | 230  | 311                               | 2,237                                | 15,323                                     | 17,775                            | 18.3                                 |  | 17.5                              |
| No Refrigeration   | 26                                   | 33   | Q                                 | 3,472                                | 5,034                                      | 1,827                             | 7.4                                  | 6.5  | 10.6                              |
| Office Equipment (more than one may apply)                                 |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
|  | 150                                  | 330  | 351                               | 9 727                                | 26,064                                     | 20 837                            | 17.2                                 | 12.7                                       | 16.9                              |
| With Flat Screen Monitors  | 150<br>39                            | 330<br>160                                 | 351<br>266                        | 8,727<br>2,173                       | 10,178                                     | 20,837<br>14,065                  | 17.2<br>18.1                         | 12.7<br>15.7                               | 16.8<br>18.9                      |
| Dedicated Servers  | 56                                   | 229  | 312                               | 2,173                                | 15,713                                     | 17,835                            | 20.0                                 |  | 17.5                              |
| Laser Printers   | 91                                   | 188  | 175                               | 5,598                                | 16,584                                     | 10,830                            | 16.3                                 |  | 16.2                              |
| Inkjet Printers  | 70                                   | 207  | 257                               | 3,821                                | 14,731                                     | 13,658                            | 18.2                                 |  | 18.8                              |
| FAX Machines   | 130                                  | 314  | 347                               | 7,520                                | 24,274                                     | 20,580                            | 17.3                                 |  | 16.9                              |
| Photocopiers   | 71                                   | 286  | 335                               | 5,167                                | 21,434                                     | 19,657                            | 13.8                                 |  | 17.0                              |
| Number of Computers  | 22                                   | 40   | ^                                 | 0.040                                | 0.700                                      | ^                                 | 40.0                                 | 2.2  | ^                                 |
| None   | 39                                   | 10   | Q                                 | 3,816                                | 2,723                                      | Q<br>4.405                        |                                      |  | Q                                 |
| 1 to 4   | 89                                   | 52   | Q                                 | 5,366                                | 5,844                                      | 1,185                             | 16.7                                 |  | Q                                 |
| 5 to 9   | 30                                   | 42   | Q                                 | 1,725                                | 4,428                                      | Q<br>4 504                        |                                      |  | Q                                 |
| 10 to 19   | 17                                   | 52   | 14                                | 1,031                                | 4,055                                      | 1,524                             | 16.2                                 |  | 9.4                               |
| 20 to 49   | 13                                   | 72   | 34                                | 569                                  | 4,639                                      | 2,207                             | 23.1                                 | 15.6                                       | 15.6                              |
| 50 to 99   | Q                                    | 47<br>51                                   | 28                                | Q                                    | 3,297                                      | 2,045                             | Q                                    |  | 13.6                              |
| 100 to 249   | Q                                    | 51   | 56<br>108                         | Q                                    | 3,165                                      | 3,522                             |                                      | 16.0                                       | 16.0                              |
| 250 or More  | N                                    | 14   | 198                               | N                                    | 636  | 9,327                             | N                                    | 21.7                                       | 21.2                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|   | C                                    | otal Electric<br>Consumptic<br>billion kWh | on n                              | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         |                                      | Electricity<br>nergy Intens<br>Wh/square f | -                                 |
|---|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|
|   | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet |
| All Buildings*  | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1                                 | 11.8                                       | 16.4                              |
| Number of Dedicated Servers   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| None  | 134                                  | 112  | 48                                | 9,753                                | 13,073                                     | 4,142                             | 13.7                                 | 8.6  | 11.5                              |
| 1 to 4  | 51                                   | 172  | 119                               | 2,667                                | 13,017                                     | 8,432                             | 19.1                                 | 13.2                                       | 14.1                              |
| 5 to 9  | Q                                    | 30   | 40                                | Q                                    | 1,491                                      | 2,305                             | Q                                    | 20.1                                       | 17.1                              |
| 10 to 19  | Q                                    | 14   | 48                                | Q                                    | 603  | 2,370                             | Q                                    | 23.8                                       | 20.2                              |
| 20 to 49  | N                                    | 9  | 44                                | N                                    | 482  | 2,101                             | N                                    | 19.5                                       | 21.0                              |
| 50 or More  | N                                    | Q  | 62                                | N                                    | Q  | 2,627                             | N                                    | Q  | 23.5                              |
| Number of Photocopiers None   | 440                                  | 5.1  | 05                                | 7.070                                | 7.050                                      | 0.001                             | 40.4                                 | 7.4  | 40.0                              |
|   | 118                                  | 54   | 25                                | 7,376                                | 7,353                                      | 2,321                             | 16.1                                 | 7.4  | 10.8                              |
| One   | 48                                   | 99   | 27                                | 3,817                                | 8,993                                      | 2,665                             | 12.5                                 | 11.0                                       | 10.1                              |
| 2 to 4  | 19<br>Q                              | 122<br>38                                  | 66<br>53                          | 1,257<br>Q                           | 8,908<br>2,032                             | 4,917<br>3,390                    | 15.0<br>Q                            | 13.7<br>18.5                               | 13.5<br>15.5                      |
| 10 or More  | Q<br>N                               | 28   | 189                               | N                                    | 1,500                                      | 8,685                             | N                                    | 18.3                                       | 21.7                              |
| Energy-Related Space Functions (more than one may apply)              |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Commercial Food Preparation Activities with Large                     | 73                                   | 119  | 211                               | 2,131                                | 8,029                                      | 12,063                            | 34.2                                 | 14.8                                       | 17.5                              |
| Amounts of Hot Water  | 38                                   | 113  | 191                               | 1,477                                | 7,554                                      | 10,451                            | 25.7                                 | 14.9                                       | 18.3                              |
| Separate Computer Area  | 16                                   | 157  | 282                               | 969                                  | 10,433                                     | 15,471                            | 16.3                                 | 15.0                                       | 18.2                              |
| HVAC Conservation Features  |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| (more than one may apply)   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Variable Air-Volume System  | 26                                   | 111  | 235                               | 1,048                                | 6,736                                      | 11,813                            | 24.5                                 | 16.5                                       | 19.9                              |
| Economizer Cycle  | 29                                   | 133  | 251                               | 1,102                                | 7,217                                      | 12,789                            | 26.5                                 | 18.4                                       | 19.6                              |
| HVAC Maintenance  | 133                                  | 304  | 356                               | 7,121                                | 23,011                                     | 21,019                            | 18.6                                 | 13.2                                       | 16.9                              |
| Energy Management and   |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Control System (EMCS)   | 9                                    | 80   | 191                               | 364                                  | 4,973                                      | 10,294                            | 24.8                                 | 16.0                                       | 18.6                              |
| Window and Interior Lighting<br>Features (more than one<br>may apply) |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Multipaned Windows  | 104                                  | 228  | 260                               | 6,162                                | 17,228                                     | 15,337                            | 16.9                                 | 13.3                                       | 17.0                              |
| Tinted Window Glass   | 68                                   | 163  | 262                               | 3,766                                | 11,952                                     | 13,908                            | 18.1                                 | 13.6                                       | 18.9                              |
| Reflective Window Glass External Overhangs                            | 12                                   | 48   | 94                                | 694                                  | 2,919                                      | 4,915                             | 16.8                                 | 16.3                                       | 19.1                              |
| or Awnings  | 70                                   | 112  | 100                               | 3,596                                | 7,868                                      | 5,709                             | 19.4                                 | 14.2                                       | 17.5                              |
| Skylights or Atriums  | 10                                   | 56   | 123                               | 733                                  | 4,605                                      | 7,170                             | 13.8                                 | 12.1                                       | 17.2                              |
| Daylighting Sensors   | Q                                    | 12   | 42                                | Q                                    | 789  | 1,864                             | Q                                    | 15.7                                       | 22.5                              |
| Specular Reflectors   | 38                                   | 145  | 253                               | 2,184                                | 10,058                                     | 13,875                            | 17.3                                 | 14.4                                       | 18.2                              |
| Electronic Ballasts   | 124                                  | 276  | 332                               | 7,346                                | 20,431                                     | 19,105                            | 16.8                                 | 13.5                                       | 17.4                              |
| Energy Management and   |                                      | 2.0  | 002                               | 7,010                                | 20,101                                     | 10,100                            | 10.0                                 | 10.0                                       |                                   |
| Control System (EMCS) For Lighting                                    | Q                                    | 21   | 67                                | Q                                    | 1,172                                      | 3,537                             | Q                                    | 18.1                                       | 19.0                              |
| Equipment Usage Reduced<br>When Building Not In Full Use              |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| (more than one may apply) <sup>a</sup>                                |                                      |  |                                   |                                      |  |                                   |                                      |  |                                   |
| Heating   | 112                                  | 221  | 233                               | 8,146                                | 19,476                                     | 15,084                            | 13.7                                 | 11.3                                       | 15.5                              |
| Cooling   | 117                                  | 232  | 247                               | 7,782                                | 19,738                                     | 15,670                            | 15.0                                 | 11.7                                       | 15.8                              |
| Lighting  | 154                                  | 253  | 180                               | 10,689                               | 23,175                                     | 13,123                            | 14.4                                 | 10.9                                       | 13.7                              |
| Office Equipment  | 57                                   | 97   | 57                                | 4,483                                | 10,317                                     | 4,597                             | 12.8                                 | 9.4  | 12.4                              |

Table C21. Electricity Consumption and Conditional Energy Intensity by Building Size for Non-Mall Buildings, 2003

|   | C                                    | otal Electric<br>Consumptic<br>billion kWh | on                                | Buildin                              | al Floorspac<br>gs Using El<br>lion square | ectricity                         | Electricity Energy Intensity (kWh/square foot) |  |                                   |  |
|---|--------------------------------------|--|-----------------------------------|--------------------------------------|--|-----------------------------------|--|--|-----------------------------------|--|
|   | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet | 10,001 to<br>100,000<br>Square<br>Feet     | Over<br>100,000<br>Square<br>Feet | 1,001 to<br>10,000<br>Square<br>Feet           | 10,001 to<br>100,000<br>Square<br>Feet | Over<br>100,000<br>Square<br>Feet |  |
| All Buildings*  | 190                                  | 341  | 360                               | 12,543                               | 28,786                                     | 21,977                            | 15.1   | 11.8                                   | 16.4                              |  |
| Annual Consumption (kilowatthours)                                |                                      |  |                                   |                                      |  |                                   |  |  |                                   |  |
| 10,000 or Less  | 4                                    | Q  | Q                                 | 1,954                                | Q  | Q                                 | 1.8  | Q                                      | Q                                 |  |
| 10,001 to 50,000  | 39                                   | 6  | Q                                 | 5,565                                |  | Q                                 | 7.0  | 1.8                                    | Q                                 |  |
| 50,001 to 100,000   | 38                                   | 14   | Q                                 | 2,527                                | 3,373                                      | Q                                 | 14.9   |  | Q                                 |  |
| 100,001 to 500,000  | 94                                   | 112  | 3                                 | 2,345                                | ,  | 1,838                             | 40.2   |  | 1.6                               |  |
| 500,001 to 1,000,000  | Q                                    | 77   | 8                                 | Q                                    | , -  | 1,684                             | Q  | 15.6                                   | 4.6                               |  |
| 1,000,001 to 5,000,000  | Q                                    | 129  | 137                               | Q                                    | ,  | 9,037                             | Q  | 31.1                                   | 15.1                              |  |
| Over 5,000,000  | N                                    | Q  | 212                               | N                                    | Q  | 8,677                             | N  | Q                                      | 24.4                              |  |
| Provider of Purchased<br>Electricity (more than<br>one may apply) | 182                                  | 314  | 296                               | 12 150                               | 27.025                                     | 19 669                            | 15.0   | 11.6                                   | 15.8                              |  |
| Local Utility Some Other Provider                                 | 182<br>7                             | 23   | 296<br>60                         | 12,150<br>351                        | 27,035<br>1,399                            | 18,668<br>3,196                   | 20.1   | 11.6                                   | 15.8                              |  |
| Some Other Provider   | ,                                    | 23   | 60                                | 331                                  | 1,399                                      | 3,190                             | 20.1   | 10.4                                   | 10.9                              |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Notes: ● Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. ● HVAC = Heating, Ventilation, and Air Conditioning. ● Due to rounding, data may not sum to totals. Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|                               | Total Electricity Consumption (billion kWh) |                 | Total Floorspace of<br>Buildings Using Electricity<br>(million square feet) |                   |                 | Electricity Energy Intensity (kWh/square foot) |                   |                 |                 |
|-------------------------------|---|-----------------|---|-------------------|-----------------|--|-------------------|-----------------|-----------------|
|                               | 1959 or<br>Before                           | 1960 to<br>1989 | 1990 to<br>2003   | 1959 or<br>Before | 1960 to<br>1989 | 1990 to<br>2003                                | 1959 or<br>Before | 1960 to<br>1989 | 1990 to<br>2003 |
| All Buildings*                | 155   | 447             | 288   | 17,163            | 28,766          | 17,378   | 9.0               | 15.5            | 16.6            |
| Building Floorspace           |   |                 |   |                   |                 |  |                   |                 |                 |
| (Square Feet)                 |   |                 |   |                   |                 |  |                   |                 |                 |
| 1,001 to 5,000                | 23  | 52              | 37  | 2,049             | 2,668           | 1,628  | 11.3              | 19.6            | 23.0            |
| 5,001 to 10,000               | 15  | 35              | 27  | 1,859             | 2,854           | 1,484  | 8.1               | 12.2            | 18.1            |
| 10,001 to 25,000              | 27  | 55              | 37  | 3,141             | 4,907           | 3,322  | 8.5               | 11.3            | 11.2            |
| 25,001 to 50,000              | 16  | 56              | 31  | 2,344             | 3,994           | 2,047  | 6.7               | 13.9            | 15.3            |
| 50,001 to 100,000             | 15  | 58              | 46  | 2,060             | 4,018           | 2,953  | 7.5               | 14.3            | 15.5            |
| 100,001 to 200,000            | 19  | 69              | 53  | 2,113             | 3,911           | 2,993  | 9.2               | 17.7            | 17.7            |
| 200,001 to 500,000            | 21  | 57              | 27  | 2,030             | 3,427           | 1,593  | 10.5              | 16.6            | 17.2            |
| Over 500,000                  | 18  | 65              | 29  | 1,566             | 2,986           | 1,357  | 11.4              | 21.9            | 21.4            |
| Principal Building Activity   |   |                 |   |                   |                 |  |                   |                 |                 |
| Education                     | 22  | 53              | 34  | 3,191             | 4,359           | 2,321  | 6.8               | 12.3            | 14.4            |
| Food Sales                    | Q   | 29              | Q   | Q                 | 585             | Q  | Q                 | 50.0            | Q               |
| Food Service                  | 10  | 22              | 31  | 613               | 524             | 517  | 16.7              | 42.9            | 59.4            |
| Health Care                   | 14  | 43              | 16  | 730               | 1,671           | 762  | 19.2              | 25.5            | 21.0            |
| Inpatient                     | 11  | 35              | 7   | 456               | 1,218           | 231  | 23.7              | 28.4            | 30.2            |
| Outpatient                    | 3   | 8               | 9   | 273               | 453             | 531  | 11.7              | 17.9            | 17.0            |
| Lodging                       | 10  | 39              | 20  | 1,236             | 2,564           | 1,296  | Q                 | 15.3            | 15.1            |
| Retail (Other Than Mall)      | 8   | 24              | 29  | 1,026             | 1,804           | 1,487  | 8.2               | 13.3            | 19.7            |
| Office                        | 34  | 131             | 46  | 2,852             | 6,792           | 2,563  | 11.9              | 19.2            | 17.9            |
| Public Assembly               | 7   | 20              | 22  | 1,455             | 1,445           | 1,035  | 4.6               | 13.9            | 21.6            |
| Public Order and Safety       | Q   | 7               | Q   | Q                 | 385             | Q  | Q                 | 18.5            | Q               |
| Religious Worship             | 4   | 6               | 7   | 1,522             | 1,328           | 904  | 2.9               | 4.8             | 8.1             |
| Service                       | 7   | 26              | 11  | 1,045             | 1,925           | 1,012  | 6.3               | 13.4            | 11.4            |
| Warehouse and Storage         | Q   | 25              | 30  | 1,941             | 3,851           | 3,633  | 8.3               | 6.5             | 8.4             |
| Other                         | Q   | 19              | 14  | Q                 | 684             | 673  | Q                 | 28.0            | Q               |
| Vacant                        | Q   | Q               | Q   | Q                 | Q               | Q  | Q                 | Q               | Q               |
| Census Region and Division    |   |                 |   |                   |                 |  |                   |                 |                 |
| Northeast                     | 45  | 72              | 31  | 5,944             | 4,834           | 2,031  | 7.5               | 15.0            | 15.0            |
| New England                   | 8   | 16              | Q   | 1,404             | 1,058           | 479  | 5.4               | 15.2            | 16.7            |
| Middle Atlantic               | 37  | 56              | 22  | 4,540             | 3,776           | 1,552  | 8.2               | 14.9            | 14.5            |
| Midwest                       | 48  | 104             | 63  | 5,494             | 7,376           | 3,832  | 8.8               | 14.1            | 16.6            |
| East North Central            | 37  | 73              | 43  | 3,932             | 5,036           | 2,405  | 9.4               | 14.6            | 17.9            |
| West North Central            | 11  | 31              | 20  | 1,562             | 2,339           | 1,427  | 7.2               | 13.2            | 14.2            |
| South                         | 40  | 186             | 149   | 3,506             | 10,654          | 8,606  | 11.3              | 17.5            | 17.3            |
| South Atlantic                | 24  | 94              | 92  | 2,043             | 5,175           | 4,878  | 11.6              | 18.3            | 18.9            |
| East South Central            | 6   | 28              | 16  | 535               | 1,656           | 1,029  | 11.8              | 16.6            | 15.7            |
| West South Central            | 10  | 64              | 41  | 927               | 3,822           | 2,700  | 10.4              | 16.7            | 15.1            |
| West                          | 22  | 85              | 45  | 2,220             | 5,902           | 2,909  | 10.1              | 14.4            | 15.5            |
| Mountain                      | 6   | 36              | 14  | 524               | 2,204           | 904  | 10.6              | 16.4            | 15.7            |
| Pacific                       | 17  | 49              | 31  | 1,695             | 3,697           | 2,005  | 9.9               | 13.1            | 15.4            |
| Climate Zone: 30-Year Average |   |                 |   |                   |                 |  |                   |                 |                 |
| Under 2,000 CDD and           |   |                 |   |                   |                 |  |                   |                 |                 |
| More than 7,000 HDD           | 24  | 61              | 35  | 3,335             | 4,624           | 2,435  | 7.1               | 13.2            | 14.3            |
| 5,500-7,000 HDD               | 53  | 115             | 56  | 5,898             | 7,607           | 3,571  | 8.9               | 15.2            | 15.7            |
| 4,000-5,499 HDD               | 38  | 84              | 44  | 4,024             | 4,894           | 2,458  | 9.4               | 17.3            | 17.9            |
| Fewer than 4,000 HDD          | 28  | 108             | 83  | 2,908             | 7,309           | 4,954  | 9.8               | 14.8            | 16.7            |
| 2,000 CDD or More and         |   |                 |   |                   |                 |  |                   |                 |                 |
| Fewer than 4,000 HDD          | 12  | 78              | 70  | 999               | 4,332           | 3,959  | 12.4              | 18.1            | 17.7            |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|                                     |   | <u> </u>        |                 |                   |                                       |                 |                   |  |                 |  |
|-------------------------------------|---|-----------------|-----------------|-------------------|---------------------------------------|-----------------|-------------------|--|-----------------|--|
|                                     | Total Electricity Consumption (billion kWh) |                 |                 | Building          | l Floorspa<br>s Using El<br>on square | ectricity       | End               | Electricity<br>ergy Intens<br>h/square f | sity            |  |
|                                     | 1959 or<br>Before                           | 1960 to<br>1989 | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                       | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 |  |
| All Buildings*                      | 155   | 447             | 288             | 17,163            | 28,766                                | 17,378          | 9.0               | 15.5                                     | 16.6            |  |
| Number of Floors                    |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| One                                 | 49  | 148             | 137             | 4,653             | 11,401                                | 8,881           | 10.5              | 13.0                                     | 15.5            |  |
| Two                                 | 34  | 99              | 69              | 4,361             | 7,474                                 | 4,143           | 7.8               | 13.3                                     | 16.6            |  |
| Three                               | 25  | 37              | 23              | 3,351             | 2,465                                 | 1,565           | 7.3               | 14.9                                     | 14.4            |  |
| Four to Nine                        | 26  | 101             | 47              | 3,384             | 4,507                                 | 2,175           | 7.8               | 22.5                                     | 21.4            |  |
| Ten or More                         | 21  | 62              | 13              | 1,415             | 2,919                                 | 613             | 14.7              | 21.3                                     | 21.1            |  |
| Elevators and Escalators            |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| (more than one may apply)           |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| Any Elevators                       | 63  | 234             | 120             | 6,479             | 11,645                                | 6,371           | 9.8               | 20.1                                     | 18.8            |  |
| Number of Elevators                 | 00  | 204             | 120             | 0,473             | 11,043                                | 0,57 1          | 5.0               | 20.1                                     | 10.0            |  |
|                                     | 17  | 40              | 27              | 2 202             | 2 240                                 | 2 567           | 7.5               | 15.0                                     | 115             |  |
| One                                 | 17  | 49              | 37              | 2,292             | 3,249                                 | 2,567           | 7.5               | 15.2                                     | 14.5            |  |
| Two to Five                         | 22  | 99              | 50              | 2,812             | 4,792                                 | 2,516           | 7.8               | 20.7                                     | 20.0            |  |
| Six or More                         | 24  | 85              | 32              | 1,375             | 3,605                                 | 1,288           | 17.7              | 23.5                                     | 24.8            |  |
| Any Escalators                      | Q   | 41              | Q               | Q                 | 1,598                                 | Q               | Q                 | 25.7                                     | Q               |  |
| Number of Workers (main shift)      |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| Fewer than 5                        | 36  | 44              | 29              | 4,848             | 5,608                                 | 3,605           | 7.4               | 7.8                                      | 8.1             |  |
| 5 to 9                              | 15  | 37              | 21              | 1,766             | 2,693                                 | 1,687           | 8.2               | 13.9                                     | 12.3            |  |
| 10 to 19                            | 14  | 37              | 38              | 2,429             | 3,045                                 | 2,329           | 5.8               | 12.2                                     | 16.2            |  |
| 20 to 49                            | 24  | 70              | 60              | 3,158             | 4,568                                 | 3,236           | 7.7               | 15.2                                     | 18.4            |  |
| 50 to 99                            | 18  | 58              | 42              | 1,781             | 3,725                                 | 2,428           | 10.3              | 15.6                                     | 17.1            |  |
| 100 to 249                          | 18  | 72              | 45              | 1,761             | 3,779                                 | 1,808           | 13.6              | 19.2                                     | 24.8            |  |
| 250 or More                         | 30  | 129             | 54              | 1,896             | 5,347                                 | 2,285           | 15.8              | 24.1                                     | 23.8            |  |
|                                     |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| Weekly Operating Hours              |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| Fewer than 40                       | 6   | 12              | 8               | 2,019             | 2,548                                 | 1,333           | 3.2               | 4.6                                      | 6.1             |  |
| 40 to 48                            | 26  | 61              | 30              | 3,627             | 5,076                                 | 2,868           | 7.2               | 11.9                                     | 10.4            |  |
| 49 to 60                            | 38  | 92              | 46              | 4,564             | 7,361                                 | 3,777           | 8.2               | 12.5                                     | 12.1            |  |
| 61 to 84                            | 26  | 71              | 48              | 2,728             | 4,607                                 | 2,976           | 9.6               | 15.4                                     | 16.2            |  |
| 85 to 167                           | 20  | 64              | 69              | 1,353             | 2,818                                 | 2,770           | 14.6              | 22.9                                     | 25.0            |  |
| Open Continuously                   | 39  | 148             | 87              | 2,872             | 6,355                                 | 3,653           | 13.5              | 23.2                                     | 23.8            |  |
| Ownership and Occupancy             |   |                 |                 |                   |                                       |                 |                   |  |                 |  |
| Nongovernment Owned                 | 108   | 343             | 222             | 12,516            | 21,961                                | 13,534          | 8.7               | 15.6                                     | 16.4            |  |
| Owner Occupied                      | 57  | 160             | 101             | 7,103             | 10,371                                | 5,981           | 8.0               | 15.4                                     | 16.9            |  |
| Nonowner Occupied                   | 51  | 182             | 120             | 5,116             |                                       |                 | 10.0              | 16.7                                     | 16.6            |  |
| •                                   |   |                 |                 | -                 | 10,912                                | 7,230           |                   |  |                 |  |
| Unoccupied                          | Q   | Q               | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |  |
| Government Owned                    | 46  | 104             | 66              | 4,647             | 6,804                                 | 3,844           | 10.0              | 15.3                                     | 17.1            |  |
| Federal                             | Q   | 17              | Q               | Q                 | 737                                   | Q               | 17.0              | 23.2                                     | Q               |  |
| StateLocal                          | 9<br>23                                     | 34<br>53        | 17<br>41        | 816<br>2,992      | 2,122<br>3,945                        | 848<br>2,620    | 11.1<br>7.7       | 15.8<br>13.5                             | 20.2<br>15.8    |  |
| Local                               | 23  | 55              | 41              | 2,992             | 3,343                                 | 2,020           | 7.1               | 13.5                                     | 13.0            |  |
| Vacancy Status                      | -   | -               | -               | -                 | -                                     | -               | -                 | -  | -               |  |
| Completely Vacant                   | Q   | Q               | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |  |
| Mostly Vacant                       | Q   | Q               | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |  |
| Partially Vacant  Not At All Vacant | 33<br>120                                   | 93<br>352       | 43<br>244       | 3,680<br>12,832   | 5,665<br>22,251                       | 2,853<br>14,179 | 8.9<br>9.4        | 16.4<br>15.8                             | 15.0<br>17.2    |  |
| NOTAL AII VACAIII                   | 120   | 332             | 244             | 12,002            | 22,201                                | 17,179          | 5.4               | 13.0                                     | 11.2            |  |
| Number of Establishments            | 440   | 222             | 0.4-            | 40.440            | 40.055                                | 40.070          | 2.2               | 45.0                                     | 40 -            |  |
| One                                 | 112   | 300             | 215             | 12,146            | 19,255                                | 12,978          | 9.2               | 15.6                                     | 16.5            |  |
| 2 to 5                              | 27  | 77              | 43              | 2,930             | 5,146                                 | 2,845           | 9.1               | 15.0                                     | 15.2            |  |
| 6 to 10                             | 4   | 17              | 13              | 467               | 989                                   | 501             | 8.1               | 16.9                                     | 26.4            |  |
| 11 to 20                            | Q   | 17              | Q               | Q                 | 974                                   | Q               | Q                 | 17.8                                     | Q               |  |
| More than 20                        | 9   | 34              | Q               | 607               | 1,720                                 | Q               | 14.8              | 19.9                                     | Q               |  |
| Currently Unoccupied                | Q   | Q               | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |  |
| •                                   |   |                 |                 |                   |                                       |                 |                   |  |                 |  |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|  | Total Electricity<br>Consumption<br>(billion kWh) |                 |                 | Total Floorspace of<br>Buildings Using Electricity<br>(million square feet) |                  |                 | End               | Electricity<br>ergy Intens<br>h/square f | sity            |
|--|---|-----------------|-----------------|---|------------------|-----------------|-------------------|--|-----------------|
|  | 1959 or<br>Before                                 | 1960 to<br>1989 | 1990 to<br>2003 | 1959 or<br>Before   | 1960 to<br>1989  | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 |
| All Buildings*   | 155   | 447             | 288             | 17,163  | 28,766           | 17,378          | 9.0               | 15.5                                     | 16.6            |
| Predominant Exterior   |   |                 |                 |   |                  |                 |                   |  |                 |
| Wall Material  |   |                 |                 |   |                  |                 |                   |  |                 |
| Brick, Stone or Stucco   | 107   | 212             | 122             | 12,533  | 12,959           | 6,802           | 8.6               | 16.4                                     | 17.9            |
| Concrete (Block or Poured)   | 30  | 78              | 46              | 2,664   | 5,391            | 2,683           | 11.4              | 14.5                                     | 17.3            |
| Concrete Panels  | Q   | 72              | 44              | Q   | 3,493            | 2,728           | Q                 | 20.5                                     | 16.0            |
| Siding or Shingles   | 8   | 16              | 20              | 1,128   | 1,512            | 1,335           | 6.9               | 10.7                                     | 15.0            |
| Metal Panels   | Q   | 41              | 40              | 485   | 3,854            | 3,038           | 10.7              | 10.7                                     | 13.3            |
| Window Glass   | Q   | 12              | Q               | Q   | 624              | Q               | Q                 | 19.6                                     | Q               |
| Other  | Q   | 11              | Q               | Q   | 726              | Q               | Q                 | 15.7                                     | Q               |
| No One Major Type  | Q   | Q               | Q               | Q   | Q                | Q               | Q                 | Q  | Q               |
| Predominant Roof Material  |   |                 |                 |   |                  |                 |                   |  |                 |
| Built-Up   | 61  | 173             | 71              | 6,451   | 10,404           | 3,926           | 9.5               | 16.6                                     | 18.2            |
| Shingles (Not Wood)  | 26  | 55              | 40              | 3,179   | 4,128            | 2,564           | 8.2               | 13.3                                     | 15.7            |
| Metal Surfacing  | 7   | 46              | 62              | 943   | 4,753            | 5,538           | 7.3               | 9.6                                      | 11.3            |
| Synthetic or Rubber  | 35  | 132             | 93              | 3,525   | 6,945            | 4,240           | 10.0              | 19.0                                     | 22.0            |
| Slate or Tile  | 9   | 10              | 12              | 1,164   | 701              | 572             | 7.6               | 13.9                                     | 20.7            |
| Wooden Materials   | Q   | 7               | Q               | Q   | 461              | Q               | Q                 | 15.3                                     | Q               |
| Concrete   | Q   | 12              | Q               | Q   | 666              | Q               | Q                 | 17.5                                     | Q               |
| Other  | Q   | Q               | Q               | Q   | Q                | Q               | Q                 | Q  | Q               |
| No One Major Type  | Q   | Q               | Q               | Q   | Q                | Q               | Q                 | Q  | Q               |
| Renovations in Buildings<br>Constructed Before 1980<br>(more than one may apply) |   |                 |                 |   |                  |                 |                   |  |                 |
| Any Type of Renovation   |   |                 |                 |   |                  |                 |                   |  |                 |
| Since 1980   | 91  | 138             | N               | 9,053   | 8,584            | N               | 10.0              | 16.1                                     | N               |
| Addition or Annex  | 31  | 61              | N               | 3,069   | 3,482            | N               | 10.1              | 17.7                                     | N               |
| Reduction In Floorspace  | 7   | Q               | N               | 501   | Q                | N               | 13.2              | Q  | N               |
| Cosmetic Improvements  | 67  | 108             | N               | 6,735   | 6,267            | N               | 10.0              | 17.3                                     | N               |
| Wall or Roof Replacement   | 41  | 61              | N               | 4,166   | 3,890            | N               | 9.8               | 15.6                                     | N               |
| Interior Wall  |   |                 |                 |   |                  |                 |                   |  |                 |
| Re-Configuration   | 42  | 76              | N               | 4,175   | 4,327            | N               | 9.9               | 17.6                                     | N               |
| HVAC Equipment Upgrade   | 59  | 96              | N               | 5,433   | 5,332            | N               | 10.8              | 18.0                                     | N               |
| Lighting Upgrade   | 54  | 86              | N               | 5,481   | 4,792            | N               | 9.9               | 17.9                                     | N               |
| Window Replacement   | 36  | 38              | N               | 4,013   | 2,264            | N               | 8.9               | 16.7                                     | N               |
| Plumbing System Upgrade  | 39  | 53              | N               | 4,011   | 3,130            | N               | 9.8               | 16.9                                     | N               |
| Insulation Upgrade   | 23  | 28              | N               | 2,209   | 1,803            | N               | 10.3              | 15.6                                     | N               |
| Other Renovation   | 3   | Q               | N               | 451   | Q                | N               | 7.4               | Q  | N               |
| No Renovations Since 1980<br>Building Newer than 1980                            | 64<br>N   | 125<br>184      | N<br>288        | 8,110<br>N  | 10,027<br>10,154 | N<br>17 279     | 7.9<br>N          | 12.5<br>18.1                             | N<br>16.6       |
| -  | IN  | 104             | 200             | IN  | 10,154           | 17,378          | IN                | 10.1                                     | 10.0            |
| Energy Sources (more than one may apply)   |   |                 |                 |   |                  |                 |                   |  |                 |
| Electricity  | 155   | 447             | 288             | 17,163  | 28,766           | 17,378          | 9.0               | 15.5                                     | 16.6            |
| Natural Gas  | 106   | 318             | 210             | 12,091  | 19,763           | 11,608          | 8.7               | 16.1                                     | 18.1            |
| Fuel Oil   | 44  | 139             | 67              | 4,995   | 6,951            | 3,196           | 8.8               | 20.1                                     | 20.9            |
| District Heat  | 31  | 47              | 20              | 2,206   | 2,330            | 908             | 14.0              | 20.3                                     | 22.0            |
| District Chilled Water   | 8   | 28              | 20              | 510   | 1,433            | 910             | 16.3              | 19.8                                     | 21.6            |
| Propane  | 24  | 39              | 36              | 2,025   | 2,881            | 2,161           | 11.8              | 13.6                                     | 16.7            |
| Other  | 2   | 14              | Q               | 331   | 804              | Q               | 6.9               | 17.1                                     | Q               |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|   | С                 | tal Electric<br>onsumptic<br>pillion kWh | on              | Building          | l Floorspa<br>s Using E<br>on square | ectricity       | Electricity<br>Energy Intensity<br>(kWh/square foot) |                 |                 |
|---|-------------------|--|-----------------|-------------------|--------------------------------------|-----------------|--|-----------------|-----------------|
|   | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                      | 1990 to<br>2003 | 1959 or<br>Before                                    | 1960 to<br>1989 | 1990 to<br>2003 |
| All Buildings*                            | 155               | 447                                      | 288             | 17,163            | 28,766                               | 17,378          | 9.0  | 15.5            | 16.6            |
| Space-Heating Energy Sources              |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Electricity                               | 61                | 238                                      | 158             | 5,769             | 13,818                               | 9,013           | 10.5   | 17.2            | 17.5            |
| Electricity Main                          | 23                | 144                                      | 98              | 1,886             | 8,416                                | 5,694           | 12.4   | 17.1            | 17.3            |
| Electricity Secondary                     | 37                | 93                                       | 59              | 3,883             | 5,402                                | 3,319           | 9.6  | 17.3            | 17.9            |
| Other Excluding Electricity               | 89                | 198                                      | 120             | 10,661            | 13,711                               | 7,019           | 8.4  |                 | 17.0            |
| Buildings without Heating                 | 5                 | 12                                       | 11              | 733               | 1,237                                | 1,346           | 6.8  | 9.4             | 7.9             |
| Primary Space-Heating Energy Source       |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Electricity                               | 23                | 144                                      | 98              | 1,886             | 8,416                                | 5,694           | 12.4   | 17.1            | 17.3            |
| Natural Gas                               | 83                | 232                                      | 144             | 9,425             | 15,149                               | 8,390           | 8.8  | 15.3            | 17.2            |
| Fuel Oil                                  | 10                | 9  | Q               | 2,583             | 958                                  | Q               | 4.0  |                 |                 |
| District Heat                             | 29                | 43                                       | 19              | 2,001             | 2,044                                | 862             | 14.6   |                 | 22.0            |
| Propane                                   | 4                 | 6  | 10              | 450               | 768                                  | 729             | 8.3  |                 | 14.4            |
| Other                                     | Q                 | Q  | Q               | 430<br>Q          | 700<br>Q                             | 729<br>Q        | 0.5<br>Q   | 0.1<br>Q        | Q               |
| Cooling Energy Sources                    |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Electricity                               | 126               | 421                                      | 267             | 13,263            | 25,843                               | 15,214          | 9.5  | 16.3            | 17.5            |
| Other Excluding Electricity               | Q                 | 18                                       | 18              | Q                 | 1,090                                | 922             | Q  | 16.4            |                 |
| Buildings without Cooling                 | Q                 | 8  | 4               | 3,308             | 1,832                                | 1,241           | 5.7  | 4.4             | 2.9             |
| Water-Heating Energy Sources              |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Electricity                               | 51                | 216                                      | 135             | 6,039             | 13,305                               | 8,147           | 8.5  | 16.2            | 16.6            |
| Other Excluding Electricity               | 85                | 216                                      | 144             | 8,530             | 13,104                               | 7,338           | 9.9  | 16.5            | 19.7            |
| Bldgs without Water Heating               | Q                 | 15                                       | 9               | 2,594             | 2,356                                | 1,893           | 7.2  | 6.4             | 4.5             |
| Cooking Energy Sources                    |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Electricity                               | 38                | 132                                      | 79              | 3,320             | 6,449                                | 3,392           | 11.3   | 20.4            | 23.4            |
| Other Excluding Electricity               | 33                | 70                                       | 52              | 3,440             | 3,327                                | 2,309           | 9.7  | 21.0            | 22.5            |
| Buildings without Cooking                 | 84                | 246                                      | 157             | 10,404            | 18,990                               | 11,676          | 8.1  | 12.9            | 13.4            |
| Energy End Uses (more than one may apply) |                   |  |                 |                   |                                      |                 |  |                 |                 |
|   | 450               | 400                                      | 077             | 10 100            | 07 500                               | 40.000          | 0.4  | 45.0            | 47.0            |
| Buildings with Space Heating              | 150               | 436                                      | 277             | 16,430            | 27,529                               | 16,032          | 9.1  | 15.8            | 17.3            |
| Buildings with Cooling                    | 136               | 439                                      | 284             | 13,855            | 26,933                               | 16,137          | 9.8  | 16.3            | 17.6            |
| Buildings with Water Heating              | 136               | 432                                      | 279             | 14,569            | 26,409                               | 15,484          | 9.3  | 16.4            | 18.0            |
| Buildings with Cooking                    | 71                | 202                                      | 131             | 6,760             | 9,776                                | 5,701           | 10.5   | 20.6            | 23.0            |
| Buildings with Manufacturing              | 7                 | 20                                       | 15              | 928               | 1,480                                | 730             | 7.2  | 13.4            | 20.3            |
| Buildings with Electricity                |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Generation                                | 35                | 154                                      | 71              | 2,294             | 6,955                                | 3,572           | 15.3   | 22.2            | 20.0            |
| Percent of Floorspace Heated              |                   |  |                 |                   |                                      |                 |  |                 |                 |
| Not Heated                                | 5                 | 12                                       | 11              | 733               | 1,237                                | 1,346           | 6.8  | 9.4             | 7.9             |
| 1 to 50                                   | 9                 | 19                                       | 26              | 1,955             | 2,608                                | 2,266           | 4.8  | 7.4             | 11.5            |
| 51 to 99                                  | 23<br>117         | 57<br>360                                | 36<br>215       | 2,611<br>11,864   | 3,476<br>21,446                      | 2,020<br>11,746 | 8.9<br>9.9   | 16.3<br>16.8    |                 |
|   | ,                 | 000                                      | 210             | . 1,004           | 27,440                               | 11,170          | 0.0  | 10.0            | 10.0            |
| Percent of Floorspace Cooled Not Cooled   | Q                 | 8  | 4               | 3,308             | 1,832                                | 1,241           | 5.7  | 4.4             | 2.9             |
| 1 to 50                                   | 31                | 59                                       | 40              | 5,393             | 7,014                                | 4,176           | 5.8  | 8.3             |                 |
| 51 to 99                                  | 39                | 111                                      | 68              |                   | 6,171                                |                 |  |                 | 20.2            |
|   |                   |  |                 | 3,663             |                                      | 3,377           | 10.6   |                 |                 |
| 100                                       | 66                | 269                                      | 176             | 4,799             | 13,748                               | 8,584           | 13.8   | 19.6            | 20.5            |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|   | C                 | tal Electric<br>onsumptic<br>oillion kWh | on              | Building          | I Floorspa<br>s Using El<br>on square | ectricity       | End               | Electricity<br>ergy Intens<br>h/square t | sity            |
|---|-------------------|--|-----------------|-------------------|---------------------------------------|-----------------|-------------------|--|-----------------|
|   | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                       | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 |
| All Buildings*                                    | 155               | 447                                      | 288             | 17,163            | 28,766                                | 17,378          | 9.0               | 15.5                                     | 16.6            |
| Percent Lit When Open                             |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Zero  | Q                 | Q  | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |
| 1 to 50   | 18                | 26                                       | 22              | 3,977             | 3,766                                 | 2,461           | 4.5               | 6.9                                      | 8.9             |
| 51 to 99  | 46                | 144                                      | 71              | 4,889             | 9,002                                 | 4,398           | 9.4               | 16.0                                     | 16.3            |
| 100   | 89                | 274                                      | 194             | 7,611             | 15,221                                | 9,957           | 11.7              | 18.0                                     | 19.4            |
| Building Never Open/                              |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Electricity Not Used                              | Q                 | Q  | Q               | Q                 | Q                                     | Q               | Q                 | Q  | Q               |
| Percent Lit When Closed                           |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Zero  | 37                | 67                                       | 56              | 5,199             | 7,017                                 | 5,169           | 7.1               | 9.5                                      | 10.8            |
| 1 to 50   | 76                | 213                                      | 123             | 8,854             | 14,432                                | 7,662           | 8.6               | 14.8                                     | 16.1            |
| 51 to 100   | 3                 | 20                                       | 22              | 238               | 961                                   | 894             | 12.7              | 20.8                                     | 25.1            |
| Building Never Closed/                            |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Electricity Not Used                              | 39                | 148                                      | 87              | 2,872             | 6,355                                 | 3,653           | 13.5              | 23.2                                     | 23.8            |
| Heating Equipment (more                           |                   |  |                 |                   |                                       |                 |                   |  |                 |
| than one may apply)                               |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Heat Pumps  | 20                | 79                                       | 54              | 1,617             | 4,223                                 | 2,973           | 12.5              | 18.6                                     | 18.3            |
| Packaged Heat Pumps                               | 11                | 62                                       | 33              | 796               | 3,059                                 | 1,587           | 14.1              | 20.1                                     | 20.5            |
| Split-System Heat Pumps                           | 5                 | 20                                       | 15              | 364               | 1,214                                 | 1,003           | 12.6              | 16.7                                     | 14.9            |
| Individual Room Heat Pumps                        | 9                 | 20                                       | 15              | 753               | 1,050                                 | 888             | 11.6              | 19.1                                     | 16.5            |
| Furnaces  | 51                | 100                                      | 73              | 5,908             | 8,367                                 | 5,329           | 8.5               | 11.9                                     | 13.7            |
| Individual Space Heaters                          | 29                | 89                                       | 48              | 3,645             | 5,661                                 | 3,233           | 7.8               | 15.6                                     | 14.9            |
| District Heat                                     | 30                | 44                                       | 19              | 2,147             | 2,139                                 | 880             | 13.9              | 20.5                                     | 22.0            |
| Boilers   | 65                | 164                                      | 66              | 7,751             | 9,099                                 | 3,573           | 8.4               | 18.1                                     | 18.5            |
| Packaged Heating Units                            | 32                | 156                                      | 123             | 2,791             | 9,252                                 | 5,978           | 11.3              | 16.9                                     | 20.5            |
| Other   | 4                 | 29                                       | 16              | 386               | 1,659                                 | 1,197           | 11.0              | 17.2                                     | 13.8            |
| Cooling Equipment (more                           |                   |  |                 |                   |                                       |                 |                   |  |                 |
| than one may apply)                               |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Residential-Type Central                          | 20                | 00                                       | 40              | 2 470             | 4 770                                 | 0.700           | 0.4               | 40.0                                     | 44.4            |
| Air Conditioners                                  | 32                | 62<br>78                                 | 40              | 3,470             | 4,779<br>4,241                        | 2,786           | 9.1               | 12.9                                     | 14.4            |
| Heat Pumps  | 22<br>12          | 60                                       | 60<br>33        | 1,699<br>860      | 2,997                                 | 3,102<br>1,569  | 13.0<br>14.4      | 18.4<br>20.1                             | 19.5<br>20.9    |
| Packaged Heat Pumps                               |                   |  |                 |                   |                                       |                 |                   |  |                 |
| Split-System Heat PumpsIndividual Room Heat Pumps | 5<br>9            | 20<br>22                                 | 15<br>20        | 419<br>716        | 1,205<br>1,183                        | 981<br>1,041    | 13.0<br>12.0      | 16.6<br>18.4                             | 15.7<br>19.2    |
| Individual Air Conditioners                       | 39                | 69                                       | 33              | 5,406             | 5,295                                 | 1,858           | 7.2               | 13.0                                     | 17.7            |
| District Chilled Water                            | 8                 | 28                                       | 20              | 510               | 1,433                                 | 910             | 16.3              | 19.8                                     | 21.6            |
| Central Chillers                                  | 37                | 153                                      | 55              | 2,346             | 6,900                                 | 2,390           | 15.8              | 22.2                                     | 23.0            |
| Packaged Air Conditioning                         | 01                | 100                                      | 00              | 2,040             | 0,000                                 | 2,000           | 10.0              |  | 20.0            |
| Units   | 71                | 229                                      | 162             | 7,068             | 13,851                                | 9,050           | 10.1              | 16.5                                     | 18.0            |
| Swamp Coolers                                     | Q                 | 16                                       | Q               | 7,000<br>Q        | 1,072                                 | 9,030<br>Q      |                   | 15.3                                     | 10.0<br>Q       |
| Other   | Q                 | 9  | Q               | Q                 | 528                                   | Q               | Q                 | 17.6                                     | Q               |
| Main Equipment Replaced Since                     |                   |  |                 |                   |                                       |                 |                   |  |                 |
| 1990 (more than one may apply)                    |                   |  |                 |                   | 40                                    |                 |                   |  |                 |
| Heating Cooling                                   | 50<br>72          | 160<br>215                               | N<br>N          | 6,045<br>7,686    | 10,348<br>13,309                      | N<br>N          | 8.3<br>9.3        | 15.4<br>16.1                             | N<br>N          |
| -   |                   | •  |                 | ,2                | - , 2                                 |                 |                   |  |                 |
| Water Heating Equipment                           | 00                | 200                                      | 407             | 0.000             | 16.540                                | 0.005           | 0.0               | 45 7                                     | 40.4            |
| Centralized System                                | 88                | 260                                      | 167             | 8,889             | 16,543                                | 9,225           | 9.9               | 15.7                                     | 18.1            |
| Distributed System                                | 21                | 71                                       | 50              | 3,221             | 4,871                                 | 3,448           | 6.4               | 14.5                                     | 14.6            |
| Combination of Centralized                        | 20                | 104                                      | 60              | 2 450             | 4 000                                 | 2 042           | 11.0              | 20.2                                     | 22.4            |
| and Distributed System                            | 28                | 101                                      | 62              | 2,459             | 4,996                                 | 2,812           | 11.2              | 20.2                                     | 22.1            |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|  | С                 | tal Electric<br>onsumptic<br>pillion kWh | on              | Building          | l Floorspa<br>s Using E<br>on square | ectricity       | En                | Electricity<br>ergy Intens<br>h/square t | sity            |  |
|--|-------------------|--|-----------------|-------------------|--------------------------------------|-----------------|-------------------|--|-----------------|--|
|  | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                      | 1990 to<br>2003 | 1959 or<br>Before | 1960 to<br>1989                          | 1990 to<br>2003 |  |
| All Buildings*                         | 155               | 447                                      | 288             | 17,163            | 28,766                               | 17,378          | 9.0               | 15.5                                     | 16.6            |  |
| Lighting Equipment Types               |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| (more than one may apply)              |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| Incandescent                           | 98                | 318                                      | 172             | 11,094            | 18,083                               | 9,351           | 8.8               | 17.6                                     | 18.4            |  |
| Standard Fluorescent                   | 148               | 438                                      | 279             | 15,996            | 27,530                               | 16,161          | 9.3               | 15.9                                     | 17.3            |  |
| Compact Fluorescent                    | 72                | 264                                      | 152             | 6,587             | 13,504                               | 7,480           | 10.9              | 19.5                                     | 20.4            |  |
| High Intensity Discharge               | 55                | 151                                      | 124             | 4,992             | 9,231                                | 6,420           | 11.0              | 16.4                                     | 19.3            |  |
| Halogen                                | 44                | 163                                      | 107             | 4,079             | 8,102                                | 5,522           | 10.7              | 20.1                                     | 19.3            |  |
| Other                                  | Q                 | Q  | Q               | Q                 | Q                                    | Q               | Q                 | Q  | Q               |  |
| Refrigeration Equipment                |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| (more than one may apply) <sup>a</sup> |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| Any Refrigeration                      | 131               | 410                                      | 271             | 13,973            | 24,165                               | 14,836          | 9.4               | 17.0                                     | 18.3            |  |
| Commercial Refrigeration               | 84                | 266                                      | 173             | 7,421             | 12,240                               | 7,107           | 11.4              | 21.7                                     | 24.4            |  |
| Walk-In Units                          | 64                | 226                                      | 146             | 5,242             | 9,625                                | 5,387           | 12.3              | 23.4                                     | 27.2            |  |
| Cases or Cabinets                      | 70                | 219                                      | 134             | 5,492             | 9,628                                | 5,304           | 12.7              | 22.8                                     | 25.2            |  |
| Residential-Type Units                 | 90                | 269                                      | 160             | 11,110            | 17,563                               | 10,211          | 8.1               | 15.3                                     | 15.7            |  |
| Vending Machines                       | 80                | 311                                      | 191             | 7,833             | 17,126                               | 10,375          | 10.2              | 18.2                                     | 18.4            |  |
| No Refrigeration                       | 24                | 37                                       | 17              | 3,190             | 4,601                                | 2,542           | 7.4               | 8.1                                      | 6.6             |  |
| Office Equipment (more                 |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| than one may apply)                    |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| Computers                              | 131               | 426                                      | 274             | 14,244            | 25,894                               | 15,490          | 9.2               | 16.5                                     | 17.7            |  |
| With Flat Screen Monitors              | 68                | 254                                      | 143             | 6,001             | 13,348                               | 7,068           | 11.4              | 19.1                                     | 20.3            |  |
| Dedicated Servers                      | 84                | 322                                      | 190             | 8,136             | 17,936                               | 10,265          | 10.4              | 17.9                                     | 18.5            |  |
| Laser Printers                         | 77                | 233                                      | 145             | 9,240             | 15,256                               | 8,516           | 8.3               | 15.2                                     | 17.0            |  |
| Inkjet Printers                        | 77                | 275                                      | 182             | 6,987             | 15,573                               | 9,650           | 11.1              | 17.6                                     | 18.8            |  |
| FAX Machines                           | 123               | 408                                      | 261             | 13,208            | 24,496                               | 14,669          | 9.3               | 16.6                                     | 17.8            |  |
| Photocopiers                           | 106               | 362                                      | 224             | 11,473            | 21,832                               | 12,952          | 9.2               | 16.6                                     | 17.3            |  |
| Number of Computers                    |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| None                                   | 24                | 21                                       | 14              | 2,920             | 2,872                                | 1,888           | 8.1               | 7.4                                      | 7.2             |  |
| 1 to 4                                 | 30                | 64                                       | 59              | 4,022             | 5,011                                | 3,362           | 7.5               | 12.7                                     | 17.6            |  |
| 5 to 9                                 | 14                | 35                                       | 31              | 2,124             | 2,820                                | 2,236           | 6.5               | 12.5                                     | 14.0            |  |
| 10 to 19                               | 11                | 39                                       | 33              | 1,268             | 3,254                                | 2,088           | 8.8               | 12.1                                     | 15.8            |  |
| 20 to 49                               | 19                | 55                                       | 46              | 1,808             | 3,178                                | 2,428           | 10.4              | 17.3                                     | 18.9            |  |
| 50 to 99                               | 13                | 44                                       | 19              | 1,607             | 2,523                                | 1,246           | 8.3               | 17.3                                     | 15.1            |  |
| 100 to 249                             | 16                | 56                                       | 36              | 1,507             | 3,277                                | 1,907           |                   | 17.1                                     | 19.0            |  |
| 250 or More                            | 28                | 133                                      | 50              | 1,909             | 5,832                                | 2,222           | 14.8              | 22.8                                     | 22.5            |  |
| Number of Dedicated Servers            |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| None                                   | 70                | 125                                      | 98              | 9,027             | 10,829                               | 7,112           | 7.8               | 11.6                                     | 13.8            |  |
| 1 to 4                                 | 49                | 177                                      | 115             | 5,444             | 11,560                               | 7,112           |                   | 15.3                                     | 16.2            |  |
| 5 to 9                                 | 10                | 37                                       | 26              | 1,078             | 1,607                                | 1,180           | 9.4               | 23.0                                     | 22.3            |  |
| 10 to 19                               | 10                | 33                                       | 20              | 795               | 1,468                                | 764             | 13.1              | 22.3                                     | 26.4            |  |
| 20 to 49                               | Q                 | 41                                       | 8               | Q                 | 1,921                                | 423             | Q                 | 21.4                                     | 19.5            |  |
| 50 or More                             | 10                | 34                                       | 20              | 581               | 1,380                                | 787             | 17.5              | 24.7                                     | 25.4            |  |
| Number of Photocopiers                 |                   |  |                 |                   |                                      |                 |                   |  |                 |  |
| None                                   | 49                | 85                                       | 64              | 5,690             | 6,934                                | 4,426           | 8.6               | 12.2                                     | 14.6            |  |
| One                                    | 32                | 72                                       | 70              | 4,324             | 6,116                                | 5,035           | 7.4               | 11.7                                     | 14.0            |  |
| 2 to 4                                 | 30                | 107                                      | 70              | 3,669             | 7,155                                | 4,258           | 8.1               | 15.0                                     | 16.5            |  |
| 5 to 9                                 | 10                | 49                                       | 36              | 1,256             | 2,754                                | 1,505           | Q                 | 17.8                                     | 23.6            |  |
|  |                   |  |                 |                   |                                      |                 |                   |  | 22.1            |  |
| 10 or More                             | 34                | 135                                      | 48              | 2,224             | 5,806                                | 2,154           | 15.4              | 23.2                                     | 22              |  |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|  | Total Electricity<br>Consumption<br>(billion kWh) |                 |                 | Total Floorspace of<br>Buildings Using Electricity<br>(million square feet) |                 |                 | Electricity<br>Energy Intensity<br>(kWh/square foot) |                 |                 |
|--|---|-----------------|-----------------|---|-----------------|-----------------|--|-----------------|-----------------|
|  | 1959 or<br>Before                                 | 1960 to<br>1989 | 1990 to<br>2003 | 1959 or<br>Before   | 1960 to<br>1989 | 1990 to<br>2003 | 1959 or<br>Before                                    | 1960 to<br>1989 | 1990 to<br>2003 |
| All Buildings*   | 155   | 447             | 288             | 17,163  | 28,766          | 17,378          | 9.0  | 15.5            | 16.6            |
| Energy-Related Space Functions                           |   |                 |                 |   |                 |                 |  |                 |                 |
| (more than one may apply)                                |   |                 |                 |   |                 |                 |  |                 |                 |
| Commercial Food Preparation                              | 71  | 202             | 131             | 6,748   | 9,774           | 5,701           | 10.5   | 20.6            | 23.0            |
| Activities with Large                                    |   |                 |                 |   |                 |                 |  |                 |                 |
| Amounts of Hot Water                                     | 52  | 178             | 111             | 4,912   | 9,140           | 5,430           | 10.6   | 19.5            | 20.5            |
| Separate Computer Area                                   | 68  | 255             | 131             | 6,222   | 13,495          | 7,156           | 11.0   | 18.9            | 18.2            |
| HVAC Conservation Features                               |   |                 |                 |   |                 |                 |  |                 |                 |
| (more than one may apply)                                | 45  | 000             | 440             | 0.405   | 0.700           | 0.005           | 40.0   | 04.0            | 40.0            |
| Variable Air-Volume System                               | 45  | 209             | 118             | 3,465   | 9,798           | 6,335           | 13.0   | 21.3            | 18.6            |
| Economizer Cycle   | 53  | 233             | 127             | 3,618   | 11,196          | 6,294           | 14.6   | 20.8            |                 |
| HVAC Maintenance   | 127   | 399             | 266             | 13,084  | 23,498          | 14,569          | 9.7  | 17.0            | 18.3            |
| Energy Management and                                    |   |                 |                 |   |                 |                 |  |                 |                 |
| Control System (EMCS)                                    | 35  | 158             | 87              | 2,975   | 8,078           | 4,577           | 11.6   | 19.5            | 19.1            |
| Window and Interior Lighting<br>Features (more than one  |   |                 |                 |   |                 |                 |  |                 |                 |
| •  |   |                 |                 |   |                 |                 |  |                 |                 |
| may apply)   | 0.4   | 202             | 216             | 0.534   | 16 600          | 10 500          | 0.0  | 17.6            | 17.0            |
| Multipaned Windows                                       | 84  | 293             | 216             | 9,534   |                 | 12,502          | 8.8  | 17.6            |                 |
| Tinted Window Glass                                      | 63  | 273             | 157             | 5,462   |                 | 9,183           | 11.5   | 18.2            |                 |
| Reflective Window Glass                                  | 19  | 81              | 53              | 1,576   | 4,009           | 2,943           | 12.3   | 20.2            | 17.8            |
| External Overhangs                                       |   |                 |                 |   |                 |                 |  |                 |                 |
| or Awnings   | 38  | 149             | 95              | 4,112   |                 | 4,919           | 9.3  | 18.3            |                 |
| Skylights or Atriums                                     | 23  | 102             | 64              | 2,661   | 6,126           | 3,722           | 8.5  | 16.7            |                 |
| Daylighting Sensors                                      | 5   | 31              | 25              | 448   | 1,407           | 1,014           | 10.3   | 21.7            | 24.9            |
| Specular Reflectors                                      | 64  | 226             | 146             | 6,340   | 12,258          | 7,519           | 10.1   | 18.4            | 19.4            |
| Electronic Ballasts                                      | 122   | 371             | 240             | 11,938  | 21,721          | 13,223          | 10.2   | 17.1            | 18.1            |
| Energy Management and Control System (EMCS)              |   |                 |                 |   |                 |                 |  |                 |                 |
| For Lighting   | 6   | 51              | 34              | 565   | 2,606           | 1,610           | 11.1   | 19.4            | 21.3            |
| Equipment Usage Reduced<br>When Building Not In Full Use |   |                 |                 |   |                 |                 |  |                 |                 |
| (more than one may apply) <sup>a</sup>                   |   |                 |                 |   |                 |                 |  |                 |                 |
| Heating  | 95  | 294             | 176             | 11,574  | 20,077          | 11,055          | 8.2  | 14.6            | 16.0            |
| Cooling  | 99  | 304             | 192             | 11,103  |                 | 11,930          | 9.0  | 15.1            | 16.1            |
| Lighting   | 113   | 285             | 190             | 13,346  | 20,951          | 12,690          |  | 13.6            | 15.0            |
| Office Equipment   | 46  | 96              | 69              | 6,195   |                 | 5,062           | 7.4  |                 |                 |
| Annual Consumption                                       |   |                 |                 |   |                 |                 |  |                 |                 |
| (kilowatthours)  |   | _               |                 | 4 400   | 4 000           | 070             |  |                 |                 |
| 10,000 or Less   | 1   | 2               | 1               | 1,102   |                 | 676             | 1.4  |                 |                 |
| 10,001 to 50,000   | 15  | 19              | 10              | 3,538   | 3,820           | 1,870           | 4.3  | 5.1             | 5.5             |
| 50,001 to 100,000  | 16  | 23              | 13              | 2,344   |                 | 1,735           | 6.7  | 9.5             |                 |
| 100,001 to 500,000                                       | 42  | 100             | 67              | 4,712   |                 | 4,244           | 9.0  | 13.9            |                 |
| 500,001 to 1,000,000                                     | 13  | 48              | 35              | 1,308   | 3,269           | 2,160           | 10.2   | 14.8            | 16.3            |
| 1,000,001 to 5,000,000                                   | 35  | 136             | 98              | 2,329   | 6,488           | 4,391           | 14.9   | 20.9            | 22.4            |
| Over 5,000,000   | 32  | 120             | 63              | 1,830   | 4,568           | 2,301           | 17.4   | 26.3            | 27.2            |

Table C22. Electricity Consumption and Conditional Energy Intensity by Year Constructed for Non-Mall Buildings, 2003

|   | Total Electricity<br>Consumption<br>(billion kWh) |         |         | Building | l Floorspa<br>s Using El<br>on square | ectricity | Electricity<br>Energy Intensity<br>(kWh/square foot) |         |         |  |
|---|---|---------|---------|----------|---------------------------------------|-----------|--|---------|---------|--|
|   | 1959 or   | 1960 to | 1990 to | 1959 or  | 1960 to                               | 1990 to   | 1959 or  | 1960 to | 1990 to |  |
|   | Before  | 1989    | 2003    | Before   | 1989                                  | 2003      | Before   | 1989    | 2003    |  |
| All Buildings*  | 155   | 447     | 288     | 17,163   | 28,766                                | 17,378    | 9.0  | 15.5    | 16.6    |  |
| Provider of Purchased Electricity (more than one may apply) Local Utility | 142   | 395     | 254     | 15,846   | 26,253                                | 15,754    | 8.9  | 15.0    | 16.2    |  |
|   | 15  | 51      | 25      | 1,329    | 2,366                                 | 1,250     | 11.1   | 21.5    | 19.8    |  |

See "Guide to the Tables" or "Glossary" for further explanations of the terms used in this table. Both can be accessed from the CBECS web site - http://www.eia.doe.gov/emeu/cbecs.

Q=Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or fewer than 20 buildings were sampled. N=No responding cases in sample that use electricity.

Notes: • Statistics for the "Energy End Uses" category represent total consumption in buildings that have the end use, not consumption specifically for that particular end use. • HVAC = Heating, Ventilation, and Air Conditioning. • Due to rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A, C, and E of the 2003 Commercial Buildings Energy Consumption Survey.

<sup>\*</sup> Figures in this table do not include enclosed malls and strip malls. Mall buildings add an estimated 213 thousand buildings comprising 6.9 billion square feet. In the 1999 CBECS, malls represented 9.7 percent of total electricity consumption.

<sup>&</sup>lt;sup>a</sup> The definition for one or more of these row items has changed and may not be directly comparable with past CBECS estimates. See "Guide to the Tables" for discussion of the differences.