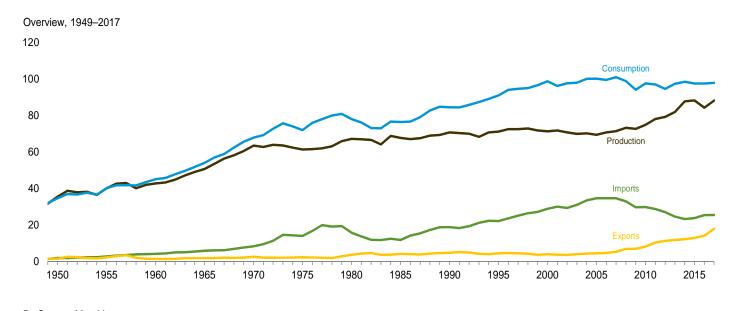
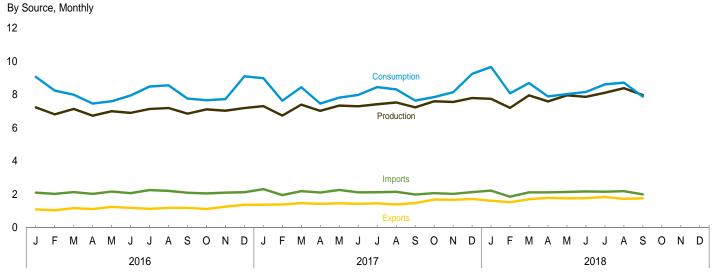
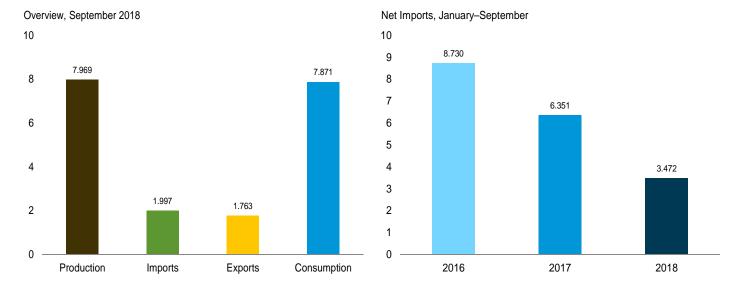
# 1. EnergyOverview

Figure 1.1 Primary Energy Overview







Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Source: Table 1.1.

**Table 1.1 Primary Energy Overview** 

|  |   | Produ  | uction   |  |  | Trade  |  |  |  | Consu  | mption   |   |
|--|---|--|--|--|--|--|--|--|--|--|--|---|
|  | Fossil<br>Fuels <sup>a</sup>  | Nuclear<br>Electric<br>Power   | Renew-<br>able<br>Energy <sup>b</sup>  | Total  | Imports  | Exports  | Net<br>Imports <sup>c</sup>  | Stock<br>Change<br>and<br>Other <sup>d</sup>   | Fossil<br>Fuels <sup>e</sup>   | Nuclear<br>Electric<br>Power   | Renew-<br>able<br>Energy <sup>b</sup>  | Total <sup>f</sup>  |
| 1950 Total<br>1955 Total<br>1960 Total<br>1965 Total<br>1970 Total<br>1975 Total<br>1980 Total<br>1985 Total<br>1990 Total   | 32.563<br>37.364<br>39.869<br>47.235<br>59.186<br>54.733<br>59.008<br>57.539<br>58.560                                    | 0.000<br>.000<br>.006<br>.043<br>.239<br>1.900<br>2.739<br>4.076<br>6.104                                | 2.978<br>2.784<br>2.928<br>3.396<br>4.070<br>4.687<br>5.428<br>6.084<br>6.040                            | 35.540<br>40.148<br>42.803<br>50.674<br>63.495<br>61.320<br>67.175<br>67.698<br>70.704                               | 1.913<br>2.790<br>4.188<br>5.892<br>8.342<br>14.032<br>15.796<br>11.781<br>18.817                                    | 1.465<br>2.286<br>1.477<br>1.829<br>2.632<br>2.323<br>3.695<br>4.196<br>4.752                            | 0.448<br>.504<br>2.710<br>4.063<br>5.709<br>11.709<br>12.101<br>7.584<br>14.065                                      | -1.372<br>444<br>427<br>722<br>-1.367<br>-1.065<br>-1.210<br>1.110<br>284                                  | 31.632<br>37.410<br>42.137<br>50.577<br>63.522<br>65.357<br>69.828<br>66.093<br>72.332                                     | 0.000<br>.000<br>.006<br>.043<br>.239<br>1.900<br>2.739<br>4.076<br>6.104                                | 2.978<br>2.784<br>2.928<br>3.396<br>4.070<br>4.687<br>5.428<br>6.084<br>6.040                            | 34.616<br>40.208<br>45.086<br>54.015<br>67.838<br>71.965<br>78.067<br>76.392<br>84.485                                  |
| 1995 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total 2008 Total 2009 Total 2009 Total 2009 Total 2009 Total   | 57.540<br>57.366<br>58.541<br>56.834<br>56.033<br>55.942<br>55.049<br>55.934<br>56.429<br>57.587<br>56.661<br>58.222      | 7.075<br>7.862<br>8.029<br>8.145<br>7.960<br>8.223<br>8.161<br>8.215<br>8.459<br>8.426<br>8.355<br>8.434 | 6.557<br>6.102<br>5.162<br>5.731<br>5.942<br>6.063<br>6.221<br>6.586<br>6.510<br>7.191<br>7.620<br>8.212 | 71.173<br>71.330<br>71.732<br>70.710<br>69.935<br>70.228<br>69.431<br>70.735<br>71.398<br>73.205<br>72.637<br>74.868 | 22.180<br>28.865<br>30.052<br>29.331<br>31.007<br>33.492<br>34.659<br>34.649<br>34.679<br>32.970<br>29.690<br>29.866 | 4.496<br>3.962<br>3.731<br>3.608<br>4.013<br>4.351<br>4.462<br>4.727<br>5.338<br>6.949<br>6.920<br>8.176 | 17.684<br>24.904<br>26.321<br>25.722<br>26.994<br>29.141<br>30.197<br>29.921<br>29.341<br>26.021<br>22.770<br>21.690 | 2.134<br>2.543<br>-1.924<br>1.172<br>.969<br>.704<br>.540<br>-1.192<br>.232<br>401<br>-1.329               | 77.222<br>84.694<br>82.865<br>83.662<br>83.972<br>85.689<br>84.550<br>85.883<br>83.112<br>78.003<br>80.855                 | 7.075<br>7.862<br>8.029<br>8.145<br>7.960<br>8.223<br>8.161<br>8.215<br>8.459<br>8.426<br>8.355<br>8.434 | 6.559<br>6.104<br>5.160<br>5.726<br>5.944<br>6.075<br>6.233<br>6.637<br>6.523<br>7.174<br>7.604<br>8.166 | 90.991<br>98.776<br>96.129<br>97.605<br>97.898<br>100.073<br>100.168<br>99.464<br>100.971<br>98.825<br>94.078<br>97.544 |
| 2011 Total<br>2012 Total<br>2013 Total<br>2014 Total<br>2015 Total   | 60.567<br>62.334<br>64.200<br>69.642<br>70.259  | 8.269<br>8.062<br>8.244<br>8.338<br>8.337  | 9.224<br>8.866<br>9.426<br>9.774<br>9.650  | 78.060<br>79.262<br>81.871<br>87.754<br>88.247   | 28.748<br>27.068<br>24.623<br>23.241<br>23.794   | 10.373<br>11.267<br>11.788<br>12.270<br>12.902   | 18.375<br>15.801<br>12.835<br>10.971<br>10.892   | .525<br>531<br>2.628<br>238<br>-1.622  | 79.436<br>77.480<br>79.440<br>80.231<br>79.318   | 8.269<br>8.062<br>8.244<br>8.338<br>8.337  | 9.128<br>8.829<br>9.452<br>9.738<br>9.634  | 96.960<br>94.532<br>97.334<br>98.487<br>97.516  |
| Page 1 Pa | 5.604<br>5.265<br>5.506<br>5.183<br>5.400<br>5.340<br>5.532<br>5.627<br>5.384<br>5.642<br>5.517<br>5.509<br><b>65.507</b> | .759<br>.687<br>.692<br>.656<br>.696<br>.703<br>.736<br>.748<br>.685<br>.635<br>.682<br>.750             | .867<br>.857<br>.933<br>.883<br>.894<br>.850<br>.862<br>.814<br>.780<br>.827<br>.933<br><b>10.328</b>    | 7.229 6.808 7.131 6.723 6.990 6.893 7.130 7.189 6.849 7.104 7.025 7.191 84.262                                       | 2.103<br>2.027<br>2.135<br>2.026<br>2.165<br>2.071<br>2.254<br>2.211<br>2.098<br>2.058<br>2.105<br>2.124<br>25.378   | 1.099<br>1.038<br>1.167<br>1.123<br>1.243<br>1.190<br>1.131<br>1.186<br>1.184<br>1.124<br>1.263<br>1.372 | 1.004<br>.989<br>.968<br>.904<br>.923<br>.881<br>1.123<br>1.025<br>.914<br>.934<br>.842<br>.752<br>11.259            | .827<br>.436<br>111<br>173<br>323<br>.167<br>.227<br>.334<br>005<br>379<br>144<br>1.147<br><b>2.003</b>    | 7, 432<br>6,683<br>6,355<br>5,906<br>5,984<br>6,372<br>6,857<br>6,963<br>6,277<br>6,184<br>6,197<br>7,400<br><b>78,610</b> | .759<br>.687<br>.692<br>.656<br>.696<br>.703<br>.736<br>.748<br>.685<br>.635<br>.635<br>.682<br>.750     | .848<br>.848<br>.924<br>.877<br>.891<br>.845<br>.863<br>.813<br>.780<br>.822<br>.825<br>.924             | 9.060<br>8.234<br>7.988<br>7.454<br>7.589<br>7.940<br>8.480<br>8.548<br>7.757<br>7.659<br>7.724<br>9.090<br>97.524      |
| Panuary February March April May June July August September October November December Total  | 5.620<br>5.209<br>5.698<br>5.433<br>5.663<br>5.610<br>5.747<br>5.895<br>5.670<br>5.988<br>5.941<br>6.066<br><b>68.541</b> | .765<br>.665<br>.681<br>.593<br>.641<br>.701<br>.746<br>.757<br>.712<br>.690<br>.697<br>.771             | .918<br>.860<br>1.014<br>.989<br>1.026<br>.982<br>.923<br>.865<br>.843<br>.916<br>.913<br>.950           | 7.303<br>6.734<br>7.393<br>7.015<br>7.331<br>7.293<br>7.416<br>7.517<br>7.226<br>7.594<br>7.551<br>7.787             | 2.315<br>1.959<br>2.195<br>2.112<br>2.264<br>2.117<br>2.129<br>2.153<br>1.993<br>2.067<br>2.027<br>2.136<br>25.467   | 1.382<br>1.387<br>1.467<br>1.429<br>1.459<br>1.430<br>1.459<br>1.392<br>1.481<br>1.686<br>1.671<br>1.718 | .933<br>.572<br>.728<br>.683<br>.805<br>.688<br>.670<br>.760<br>.512<br>.382<br>.356<br>.417                         | .745<br>.316<br>.313<br>.241<br>-327<br>007<br>.355<br>.030<br>101<br>131<br>.229<br>1.033<br><b>2.214</b> | 7.298 6.097 6.735 5.864 6.128 6.273 6.760 6.671 6.075 6.238 6.532 7.520 78.190   | .765<br>.665<br>.681<br>.593<br>.641<br>.701<br>.746<br>.757<br>.712<br>.690<br>.697<br>.771             | .895<br>.843<br>1.001<br>.984<br>1.025<br>.983<br>.918<br>.861<br>.834<br>.905<br>.896<br>.932           | 8.980<br>7.622<br>8.434<br>7.457<br>7.809<br>7.974<br>8.408<br>7.637<br>7.845<br>8.136<br>9.237<br><b>97.880</b>        |
| Page 2018 January  | 5.966<br>5.577<br>6.231<br>5.942<br>6.198<br>6.096<br>R 6.410<br>R 6.676<br>6.430<br>55.526                               | .781<br>.678<br>.701<br>.618<br>.704<br>.729<br>.758<br>.756<br>.677                                     | .991<br>.940<br>1.021<br>1.024<br>1.049<br>1.038<br>.935<br>.945<br>.862<br><b>8.805</b>                 | 7.738<br>7.195<br>7.953<br>7.584<br>7.951<br>7.863<br>R 8.102<br>R 8.377<br>7.969<br><b>70.732</b>                   | 2.227<br>1.861<br>2.115<br>2.122<br>2.142<br>2.172<br>R 2.158<br>R 2.191<br>1.997<br>18.984                          | 1.614<br>1.529<br>1.704<br>1.796<br>1.761<br>1.770<br>R 1.844<br>R 1.730<br>1.763<br><b>15.512</b>       | .614<br>.332<br>.411<br>.326<br>.380<br>.402<br>R .314<br>R .460<br>.234<br><b>3.472</b>                             | 1.304<br>.549<br>.320<br>025<br>310<br>R116<br>R .190<br>R130<br>332<br><b>1.451</b>                       | 7.884<br>6.472<br>6.963<br>6.252<br>6.261<br>6.381<br>R 6.914<br>R 7.003<br>6.338<br><b>60.468</b>                         | .781<br>.678<br>.701<br>.618<br>.704<br>.729<br>.758<br>.756<br>.677                                     | .977<br>.913<br>1.006<br>1.005<br>1.042<br>1.025<br>.919<br>.932<br>.845<br><b>8.664</b>                 | 9.655<br>8.075<br>8.685<br>7.886<br>8.021<br>8.149<br>8.607<br>8.708<br>7.871<br><b>75.656</b>                          |
| 2017 9-Month Total<br>2016 9-Month Total   | 50.546<br>48.840  | 6.261<br>6.360   | 8.421<br>7.741   | 65.228<br>62.941   | 19.237<br>19.091   | 12.886<br>10.360   | 6.351<br>8.730   | 1.083<br>1.378   | 57.900<br>58.830   | 6.261<br>6.360   | 8.345<br>7.688   | 72.663<br>73.050  |

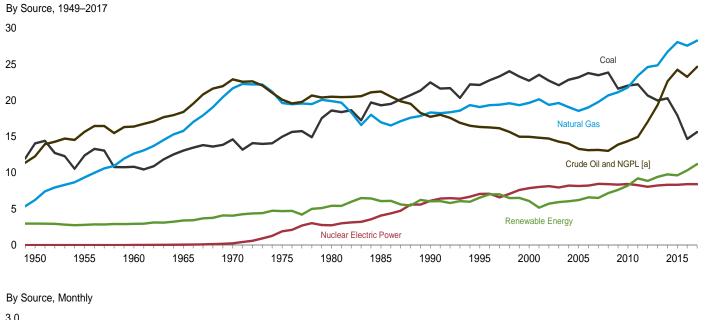
Notes: • See "Primary Energy," "Primary Energy Production," and "Primary Energy Consumption," in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

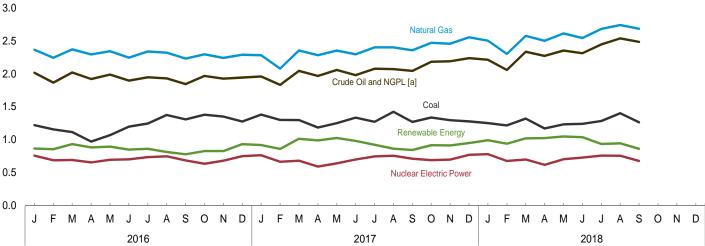
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1973.

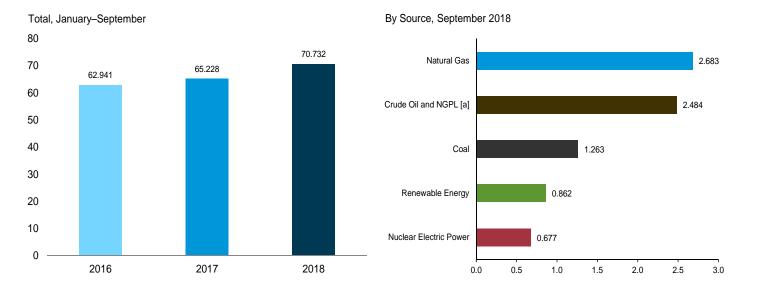
beginning in 1973. Sources: • Production: Table 1.2. • Trade: Tables 1.4a and 1.4b. • Stock Change and Other: Calculated as consumption minus production and net imports. • Consumption: Table 1.3.

 <sup>&</sup>lt;sup>a</sup> Coal, natural gas (dry), crude oil, and natural gas plant liquids.
 <sup>b</sup> See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
 <sup>c</sup> Net imports equal imports minus exports.
 <sup>d</sup> Includes petroleum stock change and adjustments; natural gas net storage withdrawals and balancing item; coal stock change, losses, and unaccounted for; fuel ethanol stock change; and biodiesel stock change and balancing item.
 <sup>e</sup> Coal, coal coke net imports, natural gas, and petroleum.
 <sup>f</sup> Also includes electricity net imports.
 R=Revised.

**Figure 1.2 Primary Energy Production** 







[a] National gas plant liquids.

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Source: Table 1.2.

**Table 1.2 Primary Energy Production by Source** 

|  |  | F  | ossil Fuels  |  |   |   |   |   | Renewabl  | e Fnerav <sup>6</sup>  | a  |   |  |
|--|--|--|--|--|---|---|---|---|---|--|--|---|--|
|  | Coalb  | Natural<br>Gas<br>(Dry)  | Crude<br>Oil <sup>c</sup>  | <b>NGPL</b> <sup>d</sup>   | Total   | Nuclear<br>Electric<br>Power  | Hydro-<br>electric<br>Power <sup>e</sup>  | Geo-<br>thermal   | Solar   | Wind   | Bio-<br>mass   | Total   | Total  |
| 1950 Total 1955 Total 1955 Total 1960 Total 1965 Total 1970 Total 1977 Total 1980 Total 1980 Total 1980 Total 1980 Total 1990 Total 1995 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2008 Total 2008 Total 2009 Total 2010 Total 2011 Total 2011 Total 2012 Total 2013 Total 2013 Total 2014 Total 2013 Total 2014 Total 2013 Total 2014 Total 2014 Total 2015 Total 2014 Total 2015 Total 2016 Total 2017 Total 2018 Total 2019 Total 2019 Total 2019 Total 2019 Total 2019 Total 2019 Total 2011 Total   | 14,060<br>12,370<br>10,817<br>13,055<br>14,607<br>14,989<br>18,598<br>19,325<br>22,735<br>22,735<br>22,732<br>22,739<br>22,732<br>22,034<br>22,852<br>23,185<br>23,790<br>23,493<br>23,851<br>21,624<br>22,038<br>22,221<br>20,677<br>20,001<br>20,286<br>17,946 | 6.233<br>9.345<br>12.656<br>15.775<br>21.666<br>19.640<br>19.908<br>16.980<br>18.326<br>19.082<br>20.166<br>19.382<br>19.633<br>19.633<br>19.633<br>21.139<br>21.806<br>23.406<br>24.610<br>24.859<br>26.718<br>28.067 | 11.447 14.410 14.935 16.521 20.401 17.729 18.249 18.929 15.571 13.887 12.282 12.160 11.960 11.950 10.974 10.767 10.741 10.613 11.324 11.596 11.970 13.801 15.807 18.542 19.679 | 0.823 1.240 1.461 1.883 2.512 2.374 2.254 2.241 2.175 2.442 2.611 2.5547 2.559 2.346 2.334 2.356 2.419 2.419 2.574 2.781 2.970 3.246 3.532 4.096 4.567 | 32.563<br>37.364<br>39.869<br>47.235<br>59.186<br>54.733<br>58.560<br>57.540<br>57.366<br>58.541<br>56.834<br>55.942<br>55.049<br>55.942<br>55.049<br>55.661<br>56.429<br>57.587<br>56.661<br>58.222<br>60.5661<br>62.334<br>64.200<br>69.642<br>70.259 | 0.000<br>.000<br>.006<br>.043<br>.239<br>1.900<br>2.739<br>4.076<br>6.104<br>7.075<br>7.862<br>8.145<br>7.960<br>8.223<br>8.161<br>8.215<br>8.459<br>8.459<br>8.426<br>8.355<br>8.434<br>8.269<br>8.062<br>8.244<br>8.338 | 1.415 1.360 1.608 2.059 2.634 3.155 2.970 3.046 3.205 2.811 2.242 2.689 2.793 2.688 2.703 2.869 2.446 2.511 2.669 2.539 3.103 2.629 2.562 2.467 2.321 | NA<br>(s)<br>.002<br>.006<br>.034<br>.053<br>.097<br>.171<br>.152<br>.164<br>.171<br>.173<br>.181<br>.181<br>.186<br>.192<br>.200<br>.208<br>.212<br>.214<br>.214 | NA<br>NA<br>NA<br>NA<br>NA<br>NA<br>(s)<br>.059<br>.063<br>.063<br>.063<br>.058<br>.058<br>.058<br>.058<br>.058<br>.074<br>.090<br>.111<br>.157<br>.225<br>.337<br>.426 | NA<br>NA<br>NA<br>NA<br>NA<br>(s)<br>.029<br>.033<br>.057<br>.070<br>.105<br>.113<br>.142<br>.264<br>.341<br>.546<br>.721<br>.923<br>.1.168<br>1.340<br>1.601<br>1.778 | 1.562<br>1.424<br>1.320<br>1.335<br>1.431<br>1.499<br>2.475<br>3.016<br>2.735<br>3.099<br>3.0624<br>2.705<br>2.805<br>2.805<br>3.101<br>3.212<br>3.472<br>3.868<br>3.953<br>4.452<br>4.632<br>4.529<br>4.824<br>5.029<br>4.914 | 2.978<br>2.784<br>2.984<br>3.396<br>4.070<br>4.687<br>5.428<br>6.084<br>6.557<br>6.102<br>5.731<br>5.942<br>6.063<br>6.221<br>6.586<br>6.510<br>7.191<br>7.620<br>8.212<br>9.224<br>8.866<br>9.426<br>9.476 | 35.540<br>40.148<br>42.803<br>50.674<br>63.495<br>61.320<br>67.175<br>67.698<br>70.704<br>71.173<br>71.330<br>71.732<br>70.710<br>69.935<br>70.228<br>69.431<br>70.735<br>71.398<br>73.205<br>72.637<br>74.868<br>78.060<br>79.262<br>81.871<br>87.754<br>88.247 |
| Page 1 September 2 October November December 2 Total March April May June July August September October November December Total March March April March August September December Total September December Total September March March March April Mar | 1.222<br>1.156<br>1.115<br>.971<br>1.069<br>1.198<br>1.246<br>1.376<br>1.309<br>1.379<br>1.350<br>1.276  | 2.365<br>2.243<br>2.371<br>2.293<br>2.342<br>2.245<br>2.339<br>2.320<br>2.231<br>2.296<br>2.241<br>2.289<br>27.576   | 1.631<br>1.503<br>1.611<br>1.522<br>1.565<br>1.488<br>1.532<br>1.538<br>1.462<br>1.559<br>1.5526<br>1.557  | .385<br>.363<br>.409<br>.398<br>.423<br>.408<br>.415<br>.393<br>.382<br>.408<br>.401<br>.386<br><b>4.770</b>   | 5.604<br>5.265<br>5.506<br>5.183<br>5.400<br>5.340<br>5.532<br>5.627<br>5.384<br>5.642<br>5.517<br>5.509  | .759<br>.687<br>.692<br>.656<br>.696<br>.703<br>.736<br>.748<br>.685<br>.635<br>.682<br>.750<br><b>8.427</b>  | .236<br>.223<br>.253<br>.239<br>.235<br>.215<br>.198<br>.181<br>.151<br>.160<br>.174<br>.208  | .018<br>.017<br>.018<br>.016<br>.017<br>.017<br>.017<br>.018<br>.017<br>.018  | .026<br>.035<br>.043<br>.048<br>.055<br>.056<br>.061<br>.061<br>.055<br>.049<br>.041  | .170<br>.186<br>.203<br>.192<br>.174<br>.151<br>.163<br>.125<br>.151<br>.188<br>.179<br>.214   | .417<br>.396<br>.417<br>.388<br>.411<br>.412<br>.422<br>.429<br>.405<br>.412<br>.415<br>.456<br><b>4.982</b>   | .867<br>.857<br>.933<br>.883<br>.894<br>.850<br>.862<br>.814<br>.780<br>.827<br>.827<br>.933  | 7.229 6.808 7.131 6.723 6.990 6.893 7.130 7.189 6.849 7.104 7.025 7.191 84.262   |
| 2017 January February March April May June July August September October November December Total   | 1.382<br>1.300<br>1.299<br>1.184<br>1.252<br>1.335<br>1.271<br>1.424<br>1.269<br>1.336<br>1.296<br>1.277   | 2.281<br>2.078<br>2.354<br>2.281<br>2.353<br>2.295<br>2.400<br>2.400<br>2.357<br>2.470<br>2.455<br>2.455<br>2.552<br>28.274  | 1.568<br>1.456<br>1.622<br>1.560<br>1.626<br>1.558<br>1.638<br>1.640<br>1.630<br>1.721<br>1.735<br>1.781   | .389<br>.376<br>.423<br>.409<br>.432<br>.422<br>.438<br>.432<br>.414<br>.461<br>.455<br><b>5.107</b>   | 5.620<br>5.209<br>5.698<br>5.433<br>5.663<br>5.610<br>5.747<br>5.895<br>5.670<br>5.988<br>5.941<br>6.066<br><b>68.541</b>   | .765<br>.665<br>.681<br>.593<br>.641<br>.701<br>.746<br>.757<br>.712<br>.690<br>.771<br><b>8.419</b>  | .247<br>.218<br>.270<br>.271<br>.298<br>.278<br>.244<br>.201<br>.176<br>.168<br>.189<br>.206<br><b>2.767</b>  | .018<br>.016<br>.018<br>.017<br>.016<br>.018<br>.017<br>.017<br>.017<br>.017<br>.020  | .033<br>.040<br>.062<br>.069<br>.081<br>.086<br>.083<br>.079<br>.073<br>.068<br>.050  | .183<br>.195<br>.230<br>.227<br>.207<br>.183<br>.147<br>.125<br>.164<br>.233<br>.222<br>.226<br><b>2.343</b>   | .437<br>.390<br>.434<br>.404<br>.423<br>.419<br>.431<br>.441<br>.413<br>.429<br>.434<br>.449   | .918<br>.860<br>1.014<br>.989<br>1.026<br>.982<br>.923<br>.865<br>.843<br>.916<br>.913<br>.950  | 7.303<br>6.734<br>7.393<br>7.015<br>7.331<br>7.293<br>7.416<br>7.517<br>7.226<br>7.594<br>7.551<br>7.787   |
| 2018 January   | 1.252<br>1.216<br>1.321<br>1.170<br>1.234<br>1.242<br>1.284<br>1.401<br>1.263<br>11.383  | E 2.502<br>E 2.302<br>E 2.575<br>E 2.501<br>E 2.612<br>E 2.542<br>RE 2.680<br>RE 2.739<br>E 2.683<br>23.135  | E1.773<br>E1.642<br>E1.856<br>E1.798<br>E1.856<br>E1.832<br>RE1.940<br>E2.013<br>E1.970  | .439<br>.417<br>.479<br>.473<br>.496<br>.480<br>.506<br>.524<br>.514   | 5.966<br>5.577<br>6.231<br>5.942<br>6.198<br>6.096<br>R 6.410<br>R 6.676<br>6.430<br>55.526   | .781<br>.678<br>.701<br>.618<br>.704<br>.729<br>.758<br>.756<br>.677  | .236<br>.235<br>.239<br>.253<br>.280<br>.258<br>.221<br>.197<br>.172<br><b>2.092</b>  | .018<br>.017<br>.018<br>.017<br>.019<br>.018<br>.019<br>.019<br>.018  | .050<br>.058<br>.076<br>.089<br>.099<br>.107<br>.100<br>.099<br>.090  | .248<br>.222<br>.251<br>.247<br>.217<br>.224<br>.148<br>.180<br>.166<br>1.902  | .440<br>.408<br>.437<br>.418<br>.433<br>.432<br>.448<br>.451<br>.416   | .991<br>.940<br>1.021<br>1.024<br>1.049<br>1.038<br>.935<br>.945<br>.862<br><b>8.805</b>  | 7.738<br>7.195<br>7.953<br>7.584<br>7.951<br>7.863<br>R 8.102<br>R 8.377<br>7.969<br><b>70.732</b>   |
| 2017 9-Month Total<br>2016 9-Month Total   | 11.716<br>10.662   | 20.798<br>20.750   | 14.297<br>13.852   | 3.736<br>3.575   | 50.546<br>48.840  | 6.261<br>6.360  | 2.203<br>1.931  | .157<br>.155  | .608<br>.441  | 1.661<br>1.515   | 3.792<br>3.699   | 8.421<br>7.741  | 65.228<br>62.941   |

a Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
 b Beginning in 1989, includes waste coal supplied. Beginning in 2001, also includes a small amount of refuse recovery. See Table 6.1.
 c Includes lease condensate.
 d Natural gas plant liquids.
 e Conventional hydroelectric power.

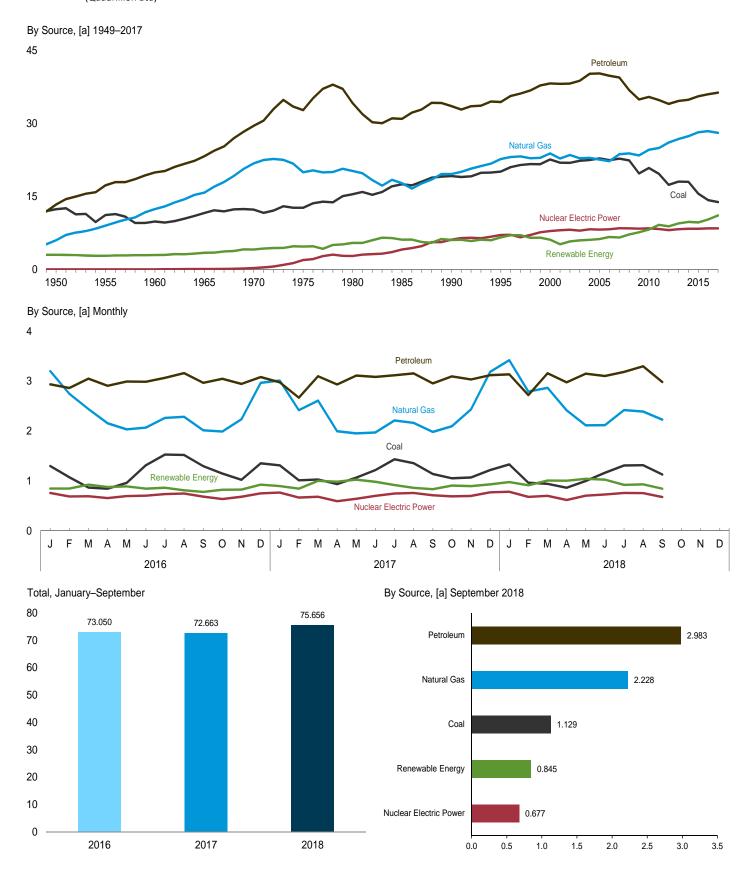
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 trillion Btu. Notes: • See "Primary Energy Production" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

Figure 1.3 Primary Energy Consumption





[a] Small quantities of net imports of coal coke and electricity are not shown. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Source: Table 1.3.

**Table 1.3 Primary Energy Consumption by Source** 

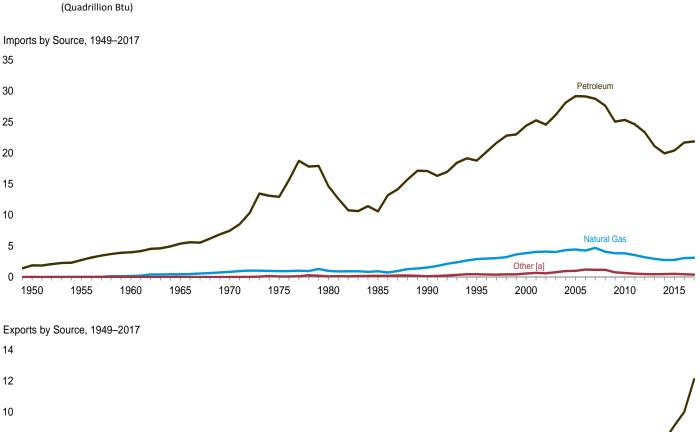
|   |   | Fossil   | Fuelsa   |  |  |   |  | Renewable  | Energy <sup>b</sup>  |   |   |  |
|---|---|--|--|--|--|---|--|--|--|---|---|--|
|   | Coal  | Natural<br>Gas <sup>c</sup>  | Petro-<br>leum <sup>d</sup>  | Totale   | Nuclear<br>Electric<br>Power   | Hydro-<br>electric<br>Power <sup>f</sup>  | Geo-<br>thermal  | Solar  | Wind   | Bio-<br>mass  | Total   | Total <sup>g</sup>   |
| 1950 Total 1955 Total 1960 Total 1960 Total 1965 Total 1970 Total 1975 Total 1985 Total 1985 Total 1995 Total 1995 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2007 Total 2007 Total 2007 Total 2007 Total 2008 Total 2019 Total 2010 Total 2010 Total 2010 Total 2011 Total 2011 Total 2011 Total 2011 Total 2011 Total 2011 Total 2012 Total 2013 Total | 12.347<br>11.167<br>9.838<br>11.581<br>12.265<br>12.663<br>15.423<br>17.478<br>19.173<br>20.089<br>22.580<br>21.914<br>22.321<br>22.466<br>22.797<br>22.447<br>22.347<br>22.749<br>22.387<br>19.691<br>20.834<br>19.658<br>17.378<br>18.039<br>17.998 | 5.968<br>8.998<br>12.385<br>15.769<br>21.795<br>19.948<br>20.235<br>17.703<br>19.603<br>22.671<br>23.824<br>22.773<br>23.510<br>22.831<br>22.923<br>23.663<br>22.239<br>23.663<br>24.575<br>24.955<br>24.955<br>26.089<br>26.805<br>27.383 | 13.315<br>17.255<br>19.919<br>23.246<br>29.521<br>32.732<br>34.205<br>30.925<br>33.552<br>34.401<br>38.187<br>38.149<br>38.187<br>40.210<br>40.283<br>39.803<br>39.445<br>36.841<br>34.920<br>35.453<br>34.813<br>34.613<br>34.613<br>34.613 | 31.632<br>37.410<br>42.137<br>50.577<br>63.522<br>65.357<br>69.828<br>66.093<br>77.332<br>77.222<br>84.694<br>82.865<br>83.972<br>85.737<br>85.689<br>84.550<br>85.883<br>83.112<br>78.003<br>80.855<br>79.440<br>79.440<br>79.440 | 0.000<br>.000<br>.006<br>.043<br>.239<br>1.900<br>2.739<br>4.076<br>6.104<br>7.075<br>7.862<br>8.029<br>8.145<br>7.960<br>8.223<br>8.161<br>8.215<br>8.459<br>8.459<br>8.434<br>8.269<br>8.062<br>8.244<br>8.338 | 1.415 1.360 1.608 2.059 2.634 3.155 2.900 2.970 3.046 3.205 2.811 2.242 2.689 2.793 2.688 2.703 2.869 2.446 2.511 2.669 2.539 3.103 2.629 2.562 2.467 | NA NA (s) .002 .006 .034 .053 .097 .171 .152 .164 .164 .171 .173 .178 .181 .181 .186 .192 .200 .208 .212 .214 .214 | NA N   | NA<br>NA<br>NA<br>NA<br>NA<br>NA<br>(s)<br>.029<br>.033<br>.057<br>.070<br>.105<br>.113<br>.142<br>.178<br>.264<br>.341<br>.546<br>.721<br>.923<br>1.168<br>1.340<br>1.601 | 1.562<br>1.424<br>1.320<br>1.335<br>1.431<br>1.499<br>2.475<br>3.016<br>2.735<br>3.101<br>3.008<br>2.622<br>2.701<br>2.806<br>3.008<br>3.114<br>3.262<br>3.485<br>3.851<br>3.851<br>3.936<br>4.405<br>4.492<br>4.850<br>4.992 | 2.978<br>2.784<br>2.928<br>3.396<br>4.070<br>4.687<br>5.428<br>6.084<br>6.055<br>6.104<br>5.726<br>5.944<br>6.075<br>6.233<br>7.174<br>7.604<br>8.166<br>9.128<br>8.829<br>9.452<br>9.738 | 34.616<br>40.208<br>45.086<br>54.015<br>67.838<br>71.965<br>78.067<br>76.392<br>84.485<br>90.91<br>98.776<br>96.129<br>97.605<br>97.898<br>100.073<br>100.168<br>99.464<br>100.971<br>98.825<br>94.078<br>97.544<br>96.960<br>94.532<br>97.334<br>98.487 |
| 2015 Total  2016 January February March April May June July August September October November December Total  | 15.549  1.297 1.074 .867 .844 .960 1.314 1.529 1.521 1.296 1.147 1.022 1.352  | 28.191 3.201 2.746 2.438 2.156 2.033 2.070 2.262 2.285 2.015 1.991 2.235 2.967 28.400  | 35.595<br>2.935<br>2.863<br>3.049<br>2.907<br>2.992<br>2.988<br>3.067<br>3.160<br>2.967<br>3.048<br>2.945<br>3.082<br>36.003   | 79.318 7.432 6.683 6.355 5.906 5.984 6.372 6.963 6.277 6.184 6.197 7.400 78.610  | 8.337  .759 .687 .692 .656 .696 .703 .736 .748 .685 .635 .682 .750 8.427   | 2.321  .236 .223 .253 .239 .235 .215 .198 .181 .151 .160 .174 .208 2.472  | .212 .018 .017 .018 .016 .018 .017 .018 .017 .018 .018 .019  | .426<br>.026<br>.035<br>.043<br>.048<br>.055<br>.056<br>.061<br>.061<br>.055<br>.049<br>.041 | 1.777 .170 .186 .203 .192 .174 .151 .163 .125 .151 .188 .179 .214  | 4.898 .398 .387 .408 .382 .408 .407 .423 .429 .404 .407 .413 .447 4.913   | 9.634  .848 .848 .924 .877 .891 .845 .863 .813 .780 .822 .825 .924  | 97.516<br>9.060<br>8.234<br>7.988<br>7.454<br>7.589<br>7.940<br>8.480<br>8.548<br>7.757<br>7.659<br>7.724<br>9.090<br>97.524   |
| 2017 January  | 1.313<br>1.011<br>1.029<br>.937<br>1.066<br>1.218<br>1.433<br>1.356<br>1.140<br>1.051<br>1.069<br>1.216<br>13.837   | 3.012<br>2.418<br>2.608<br>1.995<br>1.972<br>2.212<br>2.163<br>1.983<br>2.097<br>2.433<br>3.187<br><b>28.034</b>   | 2.976<br>2.668<br>3.099<br>2.933<br>3.111<br>3.085<br>3.117<br>3.156<br>2.954<br>3.095<br>3.033<br>3.120<br><b>36.347</b>  | 7.298 6.097 6.735 5.864 6.128 6.273 6.760 6.671 6.075 6.238 6.532 7.520 78.190   | .765<br>.665<br>.681<br>.593<br>.641<br>.701<br>.746<br>.757<br>.712<br>.690<br>.697<br>.771   | .247<br>.218<br>.270<br>.271<br>.298<br>.278<br>.244<br>.201<br>.176<br>.168<br>.189<br>.206<br><b>2.767</b>  | .018<br>.016<br>.018<br>.018<br>.017<br>.016<br>.018<br>.017<br>.017<br>.017                                       | .033<br>.040<br>.062<br>.069<br>.081<br>.086<br>.083<br>.079<br>.073<br>.068<br>.050         | .183<br>.195<br>.230<br>.227<br>.207<br>.183<br>.147<br>.125<br>.164<br>.233<br>.222<br>.226<br><b>2.343</b>   | .414<br>.374<br>.421<br>.400<br>.422<br>.419<br>.426<br>.437<br>.403<br>.419<br>.418<br>.431  | .895<br>.843<br>1.001<br>.984<br>1.025<br>.983<br>.918<br>.861<br>.834<br>.905<br>.932<br>11.078  | 8.980<br>7.622<br>8.434<br>7.457<br>7.809<br>7.974<br>8.442<br>8.308<br>7.637<br>7.845<br>8.136<br>9.237<br><b>97.880</b>  |
| 2018 January  | 1.330<br>.963<br>.941<br>.864<br>.998<br>1.162<br>1.310<br>1.315<br>1.129<br>10.012   | 3.420<br>2.790<br>2.865<br>2.414<br>2.117<br>R 2.421<br>2.2391<br>2.228<br>22.761<br>20.317<br>21.207  | 3.137<br>2.720<br>3.159<br>2.976<br>3.150<br>3.104<br>3.186<br>3.298<br>2.983<br>27.713<br>27.099<br>26.927  | 7.884<br>6.472<br>6.963<br>6.252<br>6.261<br>6.381<br>R 6.914<br>R 7.003<br>6.338<br>60.468<br>57.900<br>58.830  | .781<br>.678<br>.701<br>.618<br>.704<br>.729<br>.758<br>.756<br>.677<br><b>6.402</b><br><b>6.261</b><br><b>6.360</b>   | .236<br>.235<br>.239<br>.253<br>.280<br>.258<br>.221<br>.197<br>.172<br>2.092<br>2.203<br>1.931   | .018<br>.017<br>.018<br>.017<br>.019<br>.018<br>.019<br>.018<br>.162   | .050<br>.058<br>.076<br>.089<br>.099<br>.107<br>.100<br>.099<br>.090<br>.766                 | .248<br>.222<br>.251<br>.247<br>.217<br>.224<br>.148<br>.180<br>.166<br>1.902  | .426<br>.381<br>.421<br>.399<br>.427<br>.419<br>.432<br>.438<br>.399<br><b>3.742</b>  | .977<br>.913<br>1.006<br>1.005<br>1.042<br>1.025<br>.919<br>.932<br>.845<br><b>8.664</b><br><b>8.345</b><br><b>7.688</b>  | 9.655<br>8.075<br>8.685<br>8.7.886<br>8.021<br>8.149<br>8.607<br>8.708<br>7.871<br>75.656<br>72.663  |

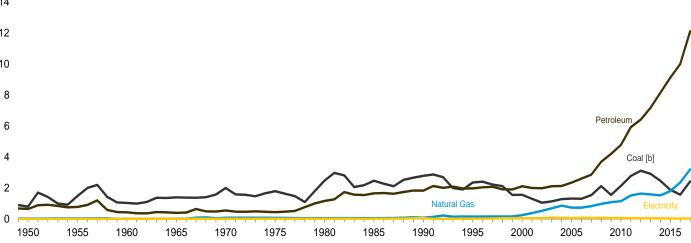
a Includes non-combustion use of fossil fuels.
b Most data are estimates. See Tables 10.1–10.2c for notes on series components and estimation; and see Note, "Renewable Energy Production and Consumption," at end of Section 10.
c Natural gas only; excludes supplemental gaseous fuels. See Note 3, "Supplemental Gaseous Fuels," at end of Section 4.
d Petroleum products supplied; excludes biofuels that have been blended with petroleum—biofuels are included in "Biomass."

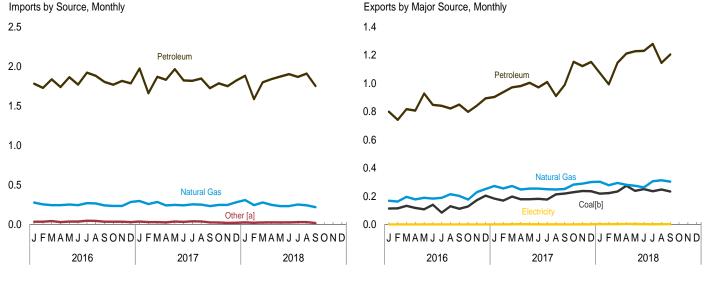
Includes coal coke net imports. See Tables 1.4a and 1.4b.
 Conventional hydroelectric power.
 Includes coal coke net imports and electricity net imports, which are not

separately displayed. See Tables 1.4a and 1.4b.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.
Notes:
See "Primary Energy Consumption" in Glossary.
See Table D1 for estimated energy consumption for 1635–1945. Totals may not equal sum of components due to independent rounding.
Geographic coverage is the 50 states and the District of Columbia.
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973. beginning in 1973. Sources: See end of section.

Figure 1.4a Primary Energy Imports and Exports







[b] Includes coal coke.

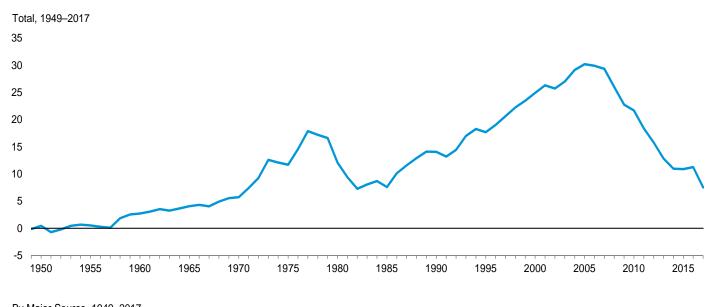
8

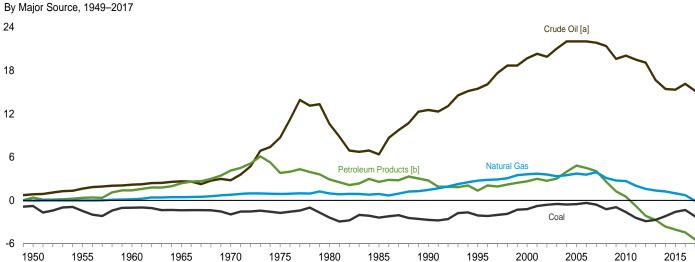
Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Sources: Tables 1.4a and 1.4b.

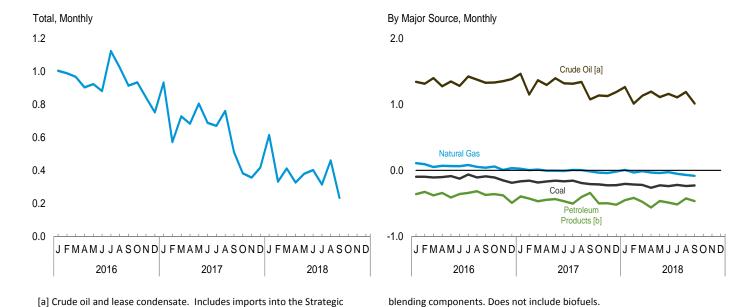
Figure 1.4b Primary Energy Net Imports

Petroleum Reserve, which began in 1977.

[b] Petroleum products, unfinished oils natural gasoline, and gasoline







Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary.

Sources: Tables 1.4a and 1.4b.

Table 1.4a Primary Energy Imports by Source

|  |              |              |                |                           | Imports                            |                  |                      |              |                    |
|--|--------------|--------------|----------------|---------------------------|------------------------------------|------------------|----------------------|--------------|--------------------|
|  |              |              |                |                           | Petroleum                          |                  |                      |              |                    |
|  | Coal         | Coal<br>Coke | Natural<br>Gas | Crude<br>Oil <sup>a</sup> | Petroleum<br>Products <sup>b</sup> | Total            | Biomass <sup>c</sup> | Electricity  | Total              |
| 1950 Total                               | 0.009        | 0.011        | 0.000          | 1.056                     | 0.830                              | 1.886            | NA                   | 0.007        | 1.913              |
| 1955 Total                               | .008         | .003         | .011           | 1.691                     | 1.061                              | 2.752            | NA                   | .016         | 2.790              |
| 1960 Total                               | .007         | .003         | .161           | 2.196                     | 1.802                              | 3.999            | NA                   | .018         | 4.188              |
| 1965 Total                               | .005         | .002         | .471           | 2.654                     | 2.748                              | 5.402            | NA                   | .012         | 5.892              |
| 1970 Total                               | .001         | .004         | .846           | 2.814                     | 4.656                              | 7.470            | NA                   | .021         | 8.342              |
| 1975 Total                               | .024         | .045         | .978           | 8.721                     | 4.227                              | 12.948           | NA                   | .038         | 14.032             |
| 1980 Total                               | .030         | .016         | 1.006          | 11.195                    | 3.463                              | 14.658           | NA                   | .085         | 15.796             |
| 1985 Total                               | .049         | .014         | .952           | 6.814                     | 3.796                              | 10.609           | NA                   | .157         | 11.781             |
| 1990 Total                               | .067         | .019         | 1.551          | 12.766                    | 4.351                              | 17.117           | NA                   | .063         | 18.817             |
| 1995 Total                               | .237         | .095         | 2.901          | 15.669                    | 3.131                              | 18.800           | .001                 | .146         | 22.180             |
| 2000 Total                               | .313         | .094         | 3.869          | 19.783                    | 4.641                              | 24.424           | (s)                  | .166         | 28.865             |
| 2001 Total                               | .495         | .063         | 4.068          | 20.348                    | 4.946                              | 25.294           | .002                 | .131         | 30.052             |
| 2002 Total                               | .422         | .080         | 4.104          | 19.920                    | 4.677                              | 24.597           | .002                 | .125         | 29.331             |
| 2003 Total                               | .626         | .068         | 4.042          | 21.060                    | 5.105                              | 26.165           | .002                 | .104         | 31.007             |
| 2004 Total                               | .682         | .170         | 4.365          | 22.082                    | 6.063                              | 28.145           | .013                 | .117         | 33.492             |
| 2005 Total                               | .762         | .088         | 4.450          | 22.091                    | 7.108                              | 29.198           | .012                 | .150         | 34.659             |
| 2006 Total                               | .906         | .101         | 4.291          | 22.085                    | 7.054                              | 29.139           | .066                 | .146         | 34.649             |
| 2007 Total                               | .909         | .061         | 4.723          | 21.914                    | 6.842                              | 28.756           | .055                 | .175         | 34.679             |
| 2008 Total                               | .855         | .089         | 4.084          | 21.448                    | 6.214                              | 27.662           | .085                 | .195         | 32.970             |
| 2009 Total                               | .566         | .009         | 3.845          | 19.699                    | 5.367                              | 25.066           | .027                 | .178         | 29.690             |
| 2010 Total                               | .484         | .030         | 3.834          | 20.140                    | 5.219                              | 25.359           | .004                 | .154         | 29.866             |
| 2011 Total                               | .327         | .035         | 3.555          | 19.595                    | 5.038                              | 24.633           | .019                 | .178         | 28.748             |
| 2012 Total                               | .212         | .028         | 3.216          | 19.239                    | 4.122                              | 23.361           | .049                 | .202         | 27.068             |
| 2013 Total                               | .199         | .003         | 2.955          | 16.957                    | 4.169                              | 21.126           | .102                 | .236         | 24.623             |
| 2014 Total<br>2015 Total                 | .252<br>.256 | .002<br>.003 | 2.763<br>2.786 | 16.178<br>16.299          | 3.773<br>4.111                     | 19.951<br>20.410 | .046<br>.079         | .227<br>.259 | 23.241<br>23.794   |
| 2016 January                             | .015         | (6)          | .280           | 1.429                     | .353                               | 1.782            | .003                 | .022         | 2.103              |
| 2016 January<br>February                 | .018         | (s)<br>(s)   | .258           | 1.389                     | .339                               | 1.728            | .003                 | .019         | 2.027              |
| March                                    | .026         | (s)          | .247           | 1.503                     | .333                               | 1.837            | .005                 | .020         | 2.135              |
| April                                    | .017         | (s)          | .247           | 1.382                     | .357                               | 1.739            | .008                 | .016         | 2.026              |
| May                                      | .020         | .001         | .255           | 1.488                     | .376                               | 1.864            | .008                 | .019         | 2.165              |
| June                                     | .014         | .002         | .248           | 1.373                     | .398                               | 1.771            | .013                 | .023         | 2.071              |
| July                                     | .022         | (s)          | .272           | 1.519                     | .402                               | 1.921            | .012                 | .026         | 2.254              |
| August                                   | .021         | (s)          | .269           | 1.504                     | .379                               | 1.883            | .014                 | .025         | 2.211              |
| September                                | .018         | .002         | .244           | 1.460                     | .343                               | 1.804            | .012                 | .018         | 2.098              |
| October                                  | .017         | .001         | .237           | 1.420                     | .350                               | 1.770            | .013                 | .020         | 2.058              |
| November                                 | .016         | (s)          | .237           | 1.457                     | .359                               | 1.816            | .015                 | .022         | 2.105              |
| December                                 | .015         | (s)          | .288           | 1.467                     | .319                               | 1.786            | .017                 | .019         | 2.124              |
| Total                                    | .220         | .òó6         | 3.082          | 17.392                    | 4.309                              | 21.700           | .123                 | .248         | 25.378             |
|  | 016          | (a)          | 200            |                           | 202                                | 1.072            | 003                  | 024          |                    |
| 2017 January                             | .016         | (s)          | .299<br>.261   | 1.590<br>1.334            | .383<br>.327                       | 1.973<br>1.661   | .003<br>.004         | .024<br>.019 | 2.315<br>1.959     |
| February                                 | .013<br>.012 | (s)          |                |                           |                                    |                  |                      |              |                    |
| March<br>April                           | .012         | (s)<br>(s)   | .288<br>.244   | 1.531<br>1.489            | .337<br>.342                       | 1.869<br>1.831   | .006<br>.006         | .021<br>.019 | 2.195<br>2.112     |
| May                                      | .023         | (s)<br>(s)   | .250           | 1.592                     | .374                               | 1.965            | .008                 | .019         | 2.112              |
| June                                     | .014         | .001         | .246           | 1.468                     | .355                               | 1.824            | .013                 | .020         | 2.117              |
| July                                     | .021         | (s)          | .257           | 1.484                     | .335                               | 1.819            | .012                 | .020         | 2.129              |
| August                                   | .018         | (s)          | .254           | 1.486                     | .361                               | 1.847            | .011                 | .022         | 2.153              |
| September                                | .011         | (s)          | .235           | 1.329                     | .396                               | 1.725            | .004                 | .018         | 1.993              |
| October                                  | .012         | (s)          | .250           | 1.441                     | .346                               | 1.787            | .004                 | .013         | 2.067              |
| November                                 | .008         | (s)          | .250           | 1.393                     | .358                               | 1.751            | .005                 | .013         | 2.027              |
| December                                 | .009         | (s)          | .285           | 1.460                     | .362                               | 1.822            | .004                 | .016         | 2.136              |
| Total                                    | .167         | .òó1         | 3.118          | 17.597                    | 4.277                              | 21.874           | .081                 | .224         | 25.467             |
| 2018 January                             | .011         | (s)          | .311           | 1.503                     | .381                               | 1.883            | .004                 | .018         | 2.227              |
| February                                 | .008         | (s)          | .247           | 1.269                     | .318                               | 1.587            | .003                 | .016         | 1.861              |
| March                                    | .011         | (s)          | .281           | 1.428                     | .371                               | 1.800            | .004                 | .019         | 2.115              |
| April                                    | .011         | .òó1         | .250           | 1.496                     | .345                               | 1.841            | .004                 | .015         | 2.122              |
| May                                      | .012         | .001         | .235           | 1.467                     | .405                               | 1.873            | .004                 | .018         | 2.142              |
| June                                     | .011         | (s)          | .236           | 1.539                     | .363                               | 1.902            | .004                 | 019          | 2 172              |
| July                                     | .015         | (s)          | 255            | 1.486                     | .381                               | 1.867            | .002                 | R .018       | <sup>R</sup> 2.158 |
| August                                   | .010         | (s)<br>(s)   | R .245         | 1.500                     | .409                               | 1.909            | .005                 | .021         | R 2.191            |
| September                                | .006         | (s)          | .221           | 1.377                     | .375                               | 1.752            | .003                 | .015         | 1.997              |
| 9-Month Total                            | .094         | .002         | 2.282          | 13.067                    | 3.348                              | 16.415           | .033                 | .159         | 18.984             |
| 2017 9-Month Total<br>2016 9-Month Total | .138<br>.172 | .001<br>.004 | 2.334<br>2.320 | 13.304<br>13.047          | 3.211<br>3.281                     | 16.515<br>16.328 | .068<br>.078         | .181<br>.188 | 19.237<br>19.091   |

<sup>&</sup>lt;sup>a</sup> Crude oil and lease condensate. Includes imports into the Strategic Petroleum

components due to independent rounding. • Geographic coverage is the 50 states

and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

<sup>&</sup>lt;sup>a</sup> Crude oil and lease condensate. Includes imports into the chategor's stress....
Reserve, which began in 1977.

<sup>b</sup> Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.

<sup>c</sup> Fuel ethanol (minus denaturant) and biodiesel.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of

Table 1.4b Primary Energy Exports by Source and Total Net Imports

|  |                      |                      |                      |                           | Exports                            |                        |                      |                     |                        | Net<br>Imports <sup>a</sup> |
|--|----------------------|----------------------|----------------------|---------------------------|------------------------------------|------------------------|----------------------|---------------------|------------------------|-----------------------------|
|  |                      |                      |                      |                           | Petroleum                          |                        |                      |                     |                        |                             |
|  | Coal                 | Coal<br>Coke         | Natural<br>Gas       | Crude<br>Oil <sup>b</sup> | Petroleum<br>Products <sup>c</sup> | Total                  | Biomassd             | Electricity         | Total                  | Total                       |
| 1950 Total                               | 0.786                | 0.010                | 0.027                | 0.202                     | 0.440                              | 0.642                  | NA                   | 0.001               | 1.465                  | 0.448                       |
| 1955 Total<br>1960 Total                 | 1.465<br>1.023       | .013<br>.009         | .032<br>.012         | .067<br>.018              | .707<br>.413                       | .774<br>.431           | NA<br>NA             | .002<br>.003        | 2.286<br>1.477         | .504<br>2.710               |
| 1965 Total                               | 1.376                | .009                 | .012                 | .006                      | .386                               | .392                   | NA<br>NA             | .013                | 1.829                  | 4.063                       |
| 1970 Total                               | 1.936                | .061                 | .072                 | .029                      | .520                               | .549                   | NA                   | .014                | 2.632                  | 5.709                       |
| 1975 Total                               | 1.761                | .032                 | .074                 | .012                      | .427                               | .439                   | NA                   | .017                | 2.323                  | 11.709                      |
| 1980 Total                               | 2.421                | .051                 | .049                 | .609                      | .551                               | 1.160                  | NA                   | .014                | 3.695                  | 12.101                      |
| 1985 Total                               | 2.438<br>2.772       | .028<br>.014         | .056<br>.087         | .432<br>.230              | 1.225<br>1.594                     | 1.657<br>1.824         | NA<br>NA             | .017<br>.055        | 4.196<br>4.752         | 7.584<br>14.065             |
| 1990 Total<br>1995 Total                 | 2.772                | .034                 | .156                 | .200                      | 1.776                              | 1.976                  | NA<br>NA             | .012                | 4.496                  | 17.684                      |
| 2000 Total                               | 1.528                | .028                 | .245                 | .106                      | 2.003                              | 2.110                  | NA                   | .051                | 3.962                  | 24.904                      |
| 2001 Total                               | 1.265                | .033                 | .377                 | .043                      | 1.956                              | 1.999                  | (s)                  | .056                | 3.731                  | 26.321                      |
| 2002 Total                               | 1.032                | .020                 | .520                 | .019                      | 1.963                              | 1.982                  | (s)                  | .054                | 3.608                  | 25.722                      |
| 2003 Total<br>2004 Total                 | 1.117<br>1.253       | .018<br>.033         | .686<br>.862         | .026<br>.057              | 2.083<br>2.068                     | 2.110<br>2.125         | .001<br>.001         | .082<br>.078        | 4.013<br>4.351         | 26.994<br>29.141            |
| 2005 Total                               | 1.273                | .043                 | .735                 | .067                      | 2.276                              | 2.344                  | .001                 | .065                | 4.462                  | 30.197                      |
| 2006 Total                               | 1.264                | .040                 | .730                 | .052                      | 2.554                              | 2.606                  | .005                 | .083                | 4.727                  | 29.921                      |
| 2007 Total                               | 1.507                | .036                 | .830                 | .058                      | 2.803                              | 2.861                  | .036                 | .069                | 5.338                  | 29.341                      |
| 2008 Total                               | 2.071                | .049                 | .972                 | .061                      | 3.626                              | 3.686                  | .089                 | .083                | 6.949                  | 26.021                      |
| 2009 Total<br>2010 Total                 | 1.515<br>2.101       | .032<br>.036         | 1.082<br>1.147       | .093<br>.088              | 4.101<br>4.691                     | 4.194<br>4.780         | .035<br>.047         | .062<br>.065        | 6.920<br>8.176         | 22.770<br>21.690            |
| 2011 Total                               | 2.751                | .024                 | 1.519                | .100                      | 5.820                              | 5.919                  | .108                 | .051                | 10.373                 | 18.375                      |
| 2012 Total                               | 3.087                | .024                 | 1.633                | .143                      | 6.261                              | 6.404                  | .078                 | .041                | 11.267                 | 15.801                      |
| 2013 Total                               | 2.895                | .021                 | 1.587                | .284                      | 6.886                              | 7.170                  | .076                 | .039                | 11.788                 | 12.835                      |
| 2014 Total<br>2015 Total                 | 2.435<br>1.852       | .023<br>.021         | 1.528<br>1.800       | .744<br>.964              | 7.414<br>8.153                     | 8.158<br>9.118         | .081<br>.080         | .045<br>.031        | 12.270<br>12.902       | 10.971<br>10.892            |
| 2016 January                             | .114                 | .001                 | .170                 | .087                      | .713                               | .800                   | .013                 | .001                | 1.099                  | 1.004                       |
| February                                 | .116                 | (s)                  | .164                 | .075                      | .666                               | .742                   | .014                 | .002                | 1.038                  | .989                        |
| March                                    | .134                 | .001                 | .197                 | .106                      | .712                               | .818                   | .016                 | .002                | 1.167                  | .968                        |
| April<br>May                             | .118<br>.108         | .001<br>.001         | .179<br>.190         | .107<br>.140              | .699<br>.788                       | .807<br>.928           | .016<br>.014         | .002<br>.001        | 1.123<br>1.243         | .904<br>.923                |
| June                                     | .139                 | .002                 | .185                 | .091                      | .757                               | .848                   | .014                 | .002                | 1.190                  | .881                        |
| July                                     | .084                 | .001                 | .190                 | .095                      | .746                               | .841                   | .012                 | .002                | 1.131                  | 1.123                       |
| August                                   | .128                 | .003                 | .216                 | .128                      | .694                               | .822                   | .015                 | .002                | 1.186                  | 1.025                       |
| September                                | .110                 | .003                 | .204                 | .133                      | .716                               | .850                   | .016                 | .002                | 1.184                  | .914                        |
| October<br>November                      | .125<br>.168         | .004<br>.005         | .178<br>.230         | .089<br>.104              | .710<br>.738                       | .799<br>.842           | .017<br>.016         | .001<br>.001        | 1.124<br>1.263         | .934<br>.842                |
| December                                 | .203                 | .002                 | .253                 | .083                      | .811                               | .894                   | .017                 | .002                | 1.372                  | .752                        |
| Total                                    | 1.546                | .025                 | 2.356                | 1.238                     | 8.752                              | 9.990                  | .181                 | .021                | 14.119                 | 11.259                      |
| 2017 January<br>February                 | .182<br>.170         | .003<br>.001         | .274<br>.257         | .126<br>.184              | .778<br>.754                       | .904<br>.938           | .017<br>.018         | .002<br>.002        | 1.382<br>1.387         | .933<br>.572                |
| March                                    | .197                 | .002                 | .274                 | .165                      | .807                               | .972                   | .018                 | .003                | 1.467                  | .728                        |
| April                                    | .178                 | .001                 | .249                 | .194                      | .787                               | .981                   | .015                 | .004                | 1.429                  | .683                        |
| May                                      | .178                 | .001<br>.003         | .256                 | .195                      | .808                               | 1.004                  | .017                 | .003                | 1.459                  | .805                        |
| June<br>July                             | .180<br>.177         | .003                 | .256<br>.251         | .149<br>.170              | .823<br>.840                       | .972<br>1.010          | .016<br>.018         | .003<br>.002        | 1.430<br>1.459         | .688<br>.670                |
| August                                   | .211                 | .004                 | .249                 | .145                      | .764                               | .910                   | .017                 | .003                | 1.392                  | .760                        |
| September                                | .219                 | .002                 | .253                 | .252                      | .738                               | .990                   | .015                 | .002                | 1.481                  | .512                        |
| October                                  | .226                 | .005                 | .284                 | .306                      | .847                               | 1.153                  | .016                 | .002                | 1.686                  | .382                        |
| November                                 | .235<br>.234         | .003<br>.003         | .291<br>.302         | .266<br>.271              | .856                               | 1.122                  | .016<br>.024         | .003<br>.003        | 1.671                  | .356<br>.417                |
| December<br>Total                        | 2.388                | .003                 | 3.196                | 2.424                     | .882<br><b>9.684</b>               | 1.152<br><b>12.108</b> | .024<br>. <b>206</b> | .032                | 1.718<br><b>17.960</b> | 7.507                       |
| 2018 January                             | .216                 | .004                 | .304                 | .239                      | .834                               | 1.073                  | .013                 | .004                | 1.614                  | .614                        |
| February                                 | .222                 | .001                 | .279                 | .258                      | .737                               | .994                   | .028                 | .004                | 1.529                  | .332                        |
| March                                    | .232                 | .002                 | .295                 | .297                      | .848                               | 1.146                  | .025                 | .004                | 1.704                  | .411                        |
| April<br>May                             | .273<br>.238         | .003<br>.002         | .282<br>.276         | .302<br>.357              | .909<br>.870                       | 1.211<br>1.227         | .022<br>.015         | .006<br>.004        | 1.796<br>1.761         | .326<br>.380                |
| June                                     | .250                 | .002                 | .264                 | .379                      | .851                               | 1.230                  | .021                 | 004                 | 1.770                  | .402                        |
| July                                     | .235                 | .002                 | .308                 | .380                      | .898                               | 1.279                  | .017                 | R .003              | R 1.844                | R .314                      |
| August                                   | .248                 | .001                 | R .314               | .311                      | .834                               | 1.145                  | .018                 | R .004              | R 1.730                | R .460                      |
| September<br>9-Month Total               | .234<br><b>2.147</b> | .001<br>. <b>020</b> | .305<br><b>2.625</b> | .364<br><b>2.887</b>      | .841<br><b>7.622</b>               | 1.205<br><b>10.509</b> | .015<br><b>.175</b>  | .004<br><b>.037</b> | 1.763<br><b>15.512</b> | .234<br><b>3.472</b>        |
| 2017 9-Month Total<br>2016 9-Month Total | 1.693<br>1.050       | .019<br>.013         | 2.319<br>1.695       | 1.582<br>.962             | 7.099<br>6.493                     | 8.681<br>7.455         | .150<br>.130         | .024<br>.016        | 12.886<br>10.360       | 6.351<br>8.730              |

Notes: • See "Primary Energy" in Glossary. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

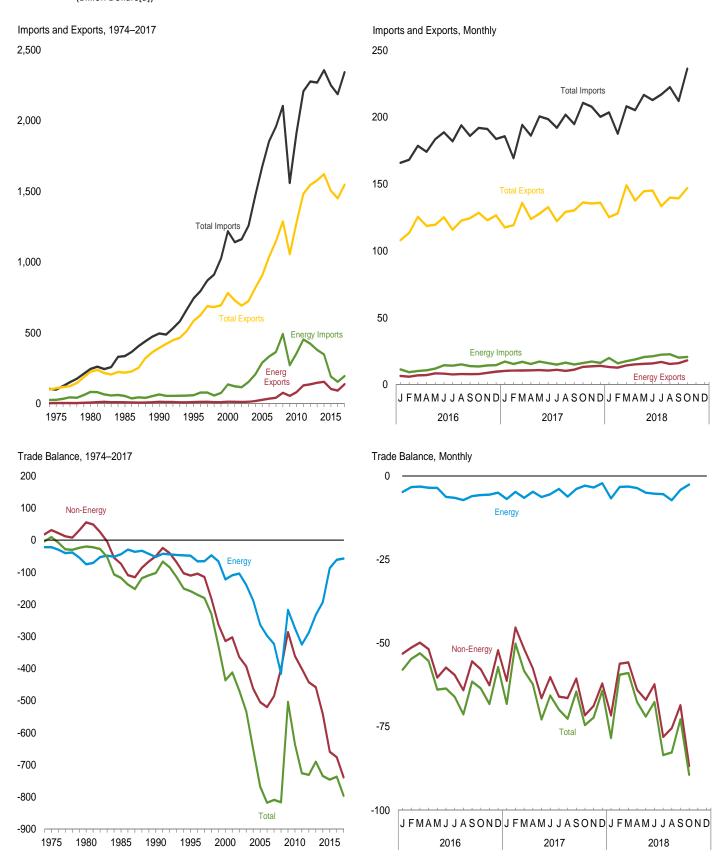
Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: See end of section.

a Net imports equal imports minus exports.
 b Crude oil and lease condensate.
 c Petroleum products, unfinished oils, natural gasoline, and gasoline blending components. Does not include biofuels.
 d Beginning in 2001, includes biodiesel. Beginning in 2010, also includes fuel ethanol (minus denaturant). Beginning in 2016, also includes wood and wood-derived fuels.
 R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Figure 1.5 Merchandise Trade Value





[a] Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary. Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.5.

**Table 1.5 Merchandise Trade Value** 

(Million Dollars<sup>a</sup>)

|  |                          | Petroleum <sup>l</sup>   | )                        |                          | Energy                   |                          | Non-                       | 1                           | otal Merchandis             | e                          |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|
|  | Exports                  | Imports                  | Balance                  | Exports                  | Imports                  | Balance                  | Energy<br>Balance          | Exports                     | Imports                     | Balance                    |
| 1974 Total                                 | 792                      | 24,668                   | -23,876                  | 3,444                    | 25,454                   | -22,010                  | 18,126                     | 99,437                      | 103,321                     | -3,884                     |
| 1975 Total                                 | 907                      | 25,197                   | -24,289                  | 4,470                    | 26,476                   | -22,006                  | 31,557                     | 108,856                     | 99,305                      | 9,551                      |
| 1980 Total                                 | 2,833                    | 78,637                   | -75,803                  | 7,982                    | 82,924                   | -74,942                  | 55,246                     | 225,566                     | 245,262                     | -19,696                    |
| 1985 Total                                 | 4,707                    | 50,475                   | -45,768                  | 9,971                    | 53,917                   | -43,946                  | -73,765                    | 218,815                     | 336,526                     | -117,712                   |
| 1990 Total                                 | 6,901                    | 61,583                   | -54,682                  | 12,233                   | 64,661                   | -52,428                  | -50,068                    | 393,592                     | 496,088                     | -102,496                   |
| 1995 Total                                 | 6,321                    | 54,368                   | -48,047                  | 10,358                   | 59,109                   | -48,751                  | -110,050                   | 584,742                     | 743,543                     | -158,801                   |
| 2000 Total                                 | 10,192                   | 119,251                  | -109,059                 | 13,179                   | 135,367                  | -122,188                 | -313,916                   | 781,918                     | 1,218,022                   | -436,104                   |
| 2001 Total                                 | 8,868                    | 102,747                  | -93,879                  | 12,494                   | 121,923                  | -109,429                 | -302,470                   | 729,100                     | 1,140,999                   | -411,899                   |
| 2002 Total                                 | 8,569                    | 102,663                  | -94,094                  | 11,541                   | 115,748                  | -104,207                 | -364,056                   | 693,103                     | 1,161,366                   | -468,263                   |
| 2003 Total                                 | 10,209                   | 132,433                  | -122,224                 | 13,768                   | 153,298                  | -139,530                 | -392,820                   | 724,771                     | 1,257,121                   | -532,350                   |
| 2004 Total                                 | 13,130                   | 179,266                  | -166,136                 | 18,642                   | 206,660                  | -188,018                 | -462,912                   | 818,775                     | 1,469,704                   | -650,930                   |
| 2005 Total                                 | 19,155<br>28.171         | 250,068                  | -230,913                 | 26,488                   | 289,723                  | -263,235                 | -504,242<br>-519,515       | 905,978                     | 1,673,455                   | -767,477                   |
| 2006 Total<br>2007 Total                   | 33,293                   | 299,714<br>327,620       | -271,543<br>-294,327     | 34,711<br>41,725         | 332,500<br>364,987       | -297,789<br>-323,262     | -519,515<br>-485,501       | 1,036,635<br>1,148,199      | 1,853,938<br>1,956,962      | -817,304<br>-808,763       |
| 2008 Total                                 | 61,695                   | 449,847                  | -294,327<br>-388,152     | 76,075                   | 491,885                  | -325,202<br>-415,810     | -400,389                   | 1,287,442                   | 2,103,641                   | -816,199                   |
| 2009 Total                                 | 44,509                   | 251,833                  | -207,324                 | 54,536                   | 271,739                  | -217,203                 | -286,379                   | 1,056,043                   | 1,559,625                   | -503,582                   |
| 2010 Total                                 | 64,753                   | 333,472                  | -268,719                 | 80,625                   | 354,982                  | -274,357                 | -361,005                   | 1,278,495                   | 1,913,857                   | -635,362                   |
| 2011 Total                                 |                          | b431,866                 | b-329,686                | 128,989                  | 453,839                  | -324,850                 | -400,597                   | 1,482,508                   | 2,207,954                   | -725,447                   |
| 2012 Total                                 | 111,951                  | 408,509                  | -296,558                 | 136,054                  | 423,862                  | -287,808                 | -442,638                   | 1,545,821                   | 2,276,267                   | -730,446                   |
| 2013 Total                                 | 123,218                  | 363,141                  | -239,923                 | 147,539                  | 379,758                  | -232,219                 | -457,712                   | 1,578,439                   | 2,268,370                   | -689,931                   |
| 2014 Total                                 | 127,818                  | 326,709                  | -198,891                 | 154,498                  | 347,474                  | -192,976                 | -541,506                   | 1,621,874                   | 2,356,356                   | -734,482                   |
| 2015 Total                                 | 85,890                   | 177,455                  | -91,565                  | 103,612                  | 190,501                  | -86,889                  | -658,594                   | 1,503,328                   | 2,248,811                   | -745,483                   |
| <b>2016</b> January                        | 5,354                    | 10,256                   | -4,902                   | 6,561                    | 11,380                   | -4,819                   | -53,163                    | 107,932                     | 165,914                     | -57,982                    |
| February                                   | 4,811                    | 8,416                    | -3,605                   | 5,957                    | 9,326                    | -3,369                   | -51,378                    | 113,402                     | 168,149                     | -54,747                    |
| March                                      | 5,723                    | 9,395                    | -3,672                   | 6,980                    | 10,164                   | -3,184                   | -49,852                    | 125,480                     | 178,516                     | -53,036                    |
| April                                      | 5,878                    | 10,041                   | -4,163                   | 7,129                    | 10,668                   | -3,539                   | -51,824                    | 118,700                     | 174,062                     | -55,363                    |
| May  | 6,960                    | 11,349                   | -4,389<br>-7,022         | 8,415                    | 12,013<br>14,475         | -3,598<br>-6,283         | -60,297                    | 119,607<br>125,080          | 183,503<br>188,690          | -63,895                    |
| June<br>July                               | 6,712<br>6,259           | 13,734<br>13,174         | -7,022<br>-6,915         | 8,192<br>7,605           | 14,475                   | -6,263<br>-6,547         | -57,327<br>-59,558         | 115,782                     | 181,887                     | -63,610<br>-66,105         |
| August                                     | 6,446                    | 14,154                   | -7,708                   | 7,886                    | 15,129                   | -7,243                   | -64,104                    | 122,626                     | 193,973                     | -71,347                    |
| September                                  | 6,453                    | 12,937                   | -6,484                   | 7,782                    | 13,848                   | -6,066                   | -55,455                    | 124,474                     | 185,995                     | -61,521                    |
| October                                    | 6,205                    | 12,707                   | -6,502                   | 7,898                    | 13,621                   | -5,723                   | -57,827                    | 128,445                     | 191,996                     | -63,550                    |
| November                                   | 6,810                    | 13,468                   | -6,658                   | 8,786                    | 14,408                   | -5,622                   | -62,623                    | 122,936                     | 191,181                     | -68,245                    |
| December                                   | 7,092                    | 13,269                   | -6,177                   | 9,566                    | 14,597                   | -5,031                   | -52,144                    | 126,558                     | 183,733                     | -57,175                    |
| Total                                      | 74,704                   | 142,900                  | -68,196                  | 92,758                   | 153,780                  | -61,022                  | -675,555                   | 1,451,024                   | 2,187,600                   | -736,577                   |
| <b>2017</b> January                        | 7,458                    | 15,772                   | -8,314                   | 10,329                   | 17,258                   | -6,929                   | -61,285                    | 117,458                     | 185,672                     | -68,214                    |
| February                                   | 7,799                    | 14,238                   | -6,439                   | 10,634                   | 15,420                   | -4,786                   | -45,354                    | 119,252                     | 169,392                     | -50,140                    |
| March                                      | 7,710                    | 15,889                   | -8,179                   | 10,460                   | 17,030                   | -6,570                   | -51,783                    | 135,905                     | 194,258                     | -58,353                    |
| April                                      | 8,077                    | 14,440                   | -6,363                   | 10,714                   | 15,449                   | -4,735                   | -57,573                    | 123,842                     | 186,150                     | -62,308                    |
| May  | 8,374                    | 16,226                   | -7,852                   | 10,950                   | 17,257                   | -6,307                   | -66,508                    | 127,782                     | 200,597                     | -72,815                    |
| June                                       | 8,244                    | 15,081                   | -6,837                   | 10,555                   | 16,062                   | -5,507                   | -60,199                    | 132,741                     | 198,447                     | -65,706                    |
| July                                       | 8,820<br>7,799           | 13,991                   | -5,171<br>-7,680         | 11,083                   | 14,985<br>16,500         | -3,902                   | -66,001<br>-66,437         | 122,140                     | 192,044                     | -69,903                    |
| August<br>September                        | 7,799<br>8,446           | 15,479<br>14,155         | -7,680<br>-5,709         | 10,302<br>11,213         | 15,105                   | -6,198<br>-3,892         | -66,437<br>-60,626         | 129,186<br>130,278          | 201,821<br>194,796          | -72,635<br>-64,518         |
| October                                    | 10,237                   | 15,247                   | -5,709<br>-5,010         | 13,294                   | 16,207                   | -3,692<br>-2,913         | -71,620                    | 136,199                     | 210,732                     | -74,533                    |
| November                                   | 10,676                   | 16.158                   | -5.482                   | 13,728                   | 17,212                   | -3,484                   | -68,809                    | 135,477                     | 207,770                     | -72,293                    |
| December                                   | 10,884                   | 14,987                   | -4,103                   | 14,112                   | 16,298                   | -2,186                   | -62.084                    | 136,014                     | 200,285                     | -64,270                    |
| Total                                      | 104,525                  | 181,662                  | -77,137                  | 137,374                  | 194,784                  | -57,410                  | -738,280                   | 1,546,273                   | 2,341,963                   | -795,690                   |
| 2018 January                               | 10,139                   | 18,086                   | -7,947                   | 13,231                   | 19,944                   | -6,713                   | -71,661                    | 125,219                     | 203,593                     | -78,374                    |
| February                                   | 9,504                    | 14,996                   | -5,492                   | 12,643                   | 15,947                   | -3,304                   | -56,179                    | 128,057                     | 187,540                     | -59,483                    |
| March                                      | 11,130                   | 16,622                   | -5,492                   | 14,373                   | 17,567                   | -3,194                   | -55,775                    | 149,164                     | 208,133                     | -58,969                    |
| April                                      | 11,972                   | 18,002                   | -6,030                   | 15,200                   | 18,813                   | -3,613                   | -64,010                    | 137,648                     | 205,271                     | -67,623                    |
| May  | 12,098                   | 19,781                   | -7,683                   | 15,557                   | 20,585                   | -5,028                   | -66,981                    | 144,593                     | 216,602                     | -72,009                    |
| June                                       | 12,764                   | 20,315                   | -7,551                   | 15,865                   | 21,188                   | -5,323                   | -62,319                    | 145,134                     | 212,775                     | -67,642                    |
| July                                       | 13,338                   | 21,549                   | -8,211                   | 16,988                   | 22,448                   | -5,460                   | -78,051                    | 133,429                     | 216,940                     | -83,511                    |
| August                                     | 11,836                   | 21,667                   | -9,831                   | 15,424                   | 22,699                   | -7,275                   | -75,450<br>R 00,000        | 139,760                     | 222,485                     | -82,725                    |
| September                                  | 12,651                   | 19,277                   | -6,626                   | 16,022                   | 20,207                   | -4,185                   | R -68,600                  | R 139,262                   | R 212,047                   | R -72,785                  |
| October<br>10-Month Total                  | 14,465<br><b>119,897</b> | 19,713<br><b>190,008</b> | -5,248<br><b>-70,111</b> | 18,130<br><b>153,432</b> | 20,737<br><b>200,134</b> | -2,607<br><b>-46,702</b> | -86,756<br><b>-685,782</b> | 146,919<br><b>1,389,184</b> | 236,281<br><b>2,121,668</b> | -89,363<br><b>-732,484</b> |
|  |                          |                          |                          |                          | -                        | -                        | ,                          |                             |                             |                            |
| 2017 10-Month Total<br>2016 10-Month Total | 82,965<br>60,801         | 150,517<br>116,163       | -67,554<br>-55,362       | 109,534<br>74,405        | 161,274<br>124,776       | -51,739<br>-50,371       | -607,386<br>-560,785       | 1,274,782<br>1,201,529      | 1,933,909<br>1,812,686      | -659,126<br>-611,157       |

components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual and monthly data beginning in 1974.

Sources: See end of section.

<sup>&</sup>lt;sup>a</sup> Prices are not adjusted for inflation. See "Nominal Dollars" in Glossary.
<sup>b</sup> Through 2010, data are for crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels. Beginning in 2011, data are for petroleum products and preparations.

C Petroleum, coal, natural gas, and electricity.

Reflevised.

Notes: 

Monthly data are not adjusted for seasonal variations.

See Note 1, "Merchandise Trade Value," at end of section. • Totals may not equal sum of

Figure 1.6 Cost of Fuels to End Users In Real (1982-1984) Dollars

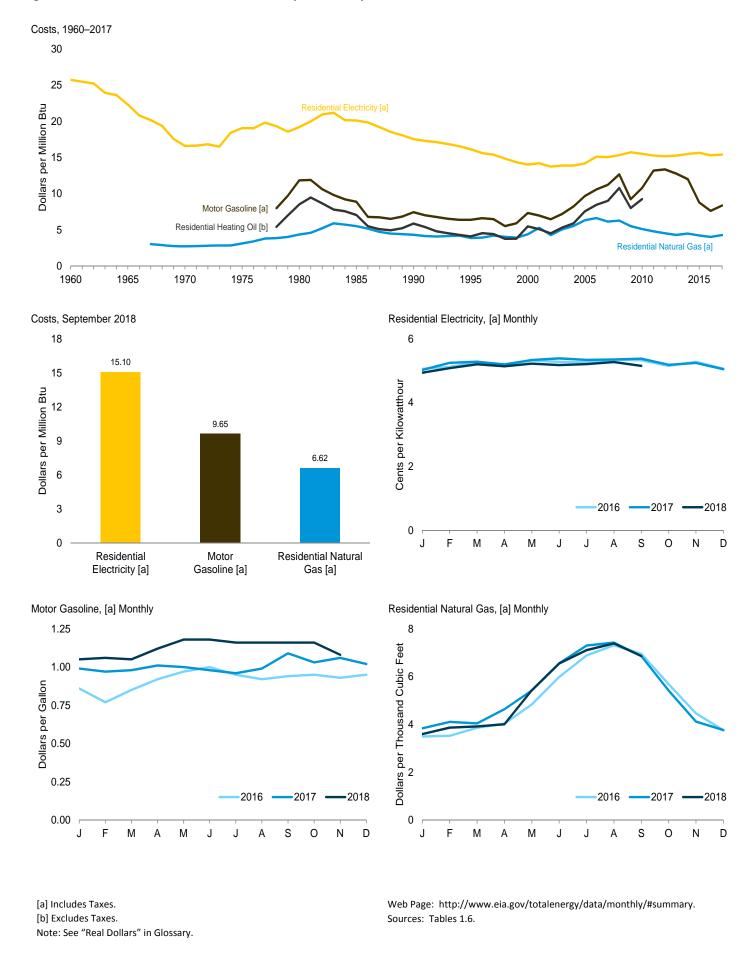


Table 1.6 Cost of Fuels to End Users in Real (1982–1984) Dollars

|                              | Consumer Price Index,<br>All Urban Consumers <sup>a</sup> | Motor G               | Basolineb                  |                       | dential<br>ng Oil <sup>c</sup> |                                       | lential<br>II Gas <sup>b</sup> | Resid<br>Electi           | ential<br>ricity <sup>b</sup> |
|------------------------------|---|-----------------------|----------------------------|-----------------------|--------------------------------|---------------------------------------|--------------------------------|---------------------------|-------------------------------|
|                              | Index<br>1982–1984=100                                    | Dollars per<br>Gallon | Dollars per<br>Million Btu | Dollars per<br>Gallon | Dollars per<br>Million Btu     | Dollars per<br>Thousand<br>Cubic Feet | Dollars per<br>Million Btu     | Cents per<br>Kilowatthour | Dollars per<br>Million Btu    |
| 1960 Average                 | 29.6  | NA                    | NA                         | NA                    | NA                             | NA                                    | NA                             | 8.8                       | 25.74                         |
| 1965 Average                 | 31.5  | NA                    | NA                         | NA                    | NA                             | NA                                    | NA                             | 7.6                       | 22.33                         |
| 1970 Average                 | 38.8  | NA                    | NA                         | NA                    | NA                             | 2.81                                  | 2.72                           | 5.7                       | 16.62                         |
| 1975 Average                 | 53.8<br>82.4  | NA<br>1.482           | NA<br>11.85                | NA<br>4 482           | NA<br>0.50                     | 3.18                                  | 3.12<br>4.36                   | 6.5                       | 19.07                         |
| 1980 Average<br>1985 Average | 107.6   | 1.462                 | 8.89                       | 1.182<br>0.979        | 8.52<br>7.06                   | 4.47<br>5.69                          | 5.52                           | 6.6<br>6.87               | 19.21<br>20.13                |
| 1990 Average                 | 130.7   | 0.931                 | 7.44                       | 0.813                 | 5.86                           | 4.44                                  | 4.31                           | 5.99                      | 17.56                         |
| 1995 Average                 | 152.4   | 0.791                 | 6.38                       | 0.569                 | 4.10                           | 3.98                                  | 3.87                           | 5.51                      | 16.15                         |
| 2000 Average                 | 172.2   | 0.908                 | 7.33                       | 0.761                 | 5.49                           | 4.51                                  | 4.39                           | 4.79                      | 14.02                         |
| 2001 Average                 | 177.1   | 0.864                 | 6.98                       | 0.706                 | 5.09                           | 5.44                                  | 5.28                           | 4.84                      | 14.20                         |
| 2002 Average                 | 179.9   | 0.801                 | 6.47                       | 0.628                 | 4.52                           | 4.39                                  | 4.28                           | 4.69                      | 13.75                         |
| 2003 Average                 | 184.0   | 0.890                 | 7.19                       | 0.736                 | 5.31                           | 5.23                                  | 5.09                           | 4.74                      | 13.89                         |
| 2004 Average                 | 188.9   | 1.018                 | 8.23                       | 0.819                 | 5.91                           | 5.69                                  | 5.55                           | 4.74                      | 13.89                         |
| 2005 Average                 | 195.3   | 1.197                 | 9.68                       | 1.051                 | 7.58                           | 6.50                                  | 6.33                           | 4.84                      | 14.18                         |
| 2006 Average                 | 201.6   | 1.307                 | 10.59                      | 1.173                 | 8.46                           | 6.81                                  | 6.63                           | 5.16                      | 15.12                         |
| 2007 Average<br>2008 Average | 207.342<br>215.303  | 1.374<br>1.541        | 11.22<br>12.67             | 1.250<br>1.495        | 9.01<br>10.78                  | 6.31<br>6.45                          | 6.14<br>6.28                   | 5.14<br>5.23              | 15.05<br>15.33                |
| 2009 Average                 | 214.537   | 1.119                 | 9.24                       | 1.495                 | 8.02                           | 5.66                                  | 5.52                           | 5.23<br>5.37              | 15.72                         |
| 2010 Average                 | 218.056   | 1.301                 | 10.78                      | 1.283                 | 9.25                           | 5.22                                  | 5.11                           | 5.29                      | 15.51                         |
| 2011 Average                 | 224.939   | 1.590                 | 13.19                      | NA                    | NA                             | 4.90                                  | 4.80                           | 5.21                      | 15.27                         |
| 2012 Average                 | 229.594   | 1.609                 | 13.35                      | NA                    | NA                             | 4.64                                  | 4.53                           | 5.17                      | 15.17                         |
| 2013 Average                 | 232.957   | 1.538                 | 12.77                      | NA                    | NA                             | 4.43                                  | 4.31                           | 5.21                      | 15.26                         |
| 2014 Average                 | 236.736   | 1.447                 | 12.01                      | NA                    | NA                             | 4.63                                  | 4.49                           | 5.29                      | 15.50                         |
| 2015 Average                 | 237.017   | 1.059                 | 8.80                       | NA                    | NA                             | 4.38                                  | 4.22                           | 5.34                      | 15.64                         |
| 2016 January                 | 236.916   | 0.859                 | 7.13                       | NA                    | NA                             | 3.50                                  | 3.36                           | 5.06                      | 14.83                         |
| February                     | 237.111<br>238.132  | 0.773<br>0.849        | 6.42<br>7.05               | NA<br>NA              | NA<br>NA                       | 3.53<br>3.86                          | 3.39<br>3.71                   | 5.12<br>5.27              | 15.01<br>15.46                |
| March                        | 230.132   | 0.849                 | 7.63                       | NA<br>NA              | NA<br>NA                       | 4.03                                  | 3.71                           | 5.27                      | 15.46                         |
| April<br>May                 | 240.229   | 0.967                 | 8.04                       | NA<br>NA              | NA<br>NA                       | 4.84                                  | 4.66                           | 5.32                      | 15.60                         |
| June                         | 241.018   | 1.005                 | 8.35                       | NA                    | NA                             | 5.99                                  | 5.76                           | 5.28                      | 15.48                         |
| July                         | 240.628   | 0.950                 | 7.90                       | NA                    | NA                             | 6.88                                  | 6.62                           | 5.27                      | 15.44                         |
| August                       | 240.849   | 0.921                 | 7.65                       | NA                    | NA                             | 7.31                                  | 7.03                           | 5.35                      | 15.67                         |
| September                    | 241.428   | 0.940                 | 7.81                       | NA                    | NA                             | 6.95                                  | 6.69                           | 5.33                      | 15.62                         |
| October                      | 241.729   | 0.953                 | 7.92                       | NA                    | NA                             | 5.68                                  | 5.47                           | 5.15                      | 15.11                         |
| November                     | 241.353   | 0.931                 | 7.73                       | NA                    | NA                             | 4.46                                  | 4.29                           | 5.28                      | 15.48                         |
| December                     | 241.432   | 0.948                 | 7.88                       | NA                    | NA                             | 3.75                                  | 3.61                           | 5.07                      | 14.85                         |
| Average                      | 240.007   | 0.918                 | 7.63                       | NA                    | NA                             | 4.19                                  | 4.03                           | 5.23                      | 15.33                         |
| 2017 January<br>February     | 242.839<br>243.603  | 0.992<br>0.969        | 8.25<br>8.05               | NA<br>NA              | NA<br>NA                       | 3.84<br>4.11                          | 3.70<br>3.96                   | 5.03<br>5.25              | 14.74<br>15.39                |
| March                        | 243.801   | 0.979                 | 8.13                       | NA                    | NA                             | 4.04                                  | 3.90                           | 5.29                      | 15.50                         |
| April                        | 244.524   | 1.014                 | 8.43                       | NA                    | NA                             | 4.64                                  | 4.47                           | 5.20                      | 15.25                         |
| May                          | 244.733   | 1.000                 | 8.31                       | NA                    | NA                             | 5.42                                  | 5.22                           | 5.34                      | 15.65                         |
| June                         | 244.955   | 0.980                 | 8.14                       | NA                    | NA                             | 6.56                                  | 6.32                           | 5.39                      | 15.79                         |
| July                         | 244.786   | 0.958                 | 7.96                       | NA                    | NA                             | 7.30                                  | 7.04                           | 5.34                      | 15.66                         |
| August                       | 245.519   | 0.992                 | 8.25                       | NA                    | NA                             | 7.42                                  | 7.16                           | 5.36                      | 15.70                         |
| September                    | 246.819   | 1.089                 | 9.05                       | NA                    | NA                             | 6.86                                  | 6.61                           | 5.38                      | 15.77                         |
| October<br>November          | 246.663<br>246.669  | 1.032<br>1.057        | 8.58<br>8.79               | NA<br>NA              | NA<br>NA                       | 5.42<br>4.12                          | 5.22<br>3.97                   | 5.19<br>5.25              | 15.21<br>15.37                |
| December                     | 246.524   | 1.023                 | 8.50                       | NA<br>NA              | NA<br>NA                       | 3.77                                  | 3.63                           | 5.25<br>5.05              | 14.80                         |
| Average                      | 245.120   | 1.023                 | 8.37                       | NA                    | NA                             | 4.45                                  | 4.29                           | 5.26                      | <b>15.41</b>                  |
| 2018 January                 | 247.867   | 1.047                 | 8.71                       | NA                    | NA                             | 3.60                                  | 3.47                           | 4.94                      | 14.48                         |
| February                     | 248.991   | 1.057                 | 8.79                       | NA                    | NA                             | 3.87                                  | 3.73                           | 5.08                      | 14.90                         |
| March                        | 249.554   | 1.054                 | 8.76                       | NA                    | NA                             | 3.92                                  | 3.78                           | 5.21                      | 15.26                         |
| April                        | 250.546   | 1.116                 | 9.27                       | NA                    | NA                             | R 4.01                                | R 3.86                         | 5.14                      | 15.07                         |
| May                          | 251.588   | 1.178                 | 9.79                       | NA                    | NA                             | 5.43                                  | 5.24                           | 5.23                      | 15.32                         |
| June                         | 251.989   | 1.179                 | 9.80                       | NA                    | NA                             | 6.55                                  | 6.32                           | 5.18                      | 15.18                         |
| July                         | 252.006<br>252.146  | 1.163<br>1.158        | 9.66<br>9.62               | NA<br>NA              | NA<br>NA                       | 7.11<br>7.39                          | R 6.86                         | 5.21<br>5.27              | 15.27<br>15.46                |
| August                       | 252.146<br>252.439  | 1.158                 | 9.62<br>9.65               | NA<br>NA              | NA<br>NA                       | 7.39<br><sup>R</sup> 6.86             | 7.12<br><sup>R</sup> 6.62      | 5.27<br>R 5.15            | 15.46<br>R 15.10              |
| September<br>October         | 252.439<br>252.885  | 1.165                 | 9.65<br>9.68               | NA<br>NA              | NA<br>NA                       | NA                                    | NA                             | NA                        | NA                            |
| November                     | 252.005   | 1.084                 | 9.00                       | NA<br>NA              | NA<br>NA                       | NA<br>NA                              | NA<br>NA                       | NA<br>NA                  | NA<br>NA                      |
| 140 V C I I I D C I          | 202.000   | 1.00-                 | 0.01                       | 1 1/7                 | 14/3                           | 14/7                                  | 1 1/7                          | 14/3                      | 14/7                          |

Data are U.S. city averages for all items, and are not seasonally adjusted.

R=Revised. NA=Not available.

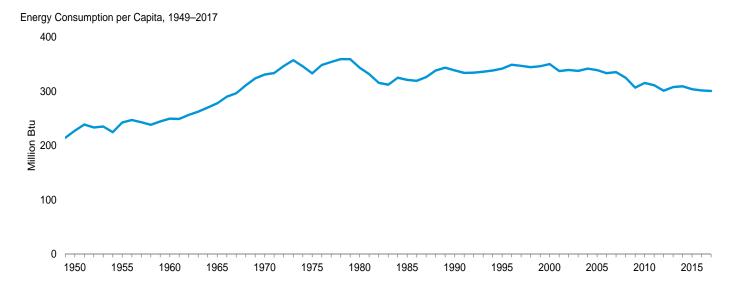
Notes: • See "Real Dollars" in Glossary. • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1960 and monthly data beginning in 1995.

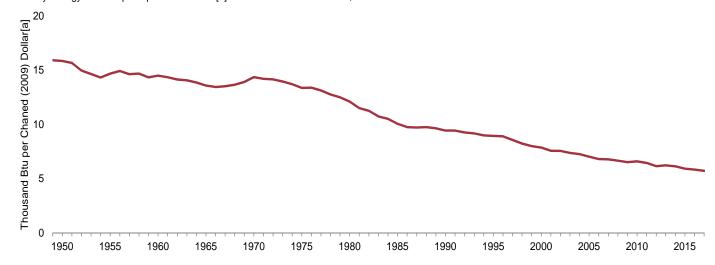
Sources: • Fuel Prices: Tables 9.4 (All Grades), 9.8, and 9.10, adjusted by the CPI; and *Monthy Energy Review*, September 2012, Table 9.8c. • Consumer Price Index, All Urban Consumers: U.S. Department of Labor, Bureau of Labor Statistics, series ID CUUR0000SA0. • Conversion Factors: Tables A1, A3, A4, and A6.

a Data are U.S. ci
 b Includes taxes.
 c Excludes taxes.

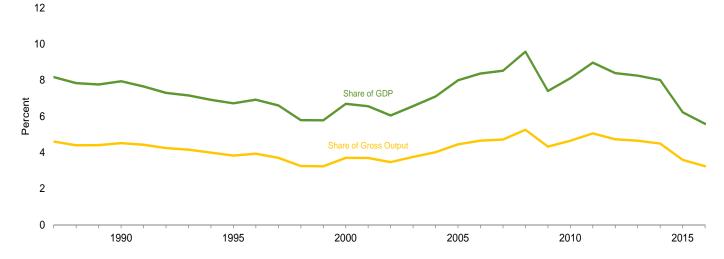
Figure 1.7 Primary energy Consumption and Energy Expenditures Indicators



Primary Energy Consumption per Real Dollar [a] of Gross Domestic Product, 1949–2017



Energy Expenditures as Share of Gross Domestic Product and Gross Output,[b] 1987–2016



<sup>[</sup>a] See "Chained Dollars" and "Real Dollars" in Glossary.

[b] Gross output is the value of gross domestic product (GDP) plus the value of intermediate inputs used to produce GDP.

 $Web\ Page:\ http://www.eia.gov/totalenergy/data/monthly/\#summary.$ 

Source: Table 1.7.

Table 1.7 Primary Energy Consumption, Energy Expenditures, and Carbon Dioxide Emissions Indicators

|      | Primar  | y Energy Cons   | sumption <sup>a</sup>  |  | Energy E  | kpenditures <sup>b</sup>   |  | Carbo  | on Dioxide Em  | issions <sup>c</sup>  |
|------|---|---|--|--|---|--|--|--|--|---|
|      | Consump-<br>tion  | Consump-<br>tion<br>per Capita  | Consumption<br>per<br>Real Dollar <sup>d</sup><br>of GDP <sup>e</sup>  | Expendi-<br>tures  | Expendi-<br>tures<br>per Capita   | Expenditures<br>as Share<br>of GDP <sup>e</sup>  | Expenditures<br>as Share<br>of Gross<br>Output <sup>f</sup>                            | Emissions  | Emissions<br>per Capita  | Emissions<br>per<br>Real Dollar <sup>d</sup><br>of GDP <sup>e</sup>   |
|      | Quadrillion<br>Btu  | Million<br>Btu  | Thousand<br>Btu per<br>Chained (2009)<br>Dollar <sup>d</sup>   | Million<br>Nominal<br>Dollars <sup>g</sup>   | Nominal<br>Dollars <sup>g</sup>   | Percent  | Percent  | Million<br>Metric Tons<br>Carbon<br>Dioxide  | Metric<br>Tons<br>Carbon<br>Dioxide  | Metric Tons<br>Carbon Dioxide<br>per Million<br>Chained (2009)<br>Dollars <sup>d</sup>  |
| 1950 | 34.616 40.208 45.086 54.015 67.838 71.965 78.067 76.106 73.099 72.971 76.632 76.392 76.647 79.054 82.709 84.785 84.485 84.437 85.782 87.325 89.040 90.991 94.000 94.571 94.982 96.615 98.776 96.129 97.605 97.898 100.073 | 227<br>242<br>250<br>278<br>331<br>333<br>344<br>332<br>316<br>312<br>325<br>321<br>319<br>326<br>338<br>344<br>338<br>334<br>334<br>334<br>336<br>338<br>344<br>336<br>338<br>344<br>336<br>338<br>344<br>336<br>337<br>347<br>349 | 15.85<br>14.68<br>14.50<br>13.58<br>14.37<br>13.36<br>12.10<br>11.50<br>11.26<br>10.74<br>10.52<br>10.06<br>9.75<br>9.72<br>9.76<br>9.65<br>9.43<br>9.44<br>9.26<br>9.17<br>8.99<br>8.94<br>8.90<br>8.57<br>8.24<br>8.01<br>7.86<br>7.58<br>7.58<br>7.58<br>7.58 | NA<br>NA<br>NA<br>NA<br>82,875<br>171,851<br>374,347<br>427,898<br>426,479<br>417,617<br>435,309<br>438,339<br>384,088<br>397,623<br>411,565<br>439,046<br>474,647<br>472,434<br>476,840<br>492,267<br>504,854<br>514,622<br>560,292<br>567,960<br>526,280<br>558,624<br>687,708<br>696,240<br>663,962<br>755,068<br>871,209 | NA NA NA NA 404 796 1,647 1,865 1,841 1,786 1,846 1,842 1,599 1,641 1,683 1,779 1,901 1,867 1,859 1,894 1,919 1,933 2,080 2,083 1,908 2,083 1,908 2,083 2,080 2,437 2,443 2,308 2,603 2,975 | NA NA NA NA 7.7 10.2 13.1 13.3 12.7 11.5 10.8 10.1 8.4 8.2 7.8 7.8 7.9 7.7 7.3 7.2 6.9 6.6 6.7 6.9 6.6 5.8 5.8 6.7 6.6 6.0 6.6 7.1 | NA N   | 2,382<br>2,685<br>2,914<br>3,462<br>4,261<br>4,421<br>4,750<br>4,625<br>4,393<br>4,371<br>4,600<br>4,593<br>4,757<br>4,982<br>5,066<br>5,038<br>4,993<br>5,090<br>5,181<br>5,258<br>5,321<br>5,510<br>5,582<br>5,635<br>5,687<br>5,864<br>5,759<br>5,864<br>5,759<br>5,863<br>5,864<br>5,759<br>5,803<br>5,864<br>5,759<br>5,803<br>5,854<br>5,969 | 15.6<br>16.2<br>16.1<br>17.8<br>20.8<br>20.5<br>20.9<br>20.2<br>19.0<br>18.7<br>19.5<br>19.3<br>19.1<br>19.6<br>20.4<br>20.5<br>20.2<br>19.7<br>19.8<br>19.9<br>20.0<br>20.5<br>20.0<br>20.5<br>20.0<br>20.5<br>20.0<br>20.0 | 1,091<br>980<br>937<br>871<br>902<br>821<br>736<br>699<br>677<br>644<br>631<br>605<br>585<br>585<br>588<br>577<br>563<br>558<br>549<br>544<br>531<br>523<br>522<br>506<br>489<br>471<br>467<br>454<br>450<br>441<br>433 |
| 2005 | 100.168<br>99.464<br>100.971<br>98.825<br>94.078<br>97.544<br>96.960<br>94.532<br>97.334<br>98.487<br>97.516<br>97.524<br>97.880  | 339<br>333<br>335<br>325<br>307<br>315<br>311<br>301<br>308<br>309<br>304<br>302<br>301   | 7.24<br>6.81<br>6.79<br>6.66<br>6.52<br>6.60<br>6.46<br>6.16<br>6.23<br>6.15<br>5.92<br>5.83<br>5.73   | 1,045,729<br>1,158,819<br>1,233,864<br>1,408,750<br>1,066,275<br>1,213,609<br>1,391,358<br>1,354,948<br>1,376,201<br>1,394,971<br>1,127,726<br>1,038,504<br>NA   | 3,539<br>3,884<br>4,096<br>4,633<br>3,476<br>3,923<br>4,465<br>4,315<br>4,352<br>4,378<br>3,513<br>3,211<br>NA  | 8.0<br>8.4<br>8.5<br>9.6<br>7.4<br>8.1<br>9.0<br>8.4<br>8.2<br>8.0<br>6.2<br>5.6<br>NA   | 4.4<br>4.7<br>4.7<br>5.3<br>4.3<br>4.7<br>5.1<br>4.7<br>4.6<br>4.5<br>3.6<br>3.2<br>NA | 5,990<br>5,991<br>6,002<br>5,811<br>5,393<br>5,588<br>5,452<br>5,242<br>5,371<br>5,419<br>5,273<br>5,186<br>5,144  | 20.3<br>19.8<br>19.9<br>19.1<br>17.6<br>18.1<br>17.5<br>16.7<br>17.0<br>17.0<br>16.4<br>16.0<br>15.8   | 421<br>404<br>404<br>392<br>374<br>378<br>363<br>341<br>344<br>338<br>320<br>310<br>301   |

a See "Primary Energy Consumption" in Glossary.

NA=Not available.

Notes: • Data are estimates. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949.

Sources: • Consumption: Table 1.3. • Consumption per Capita:

Calculated as energy consumption divided by U.S. population (see Table C1).

Consumption per Real Dollar of GDP: Calculated as energy consumption divided by U.S. gross domestic product in chained (2009) dollars (see Table C1).
 Expenditures: U.S. Energy Information Administration, "State Energy Price and Expenditure Estimates, 1970 Through 2015" (June 2017), U.S. Table ET1.
 Expenditures per Capita: Calculated as energy expenditures divided by U.S. population (see Table C1).
 Expenditures as Share of GDP: Calculated as energy expenditures divided by U.S. gross domestic product in nominal dollars (see Table C1).
 Expenditures as Share of Gross Output: Calculated as energy expenditures divided by U.S. gross output (see Table C1).
 Emissions: 1949–1972—U.S. Energy Information Administration, Annual Energy Review 2011, Table 11.1.
 1973 forward—Table 12.1.
 Emissions per Capita: Calculated as carbon dioxide emissions divided by U.S. population (see Table C1).
 Emissions per Real Dollar of GDP: Calculated as carbon dioxide emissions divided by U.S. gross domestic product in chained (2009) dollars (see Table C1).

b Expenditures include taxes where data are available.

<sup>&</sup>lt;sup>c</sup> Carbon dioxide emissions from energy consumption. See Table 12.1.

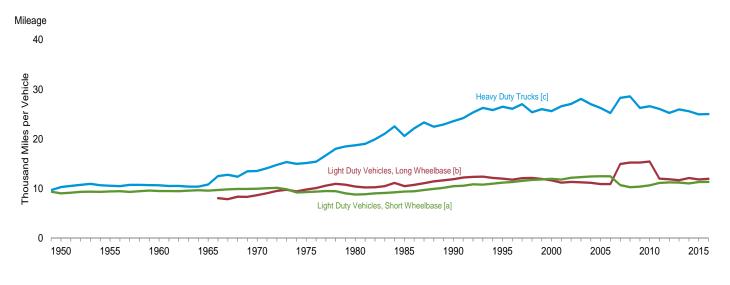
<sup>&</sup>lt;sup>d</sup> See "Chained Dollars" and "Real Dollars" in Glossary.

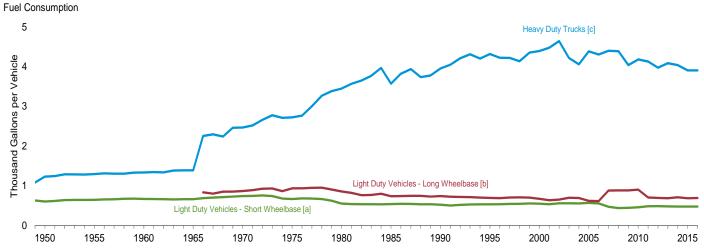
e See "Gross Domestic Product (GDP)" in Glossary.

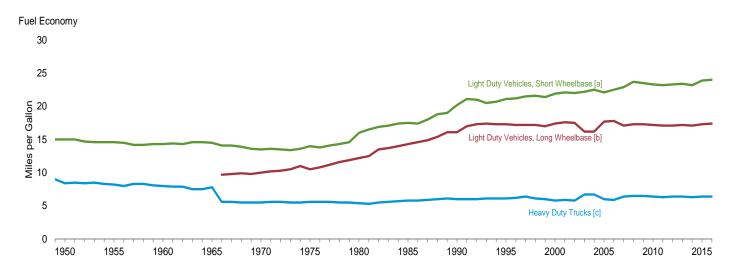
<sup>&</sup>lt;sup>f</sup> Gross output is the value of GDP plus the value of intermediate inputs used to produce GDP.

<sup>&</sup>lt;sup>g</sup> See "Nominal Dollars" in Glossary.

Figure 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949-2016







[a] Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

[b] For 1966–2000, data are for vans, pickup trucks, and sport utility vehicles. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

[c] For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more

tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006 data are for single-unit truck with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding 10,000 pounds), and combination trucks.

Note: Through 1965, "light-Duty Vehicles, Long Wheelbase" data are

Note: Through 1965, "Light-Duty Vehicles, Long Wheelbase" data are included in "Heavy-Duty Trucks."

Web Page: http://www.eia.gov/totalenergy/data/monthly/#summary. Source: Table 1.8.

Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy

|                              |                                  | ght-Duty Vehic<br>Short Wheelbas |                              |                            | ght-Duty Vehicl<br>Long Wheelbase |                                  | н                                    | eavy-Duty Truc                   | ks <sup>c</sup>          | А                                | II Motor Vehicle         | esd                          |
|------------------------------|----------------------------------|----------------------------------|------------------------------|----------------------------|-----------------------------------|----------------------------------|--------------------------------------|----------------------------------|--------------------------|----------------------------------|--------------------------|------------------------------|
|                              | Mileage                          | Fuel<br>Consumption              | Fuel<br>Economy              | Mileage                    | Fuel<br>Consumption               | Fuel<br>Economy                  | Mileage                              | Fuel<br>Consumption              | Fuel<br>Economy          | Mileage                          | Fuel<br>Consumption      | Fuel<br>Economy              |
|                              | Miles per                        | Gallons                          | Miles per                    | Miles per                  | Gallons                           | Miles per                        | Miles per                            | Gallons                          | Miles per                | Miles per                        | Gallons                  | Miles per                    |
|                              | Vehicle                          | per Vehicle                      | Gallon                       | Vehicle                    | per Vehicle                       | Gallon                           | Vehicle                              | per Vehicle                      | Gallon                   | Vehicle                          | per Vehicle              | Gallon                       |
| 1950<br>1955                 | 9,060<br>9,447                   | 603<br>645                       | 15.0<br>14.6                 | (e)<br>(e)<br>(e)          | ( e )<br>( e )<br>( e )           | (e)<br>(e)                       | 10,316<br>10,576                     | 1,229<br>1,293                   | 8.4<br>8.2               | 9,321<br>9,661                   | 725<br>761               | 12.8<br>12.7                 |
| 1960<br>1965<br>1970<br>1975 | 9,518<br>9,603<br>9,989<br>9,309 | 668<br>661<br>737<br>665         | 14.3<br>14.5<br>13.5<br>14.0 | (e)<br>8,676<br>9,829      | (e)<br>866<br>934                 | ( <sup>e</sup> )<br>10.0<br>10.5 | 10,693<br>10,851<br>13,565<br>15,167 | 1,333<br>1,387<br>2,467<br>2,722 | 8.0<br>7.8<br>5.5<br>5.6 | 9,732<br>9,826<br>9,976<br>9,627 | 784<br>787<br>830<br>790 | 12.4<br>12.5<br>12.0<br>12.2 |
| 1980                         | 8,813                            | 551                              | 16.0                         | 10,437                     | 854                               | 12.2                             | 18,736                               | 3,447                            | 5.4                      | 9,458                            | 712                      | 13.3                         |
| 1981                         | 8,873                            | 538                              | 16.5                         | 10,244                     | 819                               | 12.5                             | 19,016                               | 3,565                            | 5.3                      | 9,477                            | 697                      | 13.6                         |
| 1982                         | 9,050                            | 535                              | 16.9                         | 10,276                     | 762                               | 13.5                             | 19,931                               | 3,647                            | 5.5                      | 9,644                            | 686                      | 14.1                         |
| 1983                         | 9,118                            | 534                              | 17.1                         | 10,497                     | 767                               | 13.7                             | 21,083                               | 3,769                            | 5.6                      | 9,760                            | 686                      | 14.2                         |
| 1984                         | 9,248                            | 530                              | 17.4                         | 11,151                     | 797                               | 14.0                             | 22,550                               | 3,967                            | 5.7                      | 10,017                           | 691                      | 14.5                         |
| 1985                         | 9,419                            | 538                              | 17.5                         | 10,506                     | 735                               | 14.3                             | 20,597                               | 3,570                            | 5.8                      | 10,020                           | 685                      | 14.6                         |
| 1986                         | 9,464                            | 543                              | 17.4                         | 10,764                     | 738                               | 14.6                             | 22,143                               | 3,821                            | 5.8                      | 10,143                           | 692                      | 14.7                         |
| 1987                         | 9,720                            | 539                              | 18.0                         | 11,114                     | 744                               | 14.9                             | 23,349                               | 3,937                            | 5.9                      | 10,453                           | 694                      | 15.1                         |
| 1988                         | 9,972                            | 531                              | 18.8                         | 11,465                     | 745                               | 15.4                             | 22,485                               | 3,736                            | 6.0                      | 10,721                           | 688                      | 15.6                         |
| 1989                         | 10,157                           | 533                              | 19.0                         | 11,676                     | 724                               | 16.1                             | 22,926                               | 3,776                            | 6.1                      | 10,932                           | 688                      | 15.9                         |
| 1990                         | 10,504                           | 520                              | 20.2                         | 11,902                     | 738                               | 16.1                             | 23,603                               | 3,953                            | 6.0                      | 11,107                           | 677                      | 16.4                         |
| 1991                         | 10,571                           | 501                              | 21.1                         | 12,245                     | 721                               | 17.0                             | 24,229                               | 4,047                            | 6.0                      | 11,294                           | 669                      | 16.9                         |
| 1992                         | 10,857                           | 517                              | 21.0                         | 12,381                     | 717                               | 17.3                             | 25,373                               | 4,210                            | 6.0                      | 11,558                           | 683                      | 16.9                         |
| 1993                         | 10,804                           | 527                              | 20.5                         | 12,430                     | 714                               | 17.4                             | 26,262                               | 4,309                            | 6.1                      | 11,595                           | 693                      | 16.7                         |
| 1994                         | 10,992                           | 531                              | 20.7                         | 12,156                     | 701                               | 17.3                             | 25,838                               | 4,202                            | 6.1                      | 11,683                           | 698                      | 16.7                         |
| 1995                         | 11,203                           | 530                              | 21.1                         | 12,018                     | 694                               | 17.3                             | 26,514                               | 4,315                            | 6.1                      | 11,793                           | 700                      | 16.8                         |
| 1996                         | 11,330                           | 534                              | 21.2                         | 11,811                     | 685                               | 17.2                             | 26,092                               | 4,221                            | 6.2                      | 11,813                           | 700                      | 16.9                         |
| 1997                         | 11,581                           | 539                              | 21.5                         | 12,115                     | 703                               | 17.2                             | 27,032                               | 4,218                            | 6.4                      | 12,107                           | 711                      | 17.0                         |
| 1998                         | 11,754                           | 544                              | 21.6                         | 12,173                     | 707                               | 17.2                             | 25,397                               | 4,135                            | 6.1                      | 12,211                           | 721                      | 16.9                         |
| 1999                         | 11,848                           | 553                              | 21.4                         | 11,957                     | 701                               | 17.0                             | 26,014                               | 4,352                            | 6.0                      | 12,206                           | 732                      | 16.7                         |
| 2000                         | 11,976                           | 547                              | 21.9                         | 11,672                     | 669                               | 17.4                             | 25,617                               | 4,391                            | 5.8                      | 12,164                           | 720                      | 16.9                         |
| 2001                         | 11,831                           | 534                              | 22.1                         | 11,204                     | 636                               | 17.6                             | 26,602                               | 4,477                            | 5.9                      | 11,887                           | 695                      | 17.1                         |
| 2002                         | 12,202                           | 555                              | 22.0                         | 11,364                     | 650                               | 17.5                             | 27,071                               | 4,642                            | 5.8                      | 12,171                           | 719                      | 16.9                         |
| 2003                         | 12,325                           | 556                              | 22.2                         | 11,287                     | 697                               | 16.2                             | 28,093                               | 4,215                            | 6.7                      | 12,208                           | 718                      | 17.0                         |
| 2004                         | 12,460                           | 553                              | 22.5                         | 11,184                     | 690                               | 16.2                             | 27,023                               | 4,057                            | 6.7                      | 12,200                           | 714                      | 17.1                         |
| 2005                         | 12.485                           | 567                              | 22.1                         | 10,920                     | 617                               | 17.7                             | 26,235                               | 4,385                            | 6.0                      | 12,082                           | 706                      | 17.1                         |
| 2006                         |                                  | 554                              | 22.5                         | 10,920                     | 612                               | 17.8                             | 25,231                               | 4,304                            | 5.9                      | 12,017                           | 698                      | 17.2                         |
| 2007                         |                                  | a 468                            | a 22.9                       | b 14,970                   | <sup>b</sup> 877                  | b 17.1                           | c 28,290                             | c 4,398                          | 6.4                      | 11,915                           | 693                      | 17.2                         |
| 2008<br>2009<br>2010         | 10,391<br>10,650                 | 435<br>442<br>456                | 23.7<br>23.5<br>23.3         | 15,256<br>15,252<br>15,474 | 880<br>882<br>901                 | 17.3<br>17.3<br>17.2             | 28,573<br>26,274<br>26,604           | 4,387<br>4,037<br>4,180          | 6.5<br>6.5<br>6.4        | 11,631<br>11,631<br>11,866       | 667<br>661<br>681        | 17.4<br>17.6<br>17.4         |
| 2011                         | 11,150                           | 481                              | 23.2                         | 12,007                     | 702                               | 17.1                             | 26,054                               | 4,128                            | 6.3                      | 11,652                           | 665                      | 17.5                         |
| 2012                         | 11,262                           | 484                              | 23.3                         | 11,885                     | 694                               | 17.1                             | 25,255                               | 3,973                            | 6.4                      | 11,707                           | 665                      | 17.6                         |
| 2013                         | 11,244                           | 480                              | 23.4                         | 11,712                     | 683                               | 17.2                             | 25,951                               | 4,086                            | 6.4                      | 11,679                           | 663                      | 17.6                         |
| 2014                         | 11,048                           | 476                              | 23.2                         | 12,138                     | 710                               | 17.1                             | 25,594                               | 4,036                            | 6.3                      | 11,621                           | 666                      | 17.5                         |
| 2015                         | 11,327                           | 475                              | 23.9                         | 11,855                     | 684                               | 17.3                             | 24,979                               | 3,904                            | 6.4                      | 11,742                           | 656                      | 17.9                         |
| 2016 <sup>P</sup>            | 11,370                           | 475                              | 24.0                         | 11,991                     | 689                               | 17.4                             | 25,037                               | 3,904                            | 6.4                      | 11,810                           | 658                      | 17.9                         |

<sup>&</sup>lt;sup>a</sup> Through 1989, data are for passenger cars and motorcycles. For 1990–2006, data are for passenger cars only. Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase less than or equal to 121 inches.

Note: Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949.

Sources: • Light-Duty Vehicles, Short Wheelbase: 1990–1994—U.S. Department of Transportation, Bureau of Transportation Statistics 1998, Table 4-13. • All Other Data: 1949–1994—Federal Highway Administration (FHWA), Highway Statistics Summary to 1995, Table VM-201A. 1995 forward—FHWA, Highway Statistics, annual reports, Table VM-1.

wheelbase less than or equal to 121 inches.

<sup>b</sup> For 1966–2006, data are for vans, pickup trucks, and sport utility vehicles.

Beginning in 2007, data are for light-duty vehicles (passenger cars, light trucks, vans, and sport utility vehicles) with a wheelbase greater than 121 inches.

<sup>&</sup>lt;sup>c</sup> For 1949–1965, data are for single-unit trucks with 2 axles and 6 or more tires, combination trucks, and other vehicles with 2 axles and 4 tires that are not passenger cars. For 1966–2006, data are for single-unit trucks with 2 axles and 6 or more tires, and combination trucks. Beginning in 2007, data are for single-unit trucks with 2 axles and 6 or more tires (or a gross vehicle weight rating exceeding 10,000 pounds), and combination trucks.

<sup>&</sup>lt;sup>d</sup> Includes buses and motorcycles, which are not separately displayed.

e Included in "Heavy-Duty Trucks."

P=Preliminary.

Table 1.9 Heating Degree Days by Census Division

|  | New<br>England <sup>a</sup>  | Middle<br>Atlantic <sup>b</sup>   | East North<br>Central <sup>c</sup>  | West North<br>Central <sup>d</sup>  | South<br>Atlantic <sup>e</sup>  | East South<br>Central <sup>f</sup>  | West South<br>Central <sup>9</sup>   | Mountainh  | Pacific <sup>i</sup>  | United<br>States   |
|--|--|---|---|---|---|---|--|--|---|--|
| 1950 Total 1955 Total 1965 Total 1965 Total 1965 Total 1965 Total 1970 Total 1970 Total 1970 Total 1980 Total 1980 Total 1980 Total 1995 Total 2000 Total 2001 Total 2002 Total 2003 Total 2005 Total 2006 Total 2007 Total 2008 Total 2009 Total 2009 Total 2010 Total 2011 Total 2011 Total 2011 Total 2013 Total 2013 Total 2014 Total 2014 Total 2014 Total 2015 Total 2017 Total 2018 Total 2019 Total  | 6,794<br>6,872<br>6,828<br>7,029<br>7,022<br>6,547<br>7,071<br>6,749<br>5,987<br>6,684<br>6,625<br>6,202<br>6,234<br>6,975<br>6,709<br>6,644<br>5,885<br>6,537<br>6,434<br>6,644<br>5,934<br>6,114<br>5,561<br>6,426<br>6,675<br>6,521 | 6,324<br>6,231<br>6,391<br>6,393<br>6,388<br>5,892<br>6,477<br>5,971<br>5,252<br>6,093<br>5,999<br>5,541<br>5,550<br>6,258<br>5,892<br>5,950<br>5,211<br>5,756<br>5,782<br>5,953<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,483<br>5,770<br>5,838<br>6,203<br>5,777 | 7,027<br>6,486<br>6,908<br>6,587<br>6,721<br>6,406<br>6,975<br>6,668<br>5,780<br>6,740<br>6,315<br>5,844<br>6,128<br>6,536<br>6,178<br>6,222<br>5,703<br>6,074<br>6,677<br>6,512<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175<br>6,175 | 7,455<br>6,912<br>7,184<br>6,932<br>7,090<br>6,836<br>7,262<br>6,137<br>6,911<br>6,500<br>6,221<br>6,485<br>6,329<br>6,213<br>5,821<br>6,329<br>6,213<br>5,834<br>7,118<br>6,565<br>6,565<br>5,515<br>7,135<br>7,304<br>6,088 | 3,521<br>3,508<br>3,780<br>3,452<br>2,970<br>3,378<br>2,899<br>2,307<br>2,988<br>2,905<br>2,604<br>2,664<br>2,884<br>2,715<br>2,775<br>2,475<br>2,525<br>2,712<br>2,812<br>3,167<br>2,565<br>2,306<br>2,736<br>2,951<br>2,487 | 3,547<br>3,513<br>4,134<br>3,501<br>3,823<br>3,437<br>3,964<br>3,660<br>2,942<br>3,648<br>3,551<br>3,327<br>3,443<br>3,559<br>3,291<br>3,380<br>3,211<br>3,187<br>3,600<br>3,548<br>3,343<br>3,648<br>3,343<br>2,876<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648<br>3,648 | 2,277<br>2,294<br>2,767<br>2,237<br>2,558<br>2,312<br>2,494<br>2,535<br>1,968<br>2,147<br>2,153<br>2,162<br>2,292<br>2,205<br>1,985<br>1,802<br>2,105<br>2,125<br>2,125<br>2,125<br>2,149<br>2,114<br>1,650<br>2,326<br>2,422<br>2,087 | 6,341<br>6,704<br>6,281<br>6,086<br>6,119<br>6,260<br>5,554<br>6,059<br>5,391<br>5,101<br>4,971<br>5,101<br>4,817<br>5,197<br>4,817<br>5,233<br>5,233<br>5,233<br>5,139<br>5,233<br>5,139<br>5,273<br>4,744<br>4,602 | 3,906<br>4,320<br>3,799<br>3,819<br>3,726<br>4,117<br>3,539<br>3,935<br>3,603<br>3,269<br>3,460<br>3,545<br>3,510<br>3,355<br>3,346<br>3,377<br>3,556<br>3,566<br>3,566<br>3,566<br>3,538<br>3,624<br>3,818<br>3,411<br>3,362<br>2,774<br>2,898 | 5,367<br>5,246<br>5,404<br>5,146<br>5,218<br>4,905<br>5,080<br>4,889<br>4,180<br>4,640<br>4,494<br>4,257<br>4,356<br>4,544<br>4,344<br>4,348<br>4,040<br>4,268<br>4,494<br>4,481<br>4,463<br>4,312<br>3,769<br>4,465<br>4,550<br>4,087 |
| Page 1 September 2 December 2 Total 2 September 2 December 2 Decem | 1,127<br>957<br>754<br>605<br>251<br>45<br>4<br>5<br>67<br>388<br>672<br>1,053<br><b>5,928</b>   | 1,119<br>901<br>644<br>515<br>213<br>22<br>1<br>1<br>38<br>316<br>609<br>975<br>5,353   | 1,241<br>957<br>670<br>506<br>221<br>25<br>2<br>5<br>40<br>285<br>582<br>1,166<br>5,701   | 1,303<br>937<br>653<br>424<br>207<br>27<br>11<br>17<br>75<br>304<br>569<br>1,257<br><b>5,786</b>  | 659<br>483<br>240<br>152<br>58<br>1<br>0<br>0<br>2<br>91<br>290<br>479<br><b>2,456</b>  | 857<br>574<br>324<br>162<br>71<br>0<br>0<br>0<br>5<br>89<br>339<br>672<br><b>3,094</b>  | 565<br>310<br>179<br>61<br>17<br>0<br>0<br>0<br>1<br>22<br>154<br>444<br>1,752   | 918<br>619<br>543<br>381<br>254<br>42<br>15<br>31<br>115<br>265<br>513<br>927<br><b>4,621</b>  | 569 341 395 242 181 44 20 12 66 200 331 627 3,029   | 871<br>628<br>450<br>310<br>150<br>21<br>6<br>6<br>39<br>198<br>418<br>783<br>3,879  |
| Pebruary February March March May June July Magust September October November December Total   | R 1,037<br>R 905<br>1,038<br>R 451<br>R 304<br>45<br>9<br>27<br>R 57<br>R 237<br>R 742<br>1,188<br>R <b>6,040</b>  | R 971<br>R 779<br>R 908<br>341<br>234<br>25<br>3<br>18<br>52<br>R 214<br>R 697<br>R 1,086<br>R 5,329  | R 1,082<br>776<br>834<br>349<br>250<br>28<br>R 65<br>R 65<br>R 292<br>R 775<br>R 1,198  | 1,212<br>818<br>783<br>400<br>R 224<br>37<br>10<br>50<br>78<br>363<br>806<br>R 1,219<br>5,999   | R 476<br>R 322<br>R 346<br>76<br>47<br>2<br>0<br>1<br>14<br>89<br>R 321<br>535<br>R <b>2,229</b>  | R 579<br>R 410<br>R 388<br>94<br>57<br>4<br>0<br>1<br>24<br>146<br>R 408<br>R 729<br>R 2,838  | 418<br>208<br>R 147<br>R 52<br>14<br>0<br>0<br>3<br>59<br>R 179<br>502<br>R 1,583  | R 962<br>628<br>R 467<br>R 405<br>235<br>F 59<br>7<br>27<br>120<br>358<br>R 489<br>R 816<br><b>4,573</b>   | R 669<br>R 497<br>R 394<br>R 309<br>R 172<br>50<br>14<br>9<br>46<br>R 177<br>R 350<br>R 3,189   | 767<br>R 547<br>543<br>248<br>154<br>25<br>5<br>15<br>45<br>193<br>490<br>797<br>R 3,830   |
| 2018 January   | 1,255<br>869<br>927<br>8677<br>167<br>63<br>2<br>3<br>66<br>4,029<br>3,873<br>3,814  | R 1,212<br>810<br>912<br>R 616<br>R 109<br>28<br>1<br>2<br>33<br>3,723<br>3,331<br>3,453  | 1,308<br>980<br>922<br>R 703<br>98<br>24<br>4<br>8<br>4,094<br>3,425<br>3,668   | R 1,374<br>1,178<br>870<br>716<br>89<br>23<br>11<br>19<br>91<br>4,371<br>3,611<br>3,656   | 700<br>308<br>R 436<br>R 206<br>12<br>1<br>0<br>0<br>2<br>1,665<br>1,284<br>1,595   | R 931<br>R 412<br>R 476<br>313<br>13<br>0<br>0<br>0<br>2<br>2,147<br>1,556<br>1,994   | 660<br>R 347<br>186<br>142<br>0<br>0<br>0<br>3<br>1,338<br>843<br>1,133  | R 770<br>R 748<br>603<br>379<br>163<br>57<br>9<br>R 25<br>89<br>2,843<br>2,909<br>2,917  | R 458<br>R 495<br>R 487<br>298<br>R 177<br>R 65<br>8<br>14<br>61<br>2,063<br>2,159<br>1,870   | 896<br>625<br>609<br>R 410<br>R 86<br>26<br>4<br>7<br>37<br>2,700<br>2,350<br>2,480  |

<sup>&</sup>lt;sup>a</sup> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Alaska, California, Hawaii, Oregon, and Washington.

R=Revised.

Notes: • Degree days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree days are the number of degrees that the daily average temperature falls below 65 degrees Fahrenheit (°F). Cooling degree days are the number of degrees that the

daily average temperature rises above 65°F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40°F would report 25 heating degree days for that day (and 0 cooling degree days). If a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13 (and 0 heating degree days). Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1949 and monthly data

and CSV files) for all available annual data beginning in 1973.

Source: State-level degree day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012\_sp\_04.pdf.

New Jersey, New York, and Pennsylvania.
Illinois, Indiana, Michigan, Ohio, and Wisconsin.
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.
 f Alabama, Kentucky, Mississippi, and Tennessee.
 g Arkansas, Louisiana, Oklahoma, and Texas.
 h Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Mexico.

Wyoming.

i Alaska, California, Hawaii, Oregon, and Washington.

Table 1.10 Cooling Degree Days by Census Division

|  | Name                               |                                 | Foot North                         | M4 N41                             | 0                              | F                                  | W                                    |                               |                                     | 11-24-1          |
|--|------------------------------------|---------------------------------|------------------------------------|------------------------------------|--------------------------------|------------------------------------|--------------------------------------|-------------------------------|-------------------------------------|------------------|
|  | New<br>England <sup>a</sup>        | Middle<br>Atlantic <sup>b</sup> | East North<br>Central <sup>c</sup> | West North<br>Central <sup>d</sup> | South<br>Atlantic <sup>e</sup> | East South<br>Central <sup>f</sup> | West South<br>Central <sup>g</sup>   | <b>Mo</b> untain <sup>h</sup> | Pacific <sup>i</sup>                | United<br>States |
| 1950 Total                               | 295                                | 401                             | 505                                | 647                                | 1,414                          | 1,420                              | 2,282                                | 682                           | 629                                 | 871              |
| 1955 Total                               | 532                                | 761                             | 922                                | 1,139                              | 1,636                          | 1,674                              | 2,508                                | 780                           | 558                                 | 1,144            |
| 1960 Total                               | 318                                | 487                             | 626                                | 871                                | 1,583                          | 1,532                              | 2,367                                | 974                           | 796                                 | 1,000            |
| 1965 Total                               | 310<br>423                         | 498<br>615                      | 618<br>747                         | 832<br>980                         | 1,613<br>1,744                 | 1,552                              | 2,461                                | 780<br>971                    | 577<br>734                          | 979<br>1.079     |
| 1970 Total<br>1975 Total                 | 423<br>422                         | 584                             | 747<br>721                         | 937                                | 1,744                          | 1,571<br>1,440                     | 2,282<br>2,162                       | 903                           | 734<br>597                          | 1,079            |
| 1980 Total                               | 438                                | 680                             | 769                                | 1,158                              | 1,911                          | 1,754                              | 2,651                                | 1.071                         | 653                                 | 1,214            |
| 1985 Total                               | 324                                | 509                             | 602                                | 780                                | 1,878                          | 1,522                              | 2,519                                | 1,095                         | 761                                 | 1,121            |
| 1990 Total                               | 429                                | 562                             | 602                                | 913                                | 2,054                          | 1,563                              | 2,526                                | 1,212                         | 838                                 | 1,200            |
| 1995 Total                               | 471                                | 704                             | 877                                | 928                                | 2,028                          | 1,613                              | 2,398                                | 1,213                         | 794                                 | 1,261            |
| 2000 Total                               | 279<br>464                         | 458<br>623                      | 632<br>722                         | 983<br>994                         | 1,925<br>1.897                 | 1,674<br>1.478                     | 2,775<br>2.543                       | 1,480<br>1.508                | 772<br>861                          | 1,232<br>1,255   |
| 2001 Total<br>2002 Total                 | 508                                | 772                             | 899                                | 1,045                              | 2.182                          | 1,757                              | 2,543<br>2,515                       | 1,467                         | 783                                 | 1,255            |
| 2003 Total                               | 475                                | 615                             | 619                                | 907                                | 1.980                          | 1,452                              | 2,496                                | 1,553                         | 978                                 | 1,363            |
| 2004 Total                               | 368                                | 591                             | 585                                | 722                                | 2,038                          | 1,517                              | 2,482                                | 1,290                         | 828                                 | 1,217            |
| 2005 Total                               | 598                                | 892                             | 944                                | 1,063                              | 2,098                          | 1,676                              | 2,647                                | 1,372                         | 777                                 | 1,388            |
| 2006 Total                               | 485                                | 693                             | 734                                | 1,034                              | 2,053                          | 1,648                              | 2,786                                | 1,466                         | 922                                 | 1,360            |
| 2007 Total                               | 447                                | 694                             | 881                                | 1,102                              | 2,219                          | 1,892                              | 2,475                                | 1,564                         | 828                                 | 1,392            |
| 2008 Total                               | 462<br>350                         | 667<br>524                      | 683<br>534                         | 818<br>698                         | 1,993<br>2,029                 | 1,537<br>1,479                     | 2,501<br>2,590                       | 1,385<br>1,393                | 918<br>894                          | 1,282<br>1,241   |
| 2009 Total<br>2010 Total                 | 635                                | 908                             | 964                                | 1,096                              | 2,029                          | 1,977                              | 2,757                                | 1,358                         | 674                                 | 1,456            |
| 2011 Total                               | 554                                | 836                             | 859                                | 1,074                              | 2,259                          | 1,727                              | 3,112                                | 1,450                         | 736                                 | 1,470            |
| 2012 Total                               | 565                                | 815                             | 974                                | 1,221                              | 2,162                          | 1,762                              | 2,915                                | 1,573                         | 917                                 | 1,495            |
| 2013 Total                               | 540                                | 683                             | 690                                | 892                                | 2,000                          | 1,441                              | 2,536                                | 1,462                         | 892                                 | 1,306            |
| 2014 Total                               | 420                                | 596                             | 610                                | 814                                | 2,009                          | 1,493                              | 2,474                                | 1,431                         | 1,068                               | 1,299            |
| 2015 Total                               | 555                                | 804                             | 729                                | 942                                | 2,405                          | 1,718                              | 2,741                                | 1,478                         | 1,068                               | 1,488            |
| 2016 January                             | 0                                  | 0<br>0                          | 0<br>0                             | 0                                  | 25<br>24                       | 2                                  | 9<br>25                              | 0<br>10                       | 8<br>15                             | 7                |
| March                                    | 0                                  | 0                               | 3                                  | 10                                 | 89                             | 36                                 | 86                                   | 24                            | 13                                  | 35               |
| April                                    | ŏ                                  | ŏ                               | ĭ                                  | 8                                  | 87                             | 37                                 | 123                                  | 42                            | 27                                  | 42               |
| May                                      | 7                                  | 17                              | 42                                 | 49                                 | 185                            | 124                                | 238                                  | 90                            | 37                                  | 98               |
| June                                     | 75                                 | 129                             | 188                                | 263                                | 379                            | 371                                | 475                                  | 331                           | 166                                 | 271              |
| July                                     | 242                                | 310                             | 277                                | 306                                | 509                            | 473                                | 620                                  | 408                           | 236                                 | 384              |
| August<br>September                      | 241<br>61                          | 312<br>114                      | 297<br>131                         | 268<br>138                         | 484<br>352                     | 460<br>321                         | 547<br>429                           | 305<br>173                    | 234<br>122                          | 362<br>219       |
| October                                  | 0                                  | 6                               | 19                                 | 28                                 | 157                            | 113                                | 233                                  | 99                            | 47                                  | 86               |
| November                                 | ŏ                                  | ő                               | 0                                  | 2                                  | 56                             | 12                                 | 80                                   | 14                            | 17                                  | 26               |
| December                                 | Ö                                  | 0                               | 0                                  | 0                                  | 65                             | 4                                  | 17                                   | 0                             | 8                                   | 17               |
| Total                                    | 626                                | 888                             | 958                                | 1,073                              | 2,412                          | 1,957                              | 2,882                                | 1,496                         | 929                                 | 1,558            |
| <b>2017</b> January                      | 0                                  | 0                               | 0                                  | 0<br>3                             | 50                             | 20                                 | 35<br><sup>R</sup> 66                | 0<br>5                        | 7<br>7                              | R 16             |
| February<br>March                        | 0                                  | 0<br>0                          | 0<br>1                             | 3<br>6                             | 54<br>56                       | 18<br>28                           | 112                                  | 31                            | 17                                  | 22<br>32         |
| April                                    | 0                                  | 2                               | 7                                  | 9                                  | 123                            | 74                                 | R 140                                | 50                            | R 25                                | 56               |
| May                                      | 3                                  | 14                              | 37                                 | 50                                 | 211                            | 135                                | 240                                  | 109                           | 46                                  | R 105            |
| June                                     | R 72                               | <sup>R</sup> 123                | <sup>R</sup> 166                   | R 206                              | 338                            | _ 272                              | R 446                                | R 307                         | <sup>R</sup> 150                    | 241              |
| July                                     | 171                                | R 250                           | 241                                | R 330                              | 468                            | R 429                              | 582<br>8 500                         | R 413                         | 284                                 | 363              |
| August                                   | R 127                              | R 163                           | R 146                              | R 166                              | 407<br>R 202                   | R 340                              | R 506                                | 329                           | R 280                               | R 291            |
| September<br>October                     | <sup>R</sup> 66<br><sup>R</sup> 11 | 88<br>22                        | <sup>R</sup> 91<br><sup>R</sup> 15 | 127<br>14                          | <sup>R</sup> 282<br>158        | 194<br>66                          | <sup>R</sup> 369<br><sup>R</sup> 144 | 178<br><sup>R</sup> 91        | <sup>R</sup> 137<br><sup>R</sup> 69 | R 184<br>R 77    |
| November                                 | 0                                  | 0                               | 0                                  | 0                                  | 66                             | 6                                  | 67                                   | 29                            | 21                                  | 27               |
| December                                 | 0                                  | 0                               | 0                                  | Ö                                  | 38                             | 1                                  | 5                                    | 1                             | 10                                  | 10               |
| Total                                    | R <b>450</b>                       | R 662                           | R <b>704</b>                       | 910                                | R 2,251                        | R 1,582                            | R 2,713                              | R 1,546                       | R 1,051                             | R 1,425          |
| 2018 January                             | 0                                  | 0                               | 0                                  | 0                                  | 21                             | _1                                 | _4                                   | 5                             | 15                                  | .8               |
| February                                 | 0                                  | 0                               | 0                                  | 0                                  | 81                             | 21                                 | 33<br>R 99                           | 3                             | 8                                   | 23               |
| March<br>April                           | 0                                  | 0<br>0                          | 0                                  | 2                                  | 34<br>79                       | 14<br>7                            | <sup>R</sup> 88<br>57                | 14<br>71                      | 9<br>25                             | 21<br>33         |
| May                                      | 25                                 | 65                              | 141                                | 168                                | 263                            | 267                                | R 397                                | R 138                         | 39                                  | 174              |
| June                                     | 55                                 | 111                             | 193                                | R 271                              | 382                            | R 376                              | <sup>R</sup> 551                     | R 300                         | <sup>R</sup> 118                    | 270              |
| July                                     | <sup>R</sup> 251                   | R 287                           | 258                                | R 304                              | 439                            | R 429                              | <sup>R</sup> 606                     | R 417                         | R 321                               | R 376            |
| August                                   | R 264                              | R 297                           | <sup>R</sup> 257                   | 258                                | R 436                          | R 392                              | R 563                                | R 346                         | R 258                               | 351              |
| September                                | 63                                 | 123                             | 123                                | 124                                | 390                            | 338                                | 391                                  | 240                           | 146                                 | 232              |
| 9-Month Total                            | 657                                | 884                             | 972                                | 1,127                              | 2,126                          | 1,844                              | 2,691                                | 1,532                         | 939                                 | 1,486            |
| 2017 9-Month Total<br>2016 9-Month Total | 440<br>626                         | 640<br>882                      | 689<br>939                         | 896<br>1,042                       | 1,988<br>2,134                 | 1,509<br>1,828                     | 2,496<br>2,553                       | 1,424<br>1,383                | 952<br>857                          | 1,310<br>1,429   |
| ZUIO 9-IVIOIITN TOTAL                    | 020                                | 682                             | 939                                | 1,042                              | ∠,134                          | 1,828                              | ∠,353                                | 1,383                         | 65/                                 | 1,429            |

<sup>&</sup>lt;sup>a</sup> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Alaska, California, Hawaii, Oregon, and Washington.

R=Revised.

Notes: • Degree days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree days are the number of degrees that the daily average temperature rises above 65 degrees Fahrenheit (°F). Heating degree days are the number of degrees that the

daily average temperature falls below 65°F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78°F, cooling degree days for that station would be 13 (and 0 heating degree days). A weather station recording an average daily temperature of 40°F would report 25 heating degree days for that day (and 0 cooling degree days).

Totals may not equal sum of components due to independent rounding.

Geographic coverage is the 50 states and the District of Columbia.

Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary (Excel and CSV files) for all available annual data beginning in 1973.

and CSV files) for all available annual data beginning in 1973.

Source: State-level degree day data are from U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Centers for Environmental Information. Using these state-level data, the U.S. Energy Information Administration calculates population-weighted census-division and U.S. degree day averages using state populations from the same year the degree days are measured. See methodology at http://www.eia.gov/forecasts/steo/special/pdf/2012\_sp\_04.pdf.

New Jersey, New York, and Pennsylvania.
Illinois, Indiana, Michigan, Ohio, and Wisconsin.
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South

Delaware, Florida, Georgia, Maryland (and the District of Columbia), North Carolina, South Carolina, Virginia, and West Virginia.
 f Alabama, Kentucky, Mississippi, and Tennessee.
 g Arkansas, Louisiana, Oklahoma, and Texas.
 h Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Mexico.

Wyoming.

i Alaska, California, Hawaii, Oregon, and Washington.

Table 1.11a Non-Combustion Use of Fossil Fuels in Physical Units

|                            |                        |                       |                            |  |                  | Petrol  | eum               |                     |                    |                       |
|----------------------------|------------------------|-----------------------|----------------------------|--|------------------|---|-------------------|---------------------|--------------------|-----------------------|
|                            | Coal                   | Natural<br>Gas        | Asphalt<br>and<br>Road Oil | Hydrocarbon<br>Gas<br>Liquids <sup>a</sup> | Lubricants       | Petro-<br>chemical<br>Feedstocks <sup>b</sup> | Petroleum<br>Coke | Special<br>Naphthas | Other <sup>c</sup> | Total                 |
|                            | Thousand<br>Short Tons | Billion<br>Cubic Feet |                            |  |                  | Thousand Bar                                  | rels per Day      |                     |                    |                       |
| 1973 Total                 | 3,345                  | 792                   | 522                        | 736  | 162              | 375   | 42                | 88                  | 134                | 2,059                 |
| 1975 Total                 | 2,972                  | 674                   | 419                        | 702  | 137              | 330   | 41                | 75                  | 159                | 1,863                 |
| 1980 Total                 | 2,370                  | 674                   | 396                        | 871  | 159              | 709   | 39                | 100                 | 176                | 2,451                 |
| 1985 Total<br>1990 Total   | 1,050<br>641           | 572<br>712            | 425<br>483                 | 980<br>1,067                               | 145<br>164       | 364<br>553                                    | 43<br>56          | 83<br>56            | 114<br>94          | 2,154<br>2,473        |
| 1995 Total                 | 921                    | 868                   | 486                        | 1,347                                      | 156              | 593   | 55                | 36<br>37            | 87                 | 2,762                 |
| 1996 Total                 | 884                    | 896                   | 484                        | 1,420                                      | 151              | 593   | 54                | 39                  | 87                 | 2,828                 |
| 1997 Total                 | 842                    | 909                   | 505                        | 1,452                                      | 160              | 691   | 40                | 38                  | 86                 | 2,972                 |
| 1998 Total                 | 786                    | 938                   | 521                        | 1,375                                      | 168              | 693   | 69                | 56                  | 107                | 2,988                 |
| 1999 Total                 | 784<br>907             | 906                   | 547<br>525                 | 1,605                                      | 169              | 654   | 98<br>45          | 76<br>51            | 99                 | 3,248                 |
| 2000 Total<br>2001 Total   | 807<br>727             | 918<br>839            | 525<br>519                 | 1,586<br>1,422                             | 166<br>153       | 666<br>592                                    | 45<br>79          | 41                  | 103<br>104         | 3,142<br>2,911        |
| 2002 Total                 | 660                    | 836                   | 512                        | 1,504                                      | 151              | 630   | 66                | 53                  | 103                | 3,020                 |
| 2003 Total                 | 676                    | 808                   | 503                        | 1,436                                      | 140              | 676   | 56                | 42                  | 101                | 2,954                 |
| 2004 Total                 | 660                    | 818                   | 537                        | 1,481                                      | 141              | 784   | 99                | 27                  | 98                 | 3,167                 |
| 2005 Total                 | 654                    | 761                   | 546                        | 1,399                                      | 141              | 729<br>726                                    | 85<br>07          | 33                  | 102                | 3,034                 |
| 2006 Total<br>2007 Total   | 640<br>634             | 584<br>598            | 521<br>494                 | 1,454<br>1,461                             | 137<br>142       | 726<br>664                                    | 97<br>91          | 37<br>41            | 112<br>104         | 3,084<br>2,997        |
| 2008 Total                 | 616                    | 608                   | 417                        | 1,340                                      | 131              | 574   | 102               | 44                  | 107                | 2,714                 |
| 2009 Total                 | 427                    | 524                   | 360                        | 1,456                                      | 118              | 507   | 82                | 24                  | 99                 | 2,648                 |
| 2010 Total                 | 588                    | 654                   | 362                        | 1,587                                      | 131              | 539   | 28                | 14                  | 100                | 2,760                 |
| 2011 Total                 | 598                    | 680                   | 355                        | 1,624                                      | 125              | 520   | 28                | 12                  | 103                | 2,767                 |
| 2012 Total                 | 579<br>599             | 706<br>721            | 340<br>323                 | 1,642                                      | 114              | 444<br>448                                    | 31                | . 8<br>52           | 94<br>97           | 2,673                 |
| 2013 Total<br>2014 Total   | 599<br>594             | 725                   | 323                        | 1,782<br>1,780                             | 121<br>126       | 448<br>410                                    | 28<br>28          | 52<br>55            | 101                | 2,853<br>2,829        |
| 2015 Total                 | 550                    | 703                   | 343                        | 1,865                                      | 138              | 378   | 28                | 52                  | 102                | 2,906                 |
| 0040 1                     | 0.7                    | 00                    | 405                        | 0.075                                      | 400              | 077   | 0.4               | 47                  | 407                | 0.000                 |
| 2016 January<br>February   | 37<br>38               | 69<br>63              | 195<br>230                 | 2,075<br>1,970                             | 136<br>148       | 377<br>373                                    | 31<br>29          | 47<br>53            | 107<br>95          | 2,968<br>2,899        |
| March                      | 40                     | 63                    | 254                        | 1,932                                      | 143              | 368   | 29                | 58                  | 108                | 2,899                 |
| April                      | 37                     | 59                    | 301                        | 1,840                                      | 131              | 370   | 22                | 46                  | 109                | 2,820                 |
| May                        | 38                     | 58                    | 394                        | 1,828                                      | 132              | 359   | 21                | 59                  | 101                | 2,894                 |
| June                       | 39                     | 55                    | 482                        | 1,751                                      | 146              | 363   | 18                | 40                  | 107                | 2,907                 |
| July                       | 40                     | 57<br>59              | 472                        | 1,853                                      | 115              | 384   | 25                | 47                  | 112                | 3,007                 |
| August<br>September        | 39<br>37               | 58<br>56              | 524<br>439                 | 1,760<br>1,817                             | 124<br>125       | 371<br>364                                    | 36<br>21          | 43<br>56            | 110<br>107         | 2,968<br>2,928        |
| October                    | 37                     | 58                    | 417                        | 1,920                                      | 131              | 365   | 26                | 41                  | 90                 | 2,991                 |
| November                   | 37                     | 62                    | 310                        | 1,865                                      | 121              | 373   | 42                | 49                  | 108                | 2,868                 |
| December                   | 40                     | 70                    | 195                        | 1,969                                      | 115              | 390   | 32                | 45                  | 107                | 2,853                 |
| Total                      | 460                    | 729                   | 351                        | 1,882                                      | 130              | 371   | 28                | 49                  | 105                | 2,917                 |
| 2017 January               | 40                     | 70                    | 183                        | 2,124                                      | 136              | 372   | 35                | 55                  | 109                | 3,014                 |
| February                   | 38                     | 62                    | 242                        | 1,921                                      | 128              | 409   | 17                | 55                  | 106                | 2,879                 |
| March                      | 40                     | 66                    | 260                        | 2,014                                      | 143              | 435   | 13                | 53                  | 111                | 3,029                 |
| April                      | 40<br>41               | 60<br>59              | 316<br>367                 | 1,895<br>1,906                             | 128<br>131       | 429<br>439                                    | 26<br>28          | 41<br>48            | 104<br>112         | 2,940<br>3.031        |
| May<br>June                | 39                     | 59<br>57              | 475                        | 1,982                                      | 120              | 439<br>439                                    | 28<br>21          | 48<br>56            | 112                | 3,031                 |
| July                       | 42                     | 57                    | 443                        | 2,018                                      | 116              | 403   | 38                | 49                  | 110                | 3,178                 |
| August                     | 43                     | 59                    | 543                        | 1,724                                      | 92               | 383   | 24                | 55                  | 107                | 2,928                 |
| September                  | 41                     | 57                    | 444                        | 1,718                                      | 114              | 356   | 29                | 45                  | 97                 | 2,804                 |
| October                    | 41<br>41               | 62<br>66              | 411<br>308                 | 1,989<br>2,163                             | 123<br>122       | 373<br>373                                    | 13<br>33          | 58<br>59            | 101<br>118         | 3,068<br>3,176        |
| November<br>December       | 43                     | 72                    | 209                        | 2,163                                      | 94               | 373<br>381                                    | 33<br>32          | 59<br>55            | 108                | 3,176<br>3,189        |
| Total                      | 489                    | 748                   | 351                        | 1,981                                      | 121              | 399   | 26                | 52                  | 108                | 3,038                 |
|                            |                        |                       |                            | •  |                  | 0.45  |                   |                     |                    | •                     |
| 2018 January               | 41                     | 73                    | 204                        | 2,479                                      | 105              | 345   | 29                | 58<br>53            | 106                | 3,326                 |
| February<br>March          | 36<br>41               | 66<br>69              | 219<br>233                 | 2,296<br>2,312                             | 105<br>134       | 350<br>370                                    | 15<br>24          | 53<br>55            | 104<br>103         | 3,142<br>3,231        |
| April                      | 43                     | 65                    | 233<br>242                 | 2,312                                      | 99               | 370<br>384                                    | 24<br>25          | 58                  | 112                | 3,231                 |
| May                        | 45                     | 62                    | 370                        | 2,043                                      | 111              | 370   | 28                | 56                  | 111                | 3,088                 |
| June                       | 41                     | 59                    | 475                        | 2,117                                      | 133              | 384   | 29                | 46                  | 110                | 3,295                 |
| July                       | 42                     | 60                    | 471                        | 2,222                                      | 127              | 399   | 27                | 49                  | 111                | 3,407                 |
| August                     | 52<br>51               | 61<br>60              | 508                        | 2,269                                      | 120<br>73        | 429<br>409                                    | 38<br>35          | 39<br>45            | 111<br>110         | 3,514<br>3,260        |
| September<br>9-Month Total | 391                    | 60<br><b>575</b>      | 388<br><b>347</b>          | 2,199<br><b>2,236</b>                      | 73<br><b>112</b> | 409<br><b>382</b>                             | 35<br><b>28</b>   | 45<br><b>51</b>     | 110<br><b>109</b>  | 3,260<br><b>3,265</b> |
|                            |                        |                       |                            |  |                  |   |                   |                     |                    | •                     |
| 2017 9-Month Total         | 364                    | 548                   | 364                        | 1,923                                      | 123              | 407   | 26                | 51                  | 108                | 3,002                 |

a Ethane, propane, normal butane, isobutane, natural gasoline, and refinery olefins (ethylene, propylene, butylene, and isobutylene).
 b Includes still gas not burned as refinery fuel.
 c Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.
 Notes: • Data are estimates. • Non-combustion use estimates are included in total energy consumption. See Table 1.3. • Non-combustion estimates are all for industrial sector consumption, except for some lubricants consumed by the

transportation sector. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia. • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available annual and monthly data beginning in 1973.

Sources: • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of continuous continu

section.

Table 1.11b Heat Content of Non-Combustion Use of Fossil Fuels

|  |   |   | Petroleum   |  |   |   |   |   |   |  |  | Percent of   |
|--|---|---|---|--|---|---|---|---|---|--|--|--|
|  | Coal  | Natural<br>Gas  | Asphalt<br>and<br>Road Oil  | Hydro-<br>carbon<br>Gas<br>Liquids <sup>a</sup>  | Lubri-<br>cants   | Petro-<br>chemical<br>Feed-<br>stocks <sup>b</sup>  | Petro-<br>leum<br>Coke  | Special<br>Naphthas   | Otherc  | Total  | Total  | Total<br>Energy<br>Consump-<br>tion  |
| 1973 Total 1975 Total 1975 Total 1980 Total 1985 Total 1990 Total 1990 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 Total 2004 Total 2005 Total 2006 Total 2007 Total 2007 Total 2008 Total 2009 Total 2010 Total 2011 Total 2012 Total 2013 Total 2014 Total 2015 Total 2017 Total 2018 Total 2019 Total 2019 Total 2019 Total 2011 Total 2011 Total 2011 Total 2012 Total 2013 Total 2014 Total 2014 Total | 0.107<br>.095<br>.076<br>.034<br>.029<br>.028<br>.027<br>.025<br>.026<br>.023<br>.021<br>.021<br>.020<br>.020<br>.020<br>.014<br>.019<br>.019 | 0.808<br>.688<br>.690<br>.590<br>.732<br>.892<br>.921<br>.933<br>.969<br>.932<br>.840<br>.782<br>.600<br>.614<br>.625<br>.537<br>.669<br>.695<br>.724<br>.741<br>.749 | 1.264 1.014 .962 1.029 1.178 1.178 1.176 1.224 1.263 1.324 1.276 1.257 1.240 1.304 1.323 1.261 1.197 1.012 .873 .878 .859 .827 .783 .783 .832 | 0.977<br>.921<br>1.147<br>1.251<br>1.393<br>1.764<br>1.856<br>1.894<br>1.789<br>2.098<br>2.065<br>1.844<br>1.945<br>1.869<br>1.924<br>1.872<br>1.872<br>1.872<br>1.872<br>1.872<br>1.872<br>2.010<br>2.028<br>2.062<br>2.248<br>2.234<br>2.351 | 0.359<br>.304<br>.354<br>.322<br>.346<br>.335<br>.354<br>.371<br>.375<br>.369<br>.338<br>.313<br>.312<br>.303<br>.313<br>.291<br>.262<br>.291<br>.262<br>.294<br>.268<br>.305 | 0.767<br>.675<br>1.464<br>.747<br>1.138<br>1.222<br>1.211<br>1.410<br>1.409<br>1.353<br>1.205<br>1.276<br>1.371<br>1.592<br>1.474<br>1.477<br>1.351<br>1.172<br>1.031<br>1.096<br>1.057<br>.901 | 0.088<br>.085<br>.081<br>.090<br>.117<br>.115<br>.113<br>.083<br>.143<br>.205<br>.094<br>.165<br>.138<br>.117<br>.207<br>.177<br>.203<br>.191<br>.214<br>.172<br>.058<br>.059<br>.064<br>.059 | 0.169<br>.144<br>.193<br>.159<br>.107<br>.071<br>.075<br>.072<br>.107<br>.145<br>.097<br>.078<br>.102<br>.080<br>.051<br>.063<br>.070<br>.078<br>.085<br>.046<br>.026<br>.026<br>.023<br>.015<br>.106 | 0.290<br>.341<br>.379<br>.242<br>.198<br>.185<br>.185<br>.183<br>.229<br>.211<br>.222<br>.223<br>.220<br>.217<br>.211<br>.218<br>.242<br>.223<br>.230<br>.212<br>.213<br>.201<br>.201<br>.201<br>.201<br>.201<br>.201<br>.201<br>.201 | 3.914 3.485 4.580 3.841 4.486 4.879 4.951 5.220 5.310 5.695 5.476 5.112 5.257 5.183 5.602 5.380 5.427 4.725 4.434 4.571 4.522 4.324 4.5622 | 4.829<br>4.268<br>5.345<br>4.465<br>5.800<br>5.900<br>6.181<br>6.304<br>6.652<br>6.443<br>5.998<br>6.134<br>6.037<br>6.463<br>6.048<br>5.859<br>5.370<br>4.985<br>5.258<br>5.258<br>5.266<br>5.327<br>5.280<br>5.370 | 6.4<br>6.8<br>6.8<br>6.4<br>6.5<br>6.6<br>6.5<br>6.2<br>6.5<br>6.5<br>6.5<br>6.5<br>6.5<br>6.5<br>6.5<br>6.5 |
| 2016 January   | .001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.001  | .072<br>.066<br>.065<br>.061<br>.060<br>.057<br>.059<br>.060<br>.058<br>.061<br>.065<br>.073  | .040<br>.044<br>.052<br>.060<br>.081<br>.096<br>.097<br>.108<br>.087<br>.086<br>.062<br>.040  | .223<br>.196<br>.204<br>.189<br>.193<br>.180<br>.195<br>.185<br>.188<br>.205<br>.190<br>.210   | .026<br>.026<br>.027<br>.024<br>.025<br>.027<br>.022<br>.023<br>.023<br>.025<br>.025<br>.025<br>.025  | .065<br>.060<br>.063<br>.061<br>.062<br>.060<br>.066<br>.064<br>.061<br>.063<br>.062  | .006<br>.005<br>.005<br>.004<br>.004<br>.003<br>.004<br>.006<br>.004<br>.005<br>.007  | .008<br>.008<br>.010<br>.007<br>.010<br>.006<br>.008<br>.007<br>.009<br>.007  | .019<br>.016<br>.019<br>.018<br>.019<br>.020<br>.020<br>.019<br>.016<br>.019  | .386<br>.355<br>.380<br>.364<br>.392<br>.391<br>.412<br>.413<br>.390<br>.406<br>.370<br>.371   | .459<br>.422<br>.447<br>.426<br>.453<br>.449<br>.473<br>.475<br>.450<br>.468<br>.435<br>.445   | 5.1<br>5.1<br>5.6<br>5.7<br>6.0<br>5.6<br>5.6<br>5.6<br>5.1<br>4.9   |
| 2017 January   | .001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.001  | .073<br>.064<br>.069<br>.062<br>.061<br>.059<br>.059<br>.061<br>.060<br>.064  | .038<br>.045<br>.053<br>.063<br>.075<br>.095<br>.091<br>.112<br>.088<br>.085<br>.061<br>.043  | .227<br>.182<br>.214<br>.194<br>.200<br>.200<br>.214<br>.180<br>.176<br>.211<br>.219<br>.243<br><b>2.459</b>   | .026<br>.022<br>.027<br>.023<br>.025<br>.022<br>.017<br>.021<br>.023<br>.022<br>.018<br>.267  | .064<br>.063<br>.075<br>.072<br>.076<br>.073<br>.070<br>.066<br>.060<br>.064<br>.062  | .006<br>.003<br>.002<br>.004<br>.005<br>.004<br>.007<br>.004<br>.005<br>.002<br>.006<br>.006  | .009<br>.008<br>.009<br>.006<br>.008<br>.009<br>.008<br>.009<br>.007<br>.009<br>.009  | .020<br>.017<br>.020<br>.018<br>.020<br>.020<br>.020<br>.019<br>.017<br>.018<br>.021<br>.019  | .389<br>.340<br>.400<br>.381<br>.409<br>.422<br>.431<br>.408<br>.374<br>.413<br>.400<br>.403   | .463<br>.405<br>.470<br>.444<br>.471<br>.482<br>.491<br>.471<br>.435<br>.478<br>.479<br>5.559  | 5.2<br>5.3<br>5.6<br>6.0<br>6.0<br>6.0<br>5.8<br>5.7<br>6.1<br>5.8<br>5.7                                    |
| Pebruary   | .001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.001<br>.002<br>.002  | .076<br>.068<br>.072<br>.067<br>.064<br>.061<br>.063<br>.063<br>.062  | .042<br>.041<br>.048<br>.048<br>.076<br>.095<br>.097<br>.104<br>.077  | .264<br>.221<br>.241<br>.212<br>.213<br>.232<br>.238<br>.222<br><b>2.064</b>   | .020<br>.018<br>.025<br>.018<br>.021<br>.024<br>.024<br>.022<br>.013  | .059<br>.054<br>.064<br>.064<br>.064<br>.069<br>.074<br>.068  | .005<br>.002<br>.004<br>.004<br>.005<br>.005<br>.005<br>.007  | .009<br>.008<br>.009<br>.009<br>.007<br>.008<br>.006<br>.007  | .019<br>.017<br>.019<br>.019<br>.020<br>.019<br>.020<br>.020<br>.020  | .419<br>.361<br>.410<br>.384<br>.407<br>.428<br>.454<br>.472<br>.413   | .496<br>.430<br>.483<br>.453<br>.473<br>.490<br>.518<br>.536<br>.477   | 5.1<br>5.3<br>5.6<br>5.7<br>5.9<br>6.0<br>6.0<br>6.2<br>6.1<br><b>5.8</b>                                    |
| 2017 9-Month Total<br>2016 9-Month Total   | .012<br>.011  | .568<br>.559  | .660<br>.666  | 1.787<br>1.753   | .204<br>.221  | .618<br>.562  | .040<br>.041  | .073<br>.072  | .171<br>.169  | 3.552<br>3.483   | 4.132<br>4.053   | 5.7<br>5.5   |

a Ethane, propane, normal butane, isobutane, natural gasoline, and refinery olefins (ethylene, propylene, butylene, and isobutylene).
 b Includes still gas not burned as refinery fuel.
 c Distillate fuel oil, residual fuel oil, waxes, and miscellaneous products.
 Notes: • Data are estimates. • Non-combustion use estimates are included in total energy consumption. See Table 1.3. • Non-combustion estimates are all for industrial sector consumption, except for some lubricants consumed by the transportation sector. • Totals may not equal sum of components due to

independent rounding. • Geographic coverage is the 50 states and the District of Columbia.• See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section. Web Page: See http://www.eia.gov/totalenergy/data/monthly/#summary for all available annual and monthly data beginning in 1973.

Sources: • See Note 2, "Non-Combustion Use of Fossil Fuels," at end of section. • Percent of Total Energy Consumption: Calculated as total non-combustion use of fossil fuels divided by total primary energy consumption (see Table 1.3).

# **Energy Overview**

**Note 1. Merchandise Trade Value.** Imports data presented are based on the customs values. Those values do not include insurance and freight and are consequently lower than the cost, insurance, and freight (CIF) values, which are also reported by the Bureau of the Census. All exports data, and imports data through 1980, are on a free alongside ship (f.a.s.) basis.

"Balance" is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. "Energy" includes mineral fuels, lubricants, and related material. "Non-Energy Balance" and "Total Merchandise" include foreign exports (i.e., re-exports) and nonmonetary gold and U.S. Department of Defense Grant-Aid shipments. The "Non-Energy Balance" is calculated by subtracting the "Energy" from the "Total Merchandise Balance."

"Imports" consist of government and nongovernment shipments of merchandise into the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

**Note 2. Non-Combustion Use of Fossil Fuels.** Most fossil fuels consumed in the United States and elsewhere are combusted to produce heat and power. However, some are used directly for non-combustion use as construction materials, chemical feedstocks, lubricants, solvents, and waxes. For example, coal tars from coal coke manufacturing are used as feedstock in the chemical industry, for metallurgical work, and in anti-dandruff shampoos; natural gas is used to make nitrogenous fertilizers and as chemical feedstocks; asphalt and road oil are used for roofing and paving; hydrocarbon gas liquids are used to create intermediate products that are used in making plastics; lubricants, including motor oil and greases, are used in vehicles and various industrial processes; petrochemical feedstocks are used to make plastics, synthetic fabrics, and related products.

#### Coal

The U.S. Energy Information Administration (EIA) assumes all non-combustion use of coal comes from the process of manufacturing coal coke. Among the byproducts of the process are "coal tars" or "coal liquids," which typically are rich in aromatic hydrocarbons, such as benzene, and are used as chemical feedstock. EIA's Office of Energy Analysis (OEA) estimates non-combustion use ratios of coal tar. Prior to 1995, estimate ratios are based on coal tar production data from the United States International Trade Commission's Synthetic Organic Chemicals. From 1995 forward, coal tar production is estimated using the ratio of EIA's estimate of 1994 coke production, reported in EIA's Quarterly Coal Report. Coal tar ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, coal tar values in Table 1.11a are multiplied by 32.0067 million Btu/short ton, which is the product of 4.95 barrels/short ton (the density of coal tar) and 6.466 million Btu/barrel (the approximate heat content of coal tar).

#### Natural Gas

EIA assumes that all non-combustion use of natural gas takes place in the industrial sector. OEA estimates non-combustion ratios of natural gas using Form EIA-864A "Manufacturers Energy Consumption Survey" (MECS) and natural gas used as feedstock for hydrogen production using Form EIA-820 "Annual Refinery Report" data. For years when MECS data are unavailable, estimates are interpolated or extrapolated using chemical indices as scaling factors. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, natural gas values in Table 1.11a are multiplied by the heat content factor for natural gas total consumption shown in Table A4.

#### Asphalt & Road Oil

EIA assumes all asphalt and road oil consumption is for non-combustion use. For Table 1.11b, asphalt and road oil values in Table 1.11a are multiplied by 6.636 million Btu/ barrel (the approximate heat content of asphalt and road oil) and the number of days in the period.

#### Distillate & Residual Fuels

OEA estimates non-combustion ratios of distillate and residual fuels using chemical industry fuel product data reported in MECS. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. Distillate and residual fuel oils are included in "other" petroleum products. For Table 1.11b, distillate fuel values in Table 1.11a are multiplied by the appropriate values in Table A3 and the number of days in the period. Residual fuel values in Table 1.11a are multiplied by 6.287 million Btu/barrel (the approximate heat content of residual fuel oil) and the number of days in the period.

#### *Hydrocarbon Gas Liquids (HGL)*

OEA estimates non-combustion ratios of liquefied petroleum gas (LPG) components, including ethane, propane, and butane, using chemical industry fuel product data reported in MECS. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. OEA estimates non-combustion ratios of natural gasoline (pentanes plus) with annual surveys of natural gas liquids and refinery gases sold to the chemical industry published in EIA's Petroleum Supply Annual (PSA). All non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, HGL values in Table 1.11a are multiplied by the appropriate heat content factors in Table A1 and the number of days in the period.

#### Lubricants

EIA assumes all lubricants consumption are for non-combustion use in the industrial and transportation sectors. For Table 1.11b, lubricants values in Table 1.11a are multiplied by 6.065 million Btu/barrel (the approximate heat rate for lubricants) and the number of days in the period.

#### Petrochemical Feedstocks

EIA assumes all naphthas and other oils for petrochemical feedstock use are for non-combustion use. OEA estimates non-combustion ratios of still gas by deducting all known fuel uses (refinery fuel use from PSA and pipeline gas supplies from EIA's Natural Gas Annual) from the products supplied value from the PSA. The remainder is assumed to be dispatched to chemical plants as a feedstock. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, petrochemical feedstock values in 1.11a are multiplied by the appropriate values in Table A1 and the number of days in the period.

#### Petroleum Coke

EIA assumes all non-combustion use of petroleum coke occurs in the industrial sector. Examples include petroleum coke used in the production of chemicals and metals. EIA estimates non-combustion ratios of petroleum coke using PSA and MECS data. Values for years after the most recent MECS are assumed to be equal to the most recent MECS values. Non-combustion ratios prior to 1980 are assumed to be equal to the 1980 ratio. For Table 1.11b, petroleum coke values in 1.11a are multiplied by 5.719 million Btu/barrel (the approximate heat content of marketable petroleum coke) and the number of days in the period.

# Special Naphthas

EIA assumes all special naphthas consumption is for non- combustion use. For Table 1.11b, special naphthas values in Table 1.11a are multiplied by 5.248 million Btu/barrel (the approximate heat content of special naphthas) and the number of days in the period.

#### Waxes

EIA assumes all waxes consumption is for non-combustion use. Waxes are included in "other" petroleum products. For Table 1.11b, waxes values in Table 1.11a are multiplied by 5.537 million Btu/barrel (the approximate heat content of waxes) and the number of days in the period.

# Miscellaneous Petroleum Products

Miscellaneous products include all finished petroleum products not classified elsewhere. EIA assumes all miscellaneous petroleum products consumption are for non-combustion use and are included in "other" petroleum products. For Table

1.11b, miscellaneous petroleum values in Table 1.11a are multiplied by 5.796 million Btu/barrel (the approximate heat content of miscellaneous petroleum products) and the number of days in the period.

# **Table 1.2 Sources**

#### Coal

1949–1988: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5.

1989 forward: Coal production data from Table 6.1 are converted to Btu by multiplying by the coal production heat content factors in Table A5. Waste coal supplied data from Table 6.1 are converted to Btu by multiplying by the waste coal supplied heat content factors in Table A5. Coal production (including waste coal supplied) is equal to coal production plus waste coal supplied.

#### *Natural Gas (Dry)*

1949 forward: Natural gas (dry) production data from Table 4.1 are converted to Btu by multiplying by the natural gas (dry) production heat content factors in Table A4.

#### Crude Oil

1949 forward: Crude oil (including lease condensate) production data from Table 3.1 are converted to Btu by multiplying by the crude oil (including lease condensate) production heat content factors in Table A2.

#### NGPL

1949 forward: Natural gas plant liquids (NGPL) production data from Table 3.1 are converted to Btu by multiplying by the NGPL production heat content factors in Table A2.

#### Fossil Fuels Total

1949 forward: Total fossil fuels production is the sum of the production values for coal, natural gas (dry), crude oil, and NGPL.

#### Nuclear Electric Power

1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

#### Renewable Energy

1949 forward: Table 10.1.

# Total Primary Energy Production

1949 forward: Total primary energy production is the sum of the production values for fossil fuels, nuclear electric power, and renewable energy.

#### **Table 1.3 Sources**

#### Coal

1949 forward: Coal consumption data from Table 6.1 are converted to Btu by multiplying by the total coal consumption heat content factors in Table A5.

#### Natural Gas

1949–1979: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4.

1980 forward: Natural gas (including supplemental gaseous fuels) consumption data from Table 4.1 are converted to Btu by multiplying by the total natural gas consumption heat content factors in Table A4. Supplemental gaseous fuels data in Btu are estimated using the method described in Note 3, "Supplemental Gaseous Fuels," at the end of Section 4. Natural

gas (excluding supplemental gaseous fuels) consumption is equal to natural gas (including supplemental gaseous fuels) consumption minus supplemental gaseous fuels.

#### Petroleum

1949–1992: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6.

1993–2008: Petroleum (excluding biofuels) consumption is equal to total petroleum products supplied from Table 3.6 minus fuel ethanol consumption from Table 10.3.

2009 forward: Petroleum (excluding biofuels) consumption is equal to: total petroleum products supplied from Table 3.6; minus fuel ethanol (minus denaturant) consumption from Table 10.3; minus refinery and blender net inputs of renewable fuels (excluding fuel ethanol) from U.S. Energy Information Administration (EIA), Petroleum Supply Annual/Petroleum Supply Monthly, Table 1 (for biomass-based diesel fuel, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1).

# Coal Coke Net Imports

1949 forward: Coal coke net imports are equal to coal coke imports from Table 1.4a minus coal coke exports from Table 1.4b.

#### Fossil Fuels Total

1949 forward: Total fossil fuels consumption is the sum of the consumption values for coal, natural gas, and petroleum, plus coal coke net imports.

# Nuclear Electric Power

1949 forward: Nuclear electricity net generation data from Table 7.2a are converted to Btu by multiplying by the nuclear heat rate factors in Table A6.

#### Renewable Energy

1949 forward: Table 10.1.

### **Electricity Net Imports**

1949 forward: Electricity net imports are equal to electricity imports from Table 1.4a minus electricity exports from Table 1.4b.

# Total Primary Energy Consumption

1949 forward: Total primary energy consumption is the sum of the consumption values for fossil fuels, nuclear electric power, and renewable energy, plus electricity net imports.

#### **Table 1.4a Sources**

#### Coal

1949 forward: Coal imports data from Table 6.1 are converted to Btu by multiplying by the coal imports heat content factors in Table A5.

#### Coal Coke

1949 forward: Coal coke imports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report IM 145, are converted to Btu by multiplying by the coal coke imports heat content factor in Table A5.

#### Natural Gas

1949 forward: Natural gas imports data from Table 4.1 are converted to Btu by multiplying by the natural gas imports heat content factors in Table A4.

#### Crude Oil

1949 forward: Crude oil imports data from Table 3.3b are converted to Btu by multiplying by the crude oil imports heat content factors in Table A2.

#### Petroleum Products

1949–1992: Petroleum products (excluding biofuels) imports are equal to total petroleum imports from Table 3.3b minus crude oil imports from Table 3.3b; petroleum products (excluding biofuels) imports data are converted to Btu by multiplying by the total petroleum products imports heat content factors in Table A2.

1993–2008: Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see "Biomass—Fuel Ethanol (Minus Denaturant)" sources below).

2009 forward: Renewable fuels (excluding fuel ethanol) imports data are from U.S. Energy Information Administration, Petroleum Supply Annual (PSA), Tables 1 and 25, and Petroleum Supply Monthly (PSM), Tables 1 and 37 (for biomass-based diesel fuel and other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1; for other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1). Petroleum products (excluding biofuels) imports are equal to petroleum products (including biofuels) imports (see 1949–1992 sources above) minus fuel ethanol (minus denaturant) imports (see "Biomass—Fuel Ethanol (Minus Denaturant)" sources below) minus renewable fuels (excluding fuel ethanol) imports.

#### Total Petroleum

1949 forward: Total petroleum imports are equal to crude oil imports plus petroleum products imports.

#### Biomass—Fuel Ethanol (Minus Denaturant)

1993 forward: Fuel ethanol (including denaturant) imports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) imports are equal to fuel ethanol (including denaturant) imports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) imports data are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

#### Biomass—Biodiesel

2001 forward: Biodiesel imports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

#### Biomass—Other Renewable Fuels

2009 forward: Other renewable fuels imports data are from PSA Table 25 and PSM Table 37. For other renewable diesel fuel, the data are converted to Btu by multiplying by the other renewable diesel fuel heat content factor in Table A1; for other renewable fuels, the data are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

#### Total Biomass

1993–2000: Total biomass imports are equal to fuel ethanol (minus denaturant) imports.

2001–2008: Total biomass imports are equal to fuel ethanol (minus denaturant) imports plus biodiesel imports.

2009 forward: Total biomass imports are the sum of imports values for fuel ethanol (minus denaturant), biodiesel, and other renewable fuels.

#### *Electricity*

1949 forward: Electricity imports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

# Total Primary Energy Imports

1949 forward: Total primary energy imports are the sum of the imports values for coal, coal coke, natural gas, total petroleum, total biomass, and electricity.

# **Table 1.4b Sources**

#### Coal

1949 forward: Coal exports data from Table 6.1 are converted to Btu by multiplying by the coal exports heat content factors in Table A5.

#### Coal Coke

1949 forward: Coal coke exports data from U.S. Department of Commerce, Bureau of the Census, Monthly Report EM 545, are converted to Btu by multiplying by the coal coke exports heat content factor in Table A5.

#### Natural Gas

1949 forward: Natural gas exports data from Table 4.1 are converted to Btu by multiplying by the natural gas exports heat content factors in Table A4.

#### Crude Oil

1949 forward: Crude oil exports data from Table 3.3b are converted to Btu by multiplying by the crude oil exports heat content factor in Table A2.

#### Petroleum Products

1949–2009: Petroleum products (excluding biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (excluding biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2.

2010: Petroleum products (including biofuels) exports are equal to total petroleum exports from Table 3.3b minus crude oil exports from Table 3.3b; petroleum products (including biofuels) exports data are converted to Btu by multiplying by the total petroleum products exports heat content factors in Table A2. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports minus fuel ethanol (minus denaturant) exports (see "Biomass—Fuel Ethanol (Minus Denaturant)" sources below).

2011 forward: Biomass-based diesel fuel exports data are from U.S. Energy Information Administration (EIA), Petroleum Supply Annual (PSA), Table 31, and Petroleum Supply Monthly (PSM), Table 49, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1. Petroleum products (excluding biofuels) exports are equal to petroleum products (including biofuels) exports (see 2010 sources above) minus fuel ethanol (minus denaturant) exports (see "Biomass—Fuel Ethanol (Minus Denaturant)" sources below) minus biomass-based diesel fuel exports.

#### Total Petroleum

1949 forward: Total petroleum exports are equal to crude oil exports plus petroleum products exports.

#### Biomass—Fuel Ethanol (Minus Denaturant)

2010 forward: Fuel ethanol (including denaturant) exports data are from PSA/PSM Table 1. Fuel ethanol (minus denaturant) production is equal to fuel ethanol (including denaturant) production from Table 10.3 minus denaturant from Table 10.3. Fuel ethanol (minus denaturant) exports are equal to fuel ethanol (including denaturant) exports multiplied by the ratio of fuel ethanol (minus denaturant) production to fuel ethanol (including denaturant) production. Fuel ethanol (minus denaturant) exports are converted to Btu by multiplying by 3.539 million Btu per barrel, the undenatured ethanol heat content factor in Table A3.

### Biomass—Biodiesel

2001 forward: Biodiesel exports data are from Table 10.4, and are converted to Btu by multiplying by the biodiesel heat content factor in Table A1.

Biomass—Densified Biomass

2016 forward: Densified biomass exports data are from EIA, Form EIA-63C, "Densified Biomass Fuel Report."

**Total Biomass** 

2001–2009: Total biomass exports are equal to biodiesel exports.

2010 forward: Total biomass exports are equal to fuel ethanol (minus denaturant) exports plus biodiesel exports.

2016 forward: Total biomass exports are the sum of the exports values for fuel ethanol (minus denaturant), biodiesel, and densified biomass.

*Electricity* 

1949 forward: Electricity exports data from Table 7.1 are converted to Btu by multiplying by the electricity heat content factor in Table A6.

Total Primary Energy Exports

1949 forward: Total primary energy exports are the sum of the exports values for coal, coal coke, natural gas, total petroleum, total biomass, and electricity.

Total Primary Energy Net Imports

1949 forward: Total primary energy net imports are equal to total primary energy imports from Table 1.4a minus total primary energy exports.

# **Table 1.5 Sources**

U.S. Department of Commerce, U.S. Census Bureau, Foreign Trade Division:

Petroleum Exports

1974–1987: "U.S. Exports," FT-410, December issues.

1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

1990–1992: "U.S. Merchandise Trade," Final Report.

1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.

2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.

2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.

2015 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.

Petroleum Imports

1974–1987: "U.S. Merchandise Trade," FT-900, December issues, 1975–1988.

1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

1990–1993: "U.S. Merchandise Trade," Final Report.

1994–2009: "U.S. International Trade in Goods and Services," Annual Revisions.

2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.

2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.

2015 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.

# Energy Exports and Imports

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January–July, monthly FT-900 supplement, 1989 issues. August–December, monthly FT-900, 1989 issues.

1989: Monthly FT-900, 1990 issues.

1990–1992: "U.S. Merchandise Trade," Final Report. 1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.

1993–2009: "U.S. International Trade in Goods and Services," Annual Revisions.

2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.

2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.

2015 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### Petroleum Balance

1974 forward: The petroleum balance is calculated by the U.S. Energy Information Administration (EIA) as petroleum imports minus petroleum exports.

# Energy Balance

1974 forward: The energy balance is calculated by EIA as energy imports minus energy exports.

# Non-Energy Balance

1974 forward: The non-energy balance is calculated by EIA as the total merchandise balance minus the energy balance.

#### Total Merchandise

1974–1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.

1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.

1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992,"

February 18, 1993, page 3.

1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1992–2009: "U.S. International Trade in Goods and Services," Annual Revisions.

2010–2011: "U.S. International Trade in Goods and Services," 2012 Annual Revisions.

2012–2014: "U.S. International Trade in Goods and Services," 2014 Annual Revisions.

2015 forward: "U.S. International Trade in Goods and Services," FT-900, monthly.