

Table 33. Transportation Sector Energy Use by Mode and Type (Trillion Btu) (1 of 2)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 | |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|
| Energy Use by Mode | | | | | | | | | | | | | | | | | | | | | | | | |
| Highway | | | | | | | | | | | | | | | | | | | | | | | | |
| Light-Duty Vehicles | 14641 | 15288 | 15666 | 16010 | 16279 | 16641 | 16966 | 17303 | 17632 | 17928 | 18234 | 18537 | 18795 | 19034 | 19299 | 19590 | 19867 | 20103 | 20324 | 20556 | 20781 | 21027 | 1.7% | |
| Automobiles | 7948 | 7784 | 7758 | 7707 | 7615 | 7573 | 7516 | 7473 | 7435 | 7389 | 7355 | 7336 | 7296 | 7265 | 7259 | 7262 | 7276 | 7290 | 7302 | 7326 | 7351 | 7394 | -0.3% | |
| Light Trucks | 6670 | 7482 | 7889 | 8282 | 8641 | 9045 | 9429 | 9812 | 10176 | 10519 | 10858 | 11181 | 11478 | 11748 | 12019 | 12308 | 12570 | 12791 | 13000 | 13209 | 13409 | 13611 | 3.3% | |
| Motorcycles | 22.8 | 22.4 | 22.3 | 22.1 | 21.9 | 21.8 | 21.6 | 21.5 | 21.4 | 21.2 | 21.1 | 21.1 | 21.0 | 20.9 | 20.8 | 20.9 | 20.9 | 20.9 | 20.9 | 21.0 | 21.0 | 21.1 | 21.2 | -0.3% |
| Commercial Light Trucks 1/ | 612.8 | 623.5 | 631.4 | 642.3 | 652.3 | 662.8 | 673.1 | 681.6 | 690.2 | 698.5 | 705.6 | 714.0 | 720.0 | 727.5 | 736.7 | 747.2 | 757.4 | 762.9 | 769.7 | 777.1 | 785.2 | 793.2 | 1.2% | |
| Buses | 151.5 | 152.3 | 152.8 | 153.2 | 153.5 | 154.1 | 154.4 | 154.7 | 155.0 | 155.1 | 155.2 | 155.1 | 154.9 | 154.7 | 154.4 | 154.2 | 153.9 | 153.7 | 153.3 | 152.9 | 152.5 | 152.0 | 0.0% | |
| Transit | 73.0 | 73.3 | 73.6 | 73.8 | 73.9 | 74.2 | 74.4 | 74.5 | 74.6 | 74.7 | 74.7 | 74.7 | 74.6 | 74.5 | 74.3 | 74.2 | 74.1 | 74.0 | 73.8 | 73.6 | 73.4 | 73.2 | 0.0% | |
| Intercity | 19.8 | 19.9 | 20.0 | 20.0 | 20.1 | 20.2 | 20.2 | 20.2 | 20.3 | 20.3 | 20.3 | 20.3 | 20.3 | 20.2 | 20.2 | 20.2 | 20.1 | 20.1 | 20.1 | 20.0 | 19.9 | 19.9 | 0.0% | |
| School | 58.7 | 59.0 | 59.2 | 59.4 | 59.5 | 59.7 | 59.9 | 60.0 | 60.1 | 60.1 | 60.1 | 60.1 | 60.0 | 59.9 | 59.8 | 59.7 | 59.7 | 59.6 | 59.4 | 59.3 | 59.1 | 58.9 | 0.0% | |
| Freight Trucks 2/ | 4139.9 | 4283.3 | 4339.0 | 4414.2 | 4493.8 | 4562.5 | 4627.5 | 4668.0 | 4709.6 | 4744.4 | 4759.0 | 4789.9 | 4797.9 | 4821.5 | 4858.7 | 4901.2 | 4939.7 | 4948.4 | 4969.4 | 4988.1 | 5006.9 | 5025.9 | 0.9% | |
| Medium (1000-26000 pounds) | 856.6 | 826.3 | 816.0 | 810.1 | 808.4 | 803.5 | 800.5 | 799.2 | 799.9 | 802.2 | 803.4 | 806.8 | 808.0 | 812.0 | 818.9 | 828.8 | 834.9 | 838.2 | 844.6 | 851.4 | 858.8 | 866.4 | 0.1% | |
| Large (> 26000 pounds) | 3283.3 | 3457.1 | 3522.9 | 3604.0 | 3685.4 | 3759.0 | 3827.0 | 3868.8 | 3909.7 | 3942.2 | 3955.6 | 3983.1 | 3989.9 | 4009.5 | 4039.8 | 4074.3 | 4104.8 | 4110.1 | 4124.8 | 4136.6 | 4148.1 | 4159.4 | 1.1% | |
| Non-Highway | | | | | | | | | | | | | | | | | | | | | | | | |
| Air 3/ | 3090.2 | 3294.9 | 3401.9 | 3520.1 | 3662.6 | 3812.9 | 3946.9 | 4100.9 | 4226.4 | 4372.8 | 4499.4 | 4656.6 | 4770.1 | 4914.0 | 5054.6 | 5231.5 | 5386.1 | 5540.1 | 5674.8 | 5836.7 | 5980.1 | 6124.8 | 3.2% | |
| General Aviation | 181.0 | 190.0 | 194.8 | 200.1 | 206.5 | 213.3 | 219.3 | 226.3 | 231.9 | 238.5 | 244.3 | 251.4 | 256.5 | 263.0 | 269.4 | 277.4 | 284.4 | 291.4 | 297.5 | 304.8 | 311.3 | 317.9 | 2.6% | |
| Domestic Air Carriers | 1760.4 | 1843.5 | 1889.9 | 1929.4 | 2000.1 | 2052.4 | 2101.4 | 2143.5 | 2185.3 | 2226.9 | 2266.5 | 2311.4 | 2344.2 | 2383.0 | 2429.1 | 2481.7 | 2533.8 | 2574.7 | 2617.5 | 2662.9 | 2712.0 | 2762.2 | 2.1% | |
| International Air Carriers | 728.7 | 798.8 | 819.6 | 855.5 | 876.2 | 919.5 | 943.2 | 996.9 | 1018.6 | 1060.4 | 1081.1 | 1125.9 | 1144.4 | 1187.5 | 1213.2 | 1265.6 | 1294.3 | 1340.2 | 1363.0 | 1412.5 | 1439.1 | 1466.4 | 3.2% | |
| Freight Carriers | 420.2 | 462.6 | 497.6 | 535.1 | 579.7 | 627.7 | 682.9 | 734.2 | 790.6 | 846.9 | 907.6 | 967.9 | 1025.0 | 1080.5 | 1142.9 | 1206.8 | 1273.5 | 1333.8 | 1396.8 | 1456.4 | 1517.7 | 1578.2 | 6.2% | |
| Water 4/ | 1161.4 | 1205.3 | 1224.7 | 1247.2 | 1274.4 | 1304.4 | 1336.5 | 1366.5 | 1396.7 | 1427.6 | 1457.9 | 1490.9 | 1519.4 | 1547.4 | 1578.4 | 1612.0 | 1646.2 | 1674.4 | 1703.2 | 1733.3 | 1764.4 | 1796.5 | 2.0% | |
| Freight | 910.5 | 951.0 | 968.6 | 989.2 | 1014.4 | 1042.1 | 1072.1 | 1100.0 | 1128.2 | 1157.0 | 1185.4 | 1216.3 | 1243.1 | 1269.2 | 1298.1 | 1329.4 | 1361.4 | 1387.6 | 1414.6 | 1442.6 | 1471.6 | 1501.6 | 2.3% | |
| Domestic Shipping | 283.8 | 282.5 | 279.5 | 278.5 | 279.0 | 278.8 | 279.3 | 279.1 | 279.1 | 278.7 | 277.2 | 277.1 | 275.8 | 275.2 | 275.3 | 275.8 | 276.3 | 274.8 | 274.1 | 273.0 | 272.0 | 270.8 | -0.2% | |
| International Shipping | 626.7 | 668.5 | 689.1 | 710.7 | 735.4 | 763.2 | 792.8 | 820.9 | 849.1 | 878.3 | 908.2 | 939.2 | 967.2 | 994.0 | 1022.8 | 1053.6 | 1085.1 | 1112.7 | 1140.5 | 1169.5 | 1199.6 | 1230.8 | 3.1% | |
| Recreational Boats | 250.9 | 254.2 | 256.2 | 258.1 | 260.0 | 262.3 | 264.4 | 266.5 | 268.5 | 270.5 | 272.5 | 274.6 | 276.4 | 278.2 | 280.3 | 282.6 | 284.9 | 286.8 | 288.7 | 290.7 | 292.8 | 294.9 | 0.7% | |
| Rail | 558.2 | 568.0 | 575.3 | 581.3 | 585.0 | 591.2 | 595.0 | 601.0 | 603.9 | 607.0 | 604.8 | 609.2 | 613.6 | 614.8 | 617.6 | 620.1 | 623.7 | 627.0 | 629.7 | 632.0 | 634.3 | 636.8 | 0.6% | |
| Freight | 456.2 | 462.1 | 467.4 | 471.4 | 473.1 | 477.2 | 479.1 | 483.2 | 484.2 | 485.3 | 481.1 | 483.5 | 486.0 | 485.3 | 486.1 | 486.6 | 488.2 | 489.5 | 490.3 | 490.5 | 490.7 | 491.0 | 0.3% | |
| Passenger | 102.0 | 105.8 | 107.9 | 109.9 | 112.0 | 114.0 | 115.9 | 117.8 | 119.7 | 121.7 | 123.7 | 125.7 | 127.6 | 129.5 | 131.5 | 133.5 | 135.6 | 137.5 | 139.5 | 141.5 | 143.6 | 145.8 | 1.6% | |
| Intercity | 19.3 | 20.1 | 20.5 | 20.9 | 21.2 | 21.6 | 22.0 | 22.3 | 22.7 | 23.1 | 23.5 | 23.8 | 24.2 | 24.6 | 24.9 | 25.3 | 25.7 | 26.1 | 26.5 | 26.8 | 27.2 | 27.7 | 1.6% | |
| Transit | 44.5 | 46.1 | 47.0 | 47.9 | 48.8 | 49.7 | 50.5 | 51.3 | 52.2 | 53.0 | 53.9 | 54.8 | 55.6 | 56.4 | 57.3 | 58.2 | 59.1 | 59.9 | 60.8 | 61.7 | 62.6 | 63.5 | 1.6% | |
| Commuter | 38.2 | 39.6 | 40.4 | 41.2 | 41.9 | 42.7 | 43.4 | 44.1 | 44.8 | 45.6 | 46.3 | 47.1 | 47.8 | 48.5 | 49.3 | 50.0 | 50.8 | 51.5 | 52.2 | 53.0 | 53.8 | 54.6 | 1.6% | |
| Lubricants | 258.6 | 267.9 | 270.9 | 273.1 | 275.0 | 278.2 | 282.9 | 287.0 | 290.6 | 293.4 | 295.2 | 297.7 | 299.4 | 301.7 | 305.0 | 309.2 | 313.7 | 316.8 | 319.7 | 321.9 | 323.7 | 325.9 | 1.1% | |
| Pipeline Fuel Natural Gas | 751.5 | 770.7 | 747.6 | 745.8 | 751.9 | 754.4 | 767.8 | 788.9 | 812.6 | 830.0 | 840.6 | 866.4 | 881.3 | 895.2 | 909.5 | 927.4 | 948.1 | 957.4 | 968.5 | 977.6 | 983.3 | 987.9 | 1.3% | |
| Military Use | | | | | | | | | | | | | | | | | | | | | | | | |
| Aviation | 521.3 | 528.5 | 524.1 | 521.6 | 518.3 | 516.7 | 520.0 | 525.4 | 530.2 | 535.2 | 539.8 | 542.2 | 542.9 | 544.4 | 545.9 | 547.4 | 548.9 | 550.5 | 552.1 | 553.7 | 555.3 | 556.9 | 0.3% | |
| Residual Fuel Use | 455.0 | 460.7 | 456.9 | 454.7 | 451.8 | 450.4 | 453.3 | 458.0 | 462.2 | 466.6 | 470.5 | 472.7 | 473.3 | 474.5 | 475.8 | 477.2 | 478.5 | 479.9 | 481.3 | 482.7 | 484.1 | 485.5 | 0.3% | |
| Distillate Fuel Use | 7.8 | 8.2 | 8.1 | 8.1 | 8.0 | 8.0 | 8.1 | 8.2 | 8.2 | 8.3 | 8.4 | 8.4 | 8.4 | 8.5 | 8.5 | 8.5 | 8.5 | 8.5 | 8.6 | 8.6 | 8.6 | 8.6 | 0.5% | |
| Total | 25886.2 | 26982.4 | 27533.9 | 28108.9 | 28645.8 | 29277.7 | 29870.3 | 30476.8 | 31046.9 | 31592.2 | 32091.0 | 32658.7 | 33094.6 | 33554.8 | 34059.3 | 34640.1 | 35184.8 | 35633.6 | 36064.4 | 36529.7 | 36967.2 | 37427.1 | 1.7% | |
| Energy Use by Type | | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 15589.0 | 16173.4 | 16512.1 | 16817.6 | 17043.8 | 17369.0 | 17654.3 | 17958.5 | 18258.4 | 18523.3 | 18792.9 | 19059.5 | 19278.6 | 19479.8 | 19708.5 | 19964.9 | 20208.7 | 20409.1 | 20600.5 | 20805.8 | 21007.6 | 21231.9 | 1.4% | |
| Distillate (diesel) | 4946.0 | 5117.7 | 5185.3 | 5273.7 | 5364.5 | 5448.6 | 5530.2 | 5582.6 | 5634.7 | 5682.2 | 5706.5 | 5757.3 | 5786.8 | 5830.3 | 5890.8 | 5958.1 | 6023.0 | 6056.3 | 6100.8 | 6142.2 | 6183.1 | 6224.0 | 1.1% | |
| Jet Fuel (kerosene & naptha) | 3357.0 | 3557.8 | 3650.0 | 3766.4 | 3893.2 | 4041.0 | 4171.5 | 4322.9 | 4446.7 | 4590.4 | 4715.0 | 4866.9 | 4975.5 | 5113.9 | 5249.1 | 5418.9 | 5567.4 | 5715.5 | 5845.1 | 6000.6 | 6138.7 | 6277.8 | 2.9% | |
| Residual Oil | 650.0 | 689.4 | 706.7 | 725.7 | 747.8 | 772.5 | 799.0 | 824.1 | 849.3 | 875.3 | 901.5 | 929.2 | 953.8 | 977.4 | 1003.2 | 1030.8 | 1059.0 | 1083.2 | 1107.7 | 1133.3 | 1159.8 | 1187.3 | 2.8% | |
| Aviation Gasoline | 42.8 | 42.6 | 42.5 | 42.4 | 42.3 | 42.3 | 42.3 | 42.2 | 42.2 | 42.2 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | -0.1% | |
| Liquid Petroleum Gas | 45.1 | 54.3 | 61.6 | 68.5 | 74.8 | 80.8 | 86.3 | 91.1 | 95.1 | 99.2 | 103.1 | 106.9 | 110.3 | 113.4 | 116.7 | 119.9 | 123.0 | 125.4 | 127.6 | 129.6 | 131.3 | 132.8 | 5.0% | |
| Lubricants | 258.6 | 267.9 | 270.9 | 273.1 | 275.0 | 278.2 | 282.9 | 287.0 | 290.6 | 293.4 | 295.2 | 297.7 | 299.4 | 301.7 | 305.0 | 309.2 | 313.7 | 316.8 | 319.7 | 321.9 | 323.7 | 325.9 | 1.1% | |
| Oil Subtotal | 24888.5 | 25903.1 | 26435.1 | 26967.3 | 27447.5 | 28032.5 | 28566.5 | 29108.4 | 29617.0 | 30105.9 | 30556.4 | 31059.6 | 31446.4 | 31858.6 | 32315.3 | 32844.0 | 33336.9 | 33748.5 | 34143.6 | 34575.5 | 34986.3 | 35421.8 | 1.6% | |
| Methanol | 8.1 | 21.1 | 29.8 | 40.1 | 50.7 | 55.1 | 63.3 | 72.1 | 78.9 | 86.4 | 93.7 | 101.0 | 107.8 | 114.2 | 120.5 | 126.5 | 132.0 | 137.2 | 141.7 | 145.7 | 149.0 | 152.0 | 14.3% | |
| Ethanol | 2.9 | 9.1 | 13.0 | 17.4 | 22.0 | 27.2 | 32.4 | 37.7 | 42.9 | 47.7 | 52.6 | 57.1 | 61.1 | 64.7 | 68.0 | 71.1 | 73.7 | 75.7 | 77.2 | 78.4 | 79.0 | 79.4 | 16.3% | |
| Electricity | 67.7 | 70.8 | 72.5 | 74.2 | 81.7 | | | | | | | | | | | | | | | | | | | |

Table 33. Transportation Sector Energy Use by Mode and Type (Trillion Btu) (2 of 2)

1/ Commercial light trucks from 8,500 to 10,000 pounds.

2/ Does not include commercial bus and military use.

3/ Does not include military jet fuel use.

4/ Does not include military residual oil.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most current available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 values derived using: Energy Information Administration (EIA), Short-Term Energy Outlook, September 1999, Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.html> (October 12, 1999); EIA, Fuel Oil and Kerosene Sales 1997, DOE/EIA-0535(97) (Washington, D.C., August 1998); EIA, State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Oak Ridge National Laboratory, Transportation Energy Book: 17 and 18 (September 1998); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode (1 of 2)
(Trillion Btu per Year)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Light-Duty Vehicle | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 14368.1 | 14987.9 | 15335.7 | 15646.6 | 15877.0 | 16203.4 | 16488.8 | 16793.7 | 17093.5 | 17357.5 | 17626.8 | 17890.8 | 18109.8 | 18308.2 | 18531.7 | 18780.7 | 19016.8 | 19214.5 | 19401.4 | 19600.9 | 19796.0 | 20013.1 | 1.5% |
| Methanol | 8.05 | 21.13 | 29.82 | 40.09 | 50.67 | 55.12 | 63.29 | 72.07 | 78.87 | 86.43 | 93.70 | 100.96 | 107.77 | 114.23 | 120.47 | 126.47 | 131.99 | 137.19 | 141.66 | 145.68 | 149.01 | 151.95 | 14.3% |
| Ethanol | 2.85 | 9.07 | 12.96 | 17.44 | 21.98 | 27.15 | 32.42 | 37.73 | 42.88 | 47.71 | 52.55 | 57.10 | 61.07 | 64.69 | 68.04 | 71.07 | 73.67 | 75.70 | 77.21 | 78.35 | 79.03 | 79.38 | 16.3% |
| Compressed Natural Gas | 19.69 | 49.81 | 72.48 | 94.36 | 114.28 | 133.15 | 149.69 | 163.39 | 174.83 | 185.85 | 196.59 | 206.87 | 216.15 | 224.70 | 233.21 | 241.71 | 249.62 | 256.49 | 262.53 | 268.06 | 272.90 | 277.50 | 12.8% |
| Liquid Petroleum Gas | 24.45 | 35.00 | 42.52 | 49.69 | 56.03 | 62.13 | 67.49 | 71.98 | 75.79 | 79.46 | 83.02 | 86.44 | 89.53 | 92.34 | 95.17 | 98.00 | 100.63 | 102.89 | 104.83 | 106.55 | 107.98 | 109.31 | 7.0% |
| Electricity | 0.45 | 1.04 | 1.41 | 1.77 | 2.15 | 2.52 | 2.89 | 3.26 | 3.63 | 4.00 | 4.37 | 4.74 | 5.11 | 5.48 | 5.85 | 6.22 | 6.59 | 6.96 | 7.33 | 7.70 | 8.07 | 8.44 | 26.0% |
| Liquid Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Distillate (diesel) | 217.19 | 184.15 | 171.26 | 160.20 | 150.93 | 145.78 | 145.12 | 139.70 | 137.37 | 138.63 | 144.05 | 153.39 | 165.63 | 180.24 | 196.95 | 215.23 | 234.17 | 252.56 | 270.65 | 288.76 | 306.38 | 323.81 | 1.8% |
| Total | 14640.8 | 15288.1 | 15666.1 | 16010.2 | 16278.9 | 16640.7 | 16966.2 | 17302.8 | 17631.6 | 17928.2 | 18233.5 | 18536.6 | 18795.2 | 19033.6 | 19298.6 | 19590.0 | 19867.1 | 20102.6 | 20324.0 | 20556.5 | 20781.5 | 21027.1 | 1.7% |
| Commercial LT. Gasoline 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 612.81 | 623.48 | 631.41 | 642.33 | 652.28 | 662.80 | 673.12 | 681.61 | 690.25 | 698.51 | 705.59 | 714.04 | 719.98 | 727.51 | 736.72 | 747.23 | 757.35 | 762.90 | 769.65 | 777.11 | 785.19 | 793.22 | 1.2% |
| Freight Trucks 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 349.92 | 300.46 | 281.55 | 263.25 | 247.16 | 233.14 | 220.54 | 209.23 | 198.63 | 189.25 | 180.56 | 172.69 | 165.05 | 158.45 | 152.43 | 147.05 | 142.30 | 137.50 | 133.44 | 129.68 | 126.35 | 123.32 | -4.6% |
| Distillate (diesel) | 3766.92 | 3960.88 | 4035.33 | 4128.42 | 4223.02 | 4304.24 | 4379.73 | 4428.92 | 4477.92 | 4518.67 | 4538.30 | 4573.18 | 4585.18 | 4611.68 | 4651.00 | 4695.16 | 4735.09 | 4746.08 | 4768.70 | 4788.81 | 4808.86 | 4828.95 | 1.1% |
| Compressed Natural Gas | 2.45 | 2.66 | 3.02 | 3.71 | 4.89 | 6.46 | 8.45 | 10.83 | 13.70 | 16.78 | 20.08 | 23.58 | 26.88 | 30.25 | 33.74 | 37.00 | 39.93 | 42.22 | 44.45 | 46.52 | 48.40 | 50.12 | 14.7% |
| Liquid Petroleum Gas | 20.61 | 19.34 | 19.10 | 18.79 | 18.77 | 18.66 | 18.80 | 19.08 | 19.36 | 19.70 | 20.05 | 20.45 | 20.75 | 21.10 | 21.52 | 21.94 | 22.33 | 22.55 | 22.81 | 23.05 | 23.28 | 23.49 | 0.6% |
| Total | 4139.90 | 4283.34 | 4338.99 | 4414.16 | 4493.84 | 4562.49 | 4627.51 | 4668.05 | 4709.61 | 4744.40 | 4758.99 | 4789.90 | 4797.85 | 4821.49 | 4858.68 | 4901.15 | 4939.66 | 4948.35 | 4969.39 | 4988.05 | 5006.89 | 5025.89 | 0.9% |
| Freight Rail 3/ | | | | | | | | | | | | | | | | | | | | | | | |
| Distillate (diesel) | 456.23 | 462.14 | 467.40 | 471.36 | 473.06 | 477.25 | 479.10 | 483.22 | 484.18 | 485.32 | 481.14 | 483.54 | 486.03 | 485.32 | 486.09 | 486.60 | 488.17 | 489.54 | 490.27 | 490.49 | 490.67 | 490.98 | 0.3% |
| Total | 456.23 | 462.14 | 467.40 | 471.36 | 473.06 | 477.25 | 479.10 | 483.22 | 484.18 | 485.32 | 481.14 | 483.54 | 486.03 | 485.32 | 486.09 | 486.60 | 488.17 | 489.54 | 490.27 | 490.49 | 490.67 | 490.98 | 0.3% |
| Domestic Shipping | | | | | | | | | | | | | | | | | | | | | | | |
| Distillate (diesel) | 199.98 | 196.98 | 194.89 | 194.15 | 194.54 | 194.39 | 194.69 | 194.58 | 194.60 | 194.30 | 193.25 | 193.18 | 192.31 | 191.87 | 191.93 | 192.28 | 192.64 | 191.61 | 191.09 | 190.37 | 189.64 | 188.81 | -0.3% |
| Residual Oil | 83.85 | 85.55 | 84.64 | 84.32 | 84.49 | 84.43 | 84.56 | 84.51 | 84.52 | 84.39 | 83.93 | 83.90 | 83.52 | 83.33 | 83.36 | 83.51 | 83.67 | 83.22 | 83.00 | 82.68 | 82.36 | 82.00 | -0.1% |
| Motor Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total | 283.83 | 282.54 | 279.53 | 278.47 | 279.03 | 278.82 | 279.25 | 279.09 | 279.11 | 278.69 | 277.19 | 277.09 | 275.83 | 275.21 | 275.29 | 275.79 | 276.30 | 274.83 | 274.09 | 273.05 | 272.00 | 270.82 | -0.2% |
| International Shipping | | | | | | | | | | | | | | | | | | | | | | | |
| Distillate (diesel) | 68.32 | 72.87 | 75.11 | 77.47 | 80.16 | 83.19 | 86.42 | 89.48 | 92.55 | 95.74 | 98.99 | 102.37 | 105.43 | 108.35 | 111.49 | 114.84 | 118.27 | 121.29 | 124.31 | 127.48 | 130.76 | 134.16 | 3.1% |
| Residual Oil | 558.38 | 595.63 | 613.95 | 633.23 | 655.26 | 680.05 | 706.41 | 731.46 | 756.55 | 782.59 | 809.18 | 836.85 | 861.80 | 885.66 | 911.33 | 938.78 | 966.78 | 991.46 | 1016.15 | 1042.05 | 1068.85 | 1096.65 | 3.1% |
| Total | 626.69 | 668.49 | 689.06 | 710.70 | 735.42 | 763.25 | 792.83 | 820.94 | 849.10 | 878.33 | 908.17 | 939.23 | 967.23 | 994.00 | 1022.81 | 1053.62 | 1085.05 | 1112.75 | 1140.46 | 1169.53 | 1199.60 | 1230.81 | 3.1% |
| Air Transportation | | | | | | | | | | | | | | | | | | | | | | | |
| Jet Fuel | 2901.97 | 3097.06 | 3199.06 | 3311.73 | 3447.43 | 3590.64 | 3718.25 | 3864.95 | 3984.46 | 4123.87 | 4244.51 | 4394.21 | 4502.25 | 4639.38 | 4773.23 | 4941.71 | 5088.89 | 5235.62 | 5363.83 | 5517.99 | 5654.63 | 5792.36 | 3.2% |
| Aviation Gasoline | 42.79 | 42.56 | 42.48 | 42.41 | 42.35 | 42.30 | 42.26 | 42.23 | 42.20 | 42.18 | 42.16 | 42.14 | 42.13 | 42.12 | 42.11 | 42.10 | 42.10 | 42.09 | 42.09 | 42.08 | 42.08 | 42.08 | -0.1% |
| Total | 2944.76 | 3139.62 | 3241.53 | 3354.14 | 3489.78 | 3632.94 | 3760.51 | 3907.17 | 4026.66 | 4166.05 | 4286.67 | 4436.35 | 4544.38 | 4681.50 | 4815.34 | 4983.82 | 5130.99 | 5277.71 | 5405.92 | 5560.07 | 5696.71 | 5834.43 | 3.2% |
| Miscellaneous Transportation | | | | | | | | | | | | | | | | | | | | | | | |
| Military Use | | | | | | | | | | | | | | | | | | | | | | | |
| Jet Fuel | 455.03 | 460.73 | 456.90 | 454.65 | 451.78 | 450.38 | 453.27 | 458.00 | 462.20 | 466.55 | 470.53 | 472.66 | 473.26 | 474.53 | 475.85 | 477.18 | 478.53 | 479.89 | 481.27 | 482.66 | 484.06 | 485.46 | 0.3% |
| Residual Fuel | 7.77 | 8.21 | 8.14 | 8.10 | 8.05 | 8.02 | 8.08 | 8.16 | 8.23 | 8.31 | 8.38 | 8.42 | 8.43 | 8.45 | 8.48 | 8.50 | 8.53 | 8.55 | 8.57 | 8.60 | 8.62 | 8.65 | 0.5% |
| Distillate | 58.46 | 59.59 | 59.10 | 58.81 | 58.44 | 58.25 | 58.63 | 59.24 | 59.78 | 60.35 | 60.86 | 61.14 | 61.21 | 61.38 | 61.55 | 61.72 | 61.89 | 62.07 | 62.25 | 62.43 | 62.61 | 62.79 | 0.3% |
| Total | 521.26 | 528.54 | 524.14 | 521.56 | 518.27 | 516.66 | 519.97 | 525.40 | 530.22 | 535.21 | 539.77 | 542.22 | 542.91 | 544.37 | 545.87 | 547.40 | 548.95 | 550.51 | 552.09 | 553.69 | 555.29 | 556.90 | 0.3% |

**Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode (2 of 2)
(Trillion Btu per Year)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------|
| Bus Transportation | | | | | | | | | | | | | | | | | | | | | | | |
| Transit Bus (motor gasoline) | 4.06 | 4.04 | 4.06 | 4.07 | 4.08 | 4.09 | 4.10 | 4.11 | 4.11 | 4.12 | 4.12 | 4.12 | 4.11 | 4.11 | 4.10 | 4.09 | 4.09 | 4.08 | 4.07 | 4.06 | 4.05 | 4.04 | 0.0% |
| Transit Bus (diesel) | 68.93 | 69.30 | 69.52 | 69.70 | 69.87 | 70.11 | 70.27 | 70.41 | 70.51 | 70.59 | 70.62 | 70.59 | 70.49 | 70.38 | 70.25 | 70.15 | 70.05 | 69.93 | 69.77 | 69.58 | 69.39 | 69.18 | 0.0% |
| Intercity Bus (diesel) | 19.82 | 19.92 | 19.99 | 20.04 | 20.09 | 20.16 | 20.20 | 20.24 | 20.27 | 20.29 | 20.30 | 20.29 | 20.26 | 20.23 | 20.19 | 20.17 | 20.14 | 20.10 | 20.06 | 20.00 | 19.95 | 19.89 | 0.0% |
| School Bus (motor gasoline) | 3.27 | 3.25 | 3.26 | 3.27 | 3.28 | 3.29 | 3.30 | 3.31 | 3.31 | 3.31 | 3.32 | 3.31 | 3.31 | 3.30 | 3.30 | 3.29 | 3.29 | 3.28 | 3.28 | 3.27 | 3.26 | 3.25 | 0.0% |
| School Bus (diesel) | 55.47 | 55.77 | 55.95 | 56.10 | 56.23 | 56.42 | 56.55 | 56.66 | 56.75 | 56.81 | 56.83 | 56.81 | 56.73 | 56.64 | 56.53 | 56.45 | 56.38 | 56.28 | 56.15 | 56.00 | 55.84 | 55.68 | 0.0% |
| Total | 151.55 | 152.28 | 152.77 | 153.18 | 153.54 | 154.07 | 154.42 | 154.73 | 154.95 | 155.12 | 155.18 | 155.12 | 154.90 | 154.66 | 154.37 | 154.15 | 153.94 | 153.67 | 153.32 | 152.92 | 152.49 | 152.04 | 0.0% |
| Rail Transportation | | | | | | | | | | | | | | | | | | | | | | | |
| Intercity Rail (electricity) | 7.66 | 7.94 | 8.10 | 8.25 | 8.40 | 8.55 | 8.70 | 8.84 | 8.99 | 9.13 | 9.28 | 9.43 | 9.58 | 9.72 | 9.87 | 10.02 | 10.18 | 10.32 | 10.47 | 10.62 | 10.78 | 10.94 | 1.6% |
| Intercity Rail (diesel) | 11.66 | 12.13 | 12.37 | 12.60 | 12.83 | 13.06 | 13.28 | 13.50 | 13.72 | 13.95 | 14.18 | 14.41 | 14.63 | 14.85 | 15.08 | 15.31 | 15.54 | 15.76 | 15.99 | 16.22 | 16.47 | 16.71 | 1.6% |
| Transit Rail (electricity) | 44.49 | 46.11 | 47.01 | 47.89 | 48.78 | 49.65 | 50.48 | 51.31 | 52.16 | 53.01 | 53.88 | 54.75 | 55.59 | 56.43 | 57.30 | 58.18 | 59.06 | 59.91 | 60.76 | 61.66 | 62.58 | 63.51 | 1.6% |
| Commuter Rail (electricity) | 15.14 | 15.69 | 15.99 | 16.29 | 16.60 | 16.89 | 17.18 | 17.46 | 17.75 | 18.04 | 18.33 | 18.63 | 18.91 | 19.20 | 19.50 | 19.80 | 20.10 | 20.38 | 20.67 | 20.98 | 21.29 | 21.61 | 1.6% |
| Commuter Rail (diesel) | 23.02 | 23.96 | 24.42 | 24.88 | 25.34 | 25.80 | 26.23 | 26.66 | 27.10 | 27.55 | 28.00 | 28.45 | 28.88 | 29.32 | 29.77 | 30.23 | 30.69 | 31.13 | 31.57 | 32.04 | 32.52 | 33.00 | 1.6% |
| Total | 101.97 | 105.82 | 107.89 | 109.92 | 111.95 | 113.96 | 115.87 | 117.77 | 119.72 | 121.68 | 123.67 | 125.67 | 127.59 | 129.53 | 131.51 | 133.54 | 135.57 | 137.50 | 139.47 | 141.52 | 143.64 | 145.77 | 1.6% |
| Recreation Boats | 250.86 | 254.23 | 256.16 | 258.05 | 259.99 | 262.30 | 264.42 | 266.48 | 268.53 | 270.53 | 272.51 | 274.55 | 276.35 | 278.22 | 280.28 | 282.56 | 284.85 | 286.79 | 288.69 | 290.70 | 292.78 | 294.90 | 0.7% |
| Lubricants | 258.64 | 267.89 | 270.92 | 273.10 | 275.02 | 278.17 | 282.92 | 286.96 | 290.62 | 293.44 | 295.17 | 297.68 | 299.40 | 301.68 | 304.99 | 309.18 | 313.67 | 316.75 | 319.69 | 321.90 | 323.75 | 325.91 | 1.1% |
| Pipeline Fuel Natural Gas | 751.47 | 770.67 | 747.61 | 745.82 | 751.92 | 754.40 | 767.84 | 788.86 | 812.61 | 829.99 | 840.58 | 866.37 | 881.34 | 895.16 | 909.51 | 927.41 | 948.13 | 957.35 | 968.46 | 977.57 | 983.26 | 987.94 | 1.3% |
| Total Miscellaneous | 2035.75 | 2079.43 | 2059.49 | 2061.64 | 2070.69 | 2079.57 | 2105.45 | 2140.18 | 2176.64 | 2205.97 | 2226.90 | 2261.61 | 2282.49 | 2303.61 | 2326.54 | 2354.24 | 2385.11 | 2402.58 | 2421.71 | 2438.31 | 2451.20 | 2463.47 | 0.9% |
| Total Consumption | 25740.7 | 26827.2 | 27373.5 | 27942.9 | 28473.0 | 29097.8 | 29683.9 | 30283.1 | 30847.2 | 31385.4 | 31878.2 | 32438.4 | 32868.9 | 33322.2 | 33820.1 | 34392.4 | 34929.7 | 35371.2 | 35795.5 | 36253.1 | 36683.7 | 37136.8 | 1.7% |

1/ Commercial trucks from 8,500 to 10,000 pounds.

2/ Does not include military distillate. Does not include commercial buses.

3/ Does not include passenger rail.

Btu = British thermal unit.

N/A = Not applicable.

L/I = Light Trucks.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 compressed natural gas volumes: Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100199A. Other 1998 values derived using: EIA, Short-Term Energy Outlook, September 1999, Online. <http://www.eia.doe.gov/pub/forecasting/steo/oldsteos/sep99.html> (October 12, 1999); EIA, Fuel Oil and Kerosene Sales 1997, DOE/EIA-0535(97) (Washington, D.C., August 1998); EIA, State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Oak Ridge National Laboratory, Transportation Energy Book: 17 and 18 (September 1998); Department of Defense, Defense Fuel Supply Center, and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type (Trillion Btu) (1 of 1)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Light-Duty Consumption by Technology Type | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 14340.9 | 14926.2 | 15253.2 | 15539.4 | 15742.6 | 16035.3 | 16291.5 | 16568.4 | 16841.3 | 17083.0 | 17332.1 | 17579.3 | 17786.3 | 17975.3 | 18192.1 | 18437.7 | 18673.7 | 18873.2 | 19064.3 | 19269.7 | 19472.2 | 19698.0 | 1.5% |
| TDI Diesel ICE | 217.19 | 184.15 | 171.26 | 160.20 | 150.93 | 145.78 | 145.12 | 139.70 | 137.37 | 138.63 | 144.05 | 153.39 | 165.63 | 180.24 | 196.95 | 215.23 | 234.17 | 252.56 | 270.65 | 288.76 | 306.38 | 323.81 | 1.8% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Alcohol Fuel Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 16.38 | 51.26 | 74.88 | 101.97 | 131.00 | 158.99 | 185.93 | 212.14 | 235.78 | 256.94 | 275.82 | 292.21 | 304.94 | 315.96 | 324.94 | 331.69 | 335.99 | 339.45 | 341.08 | 341.71 | 341.06 | 339.76 | 14.8% |
| Methanol ICE | 0.03 | 0.09 | 0.16 | 0.26 | 0.42 | 0.66 | 1.03 | 1.60 | 2.42 | 3.63 | 5.39 | 7.85 | 10.97 | 14.20 | 17.90 | 22.01 | 26.32 | 30.59 | 34.69 | 38.63 | 42.32 | 45.80 | 40.7% |
| Ethanol-Flex Fuel ICE | 10.42 | 33.08 | 47.13 | 63.42 | 80.47 | 99.20 | 118.12 | 137.07 | 155.08 | 171.21 | 186.70 | 200.24 | 210.94 | 219.51 | 226.43 | 231.58 | 234.81 | 236.32 | 236.40 | 235.63 | 233.85 | 231.46 | 15.1% |
| Ethanol Ice | 0.01 | 0.04 | 0.08 | 0.12 | 0.20 | 0.32 | 0.52 | 0.81 | 1.24 | 1.84 | 2.63 | 3.65 | 4.83 | 6.22 | 7.79 | 9.50 | 11.28 | 12.95 | 14.46 | 15.84 | 17.02 | 18.03 | 39.8% |
| Total Alcohol | 26.84 | 84.48 | 122.25 | 165.77 | 212.09 | 259.18 | 305.60 | 351.61 | 394.52 | 433.62 | 470.54 | 503.94 | 531.68 | 555.89 | 577.06 | 594.78 | 608.40 | 619.31 | 626.62 | 631.81 | 634.26 | 635.05 | 15.5% |
| Natural Gas Technology | | | | | | | | | | | | | | | | | | | | | | | |
| CNG ICE | 19.22 | 48.48 | 70.57 | 91.82 | 111.11 | 129.33 | 145.26 | 158.41 | 169.36 | 179.98 | 190.36 | 200.34 | 209.44 | 217.87 | 226.31 | 234.79 | 242.75 | 249.74 | 255.94 | 261.64 | 266.70 | 271.53 | 12.8% |
| CNG Bi-fuel | 0.93 | 2.66 | 3.80 | 5.05 | 6.31 | 7.61 | 8.82 | 9.93 | 10.90 | 11.71 | 12.43 | 13.01 | 13.38 | 13.62 | 13.76 | 13.80 | 13.70 | 13.48 | 13.17 | 12.80 | 12.38 | 11.92 | 12.3% |
| LPG ICE | 24.24 | 34.42 | 41.72 | 48.66 | 54.77 | 60.61 | 65.73 | 70.01 | 73.64 | 77.16 | 80.62 | 83.96 | 87.00 | 89.81 | 92.65 | 95.51 | 98.21 | 100.55 | 102.58 | 104.42 | 105.97 | 107.43 | 7.0% |
| LPG Bi-fuel | 0.66 | 1.82 | 2.54 | 3.31 | 4.06 | 4.84 | 5.56 | 6.21 | 6.77 | 7.21 | 7.56 | 7.81 | 7.93 | 7.96 | 7.92 | 7.79 | 7.59 | 7.33 | 7.03 | 6.70 | 6.34 | 5.97 | 10.5% |
| Total Natural Gas Technology | 45.05 | 87.38 | 118.63 | 148.84 | 176.26 | 202.40 | 225.37 | 244.55 | 260.67 | 276.06 | 290.97 | 305.13 | 317.75 | 329.26 | 340.64 | 351.90 | 362.24 | 371.09 | 378.71 | 385.56 | 391.38 | 396.85 | 10.4% |
| Electric Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Electric Vehicle | 0.45 | 1.04 | 1.41 | 1.77 | 2.14 | 2.51 | 2.88 | 3.25 | 3.62 | 3.99 | 4.36 | 4.73 | 5.10 | 5.47 | 5.84 | 6.21 | 6.58 | 6.95 | 7.32 | 7.69 | 8.06 | 8.43 | 26.0% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Total Electricity | 0.45 | 1.04 | 1.41 | 1.77 | 2.14 | 2.51 | 2.88 | 3.25 | 3.62 | 3.99 | 4.36 | 4.73 | 5.10 | 5.47 | 5.84 | 6.21 | 6.58 | 6.95 | 7.32 | 7.69 | 8.06 | 8.43 | 26.0% |
| Fuel Cell Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fuel Cell | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Light-Duty Consumption by Fuel Type 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gasoline | 14368.1 | 14987.9 | 15335.7 | 15646.6 | 15877.0 | 16203.4 | 16488.8 | 16793.7 | 17093.5 | 17357.5 | 17626.8 | 17890.8 | 18109.8 | 18308.2 | 18531.7 | 18780.7 | 19016.8 | 19214.5 | 19401.4 | 19600.9 | 19796.0 | 20013.1 | 1.5% |
| Distillate (diesel) | 217.19 | 184.15 | 171.26 | 160.20 | 150.93 | 145.78 | 145.12 | 139.70 | 137.37 | 138.63 | 144.05 | 153.39 | 165.63 | 180.24 | 196.95 | 215.23 | 234.17 | 252.56 | 270.65 | 288.76 | 306.38 | 323.81 | 1.8% |
| Methanol | 8.05 | 21.13 | 29.82 | 40.09 | 50.67 | 55.12 | 63.29 | 72.07 | 78.87 | 86.43 | 93.70 | 100.96 | 107.77 | 114.23 | 120.47 | 126.47 | 131.99 | 137.19 | 141.66 | 145.68 | 149.01 | 151.95 | 14.3% |
| Ethanol | 2.85 | 9.07 | 12.96 | 17.44 | 21.98 | 27.15 | 32.42 | 37.73 | 42.88 | 47.71 | 52.55 | 57.10 | 61.07 | 64.69 | 68.04 | 71.07 | 73.67 | 75.70 | 77.21 | 78.35 | 79.03 | 79.38 | 16.3% |
| Compressed Natural Gas | 19.69 | 49.81 | 72.48 | 94.36 | 114.28 | 133.15 | 149.69 | 163.39 | 174.83 | 185.85 | 196.59 | 206.87 | 216.15 | 224.70 | 233.21 | 241.71 | 249.62 | 256.49 | 262.53 | 268.06 | 272.90 | 277.50 | 12.8% |
| Liquid Petroleum Gas | 24.45 | 35.00 | 42.52 | 49.69 | 56.03 | 62.13 | 67.49 | 71.98 | 75.79 | 79.46 | 83.02 | 86.44 | 89.53 | 92.34 | 95.17 | 98.00 | 100.63 | 102.89 | 104.83 | 106.55 | 107.98 | 109.31 | 7.0% |
| Electricity | 0.45 | 1.04 | 1.41 | 1.77 | 2.14 | 2.51 | 2.88 | 3.25 | 3.62 | 3.99 | 4.36 | 4.73 | 5.10 | 5.47 | 5.84 | 6.21 | 6.58 | 6.95 | 7.32 | 7.69 | 8.06 | 8.43 | 26.0% |
| Liquid Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |

1/ Includes personal vehicles and fleet vehicles. Includes both cars and trucks.

LDI = Turbo Direct Injection.

Btu = British thermal unit.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 36. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
01 - New England

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 370.0 | 342.8 | 331.6 | 324.0 | 313.9 | 317.2 | 318.7 | 315.2 | 310.5 | 307.6 | 304.8 | 305.7 | 301.9 | 300.0 | 303.6 | 310.3 | 314.1 | 308.0 | 304.6 | 303.2 | 304.4 | 307.1 | -0.8% |
| TDI Diesel ICE | 0.1 | 0.4 | 0.5 | 0.9 | 1.3 | 2.1 | 3.4 | 2.7 | 4.0 | 5.6 | 7.2 | 8.9 | 10.1 | 11.2 | 12.1 | 13.0 | 13.6 | 13.5 | 13.5 | 13.6 | 13.8 | 14.0 | 23.0% |
| Total Conventional | 370.2 | 343.2 | 332.1 | 324.8 | 315.2 | 319.3 | 322.1 | 317.9 | 314.5 | 313.2 | 312.0 | 314.6 | 312.0 | 311.2 | 315.7 | 323.3 | 327.7 | 321.5 | 318.2 | 316.8 | 318.2 | 321.1 | -0.6% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 8.3 | 8.9 | 10.3 | 11.5 | 12.0 | 12.8 | 13.0 | 12.7 | 12.2 | 11.6 | 10.9 | 10.4 | 9.7 | 9.4 | 9.1 | 9.1 | 8.9 | 10.1 | 9.7 | 9.5 | 9.4 | 9.3 | 0.5% |
| Methanol ICE | 0.2 | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 1.0 | 1.1 | 1.3 | 1.5 | 1.8 | 2.1 | 2.1 | 2.3 | 2.5 | 2.6 | 2.6 | 2.5 | 2.5 | 2.4 | 2.4 | 10.8% |
| Ethanol-Flex Fuel ICE | 5.4 | 6.3 | 7.0 | 7.8 | 8.1 | 8.6 | 8.7 | 8.4 | 8.0 | 7.5 | 7.8 | 7.3 | 6.7 | 6.3 | 6.1 | 5.9 | 5.8 | 5.6 | 5.3 | 5.1 | 4.9 | 4.8 | -0.5% |
| Ethanol Ice | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 14.4% |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 12.4 | 12.7 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 13.0 | 12.9 | 12.9 | 13.2 | 13.5 | 13.8 | 13.6 | 13.5 | 13.5 | 13.6 | 13.8 | 28.6% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.8% |
| CNG ICE | 1.6 | 3.3 | 4.0 | 3.9 | 4.0 | 4.1 | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.4 | 4.5 | 4.5 | 4.4 | 4.4 | 4.3 | 4.3 | 4.3 | 4.6% |
| CNG Bi-fuel | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | -2.1% |
| LPG ICE | 0.9 | 1.4 | 1.6 | 1.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 3.4% |
| LPG Bi-fuel | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | -5.3% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 17.5 | 21.7 | 25.2 | 27.2 | 40.6 | 42.4 | 43.1 | 42.6 | 41.7 | 40.8 | 40.7 | 40.2 | 39.0 | 38.4 | 38.5 | 39.0 | 39.0 | 39.6 | 38.7 | 38.0 | 37.6 | 37.4 | 3.5% |
| Percent Alternative Car Sales | 4.51 | 5.95 | 7.04 | 7.72 | 11.42 | 11.73 | 11.81 | 11.83 | 11.70 | 11.53 | 11.53 | 11.32 | 11.11 | 10.98 | 10.86 | 10.76 | 10.63 | 10.97 | 10.84 | 10.71 | 10.57 | 10.43 | 3.9% |
| Total New Car Sales | 387.7 | 364.9 | 357.3 | 352.0 | 355.8 | 361.7 | 365.2 | 360.5 | 356.1 | 354.0 | 352.7 | 354.8 | 351.0 | 349.6 | 354.2 | 362.3 | 366.7 | 361.2 | 356.9 | 354.8 | 355.9 | 358.5 | -0.4% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 307.2 | 301.6 | 300.8 | 302.1 | 310.3 | 318.9 | 325.1 | 328.8 | 328.1 | 328.7 | 329.6 | 333.3 | 331.5 | 331.2 | 337.2 | 346.5 | 352.1 | 348.2 | 345.2 | 344.4 | 346.4 | 349.9 | 0.6% |
| TDI Diesel ICE | 0.2 | 0.5 | 0.7 | 1.2 | 1.9 | 3.3 | 5.3 | 1.5 | 2.3 | 3.3 | 4.4 | 5.4 | 6.2 | 6.8 | 7.1 | 7.5 | 7.7 | 7.5 | 7.4 | 7.3 | 7.2 | 7.2 | 18.8% |
| Total Conventional | 307.4 | 302.1 | 301.5 | 303.2 | 312.2 | 322.2 | 330.3 | 330.4 | 330.4 | 332.0 | 334.0 | 338.8 | 337.6 | 337.9 | 344.3 | 354.0 | 359.8 | 355.7 | 352.6 | 351.7 | 353.6 | 357.1 | 0.7% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 2.3 | 2.6 | 3.2 | 3.9 | 4.5 | 4.8 | 4.9 | 4.9 | 4.7 | 4.4 | 4.2 | 4.0 | 3.7 | 4.0 | 3.8 | 3.7 | 3.5 | 3.2 | 3.0 | 2.7 | 2.5 | 2.3 | 0.2% |
| Methanol Ice | 0.3 | 0.7 | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 7.2% |
| Ethanol-Flex Fuel ICE | 1.3 | 1.6 | 2.1 | 2.6 | 2.9 | 3.1 | 3.2 | 3.1 | 2.9 | 2.7 | 2.5 | 2.3 | 2.1 | 2.0 | 1.8 | 1.7 | 1.6 | 1.4 | 1.3 | 1.1 | 1.0 | 0.9 | -1.8% |
| Ethanol ICE | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 8.1% |
| Electric Vehicle | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 4.5% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 90.3% |
| CNG ICE | 1.0 | 2.5 | 3.4 | 3.4 | 3.5 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 | 3.8 | 3.8 | 3.8 | 3.8 | 3.9 | 4.0 | 4.0 | 4.0 | 3.9 | 3.9 | 3.9 | 4.0 | 6.3% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.5% |
| LPG ICE | 0.6 | 1.0 | 1.2 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 4.5% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.3% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 5.6 | 8.6 | 11.3 | 12.5 | 13.5 | 14.2 | 14.5 | 14.6 | 14.1 | 13.7 | 13.3 | 13.1 | 12.6 | 12.7 | 12.5 | 12.4 | 12.2 | 11.7 | 11.2 | 10.8 | 10.5 | 10.2 | 2.8% |

**Table 36. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
01 - New England**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Percent Alternative LT. Sales | 1.77 | 2.77 | 3.60 | 3.95 | 4.14 | 4.23 | 4.22 | 4.22 | 4.10 | 3.97 | 3.84 | 3.73 | 3.59 | 3.61 | 3.50 | 3.39 | 3.29 | 3.18 | 3.08 | 2.98 | 2.88 | 2.78 | 2.1% |
| Total New Truck Sales | 312.9 | 310.7 | 312.8 | 315.7 | 325.7 | 336.4 | 344.9 | 344.9 | 344.5 | 345.7 | 347.4 | 351.9 | 350.2 | 350.6 | 356.8 | 366.4 | 372.0 | 367.4 | 363.8 | 362.5 | 364.1 | 367.4 | 0.7% |
| Percent Total Alternative Sales | 3.29 | 4.49 | 5.44 | 5.94 | 7.94 | 8.11 | 8.12 | 8.11 | 7.96 | 7.79 | 7.71 | 7.54 | 7.36 | 7.29 | 7.16 | 7.06 | 6.94 | 7.04 | 6.92 | 6.80 | 6.68 | 6.56 | 3.2% |
| EPACT Leg. Alternative Sales | 4.07 | 9.17 | 11.73 | 11.70 | 11.94 | 12.22 | 12.42 | 12.34 | 12.26 | 12.24 | 12.25 | 12.37 | 12.28 | 12.26 | 12.45 | 12.76 | 12.94 | 12.76 | 12.62 | 12.56 | 12.61 | 12.71 | 5.3% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 30.79 | 31.50 | 32.05 | 31.89 | 31.72 | 31.75 | 31.84 | 32.22 | 32.06 | 32.09 | 32.66 | 33.57 | 34.13 | 33.77 | 33.52 | 33.48 | 33.72 | 34.14 | N/A |
| Total Vehicles Sales | 700.6 | 675.5 | 670.0 | 667.7 | 681.4 | 698.2 | 710.1 | 705.5 | 700.6 | 699.7 | 700.1 | 706.7 | 701.3 | 700.2 | 711.0 | 728.7 | 738.7 | 728.6 | 720.7 | 717.3 | 720.0 | 725.9 | 0.2% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I urbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPAC I = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L I . = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 37. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
02 - Middle Atlantic

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1060.9 | 960.5 | 921.4 | 893.4 | 864.5 | 868.7 | 868.7 | 855.3 | 839.5 | 829.0 | 818.7 | 818.5 | 805.3 | 797.9 | 804.4 | 819.3 | 826.1 | 807.8 | 796.4 | 790.4 | 791.4 | 796.2 | -1.3% |
| TDI Diesel ICE | 0.4 | 0.9 | 1.4 | 2.2 | 3.4 | 5.5 | 8.6 | 6.9 | 10.1 | 14.0 | 18.2 | 22.3 | 25.2 | 27.8 | 29.9 | 31.7 | 33.1 | 32.5 | 32.4 | 32.4 | 32.6 | 33.0 | 22.2% |
| Total Conventional | 1061.3 | 961.5 | 922.8 | 895.6 | 867.9 | 874.2 | 877.4 | 862.2 | 849.6 | 843.0 | 836.9 | 840.8 | 830.4 | 825.7 | 834.3 | 851.0 | 859.2 | 840.4 | 828.8 | 822.8 | 824.0 | 829.2 | -1.1% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 22.4 | 26.6 | 30.6 | 33.7 | 35.0 | 37.0 | 37.3 | 36.2 | 34.2 | 32.0 | 29.4 | 27.2 | 25.0 | 23.6 | 22.7 | 22.2 | 21.6 | 24.2 | 23.4 | 22.8 | 22.5 | 22.2 | 0.0% |
| Methanol ICE | 0.7 | 1.6 | 2.2 | 2.2 | 2.3 | 2.5 | 2.8 | 3.2 | 3.7 | 4.6 | 5.9 | 7.5 | 9.2 | 9.4 | 10.6 | 11.7 | 12.6 | 12.6 | 12.3 | 12.0 | 11.8 | 11.6 | 13.5% |
| Ethanol-Flex Fuel ICE | 14.5 | 18.2 | 20.1 | 22.2 | 23.0 | 24.1 | 24.1 | 23.2 | 21.7 | 20.1 | 20.4 | 18.6 | 16.7 | 15.4 | 14.6 | 14.0 | 13.4 | 13.0 | 12.3 | 11.8 | 11.4 | 11.0 | -1.3% |
| Ethanol Ice | 0.1 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.7 | 0.8 | 1.1 | 1.3 | 1.6 | 1.8 | 2.1 | 2.2 | 2.4 | 2.5 | 2.4 | 2.3 | 2.1 | 1.9 | 1.8 | 14.7% |
| Electric Vehicle | 0.2 | 0.3 | 0.3 | 0.3 | 29.1 | 29.7 | 30.3 | 30.1 | 30.0 | 30.0 | 30.1 | 30.4 | 30.3 | 30.3 | 30.8 | 31.7 | 32.2 | 31.9 | 31.6 | 31.6 | 31.8 | 32.2 | 27.4% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 81.6% |
| CNG ICE | 4.6 | 9.2 | 11.1 | 10.9 | 11.1 | 11.4 | 11.6 | 11.6 | 11.6 | 11.6 | 11.7 | 11.5 | 11.5 | 11.6 | 11.9 | 11.9 | 11.7 | 11.5 | 11.3 | 11.3 | 11.3 | 11.3 | 4.2% |
| CNG Bi-fuel | 1.7 | 1.9 | 2.2 | 2.4 | 2.5 | 2.5 | 2.4 | 2.2 | 2.0 | 1.8 | 1.7 | 1.6 | 1.4 | 1.3 | 1.3 | 1.3 | 1.1 | 1.1 | 1.0 | 0.9 | 0.8 | 0.8 | -3.4% |
| LPG ICE | 2.4 | 4.0 | 4.5 | 4.5 | 4.6 | 4.8 | 4.9 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.9 | 4.9 | 4.9 | 5.0 | 5.0 | 4.9 | 4.8 | 4.7 | 4.6 | 4.6 | 3.0% |
| LPG Bi-fuel | 1.1 | 1.2 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.3 | 1.2 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | -5.7% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 47.7 | 63.3 | 72.8 | 78.1 | 109.4 | 113.9 | 115.4 | 113.4 | 110.2 | 107.1 | 106.2 | 104.4 | 101.4 | 99.0 | 99.3 | 100.8 | 101.0 | 102.2 | 99.6 | 97.7 | 96.5 | 95.8 | 3.2% |
| Percent Alternative Car Sales | 4.30 | 6.18 | 7.31 | 8.02 | 11.20 | 11.53 | 11.62 | 11.63 | 11.48 | 11.27 | 11.26 | 11.05 | 10.88 | 10.71 | 10.64 | 10.59 | 10.52 | 10.84 | 10.73 | 10.61 | 10.48 | 10.35 | 4.1% |
| Total New Car Sales | 1109.0 | 1024.8 | 995.6 | 973.7 | 977.3 | 988.1 | 992.7 | 975.7 | 959.8 | 950.1 | 943.2 | 945.2 | 931.8 | 924.8 | 933.6 | 951.8 | 960.2 | 942.6 | 928.4 | 920.5 | 920.5 | 925.0 | -0.8% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 879.5 | 846.3 | 837.1 | 834.5 | 851.2 | 870.3 | 883.0 | 888.6 | 883.3 | 881.6 | 881.0 | 887.9 | 879.9 | 876.2 | 889.0 | 910.8 | 922.4 | 909.3 | 898.9 | 894.2 | 897.0 | 903.8 | 0.1% |
| TDI Diesel ICE | 0.4 | 1.2 | 1.9 | 3.1 | 4.9 | 8.3 | 13.3 | 3.8 | 5.6 | 8.1 | 10.8 | 13.3 | 15.1 | 16.3 | 17.1 | 17.6 | 18.1 | 17.6 | 17.1 | 16.8 | 16.5 | 16.4 | 18.0% |
| Total Conventional | 880.0 | 847.5 | 839.1 | 837.5 | 856.1 | 878.6 | 896.3 | 892.4 | 888.9 | 889.7 | 891.8 | 901.2 | 894.9 | 892.5 | 906.1 | 928.4 | 940.5 | 926.9 | 916.1 | 910.9 | 913.5 | 920.2 | 0.2% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 6.0 | 7.8 | 9.8 | 11.8 | 13.4 | 14.1 | 14.4 | 14.5 | 13.8 | 13.0 | 12.2 | 11.7 | 10.9 | 11.5 | 10.9 | 10.5 | 10.1 | 9.3 | 8.6 | 7.9 | 7.3 | 6.8 | 0.6% |
| Methanol Ice | 0.8 | 2.1 | 2.9 | 2.9 | 3.0 | 3.1 | 3.2 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.7 | 3.8 | 3.9 | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.6 | 7.0% |
| Ethanol-Flex Fuel ICE | 3.6 | 4.8 | 6.2 | 7.5 | 8.2 | 8.9 | 9.0 | 8.8 | 8.1 | 7.5 | 6.9 | 6.4 | 5.7 | 5.3 | 4.9 | 4.6 | 4.3 | 3.8 | 3.4 | 3.1 | 2.7 | 2.4 | -1.8% |
| Ethanol ICE | 0.1 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 7.7% |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 4.0% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 89.3% |
| CNG ICE | 3.0 | 7.1 | 9.5 | 9.5 | 9.7 | 10.0 | 10.2 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 10.1 | 10.0 | 10.2 | 10.4 | 10.5 | 10.4 | 10.2 | 10.2 | 10.2 | 10.2 | 5.8% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.8% |
| LPG ICE | 1.6 | 2.8 | 3.5 | 3.5 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.8 | 3.9 | 3.8 | 3.8 | 3.7 | 3.7 | 3.8 | 4.0% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.9% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 15.2 | 25.0 | 32.5 | 35.8 | 38.5 | 40.4 | 41.1 | 41.0 | 39.6 | 38.3 | 37.1 | 36.3 | 34.8 | 35.0 | 34.3 | 34.1 | 33.5 | 31.9 | 30.5 | 29.3 | 28.3 | 27.5 | 2.7% |

**Table 37. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
02 - Middle Atlantic**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Percent Alternative LT. Sales | 1.70 | 2.87 | 3.73 | 4.10 | 4.30 | 4.39 | 4.39 | 4.39 | 4.27 | 4.13 | 3.99 | 3.88 | 3.74 | 3.77 | 3.65 | 3.54 | 3.44 | 3.33 | 3.22 | 3.11 | 3.01 | 2.90 | 2.5% |
| Total New Truck Sales | 895.2 | 872.5 | 871.5 | 873.3 | 894.6 | 918.9 | 937.4 | 933.4 | 928.5 | 928.0 | 928.9 | 937.5 | 929.7 | 927.4 | 940.4 | 962.5 | 974.0 | 958.8 | 946.5 | 940.2 | 941.8 | 947.7 | 0.3% |
| Percent Total Alternative Sales | 3.14 | 4.66 | 5.64 | 6.17 | 7.90 | 8.09 | 8.11 | 8.09 | 7.93 | 7.74 | 7.66 | 7.48 | 7.32 | 7.24 | 7.13 | 7.04 | 6.96 | 7.05 | 6.94 | 6.82 | 6.70 | 6.58 | 3.4% |
| EPACT Leg. Alternative Sales | 11.64 | 25.76 | 32.70 | 32.36 | 32.79 | 33.37 | 33.77 | 33.40 | 33.04 | 32.87 | 32.77 | 32.96 | 32.59 | 32.43 | 32.82 | 33.52 | 33.87 | 33.30 | 32.84 | 32.59 | 32.62 | 32.80 | 4.8% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 71.92 | 73.60 | 74.90 | 74.51 | 74.14 | 74.19 | 74.42 | 75.32 | 74.93 | 75.00 | 76.35 | 78.48 | 79.79 | 78.94 | 78.35 | 78.26 | 78.84 | 79.80 | N/A |
| Total Vehicles Sales | 2004.2 | 1897.3 | 1867.1 | 1847.0 | 1872.0 | 1907.0 | 1930.2 | 1909.1 | 1888.3 | 1878.2 | 1872.0 | 1882.7 | 1861.6 | 1852.2 | 1874.0 | 1914.3 | 1934.2 | 1901.3 | 1875.0 | 1860.7 | 1862.4 | 1872.7 | -0.3% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 TDI = Turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPACT = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 LT = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 38. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
03 - East North Central

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1221.5 | 1105.9 | 1064.8 | 1035.5 | 1038.6 | 1055.8 | 1061.7 | 1050.0 | 1036.3 | 1027.2 | 1017.3 | 1020.6 | 1007.7 | 1001.3 | 1012.4 | 1034.2 | 1046.2 | 1025.5 | 1013.5 | 1008.2 | 1011.5 | 1019.9 | -0.8% |
| TDI Diesel ICE | 0.5 | 1.1 | 1.8 | 2.7 | 4.1 | 6.8 | 10.7 | 8.6 | 12.6 | 17.6 | 22.8 | 28.0 | 31.8 | 35.2 | 38.0 | 40.6 | 42.2 | 41.9 | 41.9 | 42.0 | 42.5 | 43.1 | 22.6% |
| Total Conventional | 1222.0 | 1107.0 | 1066.6 | 1038.3 | 1042.6 | 1062.5 | 1072.5 | 1058.6 | 1048.9 | 1044.8 | 1040.1 | 1048.6 | 1039.5 | 1036.5 | 1050.5 | 1074.8 | 1088.4 | 1067.5 | 1055.4 | 1050.2 | 1054.1 | 1062.9 | -0.6% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 26.8 | 37.1 | 42.5 | 47.0 | 49.9 | 45.5 | 44.8 | 43.8 | 40.4 | 38.1 | 35.7 | 33.5 | 31.1 | 29.5 | 28.7 | 28.2 | 27.5 | 30.8 | 29.8 | 29.1 | 28.6 | 28.3 | 0.3% |
| Methanol ICE | 0.8 | 1.9 | 2.5 | 2.6 | 2.7 | 2.9 | 3.1 | 3.4 | 3.8 | 4.5 | 5.5 | 6.7 | 7.9 | 8.0 | 8.7 | 9.5 | 10.0 | 10.0 | 9.8 | 9.6 | 9.4 | 9.3 | 11.7% |
| Ethanol-Flex Fuel ICE | 17.3 | 25.4 | 28.0 | 31.1 | 32.4 | 33.9 | 34.1 | 33.2 | 31.4 | 29.4 | 30.5 | 28.3 | 25.7 | 24.1 | 23.1 | 22.5 | 21.8 | 21.2 | 20.3 | 19.6 | 19.1 | 18.6 | 0.3% |
| Ethanol ICE | 0.1 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.3 | 1.7 | 2.2 | 2.7 | 3.2 | 3.7 | 4.2 | 4.6 | 4.9 | 4.7 | 4.5 | 4.2 | 4.0 | 3.8 | 17.8% |
| Electric Vehicle | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 4.8% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 82.4% |
| CNG ICE | 5.3 | 10.7 | 12.9 | 12.8 | 13.1 | 13.5 | 13.8 | 13.9 | 13.9 | 14.0 | 14.0 | 14.2 | 14.1 | 14.1 | 14.3 | 14.8 | 14.8 | 14.5 | 14.3 | 14.2 | 14.1 | 14.2 | 4.6% |
| CNG Bi-fuel | 1.9 | 2.3 | 2.6 | 2.8 | 2.9 | 2.9 | 2.8 | 2.7 | 2.4 | 2.2 | 2.1 | 2.0 | 1.8 | 1.7 | 1.7 | 1.7 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.1 | -2.6% |
| LPG ICE | 2.8 | 4.6 | 5.3 | 5.3 | 5.4 | 5.6 | 5.8 | 5.9 | 5.9 | 6.0 | 6.0 | 6.0 | 6.0 | 5.9 | 6.0 | 6.1 | 6.1 | 6.0 | 5.8 | 5.7 | 5.7 | 5.7 | 3.3% |
| LPG Bi-fuel | 1.2 | 1.4 | 1.6 | 1.7 | 1.8 | 1.8 | 1.7 | 1.6 | 1.4 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | -5.1% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 56.4 | 84.0 | 96.3 | 104.2 | 109.2 | 106.9 | 107.4 | 105.7 | 100.9 | 97.6 | 97.5 | 94.9 | 91.0 | 88.2 | 87.8 | 88.4 | 87.8 | 89.7 | 86.9 | 84.6 | 83.1 | 81.8 | 1.7% |
| Percent Alternative Car Sales | 4.41 | 7.05 | 8.28 | 9.12 | 9.48 | 9.14 | 9.10 | 9.08 | 8.78 | 8.54 | 8.57 | 8.30 | 8.05 | 7.84 | 7.71 | 7.60 | 7.46 | 7.76 | 7.61 | 7.46 | 7.31 | 7.15 | 2.2% |
| Total New Car Sales | 1278.4 | 1191.0 | 1162.8 | 1142.4 | 1151.8 | 1169.5 | 1179.8 | 1164.4 | 1149.9 | 1142.4 | 1137.6 | 1143.5 | 1130.5 | 1124.7 | 1138.3 | 1163.3 | 1176.2 | 1157.2 | 1142.3 | 1134.9 | 1137.2 | 1144.8 | -0.5% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1013.5 | 980.0 | 973.4 | 973.7 | 996.6 | 1026.7 | 1046.2 | 1057.9 | 1056.3 | 1057.9 | 1060.4 | 1071.8 | 1065.1 | 1063.5 | 1081.8 | 1110.8 | 1127.9 | 1114.2 | 1104.0 | 1100.5 | 1106.1 | 1116.6 | 0.4% |
| TDI Diesel ICE | 0.5 | 1.5 | 2.4 | 3.8 | 6.1 | 10.4 | 16.7 | 4.8 | 7.1 | 10.4 | 13.8 | 17.1 | 19.4 | 21.1 | 22.3 | 23.2 | 23.6 | 23.2 | 22.7 | 22.3 | 22.1 | 22.0 | 18.4% |
| Total Conventional | 1014.1 | 981.4 | 975.8 | 977.5 | 1002.7 | 1037.0 | 1062.9 | 1062.7 | 1063.4 | 1068.2 | 1074.2 | 1088.9 | 1084.5 | 1084.6 | 1104.0 | 1134.0 | 1151.5 | 1137.4 | 1126.7 | 1122.8 | 1128.2 | 1138.6 | 0.5% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 7.1 | 11.3 | 14.1 | 17.0 | 19.8 | 17.3 | 17.1 | 17.2 | 15.7 | 14.9 | 14.0 | 13.5 | 12.5 | 13.1 | 12.5 | 12.0 | 11.5 | 10.5 | 9.7 | 9.0 | 8.3 | 7.7 | 0.3% |
| Methanol ICE | 0.9 | 2.4 | 3.4 | 3.4 | 3.5 | 3.7 | 3.8 | 3.8 | 3.9 | 3.9 | 4.0 | 4.2 | 4.2 | 4.2 | 4.3 | 4.4 | 4.5 | 4.4 | 4.3 | 4.3 | 4.2 | 4.2 | 7.1% |
| Ethanol-Flex Fuel ICE | 4.3 | 6.8 | 8.9 | 10.7 | 11.8 | 12.8 | 13.0 | 12.9 | 12.1 | 11.3 | 10.5 | 9.9 | 8.9 | 8.3 | 7.7 | 7.3 | 6.9 | 6.2 | 5.6 | 5.1 | 4.6 | 4.1 | -0.2% |
| Ethanol ICE | 0.1 | 0.3 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 8.7% |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 4.4% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 89.1% |
| CNG ICE | 3.4 | 8.2 | 11.0 | 11.1 | 11.4 | 11.8 | 12.1 | 12.1 | 12.1 | 12.1 | 12.1 | 12.3 | 12.2 | 12.2 | 12.4 | 12.7 | 12.9 | 12.7 | 12.6 | 12.5 | 12.6 | 12.7 | 6.1% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.0% |
| LPG ICE | 1.8 | 3.2 | 4.1 | 4.1 | 4.2 | 4.3 | 4.4 | 4.4 | 4.4 | 4.4 | 4.5 | 4.5 | 4.5 | 4.5 | 4.6 | 4.7 | 4.7 | 4.7 | 4.6 | 4.6 | 4.6 | 4.7 | 4.3% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.2% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 17.9 | 32.6 | 42.2 | 47.1 | 51.6 | 50.6 | 51.2 | 51.2 | 49.0 | 47.5 | 46.1 | 45.3 | 43.4 | 43.4 | 42.6 | 42.3 | 41.7 | 39.6 | 37.9 | 36.5 | 35.3 | 34.3 | 3.0% |

**Table 38. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
03 - East North Central**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| Percent Alternative LT. Sales | 1.73 | 3.21 | 4.14 | 4.60 | 4.90 | 4.65 | 4.60 | 4.60 | 4.40 | 4.26 | 4.12 | 3.99 | 3.85 | 3.84 | 3.71 | 3.60 | 3.49 | 3.37 | 3.25 | 3.14 | 3.03 | 2.92 | 2.4% |
| Total New Truck Sales | 1031.9 | 1014.0 | 1017.9 | 1024.6 | 1054.3 | 1087.6 | 1114.1 | 1113.9 | 1112.4 | 1115.8 | 1120.3 | 1134.2 | 1127.9 | 1127.9 | 1146.6 | 1176.3 | 1193.2 | 1177.1 | 1164.6 | 1159.2 | 1163.5 | 1172.9 | 0.6% |
| Percent Total Alternative Sales | 3.21 | 5.29 | 6.35 | 6.98 | 7.29 | 6.98 | 6.91 | 6.89 | 6.63 | 6.43 | 6.36 | 6.15 | 5.95 | 5.84 | 5.71 | 5.59 | 5.46 | 5.54 | 5.41 | 5.28 | 5.14 | 5.01 | 2.0% |
| EPACT Leg. Alternative Sales | 13.42 | 29.93 | 38.19 | 37.96 | 38.64 | 39.49 | 40.13 | 39.86 | 39.59 | 39.52 | 39.52 | 39.87 | 39.54 | 39.44 | 40.01 | 40.97 | 41.49 | 40.88 | 40.40 | 40.18 | 40.29 | 40.59 | 5.2% |
| ZEVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 2310.3 | 2205.0 | 2180.8 | 2167.0 | 2206.1 | 2257.1 | 2293.9 | 2278.3 | 2262.3 | 2258.1 | 2257.9 | 2277.7 | 2258.4 | 2252.6 | 2284.9 | 2339.6 | 2369.4 | 2334.3 | 2306.9 | 2294.1 | 2300.6 | 2317.7 | 0.0% |

1/ Includes personal and fleet light-duty cars.
2/ Includes personal and fleet light-duty trucks.

TDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LI = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 39. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
04 - West North Central

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 507.3 | 463.0 | 447.1 | 435.9 | 438.0 | 446.1 | 449.2 | 444.7 | 439.5 | 436.5 | 433.5 | 435.9 | 431.3 | 429.2 | 434.6 | 444.3 | 450.1 | 442.0 | 437.4 | 435.8 | 437.7 | 441.9 | -0.6% |
| TDI Diesel ICE | 0.2 | 0.5 | 0.7 | 1.1 | 1.7 | 2.8 | 4.4 | 3.6 | 5.2 | 7.3 | 9.5 | 11.7 | 13.3 | 14.8 | 16.0 | 17.1 | 17.7 | 17.6 | 17.7 | 17.7 | 17.9 | 18.2 | 22.8% |
| Total Conventional | 507.5 | 463.5 | 447.8 | 437.0 | 439.6 | 448.9 | 453.6 | 448.3 | 444.8 | 443.8 | 443.0 | 447.6 | 444.6 | 444.0 | 450.6 | 461.4 | 467.8 | 459.6 | 455.1 | 453.5 | 455.7 | 460.0 | -0.4% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 10.6 | 15.3 | 17.6 | 19.4 | 20.5 | 18.6 | 18.1 | 17.4 | 15.8 | 14.6 | 13.4 | 12.4 | 11.3 | 10.6 | 10.3 | 10.1 | 9.9 | 11.2 | 10.9 | 10.7 | 10.6 | 10.5 | 0.0% |
| Methanol ICE | 0.3 | 0.8 | 1.1 | 1.1 | 1.2 | 1.2 | 1.3 | 1.4 | 1.6 | 1.8 | 2.2 | 2.6 | 3.0 | 3.0 | 3.3 | 3.6 | 3.8 | 3.8 | 3.7 | 3.7 | 3.6 | 3.6 | 11.3% |
| Ethanol-Flex Fuel ICE | 6.9 | 9.7 | 10.7 | 11.9 | 12.6 | 13.0 | 12.9 | 12.4 | 11.5 | 10.6 | 10.7 | 9.8 | 8.7 | 8.1 | 7.7 | 7.5 | 7.3 | 7.1 | 6.9 | 6.6 | 6.5 | 6.3 | -0.4% |
| Ethanol Ice | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.5 | 0.7 | 0.9 | 1.3 | 1.7 | 2.1 | 2.5 | 3.0 | 3.4 | 3.7 | 3.8 | 3.7 | 3.5 | 3.3 | 3.1 | 2.9 | 20.7% |
| Electric Vehicle | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 4.6% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 81.6% |
| CNG ICE | 2.2 | 4.5 | 5.5 | 5.4 | 5.6 | 5.8 | 6.0 | 6.1 | 6.1 | 6.2 | 6.3 | 6.4 | 6.4 | 6.4 | 6.6 | 6.9 | 6.9 | 6.8 | 6.7 | 6.6 | 6.6 | 6.6 | 5.1% |
| CNG Bi-fuel | 0.8 | 1.0 | 1.2 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | -3.1% |
| LPG ICE | 1.2 | 1.9 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.8 | 2.8 | 2.8 | 2.9 | 2.9 | 2.8 | 2.9 | 3.0 | 3.0 | 2.9 | 2.9 | 2.8 | 2.8 | 2.7 | 4.0% |
| LPG Bi-fuel | 0.6 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | -5.4% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 22.7 | 34.2 | 39.3 | 42.5 | 44.7 | 43.6 | 43.6 | 42.7 | 40.5 | 38.9 | 38.6 | 37.6 | 36.1 | 35.2 | 35.3 | 35.9 | 35.8 | 36.6 | 35.5 | 34.6 | 34.0 | 33.5 | 1.8% |
| Percent Alternative Car Sales | 4.28 | 6.87 | 8.07 | 8.86 | 9.24 | 8.86 | 8.77 | 8.69 | 8.34 | 8.06 | 8.02 | 7.74 | 7.51 | 7.34 | 7.26 | 7.23 | 7.11 | 7.37 | 7.23 | 7.09 | 6.94 | 6.79 | 2.1% |
| Total New Car Sales | 530.2 | 497.7 | 487.1 | 479.5 | 484.4 | 492.5 | 497.2 | 490.9 | 485.2 | 482.7 | 481.6 | 485.2 | 480.7 | 479.2 | 485.9 | 497.3 | 503.6 | 496.2 | 490.6 | 488.1 | 489.7 | 493.6 | -0.3% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 420.5 | 409.7 | 408.0 | 409.0 | 419.4 | 432.8 | 441.5 | 446.5 | 446.2 | 447.6 | 449.6 | 455.4 | 453.5 | 453.7 | 462.3 | 475.4 | 483.4 | 478.2 | 474.5 | 473.7 | 476.7 | 481.8 | 0.6% |
| TDI Diesel ICE | 0.2 | 0.6 | 1.0 | 1.5 | 2.5 | 4.2 | 6.8 | 2.0 | 2.9 | 4.3 | 5.7 | 7.0 | 8.0 | 8.7 | 9.2 | 9.6 | 9.8 | 9.6 | 9.4 | 9.3 | 9.2 | 9.1 | 18.6% |
| Total Conventional | 420.8 | 410.3 | 409.0 | 410.6 | 421.9 | 437.0 | 448.3 | 448.5 | 449.2 | 451.8 | 455.2 | 462.4 | 461.5 | 462.4 | 471.5 | 485.0 | 493.2 | 487.8 | 484.0 | 483.0 | 485.9 | 491.0 | 0.7% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 2.9 | 4.8 | 6.0 | 7.3 | 8.4 | 7.3 | 7.2 | 7.3 | 6.6 | 6.2 | 5.9 | 5.6 | 5.2 | 5.5 | 5.3 | 5.1 | 4.9 | 4.5 | 4.2 | 3.9 | 3.6 | 3.4 | 0.7% |
| Methanol Ice | 0.4 | 1.0 | 1.4 | 1.4 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 7.2% |
| Ethanol-Flex Fuel ICE | 1.7 | 2.6 | 3.4 | 4.1 | 4.7 | 5.0 | 5.1 | 5.0 | 4.6 | 4.3 | 4.0 | 3.7 | 3.4 | 3.1 | 2.9 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.8 | 1.6 | -0.4% |
| Ethanol ICE | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 10.1% |
| Electric Vehicle | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 4.6% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 89.5% |
| CNG ICE | 1.4 | 3.4 | 4.6 | 4.7 | 4.8 | 5.0 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.2 | 5.2 | 5.2 | 5.3 | 5.4 | 5.5 | 5.5 | 5.4 | 5.4 | 5.4 | 5.5 | 6.3% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.4% |
| LPG ICE | 0.8 | 1.4 | 1.7 | 1.7 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 4.5% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.5% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 7.3 | 13.5 | 17.4 | 19.5 | 21.5 | 21.0 | 21.2 | 21.2 | 20.3 | 19.7 | 19.1 | 18.8 | 18.1 | 18.2 | 17.9 | 17.9 | 17.7 | 16.9 | 16.2 | 15.6 | 15.1 | 14.7 | 3.3% |

**Table 39. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
04 - West North Central**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-----------|
| Percent Alternative LT. Sales | 1.70 | 3.18 | 4.09 | 4.53 | 4.85 | 4.59 | 4.52 | 4.52 | 4.32 | 4.17 | 4.03 | 3.91 | 3.77 | 3.79 | 3.67 | 3.56 | 3.46 | 3.34 | 3.23 | 3.13 | 3.02 | 2.91 | 2.5% |
| Total New Truck Sales | 428.0 | 423.8 | 426.4 | 430.1 | 443.4 | 458.0 | 469.5 | 469.7 | 469.4 | 471.5 | 474.3 | 481.2 | 479.6 | 480.6 | 489.4 | 502.9 | 510.9 | 504.7 | 500.1 | 498.6 | 501.0 | 505.7 | 0.8% |
| Percent Total Alternative Sales | 3.13 | 5.17 | 6.21 | 6.82 | 7.14 | 6.80 | 6.71 | 6.65 | 6.36 | 6.14 | 6.04 | 5.83 | 5.64 | 5.56 | 5.46 | 5.38 | 5.27 | 5.34 | 5.21 | 5.09 | 4.96 | 4.83 | 2.0% |
| EPACT Leg. Alternative Sales | 5.56 | 12.51 | 16.00 | 15.93 | 16.25 | 16.63 | 16.91 | 16.81 | 16.71 | 16.70 | 16.73 | 16.92 | 16.81 | 16.80 | 17.08 | 17.52 | 17.77 | 17.53 | 17.35 | 17.28 | 17.35 | 17.50 | 5.3% |
| ZEVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 958.2 | 921.5 | 913.5 | 909.6 | 927.8 | 950.5 | 966.7 | 960.6 | 954.7 | 954.3 | 956.0 | 966.3 | 960.2 | 959.7 | 975.3 | 1000.2 | 1014.5 | 1000.9 | 990.7 | 986.6 | 990.7 | 999.3 | 0.2% |

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

IDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LT = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available.

The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see

EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.L100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.L100199A.

Table 40. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
05 - South Atlantic

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1378.5 | 1264.2 | 1225.0 | 1199.6 | 1211.0 | 1240.7 | 1256.7 | 1251.4 | 1244.3 | 1243.2 | 1242.8 | 1257.7 | 1252.8 | 1256.4 | 1282.1 | 1321.8 | 1349.6 | 1334.6 | 1331.3 | 1336.8 | 1353.7 | 1377.5 | 0.0% |
| TDI Diesel ICE | 0.5 | 1.2 | 1.9 | 3.0 | 4.6 | 7.6 | 12.1 | 9.8 | 14.5 | 20.4 | 26.7 | 33.0 | 37.8 | 42.2 | 46.0 | 49.5 | 51.8 | 51.9 | 52.4 | 52.8 | 53.8 | 54.9 | 23.6% |
| Total Conventional | 1379.0 | 1265.5 | 1226.9 | 1202.6 | 1215.6 | 1248.3 | 1268.9 | 1261.2 | 1258.8 | 1263.6 | 1269.5 | 1290.7 | 1290.6 | 1298.6 | 1328.0 | 1371.2 | 1401.5 | 1386.5 | 1383.6 | 1389.6 | 1407.5 | 1432.4 | 0.2% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 28.3 | 43.4 | 50.1 | 55.9 | 59.8 | 54.6 | 54.2 | 53.4 | 49.7 | 47.4 | 44.7 | 42.5 | 39.9 | 38.4 | 37.9 | 37.7 | 37.3 | 42.4 | 41.6 | 41.1 | 41.0 | 41.1 | 1.7% |
| Methanol ICE | 0.9 | 2.2 | 2.9 | 3.0 | 3.2 | 3.4 | 3.7 | 4.1 | 4.6 | 5.5 | 6.8 | 8.5 | 10.1 | 10.3 | 11.4 | 12.6 | 13.5 | 13.7 | 13.6 | 13.5 | 13.4 | 13.3 | 12.9% |
| Ethanol-Flex Fuel ICE | 18.3 | 24.1 | 27.0 | 30.1 | 31.6 | 32.9 | 33.2 | 32.4 | 30.7 | 29.0 | 30.2 | 28.2 | 25.9 | 24.4 | 23.6 | 23.1 | 22.5 | 22.1 | 21.2 | 20.6 | 20.0 | 19.5 | 0.3% |
| Ethanol Ice | 0.1 | 0.3 | 0.4 | 0.4 | 0.5 | 0.6 | 0.7 | 0.9 | 1.2 | 1.5 | 1.9 | 2.3 | 2.7 | 3.1 | 3.5 | 3.8 | 4.1 | 4.0 | 3.7 | 3.5 | 3.3 | 3.1 | 16.2% |
| Electric Vehicle | 0.2 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 5.4% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 84.3% |
| CNG ICE | 6.0 | 12.3 | 14.9 | 14.9 | 15.3 | 15.8 | 16.4 | 16.6 | 16.7 | 17.0 | 17.2 | 17.6 | 17.6 | 17.7 | 18.2 | 18.9 | 19.1 | 19.0 | 18.8 | 18.8 | 19.0 | 19.2 | 5.5% |
| CNG Bi-fuel | 2.2 | 2.8 | 3.2 | 3.5 | 3.6 | 3.7 | 3.6 | 3.4 | 3.1 | 2.8 | 2.7 | 2.6 | 2.4 | 2.2 | 2.2 | 2.2 | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | -1.7% |
| LPG ICE | 3.1 | 5.2 | 6.1 | 6.1 | 6.3 | 6.5 | 6.8 | 6.9 | 7.0 | 7.1 | 7.2 | 7.3 | 7.3 | 7.3 | 7.4 | 7.7 | 7.8 | 7.7 | 7.6 | 7.5 | 7.5 | 7.6 | 4.1% |
| LPG Bi-fuel | 1.4 | 1.6 | 1.8 | 2.0 | 2.0 | 2.0 | 1.9 | 1.8 | 1.6 | 1.5 | 1.3 | 1.2 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | -4.7% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 60.6 | 92.2 | 106.8 | 116.2 | 122.7 | 119.8 | 120.9 | 119.9 | 115.2 | 112.3 | 112.5 | 110.7 | 107.4 | 105.1 | 105.7 | 107.5 | 107.6 | 112.1 | 109.6 | 107.9 | 107.0 | 106.4 | 2.6% |
| Percent Alternative Car Sales | 4.21 | 6.79 | 8.01 | 8.81 | 9.17 | 8.76 | 8.70 | 8.68 | 8.38 | 8.16 | 8.14 | 7.90 | 7.68 | 7.49 | 7.37 | 7.27 | 7.13 | 7.48 | 7.34 | 7.20 | 7.06 | 6.92 | 2.3% |
| Total New Car Sales | 1439.6 | 1357.7 | 1333.7 | 1318.8 | 1338.3 | 1368.1 | 1389.8 | 1381.1 | 1374.0 | 1375.9 | 1382.0 | 1401.4 | 1397.9 | 1403.6 | 1433.7 | 1478.7 | 1509.1 | 1498.6 | 1493.2 | 1497.5 | 1514.5 | 1538.8 | 0.3% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1142.1 | 1117.8 | 1117.5 | 1125.3 | 1159.4 | 1203.5 | 1235.4 | 1257.1 | 1264.6 | 1276.7 | 1290.9 | 1316.4 | 1319.9 | 1329.9 | 1365.1 | 1414.8 | 1449.9 | 1445.6 | 1445.7 | 1454.6 | 1475.7 | 1503.5 | 1.3% |
| TDI Diesel ICE | 0.6 | 1.6 | 2.6 | 4.1 | 6.7 | 11.5 | 18.6 | 5.4 | 8.0 | 11.8 | 15.8 | 19.7 | 22.6 | 24.7 | 26.4 | 27.6 | 28.3 | 28.2 | 27.8 | 27.4 | 27.3 | 27.4 | 19.3% |
| Total Conventional | 1142.7 | 1119.4 | 1120.0 | 1129.5 | 1166.1 | 1215.0 | 1254.0 | 1262.4 | 1272.6 | 1288.5 | 1306.7 | 1336.1 | 1342.6 | 1354.6 | 1391.5 | 1442.4 | 1478.2 | 1473.8 | 1473.5 | 1482.0 | 1503.0 | 1530.9 | 1.3% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 7.6 | 13.7 | 17.1 | 20.9 | 24.6 | 21.3 | 21.2 | 21.6 | 19.9 | 19.1 | 18.2 | 17.7 | 16.7 | 17.8 | 17.2 | 16.8 | 16.3 | 15.1 | 14.1 | 13.3 | 12.4 | 11.7 | 2.0% |
| Methanol Ice | 1.1 | 2.8 | 3.9 | 4.0 | 4.1 | 4.3 | 4.5 | 4.5 | 4.6 | 4.8 | 4.9 | 5.1 | 5.2 | 5.3 | 5.5 | 5.7 | 5.8 | 5.7 | 5.7 | 5.6 | 5.7 | 5.7 | 8.0% |
| Ethanol-Flex Fuel ICE | 4.5 | 6.3 | 8.4 | 10.1 | 11.3 | 12.1 | 12.3 | 12.2 | 11.4 | 10.7 | 9.9 | 9.4 | 8.5 | 7.9 | 7.5 | 7.1 | 6.7 | 6.0 | 5.5 | 4.9 | 4.5 | 4.0 | -0.6% |
| Ethanol ICE | 0.1 | 0.4 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 9.0% |
| Electric Vehicle | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 5.2% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.4% |
| CNG ICE | 3.8 | 9.4 | 12.7 | 12.8 | 13.3 | 13.8 | 14.2 | 14.3 | 14.4 | 14.6 | 14.7 | 15.0 | 15.1 | 15.2 | 15.6 | 16.2 | 16.5 | 16.5 | 16.4 | 16.5 | 16.7 | 17.0 | 7.0% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.2% |
| LPG ICE | 2.1 | 3.7 | 4.7 | 4.7 | 4.9 | 5.1 | 5.2 | 5.3 | 5.3 | 5.4 | 5.4 | 5.5 | 5.6 | 5.6 | 5.7 | 5.9 | 6.1 | 6.1 | 6.0 | 6.1 | 6.1 | 6.3 | 5.2% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.9% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 19.4 | 36.5 | 47.5 | 53.3 | 59.0 | 57.4 | 58.4 | 58.8 | 56.6 | 55.4 | 54.3 | 53.9 | 52.2 | 53.1 | 52.7 | 52.9 | 52.6 | 50.6 | 48.9 | 47.6 | 46.6 | 45.8 | 4.0% |

**Table 40. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
05 - South Atlantic**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales | 1.67 | 3.16 | 4.07 | 4.51 | 4.81 | 4.51 | 4.45 | 4.45 | 4.26 | 4.12 | 3.99 | 3.88 | 3.74 | 3.77 | 3.65 | 3.54 | 3.44 | 3.32 | 3.21 | 3.11 | 3.01 | 2.90 | 2.6% |
| Total New Truck Sales | 1162.0 | 1155.9 | 1167.5 | 1182.8 | 1225.0 | 1272.4 | 1312.4 | 1321.3 | 1329.2 | 1343.9 | 1361.0 | 1390.0 | 1394.7 | 1407.7 | 1444.2 | 1495.3 | 1530.9 | 1524.4 | 1522.4 | 1529.6 | 1549.6 | 1576.6 | 1.4% |
| Percent Total Alternative Sales | 3.07 | 5.12 | 6.17 | 6.77 | 7.09 | 6.71 | 6.64 | 6.61 | 6.35 | 6.17 | 6.08 | 5.89 | 5.71 | 5.63 | 5.50 | 5.39 | 5.27 | 5.38 | 5.26 | 5.14 | 5.01 | 4.89 | 2.1% |
| EPACT Leg. Alternative Sales | 15.11 | 34.12 | 43.80 | 43.82 | 44.90 | 46.20 | 47.28 | 47.28 | 47.30 | 47.60 | 48.01 | 48.86 | 48.89 | 49.22 | 50.39 | 52.08 | 53.24 | 52.94 | 52.81 | 53.01 | 53.66 | 54.56 | 6.0% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 2601.6 | 2513.7 | 2501.3 | 2501.6 | 2563.3 | 2640.5 | 2702.2 | 2702.4 | 2703.2 | 2719.9 | 2743.0 | 2791.4 | 2792.7 | 2811.3 | 2877.9 | 2974.0 | 3040.0 | 3023.0 | 3015.6 | 3027.1 | 3064.1 | 3115.5 | 0.8% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPACT = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L.L. = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 41. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
06 - East South Central

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 453.3 | 416.3 | 402.9 | 393.7 | 396.1 | 403.8 | 407.1 | 403.6 | 399.1 | 396.5 | 393.7 | 396.1 | 392.1 | 390.6 | 395.9 | 405.5 | 411.2 | 404.2 | 400.4 | 399.3 | 401.7 | 406.0 | -0.5% |
| TDI Diesel ICE | 0.2 | 0.4 | 0.7 | 1.1 | 1.6 | 2.7 | 4.2 | 3.4 | 5.0 | 7.0 | 9.1 | 11.2 | 12.7 | 14.1 | 15.3 | 16.4 | 17.1 | 17.1 | 17.1 | 17.2 | 17.5 | 17.8 | 23.2% |
| Total Conventional | 453.4 | 416.7 | 403.6 | 394.7 | 397.6 | 406.5 | 411.4 | 407.0 | 404.1 | 403.5 | 402.8 | 407.3 | 404.9 | 404.7 | 411.3 | 421.9 | 428.3 | 421.2 | 417.6 | 416.5 | 419.2 | 423.8 | -0.3% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 9.6 | 13.2 | 15.2 | 16.9 | 18.0 | 16.4 | 16.2 | 15.8 | 14.6 | 13.8 | 13.0 | 12.2 | 11.3 | 10.8 | 10.5 | 10.3 | 10.1 | 11.3 | 11.0 | 10.7 | 10.6 | 10.5 | 0.4% |
| Methanol ICE | 0.3 | 0.7 | 1.0 | 1.0 | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.6 | 2.0 | 2.4 | 2.8 | 2.9 | 3.1 | 3.4 | 3.6 | 3.6 | 3.5 | 3.5 | 3.4 | 3.3 | 11.5% |
| Ethanol-Flex Fuel ICE | 6.2 | 9.0 | 10.0 | 11.1 | 11.9 | 12.4 | 12.5 | 12.2 | 11.5 | 10.8 | 11.3 | 10.5 | 9.6 | 9.0 | 8.7 | 8.4 | 8.2 | 8.0 | 7.7 | 7.4 | 7.2 | 7.1 | 0.6% |
| Ethanol Ice | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.8 | 1.0 | 1.2 | 1.4 | 1.5 | 1.7 | 1.8 | 1.7 | 1.6 | 1.6 | 1.5 | 1.4 | 17.8% |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 5.0% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.1% |
| CNG ICE | 2.0 | 4.0 | 4.9 | 4.9 | 5.0 | 5.1 | 5.3 | 5.3 | 5.4 | 5.4 | 5.5 | 5.5 | 5.5 | 5.5 | 5.6 | 5.8 | 5.8 | 5.7 | 5.6 | 5.6 | 5.6 | 5.6 | 4.9% |
| CNG Bi-fuel | 0.7 | 0.9 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | -2.1% |
| LPG ICE | 1.0 | 1.7 | 2.0 | 2.0 | 2.1 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 | 2.3 | 3.7% |
| LPG Bi-fuel | 0.5 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | -4.9% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 20.4 | 30.4 | 35.0 | 37.9 | 40.1 | 39.4 | 39.6 | 39.1 | 37.4 | 36.2 | 36.3 | 35.4 | 34.0 | 33.1 | 33.0 | 33.3 | 33.0 | 33.8 | 32.8 | 32.0 | 31.5 | 31.0 | 1.9% |
| Percent Alternative Car Sales | 4.30 | 6.79 | 7.97 | 8.76 | 9.16 | 8.83 | 8.79 | 8.76 | 8.47 | 8.24 | 8.27 | 8.00 | 7.75 | 7.55 | 7.42 | 7.31 | 7.16 | 7.43 | 7.28 | 7.13 | 6.98 | 6.82 | 2.1% |
| Total New Car Sales | 473.8 | 447.1 | 438.6 | 432.6 | 437.7 | 445.8 | 451.0 | 446.1 | 441.5 | 439.7 | 439.1 | 442.7 | 438.9 | 437.8 | 444.2 | 455.1 | 461.4 | 455.1 | 450.3 | 448.5 | 450.6 | 454.8 | -0.2% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 375.8 | 368.2 | 367.5 | 369.3 | 379.3 | 391.8 | 400.2 | 405.8 | 406.0 | 407.6 | 409.6 | 415.2 | 413.7 | 414.1 | 422.3 | 434.7 | 442.5 | 438.2 | 435.2 | 434.9 | 438.3 | 443.5 | 0.8% |
| TDI Diesel ICE | 0.2 | 0.6 | 0.9 | 1.5 | 2.4 | 4.1 | 6.6 | 1.9 | 2.9 | 4.2 | 5.6 | 6.9 | 7.9 | 8.6 | 9.1 | 9.5 | 9.7 | 9.6 | 9.4 | 9.3 | 9.2 | 9.2 | 19.0% |
| Total Conventional | 376.0 | 368.8 | 368.5 | 370.8 | 381.6 | 395.9 | 406.8 | 407.7 | 408.8 | 411.7 | 415.2 | 422.1 | 421.5 | 422.7 | 431.4 | 444.2 | 452.2 | 447.8 | 444.6 | 444.2 | 447.5 | 452.8 | 0.8% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 2.6 | 4.0 | 5.0 | 6.1 | 7.1 | 6.2 | 6.1 | 6.2 | 5.7 | 5.4 | 5.1 | 4.9 | 4.5 | 4.7 | 4.5 | 4.3 | 4.2 | 3.8 | 3.5 | 3.2 | 3.0 | 2.8 | 0.3% |
| Methanol Ice | 0.3 | 0.9 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 7.4% |
| Ethanol-Flex Fuel ICE | 1.5 | 2.4 | 3.2 | 3.8 | 4.4 | 4.7 | 4.8 | 4.8 | 4.5 | 4.2 | 3.9 | 3.7 | 3.3 | 3.1 | 2.9 | 2.7 | 2.6 | 2.3 | 2.1 | 1.9 | 1.7 | 1.6 | 0.0% |
| Ethanol ICE | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 8.9% |
| Electric Vehicle | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 4.7% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 89.9% |
| CNG ICE | 1.3 | 3.1 | 4.2 | 4.2 | 4.3 | 4.5 | 4.6 | 4.6 | 4.6 | 4.7 | 4.7 | 4.8 | 4.7 | 4.8 | 4.8 | 5.0 | 5.1 | 5.0 | 5.0 | 4.9 | 5.0 | 5.0 | 6.5% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.5% |
| LPG ICE | 0.7 | 1.2 | 1.5 | 1.5 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 4.6% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.0% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 6.5 | 11.9 | 15.4 | 17.3 | 19.0 | 18.8 | 19.0 | 19.1 | 18.3 | 17.8 | 17.3 | 17.0 | 16.3 | 16.4 | 16.1 | 16.0 | 15.8 | 15.1 | 14.5 | 14.0 | 13.6 | 13.2 | 3.3% |

**Table 41. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
06 - East South Central**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| Percent Alternative LT. Sales | 1.70 | 3.12 | 4.02 | 4.45 | 4.75 | 4.52 | 4.47 | 4.47 | 4.28 | 4.14 | 4.00 | 3.88 | 3.73 | 3.73 | 3.60 | 3.49 | 3.38 | 3.27 | 3.16 | 3.05 | 2.94 | 2.84 | 2.4% |
| Total New Truck Sales | 382.5 | 380.6 | 383.9 | 388.0 | 400.7 | 414.6 | 425.9 | 426.7 | 427.1 | 429.5 | 432.5 | 439.1 | 437.9 | 439.1 | 447.5 | 460.2 | 468.0 | 462.9 | 459.1 | 458.2 | 461.0 | 466.0 | 0.9% |
| Percent Total Alternative Sales | 3.13 | 5.10 | 6.13 | 6.72 | 7.05 | 6.76 | 6.69 | 6.66 | 6.41 | 6.21 | 6.15 | 5.95 | 5.75 | 5.64 | 5.50 | 5.39 | 5.26 | 5.33 | 5.20 | 5.07 | 4.94 | 4.81 | 2.0% |
| EPACT Leg. Alternative Sales | 4.97 | 11.24 | 14.40 | 14.38 | 14.69 | 15.06 | 15.34 | 15.27 | 15.20 | 15.21 | 15.26 | 15.44 | 15.35 | 15.35 | 15.61 | 16.03 | 16.28 | 16.08 | 15.93 | 15.88 | 15.97 | 16.13 | 5.5% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 856.3 | 827.7 | 822.5 | 820.6 | 838.4 | 860.5 | 876.8 | 872.8 | 868.6 | 869.2 | 871.6 | 881.8 | 876.8 | 876.9 | 891.7 | 915.4 | 929.4 | 917.9 | 909.4 | 906.7 | 911.7 | 920.8 | 0.3% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPACT = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L.T. = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 42. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
07 - West South Central**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 801.4 | 737.4 | 714.6 | 699.3 | 705.2 | 720.6 | 728.6 | 724.5 | 718.6 | 716.0 | 713.5 | 719.8 | 714.8 | 714.0 | 725.9 | 745.4 | 758.4 | 747.8 | 743.2 | 743.4 | 750.0 | 760.3 | -0.2% |
| TDI Diesel ICE | 0.3 | 0.8 | 1.2 | 1.9 | 2.9 | 4.8 | 7.7 | 6.2 | 9.1 | 12.8 | 16.7 | 20.6 | 23.5 | 26.2 | 28.5 | 30.7 | 32.1 | 32.1 | 32.3 | 32.6 | 33.2 | 33.9 | 23.8% |
| Total Conventional | 801.7 | 738.2 | 715.8 | 701.2 | 708.0 | 725.4 | 736.2 | 730.7 | 727.7 | 728.7 | 730.1 | 740.4 | 738.3 | 740.2 | 754.5 | 776.1 | 790.5 | 779.9 | 775.5 | 776.0 | 783.2 | 794.2 | 0.0% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 16.6 | 22.4 | 25.7 | 28.5 | 30.2 | 27.3 | 26.6 | 25.8 | 23.6 | 22.2 | 20.8 | 19.7 | 18.3 | 17.6 | 17.2 | 17.0 | 19.3 | 18.8 | 18.5 | 18.3 | 18.3 | 18.3 | 0.5% |
| Methanol ICE | 0.5 | 1.2 | 1.7 | 1.7 | 1.8 | 1.9 | 2.0 | 2.1 | 2.3 | 2.6 | 3.1 | 3.7 | 4.2 | 4.2 | 4.5 | 4.9 | 5.1 | 5.1 | 5.1 | 5.0 | 5.0 | 4.9 | 10.6% |
| Ethanol-Flex Fuel ICE | 10.7 | 14.2 | 15.8 | 17.5 | 18.2 | 18.8 | 18.7 | 18.0 | 16.9 | 15.8 | 16.3 | 15.2 | 13.9 | 13.1 | 12.7 | 12.4 | 12.1 | 12.0 | 11.5 | 11.2 | 10.9 | 10.7 | 0.0% |
| Ethanol Ice | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 | 0.5 | 0.7 | 0.9 | 1.1 | 1.3 | 1.5 | 1.8 | 2.0 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 1.9 | 1.8 | 16.3% |
| Electric Vehicle | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 5.2% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.6% |
| CNG ICE | 3.5 | 7.2 | 8.7 | 8.7 | 9.0 | 9.4 | 9.8 | 10.0 | 10.1 | 10.3 | 10.5 | 10.8 | 10.9 | 11.0 | 11.4 | 12.0 | 12.0 | 11.9 | 11.7 | 11.6 | 11.7 | 11.7 | 5.7% |
| CNG Bi-fuel | 1.4 | 1.7 | 2.0 | 2.1 | 2.2 | 2.2 | 2.1 | 1.9 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | -2.4% |
| LPG ICE | 1.8 | 3.1 | 3.7 | 3.7 | 4.0 | 4.3 | 4.6 | 4.9 | 5.2 | 5.4 | 5.6 | 5.8 | 5.8 | 5.9 | 6.0 | 6.1 | 6.1 | 6.0 | 5.8 | 5.7 | 5.6 | 5.5 | 5.1% |
| LPG Bi-fuel | 0.8 | 1.1 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.0 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 | -3.8% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 35.5 | 51.3 | 59.2 | 64.1 | 67.3 | 65.7 | 65.8 | 64.7 | 61.8 | 60.0 | 60.1 | 59.0 | 57.0 | 55.7 | 55.9 | 56.9 | 56.7 | 58.3 | 56.8 | 55.6 | 55.0 | 54.5 | 2.0% |
| Percent Alternative Car Sales | 4.24 | 6.50 | 7.64 | 8.38 | 8.68 | 8.30 | 8.21 | 8.14 | 7.83 | 7.61 | 7.61 | 7.38 | 7.16 | 7.00 | 6.90 | 6.83 | 6.69 | 6.96 | 6.82 | 6.69 | 6.56 | 6.42 | 1.9% |
| Total New Car Sales | 837.2 | 789.5 | 775.0 | 765.3 | 775.3 | 791.1 | 802.1 | 795.5 | 789.5 | 788.7 | 790.3 | 799.4 | 795.3 | 796.0 | 810.4 | 833.0 | 847.1 | 838.3 | 832.3 | 831.7 | 838.2 | 848.7 | 0.1% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 664.1 | 650.8 | 650.3 | 654.1 | 672.9 | 696.5 | 713.1 | 725.0 | 727.4 | 732.3 | 738.4 | 750.7 | 750.5 | 753.8 | 771.1 | 796.4 | 813.2 | 807.8 | 804.9 | 806.9 | 815.6 | 828.0 | 1.0% |
| TDI Diesel ICE | 0.3 | 1.0 | 1.6 | 2.6 | 4.3 | 7.4 | 11.9 | 3.5 | 5.2 | 7.6 | 10.2 | 12.7 | 14.6 | 15.9 | 16.9 | 17.7 | 18.1 | 18.0 | 17.8 | 17.6 | 17.5 | 17.6 | 19.6% |
| Total Conventional | 664.5 | 651.9 | 651.9 | 656.8 | 677.2 | 703.8 | 725.0 | 728.5 | 732.6 | 739.9 | 748.6 | 763.5 | 765.1 | 769.7 | 788.1 | 814.1 | 831.3 | 825.8 | 822.7 | 824.4 | 833.1 | 845.6 | 1.1% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 4.5 | 7.0 | 8.7 | 10.6 | 12.4 | 10.8 | 10.6 | 10.8 | 9.9 | 9.4 | 8.9 | 8.5 | 8.0 | 8.4 | 8.0 | 7.8 | 7.5 | 6.9 | 6.4 | 5.9 | 5.5 | 5.1 | 0.6% |
| Methanol Ice | 0.6 | 1.6 | 2.3 | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.6 | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 3.0 | 3.1 | 3.1 | 3.1 | 3.0 | 3.0 | 3.0 | 3.1 | 7.6% |
| Ethanol-Flex Fuel ICE | 2.7 | 3.8 | 5.0 | 6.1 | 6.8 | 7.3 | 7.4 | 7.3 | 6.8 | 6.4 | 5.9 | 5.6 | 5.1 | 4.7 | 4.4 | 4.2 | 3.9 | 3.6 | 3.2 | 2.9 | 2.6 | 2.3 | -0.6% |
| Ethanol ICE | 0.1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 8.9% |
| Electric Vehicle | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 5.0% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.3% |
| CNG ICE | 2.2 | 5.4 | 7.4 | 7.4 | 7.7 | 8.0 | 8.2 | 8.3 | 8.3 | 8.4 | 8.4 | 8.6 | 8.6 | 8.6 | 8.8 | 9.1 | 9.3 | 9.2 | 9.2 | 9.2 | 9.3 | 9.4 | 6.7% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.4% |
| LPG ICE | 1.2 | 2.2 | 2.7 | 2.7 | 2.8 | 2.9 | 3.0 | 3.0 | 3.1 | 3.1 | 3.1 | 3.2 | 3.2 | 3.2 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.5 | 4.9% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.0% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 11.3 | 20.4 | 26.5 | 29.6 | 32.6 | 31.9 | 32.4 | 32.5 | 31.2 | 30.5 | 29.7 | 29.4 | 28.4 | 28.6 | 28.2 | 28.2 | 28.0 | 26.8 | 25.9 | 25.1 | 24.5 | 23.9 | 3.5% |

**Table 42. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
07 - West South Central**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------|
| Percent Alternative LT. Sales | 1.68 | 3.03 | 3.91 | 4.31 | 4.59 | 4.34 | 4.27 | 4.27 | 4.09 | 3.96 | 3.82 | 3.71 | 3.57 | 3.58 | 3.46 | 3.35 | 3.26 | 3.15 | 3.05 | 2.95 | 2.85 | 2.75 | 2.3% |
| Total New Truck Sales | 675.8 | 672.2 | 678.4 | 686.4 | 709.7 | 735.8 | 757.4 | 761.0 | 763.8 | 770.4 | 778.3 | 792.8 | 793.4 | 798.3 | 816.3 | 842.3 | 859.3 | 852.7 | 848.5 | 849.5 | 857.6 | 869.5 | 1.2% |
| Percent Total Alternative Sales | 3.10 | 4.90 | 5.90 | 6.46 | 6.72 | 6.39 | 6.30 | 6.25 | 5.99 | 5.80 | 5.73 | 5.55 | 5.37 | 5.29 | 5.17 | 5.08 | 4.96 | 5.04 | 4.92 | 4.80 | 4.68 | 4.56 | 1.8% |
| EPACT Leg. Alternative Sales | 8.79 | 19.84 | 25.45 | 25.43 | 26.01 | 26.72 | 27.28 | 27.23 | 27.18 | 27.29 | 27.46 | 27.87 | 27.81 | 27.91 | 28.48 | 29.34 | 29.88 | 29.61 | 29.44 | 29.44 | 29.70 | 30.09 | 5.8% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 1513.0 | 1461.7 | 1453.5 | 1451.7 | 1485.1 | 1526.9 | 1559.4 | 1556.4 | 1553.4 | 1559.1 | 1568.6 | 1592.2 | 1588.7 | 1594.3 | 1626.7 | 1675.4 | 1706.4 | 1690.9 | 1680.8 | 1681.2 | 1695.7 | 1718.2 | 0.6% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPAC I = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L I . = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 43. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
08 - Mountain

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 443.8 | 421.1 | 415.7 | 412.2 | 421.4 | 435.3 | 444.3 | 445.3 | 445.0 | 446.4 | 447.7 | 454.0 | 452.4 | 453.4 | 462.8 | 477.6 | 489.4 | 486.9 | 488.3 | 493.7 | 504.2 | 518.1 | 0.7% | |
| TDI Diesel ICE | 0.2 | 0.5 | 0.7 | 1.1 | 1.8 | 3.0 | 4.8 | 3.9 | 5.8 | 8.2 | 10.8 | 13.4 | 15.3 | 17.1 | 18.7 | 20.2 | 21.3 | 21.5 | 21.9 | 22.3 | 23.1 | 23.9 | 24.7% | |
| Total Conventional | 444.0 | 421.6 | 416.4 | 413.4 | 423.2 | 438.3 | 449.1 | 449.2 | 450.8 | 454.6 | 458.4 | 467.4 | 467.7 | 470.5 | 481.5 | 497.8 | 510.7 | 508.4 | 510.2 | 516.0 | 527.3 | 542.0 | 0.9% | |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 10.0 | 13.6 | 16.0 | 18.0 | 19.4 | 17.7 | 17.5 | 17.0 | 15.6 | 14.7 | 13.6 | 12.6 | 11.6 | 11.0 | 10.6 | 10.4 | 10.2 | 11.7 | 11.5 | 11.5 | 11.5 | 11.7 | 0.7% | |
| Methanol ICE | 0.3 | 0.7 | 1.0 | 1.0 | 1.1 | 1.2 | 1.4 | 1.6 | 1.8 | 2.2 | 2.8 | 3.6 | 4.3 | 4.4 | 5.0 | 5.6 | 6.0 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 14.6% | |
| Ethanol-Flex Fuel ICE | 6.5 | 8.3 | 9.4 | 10.6 | 11.2 | 11.7 | 11.8 | 11.4 | 10.7 | 9.9 | 10.2 | 9.3 | 8.3 | 7.8 | 7.4 | 7.1 | 6.9 | 6.9 | 6.7 | 6.5 | 6.4 | 6.4 | -0.1% | |
| Ethanol Ice | 0.0 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 | 1.0 | 1.2 | 1.4 | 1.7 | 1.9 | 2.2 | 2.3 | 2.3 | 2.2 | 2.1 | 2.0 | 1.9 | 19.1% | |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 5.8% | |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 84.0% | |
| CNG ICE | 1.9 | 4.1 | 5.1 | 5.2 | 5.4 | 5.7 | 6.0 | 6.2 | 6.3 | 6.5 | 6.6 | 6.8 | 6.9 | 6.9 | 7.2 | 7.6 | 7.7 | 7.6 | 7.6 | 7.7 | 7.8 | 8.0 | 6.6% | |
| CNG Bi-fuel | 0.8 | 1.0 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.9 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | -1.7% | |
| LPG ICE | 1.0 | 1.8 | 2.1 | 2.2 | 2.3 | 2.5 | 2.6 | 2.8 | 2.9 | 3.0 | 3.1 | 3.1 | 3.1 | 3.1 | 3.2 | 3.3 | 3.4 | 3.4 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 5.5% |
| LPG Bi-fuel | 0.5 | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | -4.0% | |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Total Alternatives | 21.1 | 30.4 | 35.8 | 39.4 | 41.9 | 41.3 | 41.9 | 41.5 | 39.8 | 38.7 | 38.8 | 38.1 | 37.0 | 36.2 | 36.5 | 37.5 | 37.7 | 39.1 | 38.5 | 38.1 | 38.1 | 38.3 | 2.7% | |
| Percent Alternative Car Sales | 4.53 | 6.73 | 7.92 | 8.69 | 9.01 | 8.62 | 8.53 | 8.45 | 8.11 | 7.85 | 7.80 | 7.54 | 7.33 | 7.14 | 7.05 | 7.00 | 6.88 | 7.14 | 7.01 | 6.88 | 6.74 | 6.60 | 1.7% | |
| Total New Car Sales | 465.1 | 452.0 | 452.2 | 452.7 | 465.1 | 479.7 | 490.9 | 490.7 | 490.6 | 493.3 | 497.2 | 505.5 | 504.8 | 506.7 | 518.0 | 535.3 | 548.5 | 547.5 | 548.7 | 554.1 | 565.4 | 580.3 | 1.0% | |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 368.5 | 372.2 | 379.0 | 386.3 | 402.9 | 421.6 | 435.6 | 446.6 | 451.3 | 457.4 | 463.9 | 474.0 | 475.6 | 479.0 | 492.0 | 510.9 | 525.5 | 526.7 | 529.7 | 536.7 | 549.2 | 565.1 | 2.0% | |
| TDI Diesel ICE | 0.2 | 0.6 | 1.0 | 1.6 | 2.7 | 4.6 | 7.5 | 2.2 | 3.3 | 4.9 | 6.6 | 8.3 | 9.5 | 10.4 | 11.2 | 11.8 | 12.1 | 12.2 | 12.1 | 12.1 | 12.3 | 12.5 | 20.5% | |
| Total Conventional | 368.7 | 372.8 | 380.0 | 388.0 | 405.6 | 426.2 | 443.2 | 448.8 | 454.7 | 462.3 | 470.5 | 482.3 | 485.2 | 489.4 | 503.2 | 522.6 | 537.7 | 538.8 | 541.8 | 548.8 | 561.5 | 577.6 | 2.1% | |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 2.7 | 4.3 | 5.5 | 6.7 | 8.0 | 7.0 | 7.0 | 7.1 | 6.6 | 6.3 | 6.0 | 5.8 | 5.4 | 5.7 | 5.5 | 5.4 | 5.2 | 4.9 | 4.6 | 4.3 | 4.1 | 3.8 | 1.6% | |
| Methanol Ice | 0.3 | 0.9 | 1.3 | 1.4 | 1.4 | 1.5 | 1.6 | 1.6 | 1.7 | 1.7 | 1.8 | 1.9 | 1.9 | 2.0 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 8.9% | |
| Ethanol-Flex Fuel ICE | 1.6 | 2.2 | 3.0 | 3.7 | 4.1 | 4.5 | 4.6 | 4.6 | 4.3 | 4.0 | 3.7 | 3.5 | 3.2 | 2.9 | 2.8 | 2.6 | 2.5 | 2.3 | 2.1 | 1.9 | 1.7 | 1.6 | -0.2% | |
| Ethanol ICE | 0.0 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 10.4% | |
| Electric Vehicle | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 6.0% | |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 92.7% | |
| CNG ICE | 1.2 | 3.1 | 4.3 | 4.4 | 4.6 | 4.8 | 5.0 | 5.1 | 5.1 | 5.2 | 5.3 | 5.4 | 5.5 | 5.5 | 5.6 | 5.9 | 6.0 | 6.0 | 6.0 | 6.1 | 6.2 | 6.4 | 7.8% | |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.2% | |
| LPG ICE | 0.7 | 1.2 | 1.6 | 1.6 | 1.7 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 | 2.2 | 2.3 | 2.4 | 5.9% | |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.3% | |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Total Alternatives | 6.7 | 12.0 | 15.9 | 18.1 | 20.2 | 19.9 | 20.4 | 20.6 | 19.9 | 19.6 | 19.2 | 19.0 | 18.4 | 18.7 | 18.6 | 18.7 | 18.7 | 18.1 | 17.6 | 17.2 | 17.0 | 16.9 | 4.3% | |

**Table 43. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
08 - Mountain**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales | 1.78 | 3.12 | 4.02 | 4.45 | 4.74 | 4.47 | 4.40 | 4.40 | 4.20 | 4.06 | 3.92 | 3.80 | 3.66 | 3.68 | 3.56 | 3.45 | 3.36 | 3.25 | 3.14 | 3.04 | 2.94 | 2.84 | 2.1% |
| Total New Truck Sales | 375.4 | 384.8 | 395.9 | 406.0 | 425.8 | 446.1 | 463.6 | 469.4 | 474.6 | 481.9 | 489.7 | 501.4 | 503.6 | 508.1 | 521.8 | 541.3 | 556.4 | 556.9 | 559.4 | 566.0 | 578.5 | 594.5 | 2.1% |
| Percent Total Alternative Sales | 3.30 | 5.07 | 6.10 | 6.69 | 6.97 | 6.62 | 6.52 | 6.47 | 6.19 | 5.98 | 5.88 | 5.68 | 5.50 | 5.41 | 5.30 | 5.22 | 5.11 | 5.18 | 5.06 | 4.94 | 4.82 | 4.70 | 1.6% |
| EPACT Leg. Alternative Sales | 4.88 | 11.36 | 14.85 | 15.04 | 15.60 | 16.20 | 16.70 | 16.80 | 16.89 | 17.07 | 17.28 | 17.63 | 17.65 | 17.77 | 18.21 | 18.86 | 19.35 | 19.34 | 19.41 | 19.62 | 20.03 | 20.57 | 6.8% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Vehicles Sales | 840.5 | 836.9 | 848.1 | 858.8 | 890.9 | 925.8 | 954.5 | 960.2 | 965.2 | 975.2 | 987.0 | 1006.8 | 1008.3 | 1014.8 | 1039.8 | 1076.7 | 1104.8 | 1104.4 | 1108.1 | 1120.1 | 1143.8 | 1174.8 | 1.5% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPACT = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L I. = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 44. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
09 - Pacific

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 1164.8 | 1063.3 | 1022.5 | 994.6 | 940.2 | 947.9 | 951.9 | 943.9 | 932.4 | 926.2 | 920.0 | 923.9 | 911.4 | 907.9 | 918.6 | 939.2 | 952.3 | 936.6 | 928.8 | 926.8 | 933.9 | 945.3 | -0.9% |
| TDI Diesel ICE | 0.5 | 1.1 | 1.7 | 2.7 | 4.2 | 7.0 | 11.8 | 9.5 | 13.7 | 19.5 | 25.2 | 31.1 | 36.0 | 40.3 | 44.0 | 47.4 | 50.5 | 50.7 | 51.4 | 53.0 | 54.2 | 56.0 | 24.2% |
| Total Conventional | 1165.3 | 1064.4 | 1024.2 | 997.2 | 944.4 | 954.9 | 963.7 | 953.4 | 946.1 | 945.7 | 945.2 | 955.0 | 947.4 | 948.2 | 962.6 | 986.6 | 1002.8 | 987.2 | 980.3 | 979.8 | 988.2 | 1001.3 | -0.7% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 26.4 | 31.2 | 37.3 | 41.3 | 45.0 | 47.8 | 47.2 | 45.1 | 41.8 | 38.2 | 34.5 | 31.6 | 29.0 | 27.5 | 26.9 | 27.0 | 26.9 | 30.4 | 29.8 | 29.6 | 29.6 | 29.8 | 0.5% |
| Methanol ICE | 0.8 | 1.9 | 2.5 | 2.6 | 2.9 | 3.4 | 4.0 | 5.0 | 6.3 | 8.3 | 11.2 | 15.0 | 19.0 | 19.5 | 22.2 | 24.9 | 26.1 | 26.6 | 26.5 | 26.5 | 26.5 | 26.6 | 17.2% |
| Ethanol-Flex Fuel ICE | 17.1 | 23.0 | 25.5 | 28.1 | 27.3 | 28.7 | 28.9 | 27.3 | 25.1 | 22.7 | 22.5 | 20.3 | 18.2 | 16.9 | 16.2 | 15.9 | 15.6 | 15.2 | 14.7 | 14.2 | 13.9 | 13.6 | -1.0% |
| Ethanol Ice | 0.1 | 0.2 | 0.4 | 0.4 | 0.5 | 0.6 | 0.8 | 1.1 | 1.4 | 1.8 | 2.3 | 2.9 | 3.4 | 4.0 | 4.7 | 5.3 | 5.7 | 5.6 | 5.3 | 5.0 | 4.7 | 4.4 | 18.6% |
| Electric Vehicle | 0.2 | 0.3 | 0.3 | 0.3 | 58.3 | 59.7 | 60.8 | 60.5 | 60.2 | 60.3 | 60.5 | 61.2 | 60.9 | 61.0 | 62.1 | 63.8 | 64.9 | 64.2 | 63.7 | 63.7 | 64.2 | 64.9 | 31.0% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.2% |
| CNG ICE | 5.1 | 10.4 | 12.5 | 12.4 | 12.8 | 13.3 | 13.9 | 14.2 | 14.4 | 14.5 | 14.8 | 15.1 | 15.1 | 15.3 | 15.8 | 16.7 | 16.7 | 16.5 | 16.3 | 16.3 | 16.3 | 16.5 | 5.5% |
| CNG Bi-fuel | 2.0 | 2.4 | 2.8 | 3.0 | 3.1 | 3.1 | 3.0 | 2.8 | 2.4 | 2.2 | 2.0 | 1.9 | 1.7 | 1.6 | 1.6 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.2 | 1.1 | -2.7% |
| LPG ICE | 2.7 | 4.5 | 5.3 | 5.3 | 5.6 | 6.1 | 6.6 | 7.0 | 7.3 | 7.5 | 7.6 | 7.8 | 7.8 | 7.8 | 7.9 | 8.1 | 8.0 | 7.9 | 7.7 | 7.5 | 7.4 | 7.3 | 4.6% |
| LPG Bi-fuel | 1.4 | 1.6 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.7 | 1.5 | 1.3 | 1.1 | 0.9 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.4 | -5.3% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 55.8 | 75.5 | 88.4 | 95.5 | 157.4 | 164.7 | 167.2 | 164.6 | 160.4 | 156.8 | 156.6 | 156.7 | 155.9 | 154.2 | 158.0 | 163.9 | 166.0 | 168.3 | 165.9 | 164.4 | 164.2 | 164.7 | 5.0% |
| Percent Alternative Car Sales | 4.57 | 6.62 | 7.95 | 8.74 | 14.29 | 14.71 | 14.79 | 14.72 | 14.50 | 14.22 | 14.21 | 14.09 | 14.13 | 13.99 | 14.10 | 14.25 | 14.20 | 14.56 | 14.48 | 14.37 | 14.25 | 14.12 | 5.3% |
| Total New Car Sales | 1221.1 | 1139.9 | 1112.6 | 1092.7 | 1101.8 | 1119.6 | 1130.9 | 1118.0 | 1106.5 | 1102.5 | 1101.8 | 1111.6 | 1103.3 | 1102.4 | 1120.6 | 1150.5 | 1168.8 | 1155.5 | 1146.2 | 1144.3 | 1152.4 | 1166.0 | -0.2% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 967.4 | 939.5 | 932.5 | 932.6 | 954.3 | 979.1 | 996.5 | 1011.4 | 1011.3 | 1015.0 | 1020.7 | 1034.9 | 1031.2 | 1032.7 | 1054.5 | 1087.5 | 1108.5 | 1100.2 | 1095.1 | 1096.2 | 1107.4 | 1123.1 | 0.7% |
| TDI Diesel ICE | 0.5 | 1.4 | 2.3 | 3.7 | 6.3 | 11.1 | 19.1 | 5.5 | 8.1 | 12.1 | 15.9 | 19.8 | 23.3 | 25.6 | 27.5 | 29.0 | 30.6 | 30.6 | 30.6 | 31.2 | 31.3 | 32.2 | 20.6% |
| Total Conventional | 967.9 | 940.9 | 934.8 | 936.3 | 960.7 | 990.2 | 1015.6 | 1016.9 | 1019.4 | 1027.1 | 1036.6 | 1054.7 | 1054.5 | 1058.3 | 1082.0 | 1116.5 | 1139.2 | 1130.8 | 1125.7 | 1127.4 | 1138.7 | 1155.3 | 0.8% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 7.2 | 9.5 | 12.5 | 15.2 | 18.6 | 20.1 | 20.3 | 20.6 | 19.7 | 18.8 | 17.8 | 17.3 | 16.3 | 17.5 | 16.9 | 16.6 | 16.2 | 15.1 | 14.2 | 13.4 | 12.6 | 12.0 | 2.3% |
| Methanol Ice | 0.9 | 2.3 | 3.3 | 3.3 | 3.4 | 3.6 | 3.7 | 3.9 | 4.0 | 4.2 | 4.5 | 4.7 | 4.9 | 5.1 | 5.3 | 5.4 | 5.5 | 5.4 | 5.2 | 5.2 | 5.1 | 5.0 | 8.2% |
| Ethanol-Flex Fuel ICE | 4.3 | 6.3 | 8.3 | 9.9 | 10.2 | 11.2 | 11.6 | 11.4 | 10.6 | 9.8 | 9.1 | 8.5 | 7.7 | 7.2 | 6.7 | 6.4 | 6.1 | 5.5 | 5.0 | 4.5 | 4.1 | 3.7 | -0.7% |
| Ethanol ICE | 0.1 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 9.4% |
| Electric Vehicle | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 4.7% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 93.5% |
| CNG ICE | 3.3 | 7.9 | 10.6 | 10.6 | 10.9 | 11.3 | 11.6 | 11.6 | 11.6 | 11.7 | 11.8 | 11.9 | 11.9 | 12.0 | 12.2 | 12.6 | 12.8 | 12.7 | 12.6 | 12.6 | 12.7 | 12.9 | 6.5% |
| CNG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.1% |
| LPG ICE | 1.8 | 3.1 | 3.9 | 3.9 | 4.0 | 4.2 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.4 | 4.4 | 4.4 | 4.5 | 4.6 | 4.7 | 4.7 | 4.6 | 4.6 | 4.7 | 4.7 | 4.6% |
| LPG Bi-fuel | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.5% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 17.7 | 29.6 | 39.2 | 43.7 | 47.9 | 51.1 | 52.3 | 52.6 | 51.1 | 49.8 | 48.4 | 47.8 | 46.3 | 47.2 | 46.8 | 46.9 | 46.5 | 44.6 | 42.9 | 41.4 | 40.3 | 39.4 | 3.7% |

Table 44. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
09 - Pacific

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Percent Alternative LT. Sales | 1.80 | 3.05 | 4.02 | 4.46 | 4.75 | 4.91 | 4.90 | 4.92 | 4.77 | 4.62 | 4.46 | 4.34 | 4.20 | 4.27 | 4.15 | 4.03 | 3.92 | 3.79 | 3.67 | 3.55 | 3.42 | 3.29 | 2.8% |
| Total New Truck Sales | 985.6 | 970.5 | 974.0 | 980.0 | 1008.6 | 1041.3 | 1067.9 | 1069.5 | 1070.5 | 1076.9 | 1085.1 | 1102.5 | 1100.8 | 1105.5 | 1128.8 | 1163.4 | 1185.7 | 1175.4 | 1168.6 | 1168.9 | 1179.0 | 1194.7 | 0.9% |
| Percent Total Alternative Sales | 3.33 | 4.98 | 6.12 | 6.71 | 7.73 | 9.99 | 9.98 | 9.93 | 9.72 | 9.48 | 9.38 | 9.24 | 9.17 | 9.12 | 9.11 | 9.03 | 9.13 | 9.02 | 8.90 | 8.77 | 8.64 | 8.64 | 4.4% |
| EPACT Leg. Alternative Sales | 12.81 | 28.65 | 36.54 | 36.31 | 36.97 | 37.81 | 38.47 | 38.27 | 38.10 | 38.14 | 38.28 | 38.76 | 38.59 | 38.66 | 39.39 | 40.52 | 41.23 | 40.82 | 40.54 | 40.51 | 40.83 | 41.34 | 5.5% |
| Z EVP Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 144.92 | 148.39 | 151.10 | 150.38 | 149.69 | 149.85 | 150.35 | 152.20 | 151.45 | 151.62 | 154.38 | 158.70 | 161.37 | 159.66 | 158.48 | 158.30 | 159.49 | 161.44 | N/A |
| Total Vehicles Sales | 2206.7 | 2110.4 | 2086.6 | 2072.7 | 2110.4 | 2160.9 | 2198.9 | 2187.5 | 2177.0 | 2179.5 | 2186.9 | 2214.2 | 2204.1 | 2207.9 | 2249.4 | 2313.9 | 2354.5 | 2330.9 | 2314.7 | 2313.1 | 2331.4 | 2360.7 | 0.3% |

1/ Includes personal and fleet light-duty cars.
 2/ Includes personal and fleet light-duty trucks.
 I DI = I turbo Direct Injection.
 CNG = Compressed natural gas.
 LPG = Liquid petroleum gas.
 ICE = Internal combustion engine.
 EPACT = Energy Policy Act of 1992.
 Z EVP = Zero emission vehicles from the low emission vehicle program.
 N/A = Not applicable.
 L I. = Light Truck.
 Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used were the most current available as of July 31, 1999. At that time, most regional data for 1998 were not available. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 45. Light-Duty Vehicle Sales by Technology Type (Thousands) (1 of 2)
United States Total**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| New Car Sales 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 7401.6 | 6774.7 | 6545.6 | 6388.2 | 6328.8 | 6436.0 | 6487.0 | 6433.9 | 6365.2 | 6328.6 | 6291.9 | 6332.1 | 6269.7 | 6250.8 | 6340.3 | 6497.7 | 6597.4 | 6493.4 | 6443.9 | 6437.6 | 6488.6 | 6572.3 | -0.5% |
| TDI Diesel ICE | 2.9 | 6.9 | 10.7 | 16.7 | 25.4 | 42.3 | 67.8 | 54.7 | 80.0 | 112.4 | 146.2 | 180.3 | 205.7 | 228.9 | 248.5 | 266.4 | 279.5 | 278.9 | 280.7 | 283.7 | 288.8 | 294.7 | 23.4% |
| Total Conventional | 7404.5 | 6781.5 | 6556.3 | 6404.9 | 6354.2 | 6478.3 | 6554.8 | 6488.6 | 6445.2 | 6441.0 | 6438.1 | 6512.4 | 6475.4 | 6479.7 | 6588.8 | 6764.1 | 6876.9 | 6772.2 | 6724.6 | 6721.3 | 6777.4 | 6867.1 | -0.3% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 159.0 | 211.8 | 245.3 | 272.1 | 289.9 | 277.5 | 274.9 | 267.3 | 248.0 | 232.7 | 215.9 | 202.2 | 187.2 | 178.4 | 173.9 | 172.2 | 169.6 | 191.4 | 186.5 | 183.4 | 182.1 | 181.6 | 0.6% |
| Methanol ICE | 5.0 | 11.6 | 15.5 | 15.9 | 17.0 | 18.3 | 20.4 | 23.2 | 26.7 | 32.5 | 40.9 | 51.8 | 62.6 | 63.8 | 71.2 | 78.6 | 83.3 | 84.1 | 83.2 | 82.3 | 81.7 | 81.2 | 13.5% |
| Ethanol-Flex Fuel ICE | 102.8 | 138.2 | 153.5 | 170.5 | 176.4 | 184.1 | 184.8 | 178.4 | 167.4 | 155.9 | 159.9 | 147.5 | 133.8 | 125.1 | 120.0 | 117.1 | 113.6 | 111.0 | 106.6 | 103.1 | 100.4 | 98.0 | -0.2% |
| Ethanol Ice | 0.6 | 1.5 | 2.1 | 2.4 | 2.8 | 3.4 | 4.5 | 5.8 | 7.6 | 10.0 | 12.7 | 15.7 | 18.4 | 21.5 | 24.1 | 26.7 | 28.2 | 27.4 | 26.0 | 24.5 | 23.0 | 21.6 | 17.4% |
| Electric Vehicle | 1.1 | 2.0 | 2.2 | 2.2 | 101.3 | 103.7 | 105.5 | 105.0 | 104.5 | 104.6 | 104.9 | 106.2 | 105.8 | 105.9 | 107.9 | 111.1 | 113.0 | 111.8 | 111.0 | 110.9 | 111.7 | 113.1 | 23.5% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.1% |
| CNG ICE | 32.2 | 65.7 | 79.5 | 79.2 | 81.3 | 84.2 | 87.1 | 88.0 | 88.8 | 89.7 | 90.8 | 92.5 | 92.2 | 92.7 | 95.1 | 99.1 | 99.5 | 98.2 | 96.9 | 96.4 | 96.7 | 97.5 | 5.2% |
| CNG Bi-fuel | 12.0 | 14.6 | 16.8 | 18.2 | 19.0 | 19.1 | 18.5 | 17.1 | 15.4 | 14.1 | 13.5 | 12.5 | 11.3 | 10.7 | 10.4 | 10.6 | 9.6 | 9.0 | 8.4 | 7.9 | 7.4 | 7.0 | -2.4% |
| LPG ICE | 17.0 | 28.3 | 32.8 | 33.0 | 34.3 | 36.1 | 38.1 | 39.3 | 40.3 | 41.1 | 41.6 | 42.2 | 42.0 | 42.0 | 42.6 | 43.6 | 43.9 | 43.0 | 42.1 | 41.4 | 41.0 | 40.9 | 4.1% |
| LPG Bi-fuel | 7.9 | 9.4 | 10.7 | 11.4 | 11.4 | 11.5 | 11.1 | 10.2 | 9.1 | 8.0 | 7.1 | 6.3 | 5.5 | 5.0 | 4.6 | 4.4 | 4.1 | 3.8 | 3.5 | 3.2 | 2.9 | 2.6 | -4.9% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 337.6 | 483.1 | 558.6 | 605.0 | 733.3 | 737.9 | 745.0 | 734.3 | 707.9 | 688.5 | 687.4 | 676.9 | 658.8 | 645.0 | 650.0 | 663.3 | 664.6 | 679.8 | 664.2 | 652.9 | 646.9 | 643.4 | 3.0% |
| Percent Alternative Car Sales | 4.36 | 6.65 | 7.85 | 8.63 | 10.35 | 10.23 | 10.21 | 10.17 | 9.90 | 9.66 | 9.65 | 9.42 | 9.23 | 9.05 | 8.98 | 8.93 | 8.81 | 9.12 | 8.99 | 8.85 | 8.71 | 8.57 | 3.1% |
| Total New Car Sales | 7742.1 | 7264.7 | 7115.0 | 7009.9 | 7087.5 | 7216.1 | 7299.7 | 7222.8 | 7153.1 | 7129.5 | 7125.5 | 7189.3 | 7134.2 | 7124.7 | 7238.8 | 7427.4 | 7541.5 | 7452.0 | 7388.8 | 7374.3 | 7424.3 | 7510.5 | -0.1% |
| New Light-Truck Sales 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 6138.7 | 5986.2 | 5966.1 | 5987.0 | 6146.3 | 6341.2 | 6476.6 | 6567.6 | 6574.6 | 6604.7 | 6644.2 | 6739.6 | 6720.8 | 6734.0 | 6875.3 | 7087.7 | 7225.5 | 7168.4 | 7133.4 | 7141.9 | 7212.4 | 7315.3 | 0.8% |
| TDI Diesel ICE | 3.2 | 8.9 | 14.4 | 23.1 | 37.8 | 64.8 | 105.8 | 30.6 | 45.4 | 66.7 | 88.7 | 110.3 | 126.6 | 138.1 | 146.7 | 153.5 | 158.0 | 156.4 | 154.3 | 153.2 | 152.5 | 153.9 | 19.3% |
| Total Conventional | 6141.9 | 5995.1 | 5980.5 | 6010.1 | 6184.1 | 6405.9 | 6582.4 | 6598.2 | 6620.0 | 6671.4 | 6732.9 | 6849.9 | 6847.5 | 6872.1 | 7022.0 | 7241.3 | 7383.5 | 7324.8 | 7287.6 | 7295.2 | 7364.9 | 7469.2 | 0.9% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 42.8 | 65.1 | 82.1 | 99.5 | 116.8 | 108.8 | 108.9 | 110.2 | 102.5 | 97.5 | 92.2 | 88.9 | 83.2 | 88.2 | 84.6 | 82.3 | 79.4 | 73.3 | 68.2 | 63.7 | 59.4 | 55.5 | 1.2% |
| Methanol Ice | 5.7 | 14.8 | 20.8 | 21.1 | 21.9 | 22.7 | 23.6 | 24.0 | 24.4 | 25.1 | 25.9 | 27.0 | 27.4 | 27.9 | 28.7 | 29.6 | 30.1 | 29.5 | 29.0 | 28.7 | 28.6 | 28.6 | 7.6% |
| Ethanol-Flex Fuel ICE | 25.6 | 36.9 | 48.4 | 58.6 | 64.3 | 69.6 | 71.0 | 70.0 | 65.3 | 60.9 | 56.4 | 52.8 | 47.9 | 44.5 | 41.6 | 39.4 | 37.2 | 33.6 | 30.3 | 27.4 | 24.7 | 22.1 | -0.7% |
| Ethanol ICE | 0.7 | 2.0 | 2.8 | 2.9 | 3.0 | 3.2 | 3.5 | 3.7 | 3.9 | 4.3 | 4.6 | 5.0 | 5.3 | 5.5 | 5.7 | 5.9 | 5.9 | 5.7 | 5.5 | 5.3 | 5.1 | 4.9 | 9.0% |
| Electric Vehicle | 0.4 | 0.7 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 4.8% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 91.0% |
| CNG ICE | 20.7 | 50.1 | 67.6 | 68.2 | 70.4 | 72.8 | 74.7 | 74.9 | 75.0 | 75.5 | 76.0 | 77.2 | 77.1 | 77.3 | 78.9 | 81.2 | 82.7 | 81.9 | 81.4 | 81.4 | 82.0 | 83.1 | 6.5% |
| CNG Bi-fuel | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -12.8% |
| LPG ICE | 11.1 | 19.8 | 24.8 | 25.1 | 25.9 | 26.8 | 27.5 | 27.6 | 27.6 | 27.8 | 28.0 | 28.4 | 28.4 | 28.5 | 29.0 | 29.9 | 30.4 | 30.1 | 29.9 | 29.9 | 30.2 | 30.5 | 4.7% |
| LPG Bi-fuel | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -13.1% |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Total Alternatives | 107.4 | 190.0 | 247.9 | 276.8 | 303.8 | 305.4 | 310.6 | 311.7 | 300.2 | 292.3 | 284.5 | 280.6 | 270.4 | 273.1 | 269.7 | 269.4 | 266.9 | 255.4 | 245.5 | 237.4 | 231.1 | 225.9 | 3.4% |

**Table 45. Light-Duty Vehicle Sales by Technology Type (Thousands) (2 of 2)
United States Total**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|
| Percent Alternative LT. Sales | 1.72 | 3.07 | 3.98 | 4.40 | 4.68 | 4.55 | 4.51 | 4.51 | 4.34 | 4.20 | 4.05 | 3.94 | 3.80 | 3.82 | 3.70 | 3.59 | 3.49 | 3.37 | 3.26 | 3.15 | 3.04 | 2.94 | 2.5% |
| Total New Truck Sales | 6249.3 | 6185.1 | 6228.4 | 6286.9 | 6487.9 | 6711.3 | 6893.0 | 6909.9 | 6920.2 | 6963.7 | 7017.4 | 7130.5 | 7117.8 | 7145.2 | 7291.8 | 7510.7 | 7650.4 | 7580.2 | 7533.1 | 7532.6 | 7596.1 | 7695.1 | 1.0% |
| Percent Total Alternative Sales | 3.18 | 5.00 | 6.04 | 6.63 | 7.64 | 7.49 | 7.44 | 7.40 | 7.16 | 6.96 | 6.87 | 6.69 | 6.52 | 6.43 | 6.33 | 6.24 | 6.13 | 6.22 | 6.10 | 5.97 | 5.85 | 5.72 | 2.7% |
| EPACT Leg. Alternative Sales | 81.25 | 182.58 | 233.67 | 232.94 | 237.79 | 243.69 | 248.31 | 247.28 | 246.27 | 246.64 | 247.55 | 250.68 | 249.51 | 249.85 | 254.44 | 261.60 | 266.05 | 263.26 | 261.34 | 261.07 | 263.05 | 266.28 | 5.5% |
| ZEV Leg. Alternative Sales | 0.00 | 0.00 | 0.00 | 0.00 | 247.62 | 253.49 | 258.05 | 256.78 | 255.55 | 255.79 | 256.61 | 259.74 | 258.44 | 258.71 | 263.39 | 270.75 | 275.30 | 272.37 | 270.34 | 270.03 | 272.05 | 275.38 | N/A |
| Total Vehicles Sales | 13991.4 | 13449.7 | 13343.3 | 13296.8 | 13575.4 | 13927.4 | 14192.7 | 14132.7 | 14073.3 | 14093.1 | 14142.9 | 14319.8 | 14252.0 | 14269.9 | 14530.6 | 14938.1 | 15191.9 | 15032.2 | 14921.9 | 14906.9 | 15020.3 | 15205.6 | 0.4% |

1/ Includes personal and fleet light-duty cars.
2/ Includes personal and fleet light-duty trucks.

LDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEV = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

LI = Light Truck.

Leg. = Legislative.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicle - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); US Department of Energy, Argonne National Laboratory, National Alternative-Fuel Survey, Model Version 28, July 21, 1998; Energy Information Administration (EIA), Describing Current and Potential Markets Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 46. Light-Duty Vehicle Stock by Technology Type (Millions) (2 of 2)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Fuel Cell Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Alternatives | 0.34 | 0.66 | 0.89 | 1.16 | 1.44 | 1.73 | 2.01 | 2.29 | 2.55 | 2.79 | 3.02 | 3.22 | 3.40 | 3.57 | 3.73 | 3.87 | 3.99 | 4.09 | 4.16 | 4.22 | 4.27 | 4.30 | 12.2% |
| Total Truck Stock | 66.07 | 73.05 | 76.21 | 79.30 | 82.44 | 85.66 | 88.92 | 92.03 | 94.96 | 97.76 | 100.44 | 103.06 | 105.49 | 107.79 | 110.08 | 112.43 | 114.78 | 116.91 | 118.85 | 120.66 | 122.41 | 124.13 | 2.9% |
| Total Vehicle Stock | 188.33 | 192.37 | 193.58 | 194.65 | 195.93 | 197.56 | 199.43 | 201.23 | 202.92 | 204.59 | 206.30 | 208.13 | 209.83 | 211.49 | 213.35 | 215.55 | 217.92 | 220.05 | 221.98 | 223.80 | 225.64 | 227.57 | 0.9% |

1/ Includes personal and fleet vehicles.

IDI = Turbo Direct Injection.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy Information Administration (EIA), Household Vehicles Energy Consumption 1994, DOE/EIA-0464(94) (Washington, D.C., August 1997); EIA, Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); Federal Highway Administration, Highway Statistics 1997, (Washington DC, November 1998); R.L. Polk and Company, Transportation Energy Data Book: Edition 18, "Automobiles in Operation and Vehicle Travel by Age in 1996" and "Trucking Operation and Vehicle Travel by Age in 1995", US Department of Energy, ORNL-6941, (Oak Ridge, TN., September 1998); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 47. Light-Duty Vehicle MPG by Technology Type (MPG Gasoline Equivalents) (1 of 2)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Automobiles 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 28.10 | 28.77 | 28.80 | 29.00 | 29.77 | 29.75 | 29.84 | 30.05 | 30.29 | 30.52 | 30.73 | 30.94 | 31.20 | 31.25 | 31.25 | 31.22 | 31.17 | 31.16 | 31.16 | 31.15 | 31.12 | 31.09 | 0.5% |
| TDI Diesel ICE | 38.32 | 39.10 | 39.14 | 39.31 | 39.84 | 39.76 | 39.87 | 39.84 | 40.05 | 40.27 | 40.52 | 40.70 | 40.95 | 41.09 | 41.05 | 40.95 | 40.84 | 40.78 | 40.74 | 40.68 | 40.61 | 40.53 | 0.3% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Alcohol Fuel Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 30.18 | 30.89 | 30.87 | 31.03 | 31.75 | 31.69 | 31.77 | 31.96 | 32.18 | 32.39 | 32.55 | 32.71 | 32.92 | 32.94 | 32.92 | 32.84 | 32.77 | 32.51 | 32.48 | 32.44 | 32.39 | 32.32 | 0.3% |
| Methanol ICE | 29.93 | 30.38 | 30.40 | 30.70 | 31.51 | 31.59 | 31.89 | 32.33 | 32.79 | 33.26 | 33.64 | 33.92 | 34.22 | 34.28 | 34.28 | 34.22 | 34.16 | 34.11 | 34.09 | 34.05 | 33.99 | 33.93 | 0.6% |
| Ethanol-Flex Fuel ICE | 29.81 | 30.47 | 30.58 | 30.74 | 31.47 | 31.41 | 31.49 | 31.67 | 31.89 | 32.10 | 32.09 | 32.26 | 32.49 | 32.53 | 32.52 | 32.47 | 32.41 | 32.35 | 32.33 | 32.30 | 32.25 | 32.19 | 0.4% |
| Ethanol Ice | 29.00 | 29.42 | 29.50 | 29.95 | 30.89 | 31.14 | 31.53 | 31.97 | 32.39 | 32.75 | 33.03 | 33.25 | 33.51 | 33.56 | 33.53 | 33.45 | 33.37 | 33.32 | 33.31 | 33.28 | 33.24 | 33.19 | 0.6% |
| Natural Gas Technology | | | | | | | | | | | | | | | | | | | | | | | |
| CNG ICE | 29.72 | 30.12 | 30.13 | 30.28 | 30.77 | 30.71 | 30.84 | 31.03 | 31.22 | 31.41 | 31.65 | 31.89 | 32.17 | 32.35 | 32.51 | 32.57 | 32.45 | 32.43 | 32.43 | 32.41 | 32.38 | 32.36 | 0.4% |
| CNG Bi-fuel | 27.25 | 27.69 | 27.71 | 27.90 | 28.47 | 28.41 | 28.54 | 28.73 | 28.94 | 29.15 | 29.35 | 29.57 | 29.84 | 30.04 | 30.23 | 30.30 | 29.96 | 29.96 | 29.97 | 29.97 | 29.96 | 29.95 | 0.4% |
| LPG ICE | 29.02 | 29.49 | 29.52 | 29.69 | 30.23 | 30.20 | 30.37 | 30.58 | 30.80 | 31.00 | 31.23 | 31.47 | 31.73 | 31.89 | 32.04 | 32.08 | 32.01 | 31.98 | 31.95 | 31.92 | 31.88 | 31.83 | 0.4% |
| LPG Bi-fuel | 27.62 | 28.10 | 28.11 | 28.27 | 28.84 | 28.77 | 28.88 | 29.04 | 29.22 | 29.39 | 29.60 | 29.82 | 30.08 | 30.26 | 30.42 | 30.47 | 30.41 | 30.39 | 30.38 | 30.36 | 30.33 | 30.31 | 0.4% |
| Electric Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Electric Vehicle | 33.48 | 32.97 | 32.69 | 32.52 | 30.95 | 33.62 | 37.14 | 41.63 | 47.46 | 47.23 | 47.02 | 46.86 | 46.70 | 46.57 | 46.45 | 46.30 | 46.17 | 46.04 | 45.93 | 45.86 | 45.78 | 45.71 | 1.4% |
| Electric-Diesel Hybrid | 47.66 | 47.56 | 47.42 | 47.58 | 47.28 | 46.64 | 46.38 | 46.35 | 46.61 | 46.95 | 47.25 | 47.56 | 47.86 | 48.13 | 48.34 | 48.49 | 48.58 | 48.67 | 49.01 | 49.24 | 49.36 | 49.29 | 0.2% |
| Fuel Cell Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 42.82 | 42.56 | 42.30 | 42.10 | 41.90 | 41.69 | 41.50 | 41.30 | 41.12 | 40.89 | 40.67 | 40.48 | 40.24 | 40.04 | 39.82 | 39.63 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 45.65 | 45.36 | 45.05 | 44.81 | 44.56 | 44.31 | 44.07 | 43.84 | 43.62 | 43.37 | 43.13 | 42.94 | 42.69 | 42.48 | 42.26 | 42.07 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 49.89 | 49.53 | 49.16 | 48.89 | 48.62 | 48.35 | 48.12 | 47.91 | 47.73 | 47.52 | 47.33 | 47.18 | 46.97 | 46.80 | 46.63 | 46.47 | N/A |
| Average New Car MPG | 28.17 | 28.88 | 28.93 | 29.15 | 29.94 | 29.96 | 30.12 | 30.36 | 30.66 | 30.92 | 31.16 | 31.40 | 31.68 | 31.76 | 31.78 | 31.75 | 31.71 | 31.70 | 31.70 | 31.69 | 31.66 | 31.63 | 0.5% |
| Light-Duty Trucks 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 20.62 | 20.65 | 20.65 | 20.77 | 21.01 | 20.94 | 21.02 | 21.18 | 21.35 | 21.31 | 21.39 | 21.56 | 21.72 | 21.88 | 22.01 | 22.12 | 22.23 | 22.35 | 22.48 | 22.61 | 22.77 | 22.74 | 0.4% |
| TDI Diesel ICE | 26.67 | 26.55 | 26.56 | 26.71 | 26.96 | 26.84 | 26.93 | 28.52 | 28.77 | 28.75 | 28.85 | 29.02 | 29.19 | 29.34 | 29.48 | 29.58 | 29.68 | 29.75 | 29.85 | 29.94 | 30.05 | 29.98 | 0.5% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Alcohol Fuel Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 20.78 | 21.14 | 21.18 | 21.36 | 21.66 | 21.66 | 21.70 | 21.83 | 22.01 | 21.99 | 22.06 | 22.18 | 22.29 | 22.40 | 22.51 | 22.61 | 22.70 | 22.77 | 22.84 | 22.93 | 23.04 | 23.02 | 0.5% |
| Methanol ICE | 19.56 | 19.92 | 20.00 | 20.21 | 20.50 | 20.48 | 20.64 | 20.92 | 21.19 | 21.23 | 21.40 | 21.64 | 21.87 | 22.08 | 22.26 | 22.40 | 22.52 | 22.64 | 22.77 | 22.93 | 23.10 | 23.06 | 0.8% |
| Ethanol-Flex Fuel ICE | 20.73 | 21.12 | 21.17 | 21.34 | 21.65 | 21.60 | 21.64 | 21.77 | 21.95 | 21.91 | 21.96 | 22.06 | 22.16 | 22.26 | 22.36 | 22.45 | 22.55 | 22.63 | 22.72 | 22.82 | 22.93 | 22.92 | 0.5% |
| Ethanol Ice | 18.88 | 19.22 | 19.30 | 19.53 | 19.86 | 19.89 | 20.11 | 20.47 | 20.84 | 20.98 | 21.24 | 21.55 | 21.81 | 22.04 | 22.19 | 22.32 | 22.42 | 22.51 | 22.59 | 22.70 | 22.82 | 22.74 | 0.8% |
| Natural Gas Technology | | | | | | | | | | | | | | | | | | | | | | | |
| CNG ICE | 19.59 | 19.94 | 20.00 | 20.19 | 20.46 | 20.42 | 20.55 | 20.79 | 21.01 | 20.98 | 21.08 | 21.23 | 21.40 | 21.56 | 21.69 | 21.80 | 21.90 | 22.01 | 22.13 | 22.28 | 22.44 | 22.56 | 0.6% |
| CNG Bi-fuel | 20.94 | 21.12 | 21.10 | 21.21 | 21.41 | 21.34 | 21.39 | 21.54 | 21.70 | 21.67 | 21.77 | 21.91 | 22.01 | 22.12 | 22.17 | 22.22 | 22.29 | 22.36 | 22.47 | 22.63 | 22.78 | 22.89 | 0.4% |
| LPG ICE | 19.01 | 19.29 | 19.34 | 19.52 | 19.80 | 19.75 | 19.87 | 20.11 | 20.33 | 20.30 | 20.40 | 20.57 | 20.74 | 20.89 | 21.02 | 21.13 | 21.23 | 21.34 | 21.46 | 21.61 | 21.75 | 21.88 | 0.6% |
| LPG Bi-fuel | 22.01 | 22.28 | 22.27 | 22.40 | 22.64 | 22.59 | 22.64 | 22.81 | 23.00 | 22.97 | 23.08 | 23.22 | 23.35 | 23.47 | 23.57 | 23.65 | 23.73 | 23.82 | 23.97 | 24.15 | 24.33 | 24.42 | 0.5% |
| Electric Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Electric Vehicle | 23.58 | 23.35 | 23.12 | 22.98 | 25.15 | 27.32 | 30.11 | 33.68 | 38.35 | 38.02 | 37.74 | 37.48 | 37.22 | 36.96 | 36.71 | 36.47 | 36.25 | 36.03 | 35.86 | 35.71 | 35.56 | 35.42 | 1.9% |
| Electric-Diesel Hybrid | 34.44 | 35.06 | 35.18 | 35.57 | 35.78 | 35.53 | 35.53 | 35.78 | 36.27 | 36.19 | 36.31 | 36.45 | 36.57 | 36.72 | 36.84 | 36.93 | 36.97 | 36.98 | 37.22 | 37.37 | 37.44 | 37.36 | 0.4% |

Table 47. Light-Duty Vehicle MPG by Technology Type (MPG Gasoline Equivalents) (2of 2)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Fuel Cell Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 34.54 | 34.34 | 34.18 | 34.03 | 33.89 | 33.76 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 45.57 | 45.15 | 44.79 | 44.40 | 44.05 | 43.74 | 43.45 | 43.15 | 42.87 | 42.60 | 42.34 | 42.10 | 41.91 | 41.74 | 41.56 | 41.40 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 40.18 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Average New Truck MPG | 20.61 | 20.66 | 20.66 | 20.79 | 21.04 | 20.99 | 21.09 | 21.21 | 21.39 | 21.37 | 21.47 | 21.65 | 21.82 | 21.99 | 22.12 | 22.24 | 22.35 | 22.46 | 22.59 | 22.73 | 22.88 | 22.85 | 0.5% |
| Fleet Avr. Stock Car MPG 2/ | 23.54 | 23.85 | 24.00 | 24.16 | 24.42 | 24.56 | 24.73 | 24.87 | 25.02 | 25.19 | 25.35 | 25.47 | 25.64 | 25.79 | 25.91 | 26.04 | 26.16 | 26.23 | 26.31 | 26.38 | 26.47 | 26.52 | 0.5% |
| Fleet Avr. Stock Truck MPG 2/ | 16.84 | 16.77 | 16.80 | 16.81 | 16.89 | 16.89 | 16.92 | 16.92 | 16.94 | 16.97 | 16.98 | 17.00 | 17.01 | 17.05 | 17.09 | 17.11 | 17.15 | 17.19 | 17.23 | 17.28 | 17.33 | 17.37 | 0.1% |
| Fleet Avr. Stock Vehicle MPG 2/ | 20.66 | 20.55 | 20.53 | 20.51 | 20.56 | 20.52 | 20.51 | 20.47 | 20.45 | 20.46 | 20.44 | 20.43 | 20.43 | 20.45 | 20.46 | 20.47 | 20.49 | 20.50 | 20.52 | 20.55 | 20.58 | 20.60 | 0.0% |

1/ Fuel efficiencies are EPA rated. Includes personal and fleet vehicles.

2/ Stock values are on road efficiencies. Includes personal vehicles, fleet vehicles, and freight light trucks.

IDI = Turbo Direct Injection.

CNG = Compressed natural gas.

LNG = Liquid natural gas.

MPG = Miles per Gallon.

ICE = Internal combustion engine.

N/A = Not applicable.

Avr. = Average.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Update to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports from Auto Manufacturers, 1998; Federal Highway Administration, Highway Statistics 1997, (November 1998); United States Department of Commerce, Bureau of the Census, Truck Inventory and Use Survey, IC92-1-52 (Washington, DC, May 1995); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 48. Technology Market Penetration in Light-Duty Vehicles (1 of 4)
(Percentage)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Car | | | | | | | | | | | | | | | | | | | | | | | |
| Front Wheel Drive | 85.99 | 86.42 | 86.26 | 86.18 | 86.12 | 86.03 | 85.99 | 85.93 | 85.86 | 85.79 | 85.73 | 85.66 | 85.61 | 85.55 | 85.49 | 85.41 | 85.35 | 85.29 | 85.23 | 85.18 | 85.12 | 85.06 | 0.0% |
| Unit Body | 93.44 | 93.34 | 93.22 | 93.15 | 93.74 | 93.62 | 93.57 | 93.51 | 93.46 | 93.41 | 93.35 | 93.30 | 93.26 | 93.21 | 93.16 | 93.10 | 93.04 | 92.99 | 92.94 | 92.89 | 92.84 | 92.78 | 0.0% |
| Material Substitution II | 16.50 | 19.99 | 21.02 | 23.42 | 34.19 | 34.74 | 34.98 | 36.98 | 39.32 | 39.33 | 39.34 | 39.35 | 39.35 | 39.38 | 39.38 | 39.38 | 39.38 | 39.38 | 39.37 | 39.33 | 39.19 | 39.04 | 4.0% |
| Material Substitution III | 2.18 | 4.40 | 5.73 | 8.06 | 14.19 | 14.52 | 14.86 | 16.80 | 18.69 | 20.49 | 21.60 | 22.68 | 23.07 | 23.53 | 23.95 | 23.95 | 23.96 | 23.96 | 23.95 | 23.95 | 23.95 | 23.95 | 11.5% |
| Material Substitution IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 1.02 | 2.15 | 3.53 | 5.33 | 7.09 | 8.86 | 10.64 | 12.45 | 14.22 | 15.64 | 17.06 | 18.11 | 19.17 | N/A |
| Material Substitution V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.82 | 1.74 | 2.89 | N/A |
| Drag Reduction II | 32.68 | 33.24 | 33.16 | 34.00 | 27.18 | 26.58 | 24.95 | 22.44 | 19.31 | 15.68 | 12.71 | 9.97 | 7.67 | 5.80 | 3.96 | 2.78 | 1.82 | 0.87 | 0.20 | 0.08 | 0.00 | 0.00 | N/A |
| Drag Reduction III | 58.84 | 58.14 | 58.24 | 59.17 | 72.64 | 72.67 | 72.65 | 72.66 | 72.51 | 71.90 | 70.95 | 69.93 | 68.29 | 66.46 | 64.41 | 62.02 | 58.24 | 54.75 | 50.45 | 46.33 | 41.90 | 37.64 | -2.0% |
| Drag Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 2.19 | 4.68 | 7.94 | 12.17 | 16.07 | 19.81 | 23.75 | 27.42 | 31.30 | 34.48 | 37.78 | 40.17 | 42.57 | 43.49 | 44.68 | 45.61 | N/A |
| Drag Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 1.80 | 3.84 | 6.39 | 9.70 | 13.00 | 16.31 | N/A |
| TCLU | 81.26 | 81.01 | 81.14 | 81.21 | 81.24 | 81.34 | 81.36 | 81.40 | 81.43 | 81.46 | 81.49 | 81.53 | 81.56 | 81.58 | 81.61 | 81.64 | 81.67 | 81.70 | 81.72 | 81.75 | 81.78 | 81.81 | 0.0% |
| 4-Speed Automatic | 58.34 | 55.53 | 53.57 | 52.31 | 50.45 | 49.32 | 48.16 | 46.71 | 45.89 | 44.36 | 43.81 | 43.01 | 42.27 | 42.28 | 42.30 | 42.31 | 42.32 | 42.34 | 42.34 | 42.35 | 42.36 | 42.37 | -1.4% |
| 5-Speed Automatic | 5.22 | 8.57 | 11.80 | 13.84 | 16.43 | 18.37 | 20.35 | 22.40 | 24.03 | 25.65 | 26.29 | 27.12 | 27.71 | 27.76 | 27.83 | 27.90 | 27.96 | 28.02 | 28.08 | 28.13 | 28.19 | 28.25 | 8.0% |
| CVT | 3.82 | 5.20 | 6.57 | 7.70 | 10.07 | 10.59 | 11.18 | 12.18 | 12.94 | 13.65 | 13.83 | 14.11 | 14.31 | 14.26 | 14.19 | 14.13 | 14.07 | 14.02 | 13.97 | 13.93 | 13.88 | 13.83 | 6.0% |
| 6-Speed Manual | 8.16 | 8.66 | 10.55 | 10.84 | 10.82 | 10.96 | 11.15 | 11.24 | 11.27 | 11.26 | 11.24 | 11.22 | 11.21 | 11.20 | 11.18 | 11.17 | 11.15 | 11.14 | 11.12 | 11.11 | 11.09 | 11.07 | 1.4% |
| Electronic Transmission I | 22.21 | 22.17 | 22.26 | 22.43 | 26.04 | 26.11 | 26.13 | 26.15 | 26.18 | 26.20 | 26.23 | 26.25 | 26.27 | 26.29 | 26.31 | 26.34 | 26.36 | 26.38 | 26.40 | 26.42 | 26.44 | 26.46 | 0.8% |
| Electronic Transmission II | 0.49 | 2.53 | 3.60 | 5.99 | 12.30 | 12.86 | 13.23 | 15.34 | 17.86 | 19.94 | 21.60 | 22.93 | 24.37 | 24.71 | 25.43 | 26.00 | 26.05 | 26.07 | 26.08 | 26.09 | 26.11 | 26.13 | 19.8% |
| Roller Cam | 95.74 | 96.80 | 96.78 | 97.03 | 98.70 | 98.69 | 98.68 | 98.67 | 98.66 | 98.65 | 98.64 | 98.63 | 98.62 | 98.61 | 98.59 | 98.58 | 98.57 | 98.56 | 98.55 | 98.54 | 98.52 | 98.51 | 0.1% |
| OHV 4 | 6.27 | 2.97 | 2.05 | 0.97 | 0.30 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| OHV 6 | 14.44 | 13.07 | 10.67 | 8.16 | 5.65 | 3.13 | 2.19 | 0.94 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| OHV 8 | 5.66 | 5.32 | 4.39 | 3.44 | 2.66 | 1.87 | 1.44 | 1.01 | 0.84 | 0.84 | 0.84 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.86 | 0.86 | 0.87 | -8.2% |
| 4C/4V | 41.92 | 45.34 | 44.91 | 44.35 | 42.75 | 41.03 | 39.49 | 37.78 | 35.84 | 34.39 | 32.94 | 31.98 | 31.06 | 30.65 | 30.12 | 29.69 | 29.58 | 29.48 | 29.40 | 29.31 | 29.21 | 29.12 | -1.6% |
| 6C/4V | 19.43 | 24.02 | 26.80 | 29.46 | 32.00 | 34.53 | 35.47 | 36.78 | 37.77 | 37.83 | 37.91 | 37.98 | 38.04 | 38.10 | 38.18 | 38.26 | 38.33 | 38.39 | 38.44 | 38.49 | 38.54 | 38.59 | 3.2% |
| 8C/4V | 6.09 | 8.34 | 9.37 | 10.37 | 11.24 | 12.26 | 12.73 | 13.21 | 13.45 | 13.50 | 13.55 | 13.60 | 13.65 | 13.69 | 13.73 | 13.78 | 13.83 | 13.88 | 13.92 | 13.98 | 14.03 | 14.09 | 3.9% |
| Cylinder Reduction | 8.49 | 11.38 | 12.58 | 13.92 | 15.39 | 16.40 | 16.76 | 17.36 | 17.84 | 17.89 | 17.94 | 17.98 | 18.01 | 18.05 | 18.08 | 18.12 | 18.16 | 18.19 | 18.22 | 18.25 | 18.28 | 18.31 | 3.6% |
| 4C/5V | 0.22 | 2.55 | 4.12 | 6.03 | 7.94 | 9.82 | 11.71 | 13.60 | 15.48 | 16.87 | 18.26 | 19.15 | 20.04 | 20.36 | 20.80 | 21.12 | 21.10 | 21.08 | 21.07 | 21.05 | 21.04 | 21.02 | 23.1% |
| Turbo | 4.71 | 4.53 | 4.67 | 4.73 | 4.78 | 4.79 | 4.78 | 4.79 | 4.80 | 4.82 | 4.84 | 4.85 | 4.86 | 4.87 | 4.89 | 4.91 | 4.92 | 4.93 | 4.94 | 4.95 | 4.96 | 4.97 | 0.3% |
| Engine Friction Reduction I | 84.32 | 81.22 | 80.48 | 75.62 | 60.13 | 59.79 | 59.77 | 57.11 | 51.56 | 45.83 | 40.54 | 36.47 | 31.63 | 27.65 | 24.03 | 20.46 | 17.09 | 14.30 | 11.15 | 7.85 | 4.78 | 2.93 | -14.2% |
| Engine Friction Reduction II | 9.21 | 15.09 | 16.26 | 22.11 | 39.69 | 40.02 | 40.02 | 42.23 | 46.16 | 49.50 | 51.95 | 52.42 | 53.60 | 54.09 | 54.10 | 54.03 | 53.65 | 53.19 | 52.12 | 51.30 | 49.80 | 47.75 | 7.8% |
| Engine Friction Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 2.04 | 4.41 | 7.24 | 10.82 | 14.47 | 17.95 | 21.54 | 25.16 | 28.89 | 31.78 | 34.70 | 36.92 | 39.13 | 39.98 | N/A |
| Engine Friction Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.65 | 3.53 | 5.87 | 8.90 | N/A |
| WT I | 1.00 | 9.81 | 16.81 | 25.33 | 33.81 | 42.18 | 50.80 | 59.41 | 67.89 | 74.69 | 78.86 | 80.65 | 82.38 | 74.29 | 65.63 | 56.97 | 48.32 | 39.67 | 31.03 | 24.07 | 17.12 | 11.86 | 11.9% |
| WT II | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 4.71 | 10.08 | 16.75 | 25.40 | 34.05 | 42.69 | 51.32 | 59.95 | 68.58 | 75.52 | 82.46 | 87.70 | N/A |
| Lean Burn | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Two Stroke | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| TBI | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| MPI | 99.90 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.0% |
| Air Pump | 93.53 | 94.09 | 94.01 | 93.96 | 93.94 | 93.96 | 93.95 | 93.92 | 93.89 | 93.87 | 93.84 | 93.81 | 93.79 | 93.77 | 93.75 | 93.73 | 93.71 | 93.69 | 93.67 | 93.66 | 93.64 | 93.62 | 0.0% |
| DFS | 98.34 | 99.39 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.1% |
| Oil SW-30 | 80.02 | 76.30 | 70.97 | 65.63 | 57.02 | 48.36 | 39.74 | 31.08 | 24.11 | 17.15 | 11.90 | 6.65 | 4.68 | 2.06 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | -26.7% |
| Oil Synthetic | 4.73 | 16.81 | 25.40 | 34.09 | 42.80 | 51.45 | 60.05 | 68.70 | 75.65 | 82.59 | 87.83 | 93.07 | 95.02 | 97.63 | 99.58 | 99.57 | 99.55 | 99.54 | 99.52 | 99.51 | 99.49 | 99.48 | 14.8% |
| Tires I | 37.26 | 37.48 | 37.47 | 39.06 | 59.81 | 59.85 | 59.86 | 59.65 | 58.92 | 57.78 | 56.70 | 55.66 | 54.47 | 53.83 | 51.62 | 49.11 | 44.96 | 40.85 | 35.64 | 30.15 | 24.19 | 18.72 | -3.1% |
| Tires II | 0.00 | 0.00 | 0.00 | 0.47 | 3.35 | 5.98 | 8.29 | 12.61 | 17.22 | 21.77 | 25.78 | 29.60 | 33.74 | 36.72 | 40.01 | 42.57 | 45.28 | 46.20 | 47.48 | 48.45 | 48.47 | 47.20 | N/A |
| Tires III | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 2.25 | 4.82 | 8.05 | 12.20 | 16.36 | 20.53 | 24.68 | 28.85 | N/A |
| Tires IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 2.24 | 4.79 | N/A |
| ACC I | 20.63 | 20.57 | 20.59 | 21.16 | 31.34 | 31.39 | 31.41 | 31.43 | 31.45 | 31.49 | 31.52 | 31.54 | 31.56 | 31.58 | 31.60 | 31.62 | 31.65 | 31.66 | 31.68 | 31.70 | 31.72 | 31.74 | 2.0% |
| ACC II | 2.22 | 4.68 | 6.04 | 8.63 | 16.01 | 16.22 | 16.38 | 18.29 | 20.47 | 22.52 | 23.82 | 25.05 | 25.50 | 26.00 | 26.50 | 26.52 | 26.57 | 26.58 | 26.59 | 26.61 | 26.62 | 26.64 | 12.0% |
| EPS | 0.00 | 0.00 | 0.00 | 0.05 | 0.46 | 0.79 | 1.06 | 1.51 | 1.98 | 2.45 | 2.86 | 3.25 | 3.68 | 3.93 | 4.20 | 4.34 | 4.49 | 4.53 | 4.59 | 4.63 | 4.61 | 4.60 | N/A |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (2 of 4)
(Percentage)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| 4WD Improvements | 0.00 | 0.00 | 0.00 | 0.16 | 0.83 | 1.54 | 2.33 | 3.73 | 5.21 | 6.68 | 8.02 | 9.33 | 10.70 | 11.82 | 13.04 | 14.11 | 15.22 | 15.62 | 16.17 | 16.59 | 16.62 | 16.65 | N/A |
| Air Bags | 99.90 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.0% |
| Emissions Tier I | 99.90 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.0% |
| Emissions Tier II | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.91 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | N/A |
| ABS | 15.88 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 8.7% |
| Side Impact | 99.90 | 99.89 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | 0.0% |
| Roof Crush | 0.00 | 0.00 | 99.87 | 99.85 | 99.83 | 99.81 | 99.79 | 99.78 | 99.76 | 99.74 | 99.73 | 99.72 | 99.70 | 99.69 | 99.67 | 99.66 | 99.64 | 99.62 | 99.61 | 99.60 | 99.58 | 99.57 | N/A |
| Increase Size/Weight | 26.64 | 33.30 | 36.62 | 39.94 | 43.26 | 46.58 | 49.90 | 53.21 | 56.53 | 59.85 | 63.16 | 66.48 | 69.79 | 73.11 | 76.42 | 79.73 | 83.03 | 86.34 | 89.65 | 92.96 | 96.26 | 99.57 | 6.2% |
| GDI/4-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.27 | 0.56 | 0.90 | 1.27 | 1.65 | 2.02 | 2.39 | 2.76 | 3.13 | 3.39 | 3.64 | 3.78 | 3.92 | 3.97 | 4.03 | N/A |
| GDI/6-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.11 | 0.25 | 0.44 | 0.70 | 0.97 | 1.24 | 1.50 | 1.77 | 2.04 | 2.29 | 2.53 | 2.75 | 2.96 | 3.05 | 3.16 | N/A |
| Gasoline Hybrid | 0.00 | 0.00 | 0.06 | 0.30 | 0.68 | 1.11 | 1.65 | 2.21 | 2.77 | 3.33 | 3.89 | 4.44 | 4.89 | 5.33 | 5.66 | 6.00 | 6.13 | 6.30 | 6.42 | 6.42 | 6.42 | 6.42 | N/A |
| Light Truck | | | | | | | | | | | | | | | | | | | | | | | |
| Front Wheel Drive | 73.17 | 75.91 | 75.83 | 75.84 | 77.02 | 77.21 | 77.31 | 77.37 | 77.43 | 77.48 | 77.52 | 77.57 | 77.61 | 77.65 | 77.68 | 77.72 | 77.77 | 77.81 | 77.84 | 77.89 | 77.93 | 77.96 | 0.3% |
| Unit Body | 9.33 | 20.87 | 25.47 | 31.47 | 39.16 | 44.68 | 48.60 | 53.63 | 58.13 | 58.48 | 58.89 | 59.46 | 59.90 | 59.98 | 60.07 | 60.18 | 60.34 | 60.45 | 60.56 | 60.72 | 60.87 | 61.00 | 8.9% |
| Material Substitution II | 16.50 | 19.99 | 21.02 | 23.42 | 34.19 | 34.74 | 34.98 | 36.98 | 39.32 | 39.33 | 39.34 | 39.35 | 39.35 | 39.38 | 39.38 | 39.38 | 39.38 | 39.38 | 39.37 | 39.33 | 39.19 | 39.04 | 4.0% |
| Material Substitution III | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 1.28 | 2.03 | 3.59 | 5.77 | 7.96 | 10.08 | 12.21 | 14.33 | 16.47 | 18.33 | 20.20 | 21.85 | 23.45 | 23.98 | N/A |
| Material Substitution IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 0.73 | 1.63 | 2.90 | 4.70 | N/A |
| Material Substitution V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Drag Reduction II | 62.47 | 71.66 | 70.29 | 69.37 | 62.48 | 55.07 | 48.49 | 40.63 | 32.39 | 30.56 | 25.91 | 19.33 | 13.03 | 7.52 | 4.30 | 1.98 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Drag Reduction III | 3.05 | 12.48 | 19.48 | 27.56 | 37.52 | 44.93 | 51.51 | 59.37 | 66.72 | 67.23 | 69.12 | 71.88 | 72.62 | 72.75 | 70.60 | 67.58 | 63.81 | 58.96 | 53.85 | 48.12 | 42.31 | 35.97 | 11.9% |
| Drag Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.89 | 2.21 | 4.97 | 8.79 | 14.35 | 19.73 | 25.09 | 30.44 | 35.84 | 41.04 | 45.76 | 50.45 | 54.53 | 58.54 | N/A |
| Drag Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 1.43 | 3.17 | 5.49 | N/A |
| TCLU | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| 4-Speed Automatic | 66.70 | 66.66 | 64.74 | 62.43 | 58.58 | 56.93 | 55.17 | 52.10 | 48.38 | 48.19 | 46.49 | 43.43 | 42.02 | 40.30 | 38.87 | 38.33 | 37.86 | 37.40 | 36.99 | 36.59 | 36.48 | 36.31 | -2.7% |
| 5-Speed Automatic | 1.02 | 4.80 | 8.18 | 11.56 | 17.03 | 19.56 | 22.09 | 25.59 | 29.02 | 29.05 | 30.25 | 32.81 | 33.72 | 34.94 | 35.88 | 35.91 | 35.94 | 35.97 | 35.99 | 36.02 | 36.04 | 36.07 | 17.6% |
| CVT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.31 | 0.70 | 0.92 | 1.49 | 2.05 | 2.62 | 3.17 | 3.72 | 4.27 | 4.76 | 5.23 | 5.65 | 6.07 | 6.19 | 6.37 | N/A |
| 6-Speed Manual | 0.83 | 2.55 | 4.34 | 5.53 | 6.78 | 7.96 | 9.31 | 10.64 | 11.62 | 11.59 | 12.13 | 12.78 | 12.98 | 13.28 | 13.51 | 13.48 | 13.45 | 13.43 | 13.41 | 13.39 | 13.36 | 13.34 | 13.5% |
| Electronic Transmission I | 19.33 | 25.83 | 25.73 | 27.86 | 38.95 | 39.04 | 39.11 | 39.14 | 39.17 | 39.20 | 39.23 | 39.25 | 39.27 | 39.30 | 39.32 | 39.34 | 39.36 | 39.34 | 39.28 | 39.30 | 39.32 | 39.33 | 3.3% |
| Electronic Transmission II | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.42 | 1.24 | 2.05 | 3.74 | 6.16 | 8.59 | 10.92 | 13.25 | 15.58 | 17.94 | 20.05 | 22.15 | 24.10 | 26.00 | 26.60 | N/A |
| Roller Cam | 95.21 | 98.38 | 99.13 | 99.93 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 99.99 | 0.2% |
| OHV 4 | 5.49 | 3.09 | 2.40 | 1.70 | 1.17 | 0.64 | 0.45 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| OHV 6 | 22.82 | 20.62 | 16.43 | 12.60 | 10.33 | 5.07 | 3.59 | 1.68 | 0.24 | 0.24 | 0.24 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | -18.4% |
| OHV 8 | 2.99 | 7.41 | 10.11 | 12.47 | 14.19 | 16.86 | 19.53 | 21.86 | 22.70 | 21.18 | 19.17 | 17.18 | 15.28 | 13.31 | 11.33 | 9.38 | 7.47 | 6.80 | 5.87 | 5.16 | 5.15 | 5.15 | 2.5% |
| 4C/4V | 10.60 | 10.83 | 11.29 | 11.71 | 12.02 | 12.24 | 12.25 | 12.36 | 12.48 | 12.41 | 12.41 | 12.40 | 12.40 | 12.39 | 12.38 | 12.37 | 12.35 | 12.33 | 12.32 | 12.29 | 12.27 | 12.25 | 0.7% |
| 6C/4V | 26.17 | 35.30 | 39.44 | 43.34 | 45.77 | 51.31 | 52.96 | 54.99 | 56.54 | 56.61 | 56.68 | 56.75 | 56.80 | 56.86 | 56.91 | 56.98 | 57.06 | 57.10 | 57.16 | 57.22 | 57.27 | 57.32 | 3.6% |
| 8C/4V | 0.00 | 0.00 | 0.00 | 0.28 | 0.49 | 1.26 | 2.64 | 4.76 | 6.80 | 8.32 | 10.30 | 12.28 | 14.17 | 16.12 | 18.09 | 20.03 | 21.91 | 22.58 | 23.50 | 24.21 | 24.20 | 24.19 | N/A |
| Cylinder Reduction | 11.34 | 16.24 | 18.05 | 20.20 | 22.12 | 24.50 | 26.56 | 29.53 | 31.41 | 32.20 | 33.15 | 33.97 | 34.46 | 34.47 | 34.48 | 34.50 | 34.50 | 34.50 | 34.50 | 34.49 | 34.48 | 34.47 | 5.2% |
| 4C/5V | 0.36 | 0.54 | 0.73 | 0.90 | 1.02 | 1.09 | 1.15 | 1.23 | 1.24 | 1.24 | 1.20 | 1.15 | 1.11 | 1.07 | 1.04 | 1.00 | 0.95 | 0.93 | 0.90 | 0.87 | 0.85 | 0.82 | 3.8% |
| Turbo | 1.29 | 1.71 | 2.15 | 2.21 | 2.22 | 2.23 | 2.29 | 2.30 | 2.31 | 2.32 | 2.32 | 2.33 | 2.33 | 2.34 | 2.34 | 2.34 | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 | 2.8% |
| Engine Friction Reduction I | 87.75 | 93.76 | 95.18 | 96.13 | 94.94 | 92.28 | 87.70 | 79.90 | 72.00 | 70.02 | 64.09 | 58.14 | 52.00 | 46.09 | 39.35 | 31.97 | 23.48 | 17.24 | 10.85 | 6.87 | 4.59 | 2.52 | -14.9% |
| Engine Friction Reduction II | 0.00 | 0.00 | 0.00 | 0.92 | 3.20 | 7.10 | 12.30 | 20.10 | 28.00 | 29.98 | 35.91 | 41.86 | 48.00 | 53.30 | 58.69 | 63.60 | 68.60 | 69.87 | 71.33 | 70.42 | 67.88 | 65.19 | N/A |
| Engine Friction Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.62 | 1.96 | 4.43 | 7.92 | 12.88 | 17.82 | 22.71 | 27.53 | 32.29 | N/A |
| Engine Friction Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| WT I | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 3.26 | 7.36 | 13.14 | 21.45 | 29.76 | 38.08 | 46.39 | 54.70 | 63.01 | 70.54 | 76.52 | 81.69 | 86.85 | 78.54 | N/A |
| WT II | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 3.26 | 7.36 | 13.15 | 21.46 | N/A |
| Lean Burn | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Two Stroke | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| TBI | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| MPI | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0% |
| Air Pump | 50.91 | 52.04 | 52.02 | 52.06 | 52.14 | 52.24 | 52.33 | 52.39 | 52.45 | 52.50 | 52.54 | 52.57 | 52.60 | 52.62 | 52.65 | 52.67 | 52.70 | 52.72 | 52.74 | 52.76 | 52.78 | 52.80 | 0.2% |
| DFS | 90.41 | 97.51 | 99.44 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.5% |
| Oil SW-30 | 94.98 | 86.85 | 78.54 | 70.22 | 61.91 | 53.59 | 45.28 | 36.96 | 29.44 | 21.91 | 15.17 | 8.43 | 5.90 | 2.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | -38.1% |
| Oil Synthetic | 3.26 | 13.15 | 21.46 | 29.78 | 38.09 | 46.41 | 54.72 | 63.04 | 70.56 | 78.09 | 84.83 | 91.57 | 94.10 | | | | | | | | | | |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (3 of 4)
(Percentage)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| EPS | 0.00 | 0.00 | 0.00 | 0.01 | 0.12 | 0.20 | 0.25 | 0.32 | 0.39 | 0.37 | 0.36 | 0.34 | 0.33 | 0.32 | 0.31 | 0.30 | 0.28 | 0.28 | 0.27 | 0.26 | 0.25 | 0.24 | N/A |
| 4WD Improvements | 0.00 | 0.00 | 0.00 | 0.19 | 1.00 | 1.96 | 2.97 | 4.71 | 6.55 | 6.57 | 7.19 | 8.26 | 9.41 | 10.35 | 11.34 | 12.22 | 13.13 | 13.43 | 13.86 | 14.19 | 14.25 | 14.31 | N/A |
| Air Bags | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0% |
| Emissions Tier I | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0% |
| Emissions Tier II | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | N/A |
| ABS | 70.12 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 1.6% |
| Side Impact | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.0% |
| Roof Crush | 0.00 | 0.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | N/A |
| Increase Size/Weight | 26.67 | 33.33 | 36.67 | 40.00 | 43.33 | 46.67 | 50.00 | 53.33 | 56.67 | 60.00 | 63.33 | 66.67 | 70.00 | 73.33 | 76.67 | 80.00 | 83.33 | 86.67 | 90.00 | 93.33 | 96.67 | 100.00 | 6.2% |
| GDI/4-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.12 | 0.25 | 0.29 | 0.40 | 0.52 | 0.64 | 0.76 | 0.87 | 0.98 | 1.06 | 1.14 | 1.18 | 1.23 | 1.24 | 1.26 | N/A |
| GDI/6-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.22 | 0.50 | 0.71 | 1.16 | 1.60 | 2.04 | 2.48 | 2.92 | 3.36 | 3.76 | 4.15 | 4.51 | 4.86 | 4.99 | 5.15 | N/A |
| Gasoline Hybrid | 0.00 | 0.00 | 0.07 | 0.23 | 0.54 | 0.94 | 1.50 | 2.07 | 2.66 | 3.04 | 3.58 | 4.12 | 4.61 | 5.10 | 5.54 | 5.97 | 6.14 | 6.35 | 6.51 | 6.51 | 6.51 | 6.51 | N/A |
| Light-Duty Vehicle Total | | | | | | | | | | | | | | | | | | | | | | | |
| Front Wheel Drive | 49.98 | 49.67 | 48.97 | 48.45 | 48.53 | 48.12 | 47.83 | 47.56 | 47.33 | 47.12 | 46.94 | 46.78 | 46.65 | 46.53 | 46.41 | 46.31 | 46.21 | 46.13 | 46.06 | 45.98 | 45.91 | 45.85 | -0.4% |
| Unit Body | 56.42 | 60.48 | 62.03 | 64.39 | 68.02 | 70.35 | 72.02 | 74.28 | 76.33 | 76.39 | 76.50 | 76.70 | 76.84 | 76.83 | 76.81 | 76.80 | 76.83 | 76.84 | 76.85 | 76.89 | 76.93 | 76.96 | 1.4% |
| Material Substitution II | 16.50 | 19.99 | 21.02 | 23.42 | 34.19 | 34.74 | 34.98 | 36.98 | 39.32 | 39.33 | 39.34 | 39.35 | 39.35 | 39.38 | 39.38 | 39.38 | 39.38 | 39.38 | 39.37 | 39.33 | 39.19 | 39.04 | 4.0% |
| Material Substitution III | 1.22 | 2.41 | 3.09 | 4.30 | 7.50 | 7.62 | 7.74 | 8.88 | 10.25 | 11.50 | 12.79 | 14.39 | 15.64 | 16.90 | 18.15 | 19.19 | 20.25 | 21.17 | 22.09 | 22.90 | 23.70 | 23.96 | 14.5% |
| Material Substitution IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.52 | 1.10 | 1.80 | 2.71 | 3.59 | 4.48 | 5.37 | 6.28 | 7.27 | 8.23 | 9.39 | 10.54 | 11.96 | N/A |
| Material Substitution V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.41 | 0.88 | 1.45 | N/A |
| Drag Reduction II | 45.79 | 50.66 | 50.25 | 50.49 | 43.82 | 40.12 | 36.23 | 31.21 | 25.65 | 22.93 | 19.17 | 14.56 | 10.31 | 6.65 | 4.13 | 2.39 | 1.09 | 0.44 | 0.10 | 0.04 | 0.00 | 0.00 | N/A |
| Drag Reduction III | 34.28 | 37.43 | 40.39 | 44.43 | 56.09 | 59.48 | 62.52 | 66.25 | 69.70 | 69.62 | 70.05 | 70.88 | 70.42 | 69.56 | 67.47 | 64.77 | 61.00 | 56.84 | 52.14 | 47.22 | 42.10 | 36.81 | 0.3% |
| Drag Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 1.14 | 2.42 | 4.52 | 7.32 | 10.64 | 14.41 | 19.12 | 23.63 | 28.24 | 32.48 | 36.82 | 40.60 | 44.16 | 46.95 | 49.58 | 52.05 | N/A |
| Drag Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.91 | 1.94 | 3.41 | 5.59 | 8.11 | 10.93 | N/A |
| TCLU | 77.70 | 78.70 | 78.70 | 78.70 | 79.25 | 79.37 | 79.42 | 79.45 | 79.49 | 79.52 | 79.55 | 79.59 | 79.61 | 79.64 | 79.67 | 79.70 | 79.74 | 79.77 | 79.80 | 79.83 | 79.86 | 79.89 | 0.1% |
| 4-Speed Automatic | 62.02 | 60.58 | 58.71 | 57.03 | 54.28 | 52.94 | 51.52 | 49.31 | 47.10 | 46.23 | 45.12 | 43.21 | 42.15 | 41.31 | 40.60 | 40.34 | 40.11 | 39.89 | 39.68 | 39.49 | 39.43 | 39.35 | -2.0% |
| 5-Speed Automatic | 3.37 | 6.86 | 10.13 | 12.78 | 16.71 | 18.94 | 21.18 | 23.94 | 26.45 | 27.31 | 28.23 | 29.91 | 30.66 | 31.30 | 31.81 | 31.86 | 31.92 | 31.97 | 32.01 | 32.05 | 32.10 | 32.15 | 10.8% |
| CVT | 2.14 | 2.84 | 3.54 | 4.11 | 5.32 | 5.55 | 5.87 | 6.46 | 7.01 | 7.45 | 7.80 | 8.20 | 8.56 | 8.79 | 9.02 | 9.25 | 9.45 | 9.66 | 9.84 | 10.02 | 10.05 | 10.12 | 7.3% |
| 6-Speed Manual | 4.93 | 5.89 | 7.69 | 8.37 | 8.92 | 9.54 | 10.27 | 10.95 | 11.41 | 11.42 | 11.68 | 11.99 | 12.08 | 12.22 | 12.33 | 12.31 | 12.29 | 12.28 | 12.26 | 12.24 | 12.22 | 12.20 | 4.2% |
| Electronic Transmission I | 20.94 | 23.83 | 23.85 | 24.96 | 32.13 | 32.26 | 32.35 | 32.41 | 32.48 | 32.53 | 32.58 | 32.63 | 32.67 | 32.70 | 32.74 | 32.77 | 32.81 | 32.81 | 32.80 | 32.82 | 32.85 | 32.87 | 2.1% |
| Electronic Transmission II | 0.27 | 1.38 | 1.94 | 3.20 | 6.50 | 6.74 | 6.89 | 8.14 | 9.80 | 11.23 | 12.87 | 14.70 | 16.61 | 17.91 | 19.41 | 20.84 | 22.03 | 23.08 | 24.13 | 25.10 | 26.05 | 26.36 | 23.1% |
| Roller Cam | 95.51 | 97.52 | 97.86 | 98.38 | 99.31 | 99.31 | 99.31 | 99.31 | 99.30 | 99.30 | 99.30 | 99.30 | 99.29 | 99.29 | 99.29 | 99.28 | 99.27 | 99.27 | 99.27 | 99.26 | 99.26 | 99.25 | 0.2% |
| OHV 4 | 5.93 | 3.02 | 2.21 | 1.31 | 0.71 | 0.37 | 0.21 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| OHV 6 | 18.13 | 16.50 | 13.32 | 10.23 | 7.86 | 4.05 | 2.86 | 1.30 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | -20.1% |
| OHV 8 | 4.48 | 6.26 | 7.02 | 7.65 | 8.09 | 9.00 | 10.11 | 11.07 | 11.44 | 10.75 | 9.81 | 8.86 | 7.95 | 6.99 | 6.03 | 5.07 | 4.13 | 3.81 | 3.35 | 3.00 | 3.00 | 3.00 | -1.8% |
| 4C/4V | 28.13 | 29.69 | 29.43 | 29.13 | 28.27 | 27.34 | 26.44 | 25.52 | 24.51 | 23.68 | 22.90 | 22.38 | 21.88 | 21.65 | 21.36 | 21.12 | 21.04 | 20.97 | 20.91 | 20.85 | 20.78 | 20.72 | -1.4% |
| 6C/4V | 22.40 | 29.13 | 32.62 | 35.93 | 38.49 | 42.51 | 43.85 | 45.56 | 46.87 | 46.98 | 47.09 | 47.19 | 47.27 | 47.35 | 47.44 | 47.53 | 47.61 | 47.68 | 47.74 | 47.80 | 47.86 | 47.92 | 3.5% |
| 8C/4V | 3.41 | 4.56 | 5.05 | 5.66 | 6.17 | 7.03 | 7.90 | 9.14 | 10.23 | 10.98 | 11.96 | 12.95 | 13.90 | 14.89 | 15.88 | 16.87 | 17.84 | 18.20 | 18.68 | 19.06 | 19.09 | 19.12 | 8.2% |
| Cylinder Reduction | 9.75 | 13.59 | 15.10 | 16.85 | 18.56 | 20.25 | 21.46 | 23.23 | 24.42 | 24.86 | 25.37 | 25.82 | 26.10 | 26.15 | 26.19 | 26.23 | 26.26 | 26.28 | 26.31 | 26.32 | 26.34 | 26.36 | 4.6% |
| 4C/5V | 0.28 | 1.64 | 2.56 | 3.64 | 4.68 | 5.67 | 6.65 | 7.63 | 8.58 | 9.26 | 9.92 | 10.32 | 10.73 | 10.85 | 11.03 | 11.16 | 11.11 | 11.08 | 11.05 | 11.02 | 10.99 | 10.96 | 18.2% |
| Turbo | 3.20 | 3.25 | 3.51 | 3.55 | 3.57 | 3.57 | 3.59 | 3.59 | 3.60 | 3.60 | 3.61 | 3.61 | 3.62 | 3.62 | 3.63 | 3.64 | 3.65 | 3.65 | 3.65 | 3.66 | 3.66 | 3.67 | 0.6% |
| Engine Friction Reduction I | 85.83 | 86.91 | 87.25 | 85.18 | 76.54 | 75.24 | 73.15 | 68.10 | 61.47 | 57.61 | 52.06 | 47.10 | 41.65 | 36.74 | 31.60 | 26.16 | 20.26 | 15.76 | 11.00 | 7.36 | 4.69 | 2.73 | -14.5% |
| Engine Friction Reduction II | 5.16 | 8.25 | 8.78 | 12.23 | 22.50 | 24.36 | 26.74 | 31.56 | 37.36 | 39.99 | 44.11 | 47.24 | 50.84 | 53.70 | 56.37 | 58.77 | 61.06 | 61.47 | 61.66 | 60.81 | 58.80 | 56.43 | 11.5% |
| Engine Friction Reduction IV | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 1.05 | 2.26 | 3.70 | 5.51 | 7.35 | 9.40 | 11.87 | 14.90 | 18.50 | 22.40 | 26.31 | 29.86 | 33.36 | 36.15 | N/A |
| Engine Friction Reduction V | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.83 | 1.77 | 2.95 | 4.47 | N/A |
| WT I | 0.56 | 5.36 | 9.07 | 13.52 | 17.88 | 22.13 | 26.46 | 31.24 | 36.55 | 41.89 | 46.73 | 51.61 | 56.49 | 56.43 | 56.12 | 55.85 | 55.60 | 54.99 | 53.63 | 52.72 | 51.83 | 45.07 | 22.1% |
| WT II | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 2.41 | 5.13 | 8.51 | 12.88 | 17.22 | 21.56 | 25.88 | 30.69 | 36.13 | 41.63 | 47.96 | 54.71 | N/A |
| Lean Burn | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Two Stroke | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| TBI | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| MPI | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 0.0% |
| Air Pump | 74.77 | 75.02 | 74.68 | 74.43 | 74.24 | 74.12 | 74.01 | 73.90 | 73.80 | 73.72 | 73.64 | 73.58 | 73.52 | 73.48 | 73.44 | 73.41 | 73.38 | 73.36 | 73.34 | 73.32 | 73.30 | 73.29 | -0.1% |
| DFS | 94.85 | 98.54 | 99.67 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | |

**Table 48. Technology Market Penetration in Light-Duty Vehicles (4 of 4)
(Percentage)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 | |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| ACC I | 12.24 | 14.50 | 15.85 | 18.39 | 29.03 | 30.11 | 30.69 | 32.94 | 35.29 | 35.34 | 35.38 | 35.58 | 35.77 | 36.01 | 36.19 | 36.22 | 36.25 | 36.27 | 36.29 | 36.32 | 36.34 | 36.36 | 5.1% | |
| ACC II | 1.24 | 2.56 | 3.26 | 4.61 | 8.47 | 8.51 | 8.53 | 9.47 | 10.82 | 12.14 | 13.51 | 15.16 | 16.92 | 18.66 | 20.41 | 21.92 | 23.46 | 24.93 | 26.29 | 27.64 | 28.83 | 30.01 | 15.6% | |
| EPS | 0.00 | 0.00 | 0.00 | 0.03 | 0.30 | 0.51 | 0.68 | 0.94 | 1.21 | 1.43 | 1.63 | 1.82 | 2.03 | 2.15 | 2.28 | 2.34 | 2.41 | 2.42 | 2.44 | 2.46 | 2.44 | 2.43 | 2.43 | N/A |
| 4WD Improvements | 0.00 | 0.00 | 0.00 | 0.17 | 0.91 | 1.74 | 2.63 | 4.20 | 5.86 | 6.63 | 7.61 | 8.80 | 10.07 | 11.10 | 12.20 | 13.17 | 14.18 | 14.54 | 15.02 | 15.39 | 15.44 | 15.48 | 15.48 | N/A |
| Air Bags | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78 | 0.0% |
| Emissions Tier I | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78 | 0.0% |
| Emissions Tier II | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.90 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.90 | 0.89 | 0.88 | 0.88 | N/A |
| ABS | 39.75 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78 | 4.3% |
| Side Impact | 99.95 | 99.94 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78 | 0.0% |
| Roof Crush | 0.00 | 0.00 | 99.93 | 99.92 | 99.91 | 99.90 | 99.89 | 99.88 | 99.88 | 99.87 | 99.86 | 99.86 | 99.85 | 99.84 | 99.84 | 99.83 | 99.82 | 99.81 | 99.80 | 99.80 | 99.79 | 99.78 | 99.78 | N/A |
| Increase Size/Weight | 26.65 | 33.31 | 36.64 | 39.97 | 43.29 | 46.62 | 49.95 | 53.27 | 56.60 | 59.92 | 63.25 | 66.57 | 69.89 | 73.22 | 76.54 | 79.86 | 83.18 | 86.50 | 89.82 | 93.14 | 96.46 | 99.78 | 99.78 | 6.2% |
| GDI/4-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.20 | 0.41 | 0.60 | 0.85 | 1.09 | 1.34 | 1.58 | 1.83 | 2.07 | 2.24 | 2.40 | 2.49 | 2.58 | 2.61 | 2.65 | 2.65 | N/A |
| GDI/6-cylinder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.16 | 0.37 | 0.57 | 0.93 | 1.28 | 1.63 | 1.98 | 2.34 | 2.69 | 3.02 | 3.34 | 3.62 | 3.91 | 4.01 | 4.15 | 4.15 | N/A |
| Gasoline Hybrid | 0.00 | 0.00 | 0.07 | 0.27 | 0.61 | 1.03 | 1.57 | 2.14 | 2.72 | 3.19 | 3.74 | 4.28 | 4.75 | 5.22 | 5.60 | 5.99 | 6.13 | 6.32 | 6.47 | 6.47 | 6.47 | 6.47 | 6.47 | N/A |

N/A = Not applicable.

CV I = Continuous Variable Transmission.

OHV = Overhead Camshaft.

4C/4V = 4 Cylinders/4 Valves.

6C/4V = 6 Cylinders/4 Valves.

8C/4V = 8 Cylinders/4 Valves.

4C/5V = 4 Cylinders/5 Valves.

IBI = Inertial Body Fuel Injection.

MPI = Multi Point Fuel Injection.

ACC = Accessory Improvements.

ABS = Anti-Lock Brakes System.

GDI = Gasoline Direct Injection.

ICLU = Torque Converter Lock-up.

WI = Weight Reduction.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Source: Energy Information Administration, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 49. Light-Duty Vehicle VMT by Technology Type (1 of 1)
(Billion Miles, Unless Otherwise Noted)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Conventional Vehicles 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline ICE Vehicles | 2351.6 | 2447.7 | 2499.6 | 2543.6 | 2583.1 | 2625.0 | 2663.8 | 2703.5 | 2743.8 | 2782.1 | 2819.2 | 2856.2 | 2887.1 | 2918.5 | 2953.4 | 2992.5 | 3032.2 | 3064.6 | 3097.2 | 3132.5 | 3169.9 | 3208.5 | 1.4% |
| TDI Diesel ICE | 38.6 | 31.7 | 29.3 | 27.2 | 25.7 | 25.0 | 25.2 | 24.6 | 24.7 | 25.6 | 27.4 | 30.1 | 33.5 | 37.4 | 41.7 | 46.3 | 51.1 | 55.8 | 60.3 | 64.8 | 69.3 | 73.6 | 3.0% |
| Alternative-Fuel Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| Alcohol Fuel Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol-Flex Fuel ICE | 3.4 | 10.5 | 15.5 | 21.0 | 27.0 | 32.7 | 38.1 | 43.1 | 47.6 | 51.7 | 55.3 | 58.3 | 60.7 | 62.7 | 64.3 | 65.5 | 66.3 | 66.9 | 67.3 | 67.4 | 67.4 | 67.1 | 14.5% |
| Methanol ICE | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 1.2 | 1.7 | 2.4 | 3.2 | 4.0 | 4.9 | 5.9 | 6.8 | 7.8 | 8.6 | 9.5 | 10.2 | 41.2% |
| Ethanol-Flex Fuel ICE | 1.9 | 6.2 | 8.9 | 12.0 | 15.2 | 18.8 | 22.3 | 25.9 | 29.2 | 32.2 | 35.1 | 37.6 | 39.6 | 41.1 | 42.4 | 43.3 | 43.9 | 44.1 | 44.1 | 43.9 | 43.6 | 43.1 | 15.1% |
| Ethanol Ice | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 | 0.6 | 0.8 | 1.0 | 1.3 | 1.7 | 2.0 | 2.4 | 2.8 | 3.1 | 3.4 | 3.7 | 3.9 | 40.3% |
| Natural Gas Technology | | | | | | | | | | | | | | | | | | | | | | | |
| CNG ICE | 3.1 | 7.9 | 11.5 | 14.9 | 18.2 | 21.2 | 23.9 | 26.2 | 28.2 | 30.1 | 32.0 | 33.8 | 35.5 | 37.1 | 38.7 | 40.3 | 41.8 | 43.0 | 44.2 | 45.2 | 46.2 | 47.1 | 13.2% |
| CNG Bi-fuel | 0.2 | 0.5 | 0.7 | 0.9 | 1.2 | 1.4 | 1.7 | 1.9 | 2.1 | 2.3 | 2.4 | 2.5 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 | 2.5 | 2.4 | 2.3 | 12.6% |
| LPG ICE | 3.7 | 5.4 | 6.6 | 7.7 | 8.8 | 9.8 | 10.7 | 11.5 | 12.2 | 12.9 | 13.5 | 14.2 | 14.8 | 15.4 | 15.9 | 16.5 | 17.0 | 17.5 | 17.9 | 18.2 | 18.6 | 18.8 | 7.6% |
| LPG Bi-fuel | 0.1 | 0.3 | 0.5 | 0.6 | 0.8 | 0.9 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.5 | 1.5 | 1.6 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.3 | 1.3 | 1.2 | 10.8% |
| Electric Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Electric Vehicle | 0.1 | 0.2 | 0.3 | 0.4 | 1.7 | 3.0 | 4.4 | 5.8 | 7.2 | 8.6 | 10.0 | 11.4 | 12.8 | 14.1 | 15.3 | 16.6 | 17.7 | 18.7 | 19.5 | 20.3 | 21.1 | 21.7 | 28.2% |
| Electric-Diesel Hybrid | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Technology | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Methanol | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Fuel Cell Hydrogen | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| VMT Equation Components | | | | | | | | | | | | | | | | | | | | | | | |
| Total VMT (billion miles) | 2402.8 | 2510.6 | 2572.8 | 2628.5 | 2681.9 | 2738.1 | 2791.5 | 2844.1 | 2897.0 | 2948.1 | 2998.2 | 3048.3 | 3091.5 | 3135.0 | 3181.6 | 3232.1 | 3282.4 | 3324.2 | 3365.2 | 3408.3 | 3452.7 | 3497.6 | 1.7% |
| VMT/Driving Pop. (thou. miles) | 11.3 | 11.5 | 11.6 | 11.7 | 11.8 | 12.0 | 12.1 | 12.2 | 12.3 | 12.4 | 12.5 | 12.6 | 12.6 | 12.7 | 12.8 | 12.9 | 13.0 | 13.1 | 13.2 | 13.3 | 13.4 | 13.5 | 0.8% |
| Driving Population (million) | 208.6 | 212.8 | 214.9 | 217.0 | 219.2 | 221.4 | 223.7 | 226.0 | 228.4 | 230.7 | 233.0 | 235.2 | 237.4 | 239.5 | 241.5 | 243.6 | 245.6 | 247.6 | 249.5 | 251.5 | 253.4 | 255.3 | 0.9% |
| Price Effects | | | | | | | | | | | | | | | | | | | | | | | |
| Motor Gas Price (1987 \$/mill. Btu) | 6.30 | 7.75 | 7.55 | 7.49 | 7.52 | 7.56 | 7.62 | 7.62 | 7.63 | 7.64 | 7.64 | 7.63 | 7.63 | 7.64 | 7.63 | 7.63 | 7.63 | 7.62 | 7.62 | 7.61 | 7.60 | 7.60 | 0.9% |
| Fleet Miles per Gallon | 20.81 | 20.68 | 20.64 | 20.61 | 20.65 | 20.59 | 20.57 | 20.53 | 20.50 | 20.51 | 20.49 | 20.48 | 20.47 | 20.48 | 20.49 | 20.50 | 20.52 | 20.53 | 20.55 | 20.58 | 20.61 | 20.63 | 0.0% |
| R. Cost of Driving/Mile(1987cent) | 3.786 | 4.685 | 4.575 | 4.546 | 4.553 | 4.591 | 4.630 | 4.643 | 4.656 | 4.660 | 4.661 | 4.663 | 4.666 | 4.665 | 4.659 | 4.655 | 4.650 | 4.643 | 4.636 | 4.627 | 4.613 | 4.604 | 0.9% |
| Point Price Elasticity | -0.035 | -0.042 | -0.041 | -0.040 | -0.040 | -0.040 | -0.040 | -0.040 | -0.039 | -0.039 | -0.039 | -0.039 | -0.038 | -0.038 | -0.038 | -0.037 | -0.037 | -0.037 | -0.037 | -0.036 | -0.036 | -0.035 | 0.1% |
| Income Effects | | | | | | | | | | | | | | | | | | | | | | | |
| Disposable Income (bill.1987 \$) | 4444.6 | 4707.7 | 4820.4 | 4932.6 | 5049.2 | 5190.5 | 5323.0 | 5453.2 | 5585.9 | 5716.7 | 5848.8 | 5986.5 | 6110.1 | 6239.8 | 6385.6 | 6549.2 | 6716.6 | 6860.8 | 7003.3 | 7157.3 | 7318.3 | 7485.5 | 2.4% |
| Point Income Elasticity | 0.439 | 0.448 | 0.450 | 0.452 | 0.455 | 0.459 | 0.463 | 0.466 | 0.470 | 0.473 | 0.477 | 0.481 | 0.484 | 0.487 | 0.491 | 0.495 | 0.499 | 0.502 | 0.505 | 0.509 | 0.512 | 0.516 | 0.7% |
| Demographic Driving Population Effect | | | | | | | | | | | | | | | | | | | | | | | |
| Percentage Female Driving Pop. | 0.711 | 0.744 | 0.757 | 0.766 | 0.774 | 0.780 | 0.785 | 0.789 | 0.791 | 0.794 | 0.795 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.796 | 0.5% |
| Point Demographic Elasticity | 0.248 | 0.255 | 0.256 | 0.257 | 0.257 | 0.256 | 0.256 | 0.255 | 0.253 | 0.252 | 0.251 | 0.249 | 0.248 | 0.246 | 0.245 | 0.242 | 0.240 | 0.239 | 0.237 | 0.236 | 0.234 | 0.232 | -0.3% |

1/ Includes personal and fleet vehicles. Includes both cars and light trucks.

TDI = Turbo Direct Injection. Pop. = Population
 CNG = Compressed natural gas. Thou. = Thousands.
 LNG = Liquid natural gas. Mill. = Million.
 VMT = Vehicle miles traveled. \$ = Dollar.
 ICE = Internal combustion engine. Bill. = Billion.
 Btu = British thermal unit. R. Cost = Real Cost.
 N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Federal Highway Administration, Highway Statistics 1996, (November 1997); Oak Ridge National Laboratory, Transportation Energy Data Book: 18, (September 1998); United States Department of Commerce, Bureau of the Census, Truck Inventory and Use Survey, TC92-T-52 (Washington, DC, May 1995); and Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 50. Summary of New Light-Duty Vehicle Size Class Attributes (1 of 2)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|--------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Personal Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| New Fuel Efficiency EPA Rated | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Cars (MPG) | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact | 26.100 | 26.561 | 26.708 | 26.997 | 27.745 | 27.749 | 28.024 | 28.364 | 28.695 | 28.961 | 29.255 | 29.371 | 29.470 | 29.550 | 29.611 | 29.639 | 29.687 | 29.717 | 29.738 | 29.769 | 29.807 | 29.806 | 0.6% |
| Subcompact | 31.811 | 32.383 | 32.484 | 32.624 | 33.261 | 33.255 | 33.302 | 33.461 | 33.622 | 33.792 | 33.995 | 34.073 | 34.210 | 34.241 | 34.188 | 34.079 | 33.985 | 33.930 | 33.883 | 33.831 | 33.756 | 33.658 | 0.3% |
| Compact | 30.657 | 31.352 | 31.410 | 31.605 | 32.497 | 32.464 | 32.526 | 32.719 | 32.948 | 33.190 | 33.360 | 33.543 | 33.777 | 33.811 | 33.776 | 33.695 | 33.622 | 33.592 | 33.565 | 33.515 | 33.454 | 33.389 | 0.4% |
| Mid-size | 27.127 | 27.670 | 27.715 | 27.925 | 28.537 | 28.521 | 28.633 | 28.855 | 29.105 | 29.332 | 29.533 | 29.743 | 29.998 | 30.032 | 30.048 | 30.025 | 29.995 | 29.988 | 29.993 | 29.992 | 29.983 | 29.969 | 0.5% |
| Large | 24.637 | 24.972 | 25.012 | 25.304 | 26.033 | 26.031 | 26.167 | 26.402 | 26.655 | 26.927 | 27.190 | 27.506 | 27.880 | 27.976 | 28.063 | 28.105 | 28.111 | 28.144 | 28.196 | 28.234 | 28.259 | 28.290 | 0.6% |
| Two Seater | 24.826 | 25.247 | 25.352 | 25.557 | 26.179 | 26.175 | 26.324 | 26.560 | 26.800 | 27.009 | 27.219 | 27.303 | 27.406 | 27.451 | 27.469 | 27.447 | 27.437 | 27.434 | 27.431 | 27.429 | 27.420 | 27.387 | 0.4% |
| Average New Car | 28.630 | 29.365 | 29.383 | 29.578 | 30.410 | 30.386 | 30.478 | 30.683 | 30.915 | 31.148 | 31.356 | 31.557 | 31.808 | 31.853 | 31.849 | 31.800 | 31.745 | 31.735 | 31.725 | 31.701 | 31.666 | 31.625 | 0.5% |
| Avr. New Car On-Road MPG | 24.654 | 25.093 | 25.081 | 25.246 | 26.026 | 25.974 | 26.053 | 26.195 | 26.361 | 26.559 | 26.702 | 26.806 | 26.985 | 26.992 | 26.921 | 26.848 | 26.767 | 26.691 | 26.646 | 26.592 | 26.565 | 26.500 | 0.3% |
| Conventional Light Trucks | | | | | | | | | | | | | | | | | | | | | | | |
| Small Pickup | 23.768 | 24.161 | 24.107 | 24.162 | 24.323 | 24.225 | 24.142 | 24.169 | 24.230 | 24.121 | 24.133 | 24.223 | 24.337 | 24.447 | 24.544 | 24.611 | 24.680 | 24.757 | 24.843 | 24.946 | 25.061 | 24.994 | 0.2% |
| Large Pickup | 18.516 | 18.490 | 18.454 | 18.482 | 18.597 | 18.505 | 18.575 | 18.740 | 18.861 | 18.843 | 18.951 | 19.131 | 19.307 | 19.484 | 19.620 | 19.753 | 19.882 | 20.025 | 20.176 | 20.337 | 20.506 | 20.473 | 0.5% |
| Small Van | 24.500 | 25.034 | 25.061 | 25.174 | 25.478 | 25.450 | 25.489 | 25.632 | 25.759 | 25.609 | 25.606 | 25.712 | 25.846 | 25.985 | 26.095 | 26.177 | 26.263 | 26.393 | 26.526 | 26.699 | 26.886 | 26.840 | 0.4% |
| Large Van | 18.400 | 18.804 | 18.929 | 19.188 | 19.512 | 19.492 | 19.660 | 19.942 | 20.203 | 20.218 | 20.370 | 20.603 | 20.824 | 21.030 | 21.195 | 21.353 | 21.502 | 21.666 | 21.841 | 22.044 | 22.258 | 22.259 | 0.9% |
| Small Utility | 21.070 | 21.605 | 21.608 | 21.760 | 22.056 | 22.006 | 22.032 | 22.183 | 22.381 | 22.342 | 22.413 | 22.559 | 22.707 | 22.851 | 22.990 | 23.103 | 23.196 | 23.280 | 23.377 | 23.473 | 23.588 | 23.567 | 0.5% |
| Large Utility | 17.159 | 14.586 | 14.636 | 14.791 | 14.989 | 14.998 | 15.127 | 15.337 | 15.528 | 15.555 | 15.688 | 15.886 | 16.065 | 16.198 | 16.306 | 16.409 | 16.511 | 16.620 | 16.740 | 16.854 | 16.996 | 16.980 | 0.0% |
| Average New Light Truck | 20.904 | 20.791 | 20.765 | 20.866 | 21.087 | 21.014 | 21.076 | 21.212 | 21.371 | 21.323 | 21.401 | 21.556 | 21.715 | 21.862 | 21.988 | 22.096 | 22.197 | 22.307 | 22.426 | 22.553 | 22.695 | 22.659 | 0.4% |
| Avr. New LT On-Road MPG | 17.023 | 16.779 | 16.761 | 16.841 | 17.065 | 16.985 | 17.034 | 17.122 | 17.227 | 17.189 | 17.228 | 17.330 | 17.412 | 17.508 | 17.585 | 17.627 | 17.683 | 17.746 | 17.816 | 17.891 | 17.983 | 17.932 | 0.2% |
| Degradation Factors 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 0.861 | 0.855 | 0.854 | 0.854 | 0.856 | 0.855 | 0.855 | 0.854 | 0.853 | 0.853 | 0.852 | 0.849 | 0.848 | 0.847 | 0.845 | 0.844 | 0.843 | 0.841 | 0.840 | 0.839 | 0.839 | 0.838 | -0.1% |
| Light Trucks | 0.814 | 0.807 | 0.807 | 0.807 | 0.809 | 0.808 | 0.808 | 0.807 | 0.806 | 0.806 | 0.805 | 0.804 | 0.802 | 0.801 | 0.800 | 0.798 | 0.797 | 0.796 | 0.794 | 0.793 | 0.792 | 0.791 | -0.1% |
| New Fuel Efficiency by Size Class 2/ | | | | | | | | | | | | | | | | | | | | | | | |
| Alternative-Fuel Cars | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact | 36.088 | 36.677 | 36.744 | 36.874 | 37.540 | 37.479 | 37.510 | 37.672 | 37.853 | 38.076 | 38.341 | 38.506 | 38.745 | 38.850 | 38.821 | 38.718 | 38.614 | 38.547 | 38.495 | 38.428 | 38.334 | 38.214 | 0.3% |
| Compact | 29.942 | 30.562 | 30.576 | 30.725 | 31.551 | 31.482 | 31.533 | 31.718 | 31.940 | 32.183 | 32.376 | 32.576 | 32.832 | 32.827 | 32.818 | 32.753 | 32.689 | 32.649 | 32.612 | 32.551 | 32.474 | 32.384 | 0.4% |
| Midsized | 28.293 | 28.873 | 28.919 | 29.118 | 29.738 | 29.697 | 29.822 | 30.064 | 30.339 | 30.587 | 30.787 | 31.001 | 31.259 | 31.344 | 31.398 | 31.403 | 31.396 | 31.357 | 31.350 | 31.337 | 31.316 | 31.287 | 0.5% |
| Large | 26.555 | 26.893 | 26.928 | 27.224 | 27.976 | 27.989 | 28.152 | 28.418 | 28.712 | 29.024 | 29.337 | 29.710 | 30.138 | 30.361 | 30.571 | 30.708 | 30.747 | 30.785 | 30.843 | 30.883 | 30.916 | 30.953 | 0.7% |
| 2-Seater | 28.977 | 29.478 | 29.737 | 30.195 | 30.872 | 33.434 | 36.774 | 40.999 | 46.400 | 46.201 | 46.036 | 45.906 | 45.777 | 45.659 | 45.531 | 45.368 | 45.658 | 45.542 | 45.436 | 45.378 | 45.311 | 45.251 | 2.0% |
| Average New Alternative Cars | 24.976 | 25.414 | 25.484 | 25.689 | 26.279 | 26.680 | 27.299 | 28.145 | 29.207 | 29.345 | 29.479 | 29.616 | 29.792 | 29.840 | 29.857 | 29.825 | 29.851 | 29.813 | 29.789 | 29.763 | 29.725 | 29.682 | 0.8% |
| Alternative-Fuel Light Trucks | | | | | | | | | | | | | | | | | | | | | | | |
| Small Pickup | 24.489 | 24.998 | 24.944 | 25.019 | 25.252 | 25.153 | 25.084 | 25.145 | 25.279 | 25.235 | 25.308 | 25.436 | 25.596 | 25.748 | 25.893 | 26.003 | 26.093 | 26.162 | 26.236 | 26.296 | 26.367 | 26.299 | 0.3% |
| Large Pickup | 18.107 | 18.243 | 18.208 | 18.237 | 18.354 | 18.257 | 18.333 | 18.508 | 18.644 | 18.646 | 18.779 | 18.986 | 19.190 | 19.400 | 19.561 | 19.714 | 19.857 | 20.005 | 20.151 | 20.321 | 20.493 | 20.461 | 0.6% |
| Small Van | 22.159 | 22.648 | 22.621 | 22.720 | 23.025 | 22.956 | 22.952 | 23.084 | 23.279 | 23.275 | 23.392 | 23.554 | 23.740 | 23.914 | 24.079 | 24.211 | 24.321 | 24.414 | 24.495 | 24.561 | 24.634 | 24.590 | 0.5% |
| Large Van | 17.693 | 18.086 | 18.204 | 18.455 | 18.770 | 18.749 | 18.920 | 19.205 | 19.475 | 19.513 | 19.681 | 19.936 | 20.183 | 20.414 | 20.609 | 20.786 | 20.947 | 21.112 | 21.287 | 21.490 | 21.710 | 21.712 | 0.9% |
| Small Utility | 20.597 | 21.098 | 21.087 | 21.229 | 21.528 | 21.455 | 21.467 | 21.601 | 21.789 | 21.783 | 21.869 | 22.015 | 22.168 | 22.314 | 22.455 | 22.570 | 22.670 | 22.746 | 22.825 | 22.902 | 22.994 | 22.976 | 0.5% |
| Large Utility | 16.008 | 16.345 | 16.396 | 16.568 | 16.791 | 16.791 | 16.936 | 17.171 | 17.385 | 17.409 | 17.558 | 17.778 | 17.979 | 18.130 | 18.250 | 18.365 | 18.478 | 18.598 | 18.734 | 18.861 | 19.018 | 18.999 | 0.8% |
| Average New Alt. Light Trucks | 19.842 | 20.236 | 20.243 | 20.371 | 20.620 | 20.560 | 20.615 | 20.786 | 20.975 | 20.977 | 21.098 | 21.284 | 21.476 | 21.653 | 21.808 | 21.941 | 22.061 | 22.173 | 22.288 | 22.405 | 22.536 | 22.506 | 0.6% |
| Fleet Vehicles | | | | | | | | | | | | | | | | | | | | | | | |
| New Fuel Efficiency EPA Rated | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 26.714 | 27.276 | 27.355 | 27.584 | 28.230 | 28.217 | 28.338 | 28.563 | 28.812 | 29.049 | 29.269 | 29.506 | 29.791 | 29.849 | 29.888 | 29.884 | 29.860 | 29.861 | 29.876 | 29.882 | 29.879 | 29.873 | 0.5% |
| Light Trucks | 19.943 | 20.296 | 20.342 | 20.513 | 20.785 | 20.742 | 20.844 | 21.058 | 21.261 | 21.236 | 21.341 | 21.527 | 21.710 | 21.887 | 22.034 | 22.166 | 22.289 | 22.424 | 22.570 | 22.734 | 22.911 | 22.901 | 0.6% |
| Average On Road MPG | | | | | | | | | | | | | | | | | | | | | | | |
| Cars | 22.622 | 22.900 | 23.091 | 23.286 | 23.641 | 23.834 | 24.050 | 24.222 | 24.328 | 24.503 | 24.667 | 24.807 | 24.982 | 25.124 | 25.193 | 25.246 | 25.234 | 25.175 | 25.143 | 25.112 | 25.119 | 25.091 | 0.5% |
| Light Trucks | 15.761 | 15.970 | 16.184 | 16.322 | 16.502 | 16.590 | 16.682 | 16.772 | 16.869 | 16.946 | 17.015 | 17.101 | 17.163 | 17.246 | 17.347 | 17.434 | 17.534 | 17.622 | 17.705 | 17.790 | 17.886 | 17.961 | 0.6% |

Table 50. Summary of New Light-Duty Vehicle Size Class Attributes (2 of 2)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 | |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-------|
| New Vehicle Sales Shares (percent) | | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Cars | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.6% |
| Subcompact | 0.167 | 0.172 | 0.168 | 0.167 | 0.165 | 0.163 | 0.162 | 0.161 | 0.159 | 0.158 | 0.157 | 0.156 | 0.155 | 0.154 | 0.153 | 0.152 | 0.151 | 0.150 | 0.149 | 0.148 | 0.147 | 0.146 | 0.146 | -0.6% |
| Compact | 0.358 | 0.393 | 0.389 | 0.389 | 0.389 | 0.391 | 0.393 | 0.393 | 0.393 | 0.394 | 0.394 | 0.394 | 0.394 | 0.394 | 0.394 | 0.393 | 0.394 | 0.394 | 0.394 | 0.394 | 0.394 | 0.394 | 0.394 | 0.4% |
| Mid-Size | 0.341 | 0.308 | 0.312 | 0.314 | 0.313 | 0.312 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | 0.311 | -0.4% |
| Large | 0.123 | 0.115 | 0.118 | 0.119 | 0.120 | 0.121 | 0.122 | 0.123 | 0.124 | 0.125 | 0.126 | 0.127 | 0.128 | 0.129 | 0.130 | 0.131 | 0.133 | 0.134 | 0.134 | 0.135 | 0.136 | 0.137 | 0.137 | 0.5% |
| Two Seater | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 | 0.5% |
| Conventional Light Trucks | | | | | | | | | | | | | | | | | | | | | | | | |
| Small Pickup | 0.172 | 0.154 | 0.154 | 0.154 | 0.153 | 0.149 | 0.147 | 0.147 | 0.147 | 0.146 | 0.145 | 0.145 | 0.144 | 0.144 | 0.143 | 0.143 | 0.142 | 0.141 | 0.140 | 0.139 | 0.138 | 0.138 | 0.138 | -1.0% |
| Large Pickup | 0.210 | 0.204 | 0.201 | 0.200 | 0.198 | 0.194 | 0.193 | 0.192 | 0.191 | 0.190 | 0.189 | 0.188 | 0.187 | 0.187 | 0.186 | 0.185 | 0.184 | 0.183 | 0.182 | 0.180 | 0.179 | 0.178 | 0.178 | -0.8% |
| Small Van | 0.192 | 0.216 | 0.211 | 0.210 | 0.210 | 0.207 | 0.209 | 0.209 | 0.209 | 0.209 | 0.210 | 0.210 | 0.210 | 0.210 | 0.210 | 0.209 | 0.209 | 0.209 | 0.208 | 0.207 | 0.206 | 0.206 | 0.206 | 0.3% |
| Large Van | 0.020 | 0.019 | 0.019 | 0.019 | 0.018 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.017 | 0.016 | 0.016 | -0.9% |
| Small Utility | 0.309 | 0.309 | 0.315 | 0.317 | 0.319 | 0.327 | 0.328 | 0.329 | 0.330 | 0.331 | 0.332 | 0.333 | 0.334 | 0.335 | 0.336 | 0.338 | 0.340 | 0.341 | 0.343 | 0.345 | 0.348 | 0.350 | 0.350 | 0.6% |
| Large Utility | 0.097 | 0.098 | 0.100 | 0.101 | 0.102 | 0.105 | 0.105 | 0.105 | 0.106 | 0.106 | 0.106 | 0.107 | 0.107 | 0.107 | 0.108 | 0.108 | 0.109 | 0.109 | 0.110 | 0.111 | 0.112 | 0.112 | 0.112 | 0.7% |
| New Vehicle Average Horse Power | | | | | | | | | | | | | | | | | | | | | | | | |
| Conventional Cars | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact | 194.901 | 198.484 | 202.467 | 206.056 | 207.351 | 211.521 | 215.644 | 219.400 | 222.953 | 225.608 | 228.468 | 231.121 | 233.216 | 235.497 | 237.847 | 240.677 | 243.312 | 245.694 | 248.257 | 250.375 | 252.831 | 255.316 | 255.316 | 1.2% |
| Subcompact | 140.203 | 133.076 | 136.683 | 141.083 | 145.146 | 146.804 | 151.784 | 156.665 | 161.484 | 165.921 | 170.496 | 174.973 | 178.719 | 182.429 | 186.251 | 190.509 | 194.446 | 197.822 | 201.118 | 204.251 | 207.587 | 210.876 | 210.876 | 1.9% |
| Compact | 174.408 | 132.616 | 136.340 | 140.472 | 144.726 | 146.887 | 151.607 | 156.268 | 160.864 | 165.135 | 169.344 | 173.584 | 177.210 | 180.682 | 184.445 | 188.760 | 192.668 | 196.084 | 199.253 | 202.205 | 205.315 | 208.428 | 208.428 | 0.8% |
| Mid-Size | 193.367 | 168.139 | 172.357 | 176.824 | 180.355 | 183.453 | 188.465 | 193.349 | 198.172 | 202.620 | 207.002 | 211.404 | 215.075 | 218.439 | 222.124 | 226.337 | 230.111 | 233.401 | 236.489 | 239.543 | 242.753 | 245.959 | 245.959 | 1.1% |
| Large | 207.570 | 216.194 | 220.529 | 225.279 | 230.245 | 234.015 | 238.919 | 243.624 | 248.214 | 252.759 | 257.264 | 261.823 | 266.017 | 269.727 | 273.862 | 278.241 | 281.950 | 285.254 | 288.206 | 291.318 | 294.438 | 297.506 | 297.506 | 1.6% |
| Two Seater | 169.880 | 235.616 | 240.788 | 246.318 | 250.873 | 255.189 | 261.279 | 267.059 | 272.718 | 277.620 | 282.695 | 287.515 | 291.470 | 295.408 | 299.428 | 303.855 | 307.994 | 311.653 | 315.382 | 318.774 | 322.560 | 326.396 | 326.396 | 3.0% |
| Average New Car | 179.298 | 154.358 | 158.672 | 163.193 | 167.327 | 170.013 | 174.912 | 179.774 | 184.559 | 189.030 | 193.488 | 197.947 | 201.753 | 205.334 | 209.228 | 213.615 | 217.548 | 220.989 | 224.197 | 227.305 | 230.563 | 233.808 | 233.808 | 1.2% |
| Conventional Light Trucks | | | | | | | | | | | | | | | | | | | | | | | | |
| Small Pickup | 175.212 | 144.296 | 150.316 | 157.396 | 163.849 | 165.631 | 174.437 | 183.413 | 192.008 | 196.635 | 201.594 | 206.671 | 211.129 | 215.745 | 220.670 | 225.903 | 230.727 | 234.739 | 238.420 | 242.050 | 245.873 | 249.470 | 249.470 | 1.6% |
| Large Pickup | 222.889 | 227.521 | 234.372 | 241.234 | 247.374 | 251.368 | 260.180 | 268.913 | 277.692 | 282.987 | 289.119 | 295.280 | 300.601 | 305.900 | 310.759 | 315.980 | 320.657 | 324.877 | 328.910 | 332.753 | 336.622 | 340.158 | 340.158 | 1.9% |
| Small Van | 204.945 | 169.589 | 177.059 | 184.347 | 190.285 | 194.075 | 203.460 | 212.986 | 222.151 | 227.356 | 232.898 | 238.774 | 244.208 | 249.817 | 255.911 | 262.309 | 268.210 | 273.158 | 277.691 | 282.180 | 286.742 | 290.847 | 290.847 | 1.6% |
| Large Van | 211.509 | 222.753 | 227.833 | 232.691 | 236.779 | 240.111 | 246.349 | 252.342 | 258.191 | 262.138 | 266.927 | 271.767 | 275.998 | 280.604 | 284.691 | 288.873 | 292.681 | 296.102 | 299.377 | 302.492 | 305.485 | 308.119 | 308.119 | 1.7% |
| Small Utility | 205.535 | 180.472 | 187.600 | 194.736 | 200.905 | 205.104 | 213.682 | 222.272 | 230.407 | 235.389 | 240.419 | 245.719 | 250.221 | 254.933 | 259.943 | 265.270 | 269.981 | 274.166 | 278.023 | 281.869 | 285.925 | 289.693 | 289.693 | 1.6% |
| Large Utility | 226.004 | 197.494 | 204.533 | 211.182 | 216.941 | 221.368 | 229.625 | 237.687 | 245.469 | 250.340 | 255.620 | 260.920 | 265.576 | 270.237 | 274.915 | 279.980 | 284.573 | 288.720 | 292.634 | 296.420 | 300.188 | 303.541 | 303.541 | 1.3% |
| Average New Light Truck | 205.968 | 184.627 | 191.518 | 198.484 | 204.532 | 208.260 | 216.986 | 225.715 | 234.147 | 239.141 | 244.472 | 249.993 | 254.839 | 259.818 | 264.953 | 270.408 | 275.324 | 279.622 | 283.610 | 287.519 | 291.544 | 295.230 | 295.230 | 1.6% |

1/ Conversion factor used to convert Environmental Protection Agency rated to "on road" miles per gallon.

2/ Environmental Protection Agency rated miles per gallon.

MPG = Miles per gallon.

EPA = Environmental Protection Agency.

N/A = Not applicable.

Avr. = Average.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998

are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy

Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration,

Mid-Year Fuel Economy Reports from Auto Manufacturers, 1998; Federal Highway Administration, Highway Statistics 1997, (November 1998); Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating

Characteristics, and Fueling Practices," prepared for the U.S. Department of Energy, Office of Transportation Technologies, and Office of Policy (March 1992); and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections:

EIA, AEO99 National Energy Modeling System run AEO2K.D100199A.

Table 51. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology (1 of 1)
(Trillion Btu)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 1099.82 | 1021.19 | 978.53 | 930.99 | 879.17 | 861.28 | 854.13 | 852.49 | 850.10 | 841.38 | 830.89 | 825.40 | 819.12 | 814.50 | 815.72 | 821.45 | 833.85 | 845.13 | 850.33 | 849.82 | 846.48 | 849.12 | -1.2% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.32 | 0.83 | 1.25 | 1.61 | 1.91 | 2.13 | 2.24 | 2.24 | 2.23 | 2.22 | 2.20 | 2.19 | 2.17 | 2.15 | 2.16 | 2.17 | 2.19 | 2.21 | 2.23 | 2.24 | 2.24 | 2.25 | 9.2% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.04 | 0.10 | 0.15 | 0.19 | 0.22 | 0.25 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 9.4% |
| CNG | 7.62 | 20.67 | 29.70 | 37.89 | 44.68 | 49.45 | 51.86 | 52.27 | 52.12 | 51.92 | 51.67 | 51.39 | 50.95 | 50.58 | 50.51 | 50.67 | 51.04 | 51.43 | 51.76 | 52.05 | 52.18 | 52.33 | 9.2% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 5.41 | 10.03 | 13.15 | 15.98 | 18.29 | 19.94 | 20.78 | 20.95 | 20.89 | 20.79 | 20.68 | 20.57 | 20.40 | 20.25 | 20.22 | 20.29 | 20.45 | 20.61 | 20.74 | 20.85 | 20.89 | 20.96 | 6.3% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.22 | 0.60 | 0.84 | 1.06 | 1.24 | 1.33 | 1.34 | 1.29 | 1.19 | 1.09 | 1.02 | 0.96 | 0.92 | 0.91 | 0.91 | 0.92 | 0.94 | 0.95 | 0.96 | 0.97 | 0.97 | 0.98 | 7.0% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Cars | 1113.43 | 1053.42 | 1023.62 | 987.73 | 945.51 | 934.38 | 930.62 | 929.51 | 926.79 | 917.67 | 906.72 | 900.77 | 893.81 | 888.64 | 889.77 | 895.75 | 908.73 | 920.59 | 926.29 | 926.19 | 923.02 | 925.89 | -0.8% |
| Light Trucks 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 1617.83 | 1688.69 | 1686.20 | 1671.40 | 1648.07 | 1637.24 | 1653.30 | 1673.73 | 1693.61 | 1708.00 | 1715.12 | 1718.31 | 1721.93 | 1723.88 | 1729.11 | 1743.78 | 1759.42 | 1772.08 | 1780.79 | 1782.18 | 1776.23 | 1771.87 | 0.4% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.68 | 1.78 | 2.74 | 3.69 | 4.52 | 5.29 | 5.91 | 6.26 | 6.32 | 6.37 | 6.42 | 6.45 | 6.45 | 6.44 | 6.46 | 6.51 | 6.56 | 6.59 | 6.61 | 6.63 | 6.63 | 6.62 | 10.9% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.09 | 0.24 | 0.38 | 0.51 | 0.63 | 0.74 | 0.83 | 0.88 | 0.88 | 0.89 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.91 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 11.0% |
| CNG | 9.34 | 24.56 | 37.08 | 49.16 | 59.28 | 68.43 | 75.47 | 79.44 | 80.24 | 80.97 | 81.57 | 81.87 | 81.97 | 82.04 | 82.39 | 83.12 | 83.91 | 84.43 | 84.86 | 85.16 | 85.24 | 85.14 | 10.6% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 7.14 | 12.29 | 16.25 | 19.97 | 22.99 | 25.70 | 27.84 | 29.06 | 29.35 | 29.61 | 29.80 | 29.88 | 29.92 | 29.94 | 30.05 | 30.31 | 30.60 | 30.79 | 30.95 | 31.04 | 31.04 | 30.98 | 6.9% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.13 | 0.33 | 0.46 | 0.58 | 0.66 | 0.70 | 0.71 | 0.68 | 0.63 | 0.59 | 0.56 | 0.54 | 0.53 | 0.53 | 0.54 | 0.55 | 0.57 | 0.58 | 0.59 | 0.60 | 0.60 | 0.61 | 7.1% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Light Trucks | 1635.22 | 1727.88 | 1743.10 | 1745.32 | 1736.15 | 1738.10 | 1764.05 | 1790.04 | 1811.04 | 1826.44 | 1834.36 | 1837.95 | 1841.69 | 1843.73 | 1849.47 | 1865.19 | 1881.97 | 1895.40 | 1904.73 | 1906.53 | 1900.66 | 1896.15 | 0.7% |
| Total Fleet Vehicles | 2748.65 | 2781.31 | 2766.72 | 2733.04 | 2681.66 | 2672.48 | 2694.67 | 2719.55 | 2737.83 | 2744.11 | 2741.08 | 2738.72 | 2735.50 | 2732.37 | 2739.23 | 2760.94 | 2790.70 | 2815.99 | 2831.02 | 2832.72 | 2823.69 | 2822.04 | 0.1% |
| Commercial Light Trucks 2/ | 612.81 | 623.48 | 631.41 | 642.33 | 652.28 | 662.80 | 673.12 | 681.61 | 690.25 | 698.51 | 705.59 | 714.04 | 719.98 | 727.51 | 736.72 | 747.23 | 757.35 | 762.90 | 769.65 | 777.11 | 785.19 | 793.22 | 1.2% |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

CNG = Compressed natural gas.

LPG = Liquid petroleum gas.

N/A = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Trucks Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (November 1998); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); and EIA AE02K.D100199A. Projections: EIA, AE02000 National Energy Modeling System run AE02K.D100199A.

Table 52. Transportation Fleet Car and Truck Sales by Type and Technology (Thousands) (1 of 1)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 1884.02 | 1694.38 | 1636.28 | 1612.82 | 1630.48 | 1657.07 | 1676.42 | 1659.29 | 1643.83 | 1638.95 | 1638.71 | 1653.99 | 1641.70 | 1640.00 | 1666.74 | 1710.68 | 1737.18 | 1716.83 | 1702.42 | 1699.11 | 1710.67 | 1730.56 | -0.4% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 4.67 | 10.98 | 14.58 | 14.37 | 14.52 | 14.76 | 14.93 | 14.78 | 14.64 | 14.60 | 14.60 | 14.73 | 14.62 | 14.61 | 14.85 | 15.24 | 15.47 | 15.29 | 15.16 | 15.13 | 15.24 | 15.42 | 5.6% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.49 | 1.23 | 1.70 | 1.68 | 1.70 | 1.73 | 1.75 | 1.73 | 1.71 | 1.71 | 1.71 | 1.72 | 1.71 | 1.71 | 1.74 | 1.78 | 1.81 | 1.79 | 1.77 | 1.77 | 1.78 | 1.80 | 6.1% |
| CNG | 31.59 | 64.63 | 77.90 | 76.79 | 77.63 | 78.89 | 79.81 | 79.00 | 78.26 | 78.03 | 78.02 | 78.75 | 78.16 | 78.08 | 79.35 | 81.44 | 82.71 | 81.74 | 81.05 | 80.89 | 81.44 | 82.39 | 4.5% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 16.53 | 27.50 | 31.56 | 31.10 | 31.44 | 31.96 | 32.33 | 32.00 | 31.70 | 31.61 | 31.60 | 31.90 | 31.66 | 31.63 | 32.14 | 32.99 | 33.50 | 33.11 | 32.83 | 32.77 | 32.99 | 33.37 | 3.2% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 1.09 | 2.00 | 2.22 | 2.19 | 2.22 | 2.25 | 2.28 | 2.26 | 2.24 | 2.23 | 2.23 | 2.25 | 2.23 | 2.23 | 2.27 | 2.33 | 2.36 | 2.33 | 2.31 | 2.31 | 2.31 | 2.33 | 3.6% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Cars | 1938.39 | 1800.72 | 1764.24 | 1738.95 | 1757.99 | 1786.66 | 1807.52 | 1789.05 | 1772.38 | 1767.12 | 1766.86 | 1783.34 | 1770.09 | 1768.25 | 1797.08 | 1844.46 | 1873.03 | 1851.10 | 1835.56 | 1831.99 | 1844.44 | 1865.90 | -0.2% |
| Light Trucks 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 1798.77 | 1714.02 | 1697.90 | 1713.55 | 1767.44 | 1827.18 | 1875.56 | 1879.46 | 1881.62 | 1892.89 | 1907.07 | 1937.37 | 1933.61 | 1940.69 | 1980.23 | 2039.36 | 2076.96 | 2057.70 | 2044.71 | 2044.38 | 2061.41 | 2088.09 | 0.7% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 5.62 | 14.72 | 20.71 | 20.90 | 21.56 | 22.29 | 22.88 | 22.93 | 22.95 | 23.09 | 23.26 | 23.63 | 23.59 | 23.67 | 24.15 | 24.88 | 25.33 | 25.10 | 24.94 | 24.94 | 25.14 | 25.47 | 7.1% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.73 | 1.95 | 2.78 | 2.80 | 2.89 | 2.99 | 3.07 | 3.07 | 3.08 | 3.09 | 3.12 | 3.17 | 3.16 | 3.17 | 3.24 | 3.33 | 3.40 | 3.36 | 3.34 | 3.34 | 3.37 | 3.41 | 7.3% |
| CNG | 20.64 | 50.09 | 67.53 | 68.15 | 70.30 | 72.67 | 74.60 | 74.75 | 74.84 | 75.29 | 75.85 | 77.06 | 76.91 | 77.19 | 78.76 | 81.11 | 82.61 | 81.84 | 81.32 | 81.31 | 81.99 | 83.05 | 6.5% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 11.12 | 19.81 | 24.81 | 25.04 | 25.83 | 26.70 | 27.41 | 27.46 | 27.49 | 27.66 | 27.87 | 28.31 | 28.25 | 28.36 | 28.93 | 29.80 | 30.35 | 30.07 | 29.88 | 29.87 | 30.12 | 30.51 | 4.7% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.38 | 0.73 | 0.86 | 0.87 | 0.89 | 0.92 | 0.95 | 0.95 | 0.95 | 0.96 | 0.96 | 0.98 | 0.98 | 0.98 | 1.00 | 1.03 | 1.05 | 1.04 | 1.03 | 1.03 | 1.04 | 1.06 | 4.8% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Light Trucks | 1837.27 | 1801.32 | 1814.58 | 1831.31 | 1888.90 | 1952.75 | 2004.45 | 2008.62 | 2010.93 | 2022.98 | 2038.14 | 2070.52 | 2066.49 | 2074.06 | 2116.32 | 2179.52 | 2219.69 | 2199.11 | 2185.23 | 2184.88 | 2203.08 | 2231.59 | 0.9% |
| Total Fleet Vehicles | 3775.66 | 3602.04 | 3578.82 | 3570.26 | 3646.90 | 3739.41 | 3811.97 | 3797.67 | 3783.31 | 3790.09 | 3804.99 | 3853.86 | 3836.58 | 3842.31 | 3913.40 | 4023.98 | 4092.73 | 4050.21 | 4020.79 | 4016.87 | 4047.52 | 4097.49 | 0.4% |
| Commercial Light Trucks 2/ | 919.55 | 901.21 | 909.20 | 918.94 | 949.50 | 983.30 | 1010.75 | 1013.89 | 1016.01 | 1022.85 | 1031.65 | 1049.26 | 1047.99 | 1052.49 | 1074.50 | 1107.60 | 1128.76 | 1118.52 | 1111.49 | 1111.36 | 1120.91 | 1135.92 | 1.0% |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

N/A = Not Applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Truck Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (November 1998); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AE-U2000 National Energy Modeling System run AE-U2K.D100199A. Projections: EIA, AE-U2000 National Energy Modeling System run AE-U2K.D100199A.

Table 53. Transportation Fleet Car and Truck Stock by Type and Technology (Thousands) (1 of 1)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 | |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Cars 1/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 7897.06 | 7448.88 | 7181.26 | 6878.93 | 6587.59 | 6494.21 | 6491.26 | 6525.95 | 6537.22 | 6520.02 | 6485.89 | 6481.36 | 6478.34 | 6478.50 | 6505.58 | 6564.00 | 6657.72 | 6730.17 | 6762.93 | 6752.91 | 6730.87 | 6745.01 | -0.7% | |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 10.13 | 26.65 | 40.15 | 51.86 | 62.16 | 69.76 | 73.92 | 74.33 | 74.56 | 74.65 | 74.52 | 74.35 | 74.18 | 74.13 | 74.37 | 75.00 | 75.76 | 76.41 | 76.94 | 77.24 | 77.30 | 77.28 | 77.28 | 9.7% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 1.10 | 2.92 | 4.50 | 5.85 | 7.03 | 7.93 | 8.43 | 8.45 | 8.49 | 8.49 | 8.47 | 8.45 | 8.43 | 8.43 | 8.46 | 8.53 | 8.62 | 8.70 | 8.76 | 8.79 | 8.79 | 8.79 | 8.79 | 9.9% |
| CNG | 60.09 | 164.48 | 236.99 | 303.72 | 361.69 | 401.48 | 422.87 | 427.97 | 428.78 | 429.57 | 429.37 | 428.85 | 427.61 | 427.03 | 428.22 | 431.62 | 435.98 | 439.18 | 442.00 | 444.13 | 445.23 | 445.65 | 445.65 | 9.5% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 41.50 | 77.88 | 102.53 | 125.31 | 144.96 | 158.59 | 166.02 | 168.11 | 168.39 | 168.63 | 168.49 | 168.33 | 167.87 | 167.66 | 168.14 | 169.48 | 171.27 | 172.57 | 173.62 | 174.36 | 174.73 | 174.95 | 174.95 | 6.8% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 1.99 | 5.32 | 7.36 | 9.34 | 11.04 | 12.14 | 12.72 | 12.93 | 12.95 | 12.98 | 12.98 | 12.98 | 12.93 | 12.91 | 12.94 | 13.04 | 13.17 | 13.26 | 13.33 | 13.41 | 13.46 | 13.48 | 13.48 | 9.1% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Cars | 8011.87 | 7726.13 | 7572.79 | 7375.01 | 7174.46 | 7144.10 | 7175.22 | 7217.75 | 7230.38 | 7214.34 | 7179.72 | 7174.32 | 7169.37 | 7168.66 | 7197.71 | 7261.67 | 7362.52 | 7440.28 | 7477.59 | 7470.84 | 7450.38 | 7465.17 | 7465.17 | -0.3% |
| Light Trucks 1/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 8101.4 | 8616.5 | 8712.2 | 8706.6 | 8678.3 | 8652.9 | 8772.7 | 8924.6 | 9085.1 | 9207.3 | 9287.8 | 9353.4 | 9406.7 | 9463.6 | 9549.2 | 9679.7 | 9821.0 | 9940.9 | 10038.3 | 10099.0 | 10124.0 | 10141.1 | 10141.1 | 1.0% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 13.50 | 35.26 | 54.73 | 74.12 | 91.75 | 107.93 | 121.00 | 128.91 | 131.11 | 133.23 | 134.87 | 136.17 | 136.87 | 137.60 | 138.79 | 140.56 | 142.60 | 144.05 | 145.38 | 146.59 | 147.53 | 148.10 | 148.10 | 11.5% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 1.76 | 4.64 | 7.26 | 9.88 | 12.27 | 14.49 | 16.29 | 17.38 | 17.67 | 17.96 | 18.18 | 18.36 | 18.46 | 18.55 | 18.71 | 18.95 | 19.23 | 19.42 | 19.60 | 19.76 | 19.89 | 19.97 | 19.97 | 11.7% |
| CNG | 46.20 | 122.11 | 185.38 | 247.24 | 301.31 | 348.93 | 386.54 | 408.96 | 416.03 | 422.58 | 427.52 | 431.44 | 433.70 | 436.09 | 439.87 | 445.54 | 451.99 | 456.77 | 461.05 | 464.74 | 467.39 | 468.99 | 468.99 | 11.1% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 34.36 | 59.23 | 78.58 | 97.11 | 113.00 | 126.75 | 137.92 | 144.70 | 147.23 | 149.47 | 151.10 | 152.40 | 153.21 | 154.08 | 155.43 | 157.47 | 159.75 | 161.50 | 163.04 | 164.26 | 165.06 | 165.55 | 165.55 | 7.4% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.80 | 1.94 | 2.71 | 3.41 | 3.93 | 4.31 | 4.57 | 4.71 | 4.79 | 4.86 | 4.90 | 4.94 | 4.97 | 5.00 | 5.04 | 5.11 | 5.18 | 5.25 | 5.30 | 5.33 | 5.35 | 5.36 | 5.36 | 9.0% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Light Trucks | 8198.0 | 8839.7 | 9040.8 | 9138.4 | 9200.5 | 9255.3 | 9439.0 | 9629.3 | 9801.9 | 9935.4 | 10024.4 | 10096.7 | 10153.9 | 10214.9 | 10307.1 | 10447.3 | 10599.8 | 10727.9 | 10832.6 | 10899.7 | 10929.2 | 10949.1 | 10949.1 | 1.3% |
| Total Fleet Vehicles | 16209.9 | 16565.9 | 16613.6 | 16513.4 | 16375.0 | 16399.4 | 16614.3 | 16847.0 | 17032.3 | 17149.8 | 17204.1 | 17271.0 | 17323.3 | 17383.6 | 17504.8 | 17709.0 | 17962.3 | 18168.1 | 18310.2 | 18370.5 | 18379.6 | 18414.2 | 18414.2 | 0.6% |
| Commercial Light Trucks 2/ | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9881.3 | 10387.3 | 10594.1 | 10796.8 | 11016.2 | 11254.7 | 11504.4 | 11740.4 | 11962.6 | 12176.6 | 12384.9 | 12596.8 | 12793.1 | 12980.6 | 13177.4 | 13394.0 | 13617.1 | 13815.0 | 13992.4 | 14157.7 | 14321.3 | 14489.0 | 14489.0 | 1.8% |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; United States Department of Commerce, Bureau of the Census, "Truck Inventory and Use Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997, (November 1998); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 1996, DOE/EIA-0585(96) (Washington, DC, December 1997); and EIA, AE02000 National Energy Modeling System run AE02K.D100199A. Projections: EIA, AE02000 National Energy Modeling System run AE02K.D100199A.

Table 54. Transportation Fleet Car and Truck VMT by Type and Technology (1 of 1)
(Billion Miles)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| Cars 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 203.18 | 191.20 | 184.19 | 176.22 | 168.54 | 166.20 | 166.21 | 167.10 | 167.34 | 166.81 | 165.85 | 165.70 | 165.62 | 165.62 | 166.31 | 167.80 | 170.22 | 172.09 | 172.91 | 172.58 | 171.95 | 172.31 | -0.7% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.26 | 0.68 | 1.03 | 1.33 | 1.59 | 1.79 | 1.89 | 1.90 | 1.91 | 1.91 | 1.91 | 1.90 | 1.90 | 1.90 | 1.90 | 1.92 | 1.94 | 1.95 | 1.97 | 1.97 | 1.97 | 1.97 | 9.6% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.03 | 0.07 | 0.12 | 0.15 | 0.18 | 0.20 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 9.9% |
| CNG | 1.55 | 4.22 | 6.08 | 7.78 | 9.25 | 10.27 | 10.83 | 10.96 | 10.98 | 10.99 | 10.98 | 10.96 | 10.93 | 10.92 | 10.95 | 11.03 | 11.15 | 11.23 | 11.30 | 11.35 | 11.37 | 11.38 | 9.5% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 1.07 | 2.00 | 2.63 | 3.21 | 3.71 | 4.06 | 4.25 | 4.30 | 4.31 | 4.31 | 4.31 | 4.30 | 4.29 | 4.29 | 4.30 | 4.33 | 4.38 | 4.41 | 4.44 | 4.46 | 4.46 | 4.47 | 6.7% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.05 | 0.14 | 0.19 | 0.24 | 0.28 | 0.31 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 9.1% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Cars | 206.14 | 198.31 | 194.24 | 188.93 | 183.56 | 182.83 | 183.73 | 184.82 | 185.08 | 184.58 | 183.59 | 183.42 | 183.29 | 183.26 | 184.00 | 185.63 | 188.24 | 190.25 | 191.18 | 190.93 | 190.33 | 190.70 | -0.4% |
| Light Trucks 1/ | | | | | | | | | | | | | | | | | | | | | | | |
| Gasoline Conventional | 208.44 | 221.17 | 223.46 | 223.05 | 222.03 | 221.44 | 224.63 | 228.52 | 232.56 | 235.57 | 237.50 | 239.13 | 240.49 | 241.93 | 244.11 | 247.44 | 251.09 | 254.19 | 256.65 | 258.09 | 258.63 | 259.06 | 1.0% |
| Distillate | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Neat | 0.35 | 0.91 | 1.40 | 1.90 | 2.35 | 2.76 | 3.10 | 3.30 | 3.36 | 3.41 | 3.45 | 3.48 | 3.50 | 3.52 | 3.55 | 3.59 | 3.65 | 3.68 | 3.72 | 3.75 | 3.77 | 3.78 | 11.5% |
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | |
| Flex | 0.05 | 0.12 | 0.19 | 0.25 | 0.31 | 0.37 | 0.42 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 11.6% |
| Neat | 0.05 | 0.12 | 0.19 | 0.25 | 0.31 | 0.37 | 0.42 | 0.44 | 0.45 | 0.46 | 0.46 | 0.47 | 0.47 | 0.47 | 0.48 | 0.48 | 0.49 | 0.50 | 0.50 | 0.51 | 0.51 | 0.51 | 11.6% |
| CNG | 1.19 | 3.13 | 4.75 | 6.33 | 7.71 | 8.93 | 9.90 | 10.47 | 10.65 | 10.81 | 10.93 | 11.03 | 11.09 | 11.15 | 11.24 | 11.39 | 11.56 | 11.68 | 11.79 | 11.88 | 11.94 | 11.98 | 11.1% |
| CNG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| LPG | 0.88 | 1.52 | 2.02 | 2.49 | 2.89 | 3.24 | 3.53 | 3.71 | 3.77 | 3.82 | 3.86 | 3.90 | 3.92 | 3.94 | 3.97 | 4.03 | 4.08 | 4.13 | 4.17 | 4.20 | 4.22 | 4.23 | 7.4% |
| LPG Bi-fuel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Electric | 0.02 | 0.05 | 0.07 | 0.09 | 0.10 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.14 | 0.14 | 0.14 | 9.0% |
| Electric-Diesel Hybrid | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell | | | | | | | | | | | | | | | | | | | | | | | |
| Fuel Cell Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Methanol | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Total Fleet Light Truck | 210.97 | 227.01 | 232.08 | 234.36 | 235.71 | 237.23 | 242.11 | 247.01 | 251.36 | 254.65 | 256.80 | 258.60 | 260.06 | 261.62 | 263.97 | 267.55 | 271.49 | 274.81 | 277.46 | 279.06 | 279.71 | 280.21 | 1.3% |
| Total Fleet Vehicles | 417.11 | 425.33 | 426.31 | 423.29 | 419.26 | 420.06 | 425.84 | 431.83 | 436.45 | 439.23 | 440.39 | 442.02 | 443.36 | 444.88 | 447.97 | 453.18 | 459.73 | 465.07 | 468.64 | 469.99 | 470.03 | 470.91 | 0.6% |
| Commercial Light Trucks 2/ | 72.25 | 74.65 | 76.10 | 77.89 | 79.61 | 81.38 | 83.12 | 84.64 | 86.19 | 87.65 | 88.97 | 90.46 | 91.65 | 93.04 | 94.64 | 96.42 | 98.16 | 99.31 | 100.61 | 102.00 | 103.49 | 104.93 | 1.7% |

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

CNG = Compressed natural gas.

LNG = Liquid petroleum gas.

ICE = Internal combustion engine.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis, March 1992; Bobit Publishing Company, Fleet Fact Book, Redondo Beach, California, various issues; Federal Highway Administration, Highway Statistics 1997, (November 1998); Decision Analysis Corporation of Virginia, NEIMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); and Energy Information Administration (EIA), AE02000 National Energy Modeling System run AE02K.D100199A. Projections: EIA, AE02000 National Energy Modeling System run AE02K.D100199A.

Table 55. Air Travel Energy Use (1 of 2)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| Fuel Cost (1987 dollar per million) | 3.0 | 3.9 | 3.8 | 3.9 | 3.9 | 3.9 | 4.0 | 4.0 | 4.1 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.3 | 4.3 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 1.7% |
| Macro Variables (1992 dollars) | | | | | | | | | | | | | | | | | | | | | | | |
| GDP | 7551.9 | 7990.7 | 8190.8 | 8377.2 | 8595.9 | 8823.8 | 9056.3 | 9250.8 | 9448.9 | 9651.1 | 9840.1 | 10054.3 | 10218.1 | 10415.8 | 10648.0 | 10905.7 | 11147.2 | 11330.6 | 11533.4 | 11740.6 | 11959.4 | 12178.6 | 2.2% |
| Disposable Income | 5348.5 | 5665.1 | 5800.7 | 5935.7 | 6076.0 | 6246.1 | 6405.5 | 6562.2 | 6721.9 | 6879.3 | 7038.2 | 7204.0 | 7352.7 | 7508.8 | 7684.2 | 7881.1 | 8082.6 | 8256.0 | 8427.5 | 8612.9 | 8806.7 | 9007.8 | 2.4% |
| Real Merchandise Exports | 742.6 | 810.3 | 871.1 | 942.1 | 1021.3 | 1114.1 | 1216.8 | 1322.0 | 1433.7 | 1551.3 | 1676.2 | 1805.5 | 1928.1 | 2051.9 | 2184.0 | 2326.3 | 2472.9 | 2618.3 | 2763.3 | 2909.8 | 3054.9 | 3200.7 | 6.9% |
| Yield (ticket price, 1992 dollars) | 12.0 | 12.7 | 12.6 | 12.7 | 12.7 | 12.7 | 12.8 | 12.8 | 12.9 | 12.9 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 0.4% |
| Travel Demand(billion of miles) | | | | | | | | | | | | | | | | | | | | | | | |
| Rev. Passenger Miles Domestic | 473.3 | 503.7 | 520.4 | 535.6 | 551.8 | 570.8 | 589.0 | 605.6 | 622.0 | 638.6 | 654.7 | 672.7 | 687.0 | 703.4 | 722.1 | 743.2 | 764.2 | 782.0 | 800.4 | 820.1 | 840.8 | 862.1 | 2.8% |
| Personal | 250.0 | 266.4 | 276.2 | 284.8 | 293.4 | 304.4 | 314.5 | 324.3 | 333.9 | 343.6 | 353.2 | 363.7 | 372.4 | 382.0 | 392.6 | 404.6 | 417.2 | 428.8 | 440.2 | 452.6 | 465.7 | 479.4 | 3.0% |
| Business | 223.2 | 237.2 | 244.3 | 250.7 | 258.4 | 266.4 | 274.6 | 281.3 | 288.1 | 295.1 | 301.5 | 309.0 | 314.5 | 321.4 | 329.5 | 338.6 | 347.0 | 353.3 | 360.3 | 367.4 | 375.0 | 382.7 | 2.5% |
| Load Factor Domestic 2/ | 0.70 | 0.70 | 0.70 | 0.70 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | 0.69 | -0.1% |
| Rev. Passenger Miles Int. | 207.1 | 230.7 | 238.6 | 251.0 | 259.2 | 274.3 | 283.5 | 298.0 | 306.7 | 321.8 | 330.4 | 346.7 | 354.8 | 370.8 | 381.5 | 401.0 | 413.0 | 430.6 | 441.0 | 460.2 | 472.0 | 484.2 | 3.9% |
| Load Factor International 2/ | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.74 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | 0.73 | -0.1% |
| Rev. Ton Miles Freight (billion) | 16.1 | 18.1 | 19.6 | 21.2 | 23.2 | 25.3 | 27.7 | 30.1 | 32.6 | 35.2 | 38.0 | 40.8 | 43.5 | 46.2 | 49.2 | 52.4 | 55.7 | 58.7 | 61.9 | 65.0 | 68.2 | 71.4 | 7.0% |
| Seat Miles Demanded (billion) | 1061.5 | 1151.2 | 1198.5 | 1250.7 | 1312.6 | 1378.4 | 1438.5 | 1507.2 | 1565.3 | 1632.4 | 1692.3 | 1765.2 | 1821.1 | 1890.1 | 1958.4 | 2042.6 | 2118.4 | 2194.9 | 2264.0 | 2345.5 | 2419.7 | 2495.2 | 4.0% |
| Narrow Body Aircraft | 543.7 | 577.9 | 595.6 | 615.3 | 639.3 | 664.7 | 686.7 | 712.3 | 732.4 | 756.1 | 776.0 | 801.4 | 818.5 | 841.0 | 862.7 | 890.8 | 914.6 | 938.1 | 958.0 | 982.5 | 1003.5 | 1024.5 | 2.9% |
| Wide Body Aircraft | 517.8 | 573.3 | 602.9 | 635.4 | 673.3 | 713.7 | 751.8 | 794.9 | 833.0 | 876.3 | 916.3 | 963.9 | 1002.6 | 1049.1 | 1095.8 | 1151.9 | 1203.8 | 1256.8 | 1306.0 | 1362.9 | 1416.2 | 1470.8 | 4.9% |
| Aircraft Sales | | | | | | | | | | | | | | | | | | | | | | | |
| Narrow Body Aircraft | 230.7 | 251.2 | 270.1 | 286.2 | 322.6 | 333.8 | 307.8 | 339.1 | 295.9 | 329.9 | 301.9 | 351.9 | 288.5 | 339.5 | 338.9 | 399.1 | 370.3 | 375.2 | 351.7 | 398.0 | 375.4 | 382.7 | 2.3% |
| Wide Body Aircraft | 69.6 | 81.0 | 88.9 | 96.2 | 108.9 | 115.2 | 111.1 | 122.4 | 112.7 | 124.5 | 118.4 | 135.0 | 117.7 | 134.8 | 136.4 | 157.5 | 150.5 | 154.3 | 148.6 | 166.8 | 161.7 | 167.0 | 4.1% |
| Aircraft Stock | | | | | | | | | | | | | | | | | | | | | | | |
| Narrow Body Aircraft | 4538.2 | 4837.6 | 4986.0 | 5150.8 | 5352.0 | 5563.8 | 5748.5 | 5962.7 | 6130.9 | 6329.7 | 6496.5 | 6708.5 | 6851.7 | 7040.1 | 7221.7 | 7456.7 | 7656.0 | 7853.1 | 8019.5 | 8224.9 | 8400.5 | 8576.1 | 2.9% |
| Wide Body Aircraft | 1078.0 | 1196.9 | 1258.7 | 1326.4 | 1405.6 | 1490.0 | 1569.5 | 1659.4 | 1738.9 | 1829.3 | 1912.9 | 2012.2 | 2093.2 | 2190.2 | 2287.5 | 2404.6 | 2513.1 | 2623.7 | 2726.5 | 2845.3 | 2956.6 | 3070.5 | 4.9% |
| Adv. Technology Penetration | | | | | | | | | | | | | | | | | | | | | | | |
| Ultra-high Bypass | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | 0.05 | 0.09 | 0.17 | 0.30 | 0.48 | 0.68 | 0.81 | 0.90 | 0.95 | 0.97 | 0.99 | 27.2% |
| Propfan | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Thermodynamics | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Hybrid Laminar Flow | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Advanced Aerodynamics | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Weight Reducing Materials | 0.00 | 0.00 | 0.01 | 0.02 | 0.04 | 0.08 | 0.14 | 0.25 | 0.40 | 0.57 | 0.73 | 0.85 | 0.92 | 0.96 | 0.98 | 0.99 | 0.99 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 31.4% |
| Aircraft New Efficiency 3/ | | | | | | | | | | | | | | | | | | | | | | | |
| Narrow Body Aircraft | 50.4 | 51.2 | 51.6 | 52.0 | 52.4 | 52.8 | 53.3 | 53.7 | 54.1 | 54.5 | 54.9 | 55.3 | 55.8 | 56.1 | 56.6 | 57.0 | 57.4 | 57.8 | 58.3 | 58.7 | 59.1 | 59.6 | 0.8% |
| Wide Body Aircraft | 60.2 | 61.0 | 61.3 | 61.7 | 62.1 | 62.5 | 62.9 | 63.3 | 63.7 | 64.1 | 64.4 | 64.8 | 65.2 | 65.5 | 65.9 | 66.3 | 66.6 | 67.2 | 67.6 | 67.9 | 68.1 | 68.5 | 0.6% |
| Average Aircraft | 52.4 | 53.3 | 53.7 | 54.1 | 54.6 | 55.0 | 55.5 | 55.9 | 56.4 | 56.8 | 57.3 | 57.7 | 58.2 | 58.5 | 59.0 | 59.3 | 59.8 | 60.3 | 60.8 | 61.1 | 61.6 | 62.0 | 0.8% |

Table 55. Air Travel Energy Use (2 of 2)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|
| Aircraft Stock Efficiency 3/ | | | | | | | | | | | | | | | | | | | | | | | |
| Narrow Body Aircraft | 47.3 | 48.0 | 48.4 | 48.8 | 49.2 | 49.6 | 49.9 | 50.3 | 50.7 | 51.1 | 51.5 | 51.9 | 52.2 | 52.6 | 53.0 | 53.4 | 53.8 | 54.2 | 54.6 | 55.0 | 55.4 | 55.8 | 0.8% |
| Wide Body Aircraft | 56.5 | 57.2 | 57.6 | 57.9 | 58.3 | 58.7 | 59.0 | 59.4 | 59.8 | 60.1 | 60.5 | 60.8 | 61.1 | 61.5 | 61.8 | 62.2 | 62.5 | 62.9 | 63.2 | 63.6 | 63.9 | 64.2 | 0.6% |
| Average Aircraft | 51.4 | 52.2 | 52.6 | 53.0 | 53.5 | 53.9 | 54.3 | 54.8 | 55.2 | 55.6 | 56.0 | 56.4 | 56.8 | 57.2 | 57.6 | 58.0 | 58.4 | 58.9 | 59.3 | 59.7 | 60.1 | 60.5 | 0.7% |
| Fuel Consumption (trillion Btu) | | | | | | | | | | | | | | | | | | | | | | | |
| Commercial | | | | | | | | | | | | | | | | | | | | | | | |
| Jet Fuel | 2902.0 | 3097.1 | 3199.1 | 3311.7 | 3447.4 | 3590.6 | 3718.3 | 3864.9 | 3984.5 | 4123.9 | 4244.5 | 4394.2 | 4502.3 | 4639.4 | 4773.2 | 4941.7 | 5088.9 | 5235.6 | 5363.8 | 5518.0 | 5654.6 | 5792.4 | 3.2% |
| Aviation Gasoline | 42.8 | 42.6 | 42.5 | 42.4 | 42.3 | 42.3 | 42.3 | 42.2 | 42.2 | 42.2 | 42.2 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | 42.1 | -0.1% |
| Military | | | | | | | | | | | | | | | | | | | | | | | |
| Jet Fuel | 455.0 | 460.7 | 456.9 | 454.7 | 451.8 | 450.4 | 453.3 | 458.0 | 462.2 | 466.6 | 470.5 | 472.7 | 473.3 | 474.5 | 475.8 | 477.2 | 478.5 | 479.9 | 481.3 | 482.7 | 484.1 | 485.5 | 0.3% |

1/ Fraction of seats filled.

2/ 1992 cents per passenger-mile.

3/ Seat miles per gallon.

RPM = Revenue passenger miles.

GDP = Gross domestic product.

Btu = British thermal unit.

N/A = Not applicable.

Rev. = Revenue.

Int. = International.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Model Maintenance Re-Estimation of the Air Travel Demand Model, Subtask 22-1(a), (September 30, 1997); Federal Aviation Administration (FAA), FAA Aviation Forecasts, Fiscal Years 1997-2008, FAA-APO 97-1, and previous editions; United States Department of Transportation (DOT), Research and Special Programs Administration (RSPA), Fuel Cost and Consumption Tables, annual summaries, 1979-1990; DOT, RSPA, Air Carrier Financial Statistics Quarterly, December 1990/1989, and prior issues; DOT, RSPA, Air Carrier Traffic Statistics Monthly, December 1997/1996, and prior issues; Greene, D.L., "Energy Efficiency Improvement Potential of Commercial Aircraft to 2010," ORNL-6622, 6/1990; Rathi, A. B., Peterson, and D. Greene, Air Transport Energy Use Model, Oak Ridge National Laboratory, April 1991, Draft; Energy Information Administration (EIA), State Energy Data Report 1996, DOE/EIA-0214(96) (Washington, DC, February 1999); Department of Defense, Defense Energy Support Center, Fact Book: Fiscal Year 1998; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projections: EIA AEO2000 National Energy Modeling System run AEO2K.D100199A.

Table 56. Freight Transportation Energy Use (1 of 3)

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 | |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|--|
| Existing Trucks by Size Class | | | | | | | | | | | | | | | | | | | | | | | | |
| Vehicle Miles Traveled (billion miles) | | | | | | | | | | | | | | | | | | | | | | | | |
| Medium | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 32.12 | 33.77 | 34.49 | 35.45 | 36.46 | 37.10 | 37.74 | 38.33 | 38.98 | 39.63 | 40.12 | 40.70 | 41.12 | 41.66 | 42.34 | 43.06 | 43.76 | 44.18 | 44.74 | 45.34 | 45.94 | 46.56 | 1.7% | |
| Gasoline | 18.26 | 15.74 | 14.77 | 13.82 | 13.01 | 12.28 | 11.63 | 11.04 | 10.50 | 10.04 | 9.60 | 9.22 | 8.84 | 8.53 | 8.25 | 8.00 | 7.78 | 7.56 | 7.37 | 7.20 | 7.06 | 6.92 | -4.3% | |
| Liquid Petroleum Gas | 1.06 | 0.99 | 0.98 | 0.96 | 0.95 | 0.94 | 0.94 | 0.95 | 0.96 | 0.98 | 0.99 | 1.01 | 1.02 | 1.04 | 1.06 | 1.08 | 1.10 | 1.11 | 1.13 | 1.14 | 1.16 | 1.17 | 0.4% | |
| Compressed Natural Gas | 0.11 | 0.12 | 0.13 | 0.15 | 0.20 | 0.27 | 0.35 | 0.44 | 0.56 | 0.69 | 0.83 | 0.97 | 1.11 | 1.26 | 1.41 | 1.55 | 1.67 | 1.77 | 1.87 | 1.96 | 2.04 | 2.11 | 14.4% | |
| Medium Subtotal | 51.55 | 50.61 | 50.37 | 50.38 | 50.63 | 50.58 | 50.66 | 50.77 | 51.01 | 51.33 | 51.54 | 51.90 | 52.10 | 52.48 | 53.06 | 53.69 | 54.32 | 54.62 | 55.11 | 55.64 | 56.19 | 56.77 | 0.4% | |
| Heavy | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 130.70 | 141.03 | 145.07 | 149.76 | 154.44 | 158.59 | 162.44 | 165.15 | 167.92 | 170.36 | 172.11 | 174.64 | 176.29 | 178.54 | 181.36 | 184.35 | 187.11 | 188.65 | 190.76 | 192.94 | 195.23 | 197.55 | 1.9% | |
| Gasoline | 1.98 | 1.68 | 1.56 | 1.46 | 1.36 | 1.28 | 1.21 | 1.14 | 1.08 | 1.03 | 0.97 | 0.93 | 0.89 | 0.85 | 0.82 | 0.79 | 0.77 | 0.74 | 0.72 | 0.71 | 0.69 | 0.68 | -4.8% | |
| Liquid Petroleum Gas | 0.13 | 0.13 | 0.13 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.22 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 | 0.26 | 0.26 | 0.26 | 3.2% | |
| Compressed Natural Gas | 0.03 | 0.04 | 0.05 | 0.06 | 0.09 | 0.12 | 0.15 | 0.20 | 0.26 | 0.31 | 0.38 | 0.44 | 0.50 | 0.57 | 0.63 | 0.69 | 0.74 | 0.78 | 0.82 | 0.86 | 0.89 | 0.92 | 16.4% | |
| Heavy Subtotal | 132.84 | 142.87 | 146.81 | 151.41 | 156.03 | 160.13 | 163.96 | 166.66 | 169.43 | 171.89 | 173.66 | 176.22 | 177.89 | 180.17 | 183.04 | 186.07 | 188.86 | 190.42 | 192.56 | 194.77 | 197.07 | 199.41 | 1.9% | |
| Total Vehicle Miles Traveled | 184.39 | 193.48 | 197.18 | 201.80 | 206.66 | 210.72 | 214.62 | 217.43 | 220.45 | 223.21 | 225.20 | 228.12 | 229.99 | 232.66 | 236.09 | 239.76 | 243.18 | 245.04 | 247.67 | 250.40 | 253.27 | 256.18 | 1.5% | |
| Consumption (trillion Btu) | | | | | | | | | | | | | | | | | | | | | | | | |
| Medium | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 531.45 | 545.08 | 551.36 | 561.42 | 573.06 | 579.50 | 586.20 | 593.04 | 600.85 | 608.98 | 615.21 | 622.74 | 628.03 | 635.22 | 644.59 | 654.57 | 664.41 | 670.19 | 678.28 | 686.74 | 695.46 | 704.40 | 1.3% | |
| Gasoline | 305.69 | 262.75 | 246.23 | 230.19 | 216.18 | 203.95 | 192.93 | 183.09 | 173.89 | 165.81 | 158.34 | 151.53 | 144.92 | 139.22 | 134.01 | 129.36 | 125.25 | 121.07 | 117.54 | 114.28 | 111.38 | 108.74 | -4.6% | |
| Liquid Petroleum Gas | 17.65 | 16.58 | 16.36 | 16.00 | 15.89 | 15.66 | 15.70 | 15.85 | 15.99 | 16.18 | 16.41 | 16.67 | 16.86 | 17.11 | 17.41 | 17.72 | 18.02 | 18.18 | 18.38 | 18.57 | 18.76 | 18.94 | 0.3% | |
| Compressed Natural Gas | 1.76 | 1.88 | 2.09 | 2.52 | 3.31 | 4.34 | 5.66 | 7.24 | 9.17 | 11.24 | 13.47 | 15.87 | 18.14 | 20.47 | 22.90 | 25.17 | 27.22 | 28.81 | 30.37 | 31.83 | 33.16 | 34.37 | 14.5% | |
| Medium Subtotal | 856.56 | 826.29 | 816.04 | 810.13 | 808.44 | 803.46 | 800.49 | 799.23 | 799.90 | 802.21 | 803.42 | 806.81 | 807.96 | 812.02 | 818.92 | 826.82 | 834.90 | 838.25 | 844.57 | 851.42 | 858.76 | 866.45 | 0.1% | |
| Heavy | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 3235.47 | 3415.80 | 3483.97 | 3567.00 | 3649.96 | 3724.73 | 3793.53 | 3835.88 | 3877.07 | 3909.69 | 3923.09 | 3950.44 | 3957.14 | 3976.46 | 4006.40 | 4040.59 | 4070.68 | 4075.89 | 4090.42 | 4102.07 | 4113.40 | 4124.55 | 1.1% | |
| Gasoline | 44.23 | 37.71 | 35.31 | 33.06 | 30.97 | 29.19 | 27.61 | 26.13 | 24.74 | 23.44 | 22.23 | 21.16 | 20.12 | 19.23 | 18.42 | 17.70 | 17.06 | 16.43 | 15.90 | 15.40 | 14.97 | 14.58 | -4.9% | |
| Liquid Petroleum Gas | 2.95 | 2.76 | 2.74 | 2.78 | 2.88 | 2.99 | 3.09 | 3.23 | 3.37 | 3.51 | 3.65 | 3.78 | 3.88 | 3.99 | 4.11 | 4.22 | 4.31 | 4.37 | 4.43 | 4.48 | 4.52 | 4.56 | 2.0% | |
| Compressed Natural Gas | 0.69 | 0.78 | 0.93 | 1.18 | 1.58 | 2.12 | 2.79 | 3.59 | 4.53 | 5.55 | 6.61 | 7.71 | 8.74 | 9.78 | 10.84 | 11.83 | 12.71 | 13.41 | 14.08 | 14.69 | 15.24 | 15.75 | 15.3% | |
| Heavy Subtotal | 3283.34 | 3457.05 | 3522.95 | 3604.02 | 3685.40 | 3759.03 | 3827.02 | 3868.82 | 3909.71 | 3942.19 | 3955.58 | 3983.09 | 3989.90 | 4009.47 | 4039.77 | 4074.33 | 4104.77 | 4110.10 | 4124.83 | 4136.64 | 4148.12 | 4159.44 | 1.1% | |
| Medium and Heavy Total | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 3766.92 | 3960.88 | 4035.33 | 4128.42 | 4223.02 | 4304.24 | 4379.73 | 4428.92 | 4477.92 | 4518.67 | 4538.29 | 4573.18 | 4585.18 | 4611.68 | 4651.00 | 4695.16 | 4735.10 | 4746.08 | 4768.70 | 4788.81 | 4808.86 | 4828.95 | 1.1% | |
| Gasoline | 349.92 | 300.46 | 281.55 | 263.25 | 247.16 | 233.14 | 220.54 | 209.23 | 198.63 | 189.25 | 180.56 | 172.69 | 165.05 | 158.45 | 152.43 | 147.05 | 142.30 | 137.50 | 133.44 | 129.68 | 126.35 | 123.32 | -4.6% | |
| Liquid Petroleum Gas | 2.45 | 2.66 | 3.02 | 3.71 | 4.89 | 6.46 | 8.45 | 10.83 | 13.70 | 16.78 | 20.08 | 23.58 | 26.88 | 30.25 | 33.74 | 37.00 | 39.93 | 42.22 | 44.45 | 46.52 | 48.40 | 50.12 | 14.7% | |
| Compressed Natural Gas | 20.61 | 19.34 | 19.10 | 18.79 | 18.77 | 18.66 | 18.80 | 19.08 | 19.36 | 19.70 | 20.05 | 20.45 | 20.75 | 21.10 | 21.52 | 21.94 | 22.33 | 22.55 | 22.81 | 23.05 | 23.28 | 23.49 | 0.6% | |
| Total | 4139.90 | 4283.34 | 4338.99 | 4414.15 | 4493.83 | 4562.48 | 4627.51 | 4668.05 | 4709.61 | 4744.40 | 4758.98 | 4789.90 | 4797.85 | 4821.49 | 4858.68 | 4901.15 | 4939.66 | 4948.34 | 4969.39 | 4988.06 | 5006.88 | 5025.89 | 0.9% | |
| Fuel Efficiency (Gasoline Equivalent) | | | | | | | | | | | | | | | | | | | | | | | | |
| Medium | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 7.61 | 7.78 | 7.87 | 7.94 | 7.98 | 8.03 | 8.10 | 8.13 | 8.16 | 8.19 | 8.19 | 8.22 | 8.24 | 8.25 | 8.26 | 8.28 | 8.29 | 8.30 | 8.31 | 8.31 | 8.32 | 8.32 | 0.4% | |
| Gasoline | 7.52 | 7.54 | 7.56 | 7.53 | 7.59 | 7.55 | 7.58 | 7.56 | 7.59 | 7.62 | 7.61 | 7.65 | 7.67 | 7.69 | 7.72 | 7.76 | 7.80 | 7.84 | 7.87 | 7.91 | 7.95 | 7.99 | 0.3% | |
| Liquid Petroleum Gas | 7.67 | 7.55 | 7.60 | 7.63 | 7.60 | 7.58 | 7.58 | 7.58 | 7.60 | 7.60 | 7.61 | 7.63 | 7.64 | 7.66 | 7.68 | 7.70 | 7.71 | 7.72 | 7.73 | 7.74 | 7.75 | 7.76 | 0.1% | |
| Compressed Natural Gas | 7.84 | 7.73 | 7.80 | 7.78 | 7.73 | 7.73 | 7.73 | 7.74 | 7.74 | 7.75 | 7.75 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | 7.76 | -0.1% | |
| Medium Average | 7.58 | 7.70 | 7.77 | 7.81 | 7.86 | 7.90 | 7.96 | 7.99 | 8.02 | 8.05 | 8.06 | 8.09 | 8.11 | 8.13 | 8.15 | 8.17 | 8.19 | 8.20 | 8.21 | 8.23 | 8.24 | 8.25 | 0.4% | |
| Heavy | | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel | 5.10 | 5.20 | 5.24 | 5.28 | 5.32 | 5.36 | 5.39 | 5.42 | 5.45 | 5.48 | 5.51 | 5.56 | 5.60 | 5.64 | 5.69 | 5.74 | 5.78 | 5.82 | 5.86 | 5.91 | 5.97 | 6.02 | 0.8% | |
| Gasoline | 5.68 | 5.60 | 5.57 | 5.56 | 5.56 | 5.54 | 5.53 | 5.51 | 5.51 | 5.52 | 5.51 | 5.53 | 5.55 | 5.57 | 5.60 | 5.63 | 5.66 | 5.69 | 5.72 | 5.76 | 5.79 | 5.83 | 0.1% | |
| Liquid Petroleum Gas | 5.58 | 5.72 | 5.91 | 6.00 | 6.12 | 6.24 | 6.37 | 6.47 | 6.59 | 6.64 | 6.71 | 6.79 | 6.86 | 6.92 | 6.98 | 7.03 | 7.08 | 7.12 | 7.15 | 7.17 | 7.20 | 7.21 | 1.2% | |
| Compressed Natural Gas | 6.04 | 6.30 | 6.46 | 6.64 | 6.80 | 6.91 | 6.99 | 7.05 | 7.11 | 7.15 | 7.19 | 7.23 | 7.27 | 7.30 | 7.32 | 7.34 | 7.36 | 7.37 | 7.38 | 7.38 | 7.38 | 7.38 | 0.9% | |
| Heavy Average | 5.10 | 5.20 | 5.24 | 5.29 | 5.33 | 5.36 | 5.40 | 5.42 | 5.45 | 5.48 | 5.51 | 5.56 | 5.61 | 5.65 | 5.69 | 5.74 | 5.79 | 5.83 | 5.87 | 5.92 | 5.97 | 6.02 | 0.8% | |
| Average | 5.62 | 5.69 | 5.72 | 5.75 | 5.78 | 5.81 | 5.84 | 5.86 | 5.89 | 5.91 | 5.94 | 5.99 | 6.03 | 6.07 | 6.11 | 6.15 | 6.19 | 6.23 | 6.27 | 6.31 | 6.36 | 6.41 | 0.6% | |

Table 56. Freight Transportation Energy Use (3 of 3)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| Domestic Shipping | | | | | | | | | | | | | | | | | | | | | | | |
| Ton Miles Shipping (bill. ton mile) | 692.23 | 705.78 | 706.75 | 712.63 | 722.73 | 730.95 | 740.97 | 749.56 | 758.71 | 766.77 | 771.89 | 780.98 | 786.89 | 794.64 | 804.55 | 815.79 | 827.23 | 832.81 | 840.66 | 847.63 | 854.65 | 861.25 | 1.0% |
| Fuel Eff. (ton miles per thou Btu) | 2.44 | 2.50 | 2.53 | 2.56 | 2.59 | 2.62 | 2.65 | 2.69 | 2.72 | 2.75 | 2.79 | 2.82 | 2.85 | 2.89 | 2.92 | 2.96 | 2.99 | 3.03 | 3.07 | 3.10 | 3.14 | 3.18 | 1.2% |
| Fuel Consumption (trillion Btu) | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel (distillate) | 199.98 | 196.98 | 194.89 | 194.15 | 194.54 | 194.39 | 194.69 | 194.58 | 194.60 | 194.30 | 193.25 | 193.18 | 192.31 | 191.87 | 191.93 | 192.28 | 192.64 | 191.61 | 191.09 | 190.37 | 189.64 | 188.81 | -0.3% |
| Residual Oil | 83.85 | 85.55 | 84.64 | 84.32 | 84.49 | 84.43 | 84.56 | 84.51 | 84.52 | 84.39 | 83.93 | 83.90 | 83.52 | 83.33 | 83.36 | 83.51 | 83.67 | 83.22 | 83.00 | 82.68 | 82.36 | 82.00 | -0.1% |
| Motor Gasoline | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| International Shipping | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Trade (billion 1987 \$) | 1758.86 | 1985.28 | 2108.35 | 2243.42 | 2403.29 | 2592.12 | 2804.04 | 3014.62 | 3233.24 | 3468.46 | 3716.93 | 3984.87 | 4237.55 | 4488.13 | 4767.23 | 5075.86 | 5400.03 | 5697.65 | 6002.43 | 6327.69 | 6669.89 | 7031.37 | 6.5% |
| Exports (billion 1987 dollars) | 742.62 | 810.35 | 871.12 | 942.08 | 1021.31 | 1114.06 | 1216.84 | 1322.05 | 1433.67 | 1551.32 | 1676.17 | 1805.55 | 1928.11 | 2051.86 | 2184.03 | 2326.30 | 2472.85 | 2618.32 | 2763.26 | 2909.83 | 3054.90 | 3200.68 | 6.9% |
| Imports (billion 1987 dollars) | 1016.24 | 1174.93 | 1237.24 | 1301.34 | 1381.99 | 1478.06 | 1587.20 | 1692.57 | 1799.57 | 1917.15 | 2040.76 | 2179.33 | 2309.44 | 2436.27 | 2583.20 | 2749.56 | 2927.18 | 3079.33 | 3239.17 | 3417.86 | 3614.99 | 3830.69 | 6.2% |
| Fuel Consumption (trillion Btu) | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel (distillate) | 68.32 | 72.87 | 75.11 | 77.47 | 80.16 | 83.19 | 86.42 | 89.48 | 92.55 | 95.74 | 98.99 | 102.37 | 105.43 | 108.35 | 111.49 | 114.84 | 118.27 | 121.29 | 124.31 | 127.48 | 130.76 | 134.16 | 3.1% |
| Residual Oil | 558.38 | 595.63 | 613.95 | 633.23 | 655.26 | 680.05 | 706.41 | 731.46 | 756.55 | 782.59 | 809.18 | 836.85 | 861.80 | 885.66 | 911.33 | 938.78 | 966.78 | 991.46 | 1016.15 | 1042.05 | 1068.85 | 1096.65 | 3.1% |

VM1 = Vehicle Miles Traveled

MPG = Miles per gallon.

Btu = British thermal unit.

N/A = Not applicable.

Bill. = Billion.

Thou. = Thousand.

Eff. = Efficiency.

\$ = Dollars.

Note: Totals may not equal sum of components due to independent rounding. The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Oak Ridge National Laboratory, Transportation Energy Data Book: 17 and 18 (September 1998); United States Department of Transportation, 1989 Carload Waybill Statistics Traffic and Revenue by Commodity Classes, September 1991 and prior issues; Reebie Associates, TRANSEARCH Database, (Greenwich, Connecticut, 1989); Army Corps of Engineers, Waterborne Commerce of the United States, (New Orleans), 1991 and prior issues; U.S. Department of Commerce, Bureau of the Census, "Truck Inventory and U.S. Survey," IC92-1-52, (Washington, DC, May 1995); Federal Highway Administration, Highway Statistics 1997 (Washington, DC, November 1998); and Energy Information Administration (EIA), AEO2000 National Energy Modeling System run AEO2K.D100198A. Projections: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 57. New Light-Duty Vehicle Fuel Economy (1 of 4)
(Miles per Gallon)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| Gasoline | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 26.10 | 26.56 | 26.71 | 27.00 | 27.75 | 27.75 | 28.02 | 28.36 | 28.69 | 28.96 | 29.26 | 29.37 | 29.47 | 29.55 | 29.61 | 29.64 | 29.69 | 29.72 | 29.74 | 29.77 | 29.81 | 29.81 | 0.6% |
| Subcompact Cars | 31.81 | 32.38 | 32.48 | 32.62 | 33.26 | 33.25 | 33.30 | 33.46 | 33.62 | 33.79 | 33.99 | 34.07 | 34.21 | 34.24 | 34.19 | 34.08 | 33.99 | 33.93 | 33.88 | 33.83 | 33.76 | 33.66 | 0.3% |
| Compact Cars | 30.66 | 31.35 | 31.41 | 31.61 | 32.50 | 32.46 | 32.53 | 32.72 | 32.95 | 33.19 | 33.36 | 33.54 | 33.78 | 33.81 | 33.78 | 33.69 | 33.62 | 33.59 | 33.56 | 33.52 | 33.45 | 33.39 | 0.4% |
| Midsize Cars | 27.13 | 27.67 | 27.71 | 27.92 | 28.54 | 28.52 | 28.63 | 28.85 | 29.11 | 29.33 | 29.53 | 29.74 | 30.00 | 30.03 | 30.05 | 30.03 | 29.99 | 29.99 | 29.99 | 29.99 | 29.98 | 29.97 | 0.5% |
| Large Cars | 24.64 | 24.97 | 25.01 | 25.30 | 26.03 | 26.03 | 26.17 | 26.40 | 26.66 | 26.93 | 27.19 | 27.51 | 27.88 | 27.98 | 28.06 | 28.11 | 28.11 | 28.14 | 28.20 | 28.23 | 28.26 | 28.29 | 0.6% |
| 2-Seater Cars | 24.83 | 25.25 | 25.35 | 25.56 | 26.18 | 26.17 | 26.32 | 26.56 | 26.80 | 27.01 | 27.22 | 27.30 | 27.41 | 27.45 | 27.47 | 27.45 | 27.44 | 27.43 | 27.43 | 27.43 | 27.42 | 27.39 | 0.4% |
| Small Pickup | 23.77 | 24.16 | 24.11 | 24.16 | 24.32 | 24.22 | 24.14 | 24.17 | 24.23 | 24.12 | 24.13 | 24.22 | 24.34 | 24.45 | 24.54 | 24.61 | 24.68 | 24.76 | 24.84 | 24.95 | 25.06 | 24.99 | 0.2% |
| Large Pickup | 18.52 | 18.49 | 18.45 | 18.48 | 18.60 | 18.51 | 18.57 | 18.74 | 18.86 | 18.84 | 18.95 | 19.13 | 19.31 | 19.48 | 19.62 | 19.75 | 19.88 | 20.03 | 20.18 | 20.34 | 20.51 | 20.47 | 0.5% |
| Small Van | 24.50 | 25.03 | 25.06 | 25.17 | 25.48 | 25.45 | 25.49 | 25.63 | 25.76 | 25.61 | 25.61 | 25.71 | 25.85 | 25.98 | 26.09 | 26.18 | 26.26 | 26.39 | 26.53 | 26.70 | 26.89 | 26.84 | 0.4% |
| Large Van | 18.40 | 18.80 | 18.93 | 19.19 | 19.51 | 19.49 | 19.66 | 19.94 | 20.20 | 20.22 | 20.37 | 20.60 | 20.82 | 21.03 | 21.20 | 21.35 | 21.50 | 21.67 | 21.84 | 22.04 | 22.26 | 22.26 | 0.9% |
| Small Utility | 21.07 | 21.61 | 21.61 | 21.76 | 22.06 | 22.01 | 22.03 | 22.18 | 22.38 | 22.34 | 22.41 | 22.56 | 22.71 | 22.85 | 22.99 | 23.10 | 23.20 | 23.28 | 23.38 | 23.47 | 23.59 | 23.57 | 0.5% |
| Large Utility | 17.16 | 14.59 | 14.64 | 14.79 | 14.99 | 15.00 | 15.13 | 15.34 | 15.53 | 15.55 | 15.69 | 15.89 | 16.07 | 16.20 | 16.31 | 16.41 | 16.51 | 16.62 | 16.74 | 16.85 | 17.00 | 16.98 | 0.0% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Turbo Direct Injection Diesel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 39.84 | 40.51 | 40.55 | 40.67 | 41.20 | 41.11 | 41.17 | 41.34 | 41.51 | 41.72 | 41.93 | 42.05 | 42.25 | 42.37 | 42.27 | 42.10 | 41.94 | 41.84 | 41.76 | 41.66 | 41.55 | 41.44 | 0.2% |
| Midsize Cars | 37.62 | 38.28 | 38.36 | 38.56 | 39.01 | 38.92 | 39.06 | 39.30 | 39.55 | 39.78 | 40.08 | 40.25 | 40.48 | 40.61 | 40.59 | 40.51 | 40.42 | 40.37 | 40.33 | 40.28 | 40.22 | 40.16 | 0.3% |
| Large Cars | 35.38 | 35.77 | 35.82 | 36.05 | 36.85 | 36.83 | 37.00 | 37.26 | 37.53 | 37.82 | 38.11 | 38.48 | 38.93 | 39.18 | 39.24 | 39.27 | 39.28 | 39.33 | 39.41 | 39.46 | 39.49 | 39.50 | 0.5% |
| 2-Seater Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Pickup | 32.55 | 33.20 | 33.15 | 33.23 | 33.48 | 33.36 | 33.28 | 33.34 | 33.49 | 33.35 | 33.35 | 33.40 | 33.48 | 33.56 | 33.64 | 33.68 | 33.72 | 33.75 | 33.83 | 33.86 | 33.92 | 33.83 | 0.2% |
| Large Pickup | 24.03 | 24.20 | 24.16 | 24.18 | 24.28 | 24.16 | 24.26 | 24.47 | 24.62 | 24.55 | 24.62 | 24.79 | 24.97 | 25.16 | 25.34 | 25.50 | 25.65 | 25.81 | 25.96 | 26.15 | 26.36 | 26.32 | 0.4% |
| Small Van | 29.42 | 30.04 | 30.02 | 30.13 | 30.47 | 30.38 | 30.37 | 30.52 | 30.73 | 30.64 | 30.67 | 30.76 | 30.89 | 31.02 | 31.13 | 31.22 | 31.28 | 31.34 | 31.42 | 31.48 | 31.56 | 31.50 | 0.3% |
| Large Van | 23.49 | 23.97 | 24.12 | 24.43 | 24.80 | 24.79 | 25.01 | 25.35 | 25.69 | 25.66 | 25.77 | 25.96 | 26.15 | 26.37 | 26.57 | 26.76 | 26.93 | 27.12 | 27.31 | 27.52 | 27.78 | 27.77 | 0.8% |
| Small Utility | 27.32 | 27.96 | 27.96 | 28.13 | 28.48 | 28.39 | 28.41 | 28.58 | 28.81 | 28.76 | 28.81 | 28.92 | 29.06 | 29.20 | 29.33 | 29.43 | 29.52 | 29.60 | 29.69 | 29.78 | 29.89 | 29.83 | 0.4% |
| Large Utility | 21.22 | 21.64 | 21.70 | 21.92 | 22.19 | 22.18 | 22.38 | 22.68 | 22.95 | 22.91 | 23.00 | 23.21 | 23.41 | 23.58 | 23.74 | 23.88 | 24.00 | 24.12 | 24.26 | 24.43 | 24.63 | 24.60 | 0.7% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 38.37 | 38.98 | 39.04 | 39.15 | 39.74 | 39.68 | 39.71 | 39.85 | 40.00 | 40.17 | 40.41 | 40.52 | 40.69 | 40.76 | 40.68 | 40.53 | 40.39 | 40.31 | 40.24 | 40.16 | 40.06 | 39.94 | 0.2% |
| Compact Cars | 31.84 | 32.46 | 32.48 | 32.63 | 33.42 | 33.34 | 33.38 | 33.55 | 33.75 | 33.97 | 34.10 | 34.22 | 34.40 | 34.43 | 34.37 | 34.26 | 34.17 | 34.11 | 34.08 | 34.02 | 33.93 | 33.85 | 0.3% |
| Midsize Cars | 30.11 | 30.71 | 30.75 | 30.95 | 31.56 | 31.52 | 31.63 | 31.87 | 32.13 | 32.37 | 32.56 | 32.72 | 32.92 | 32.95 | 32.94 | 32.90 | 32.86 | 32.84 | 32.83 | 32.80 | 32.77 | 32.74 | 0.4% |
| Large Cars | 28.32 | 28.67 | 28.70 | 28.95 | 29.77 | 29.77 | 29.91 | 30.15 | 30.42 | 30.71 | 30.99 | 31.33 | 31.74 | 31.84 | 31.92 | 31.98 | 32.01 | 32.03 | 32.08 | 32.11 | 32.13 | 32.17 | 0.6% |
| 2-Seater Cars | 30.94 | 31.43 | 31.68 | 32.13 | 33.05 | 33.15 | 33.53 | 33.99 | 34.41 | 34.80 | 35.15 | 35.47 | 35.79 | 35.91 | 36.02 | 36.11 | 36.18 | 36.27 | 36.35 | 36.41 | 36.48 | 36.53 | 0.8% |
| Small Pickup | 26.05 | 26.58 | 26.53 | 26.60 | 26.84 | 26.74 | 26.66 | 26.71 | 26.83 | 26.76 | 26.79 | 26.87 | 26.98 | 27.09 | 27.19 | 27.26 | 27.32 | 27.38 | 27.45 | 27.50 | 27.56 | 27.49 | 0.2% |
| Large Pickup | 19.25 | 19.39 | 19.35 | 19.38 | 19.49 | 19.39 | 19.47 | 19.64 | 19.76 | 19.73 | 19.83 | 20.01 | 20.19 | 20.37 | 20.52 | 20.65 | 20.78 | 20.92 | 21.07 | 21.24 | 21.42 | 21.38 | 0.5% |
| Small Van | 23.56 | 24.07 | 24.04 | 24.14 | 24.45 | 24.37 | 24.36 | 24.48 | 24.66 | 24.62 | 24.68 | 24.80 | 24.94 | 25.07 | 25.20 | 25.30 | 25.38 | 25.47 | 25.55 | 25.61 | 25.67 | 25.62 | 0.4% |
| Large Van | 18.81 | 19.21 | 19.34 | 19.60 | 19.92 | 19.90 | 20.07 | 20.36 | 20.63 | 20.63 | 20.76 | 20.96 | 21.18 | 21.38 | 21.56 | 21.71 | 21.86 | 22.01 | 22.18 | 22.38 | 22.62 | 22.61 | 0.8% |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol Flex | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 36.22 | 36.81 | 36.88 | 37.00 | 37.66 | 37.59 | 37.61 | 37.76 | 37.91 | 38.09 | 38.31 | 38.42 | 38.60 | 38.65 | 38.57 | 38.43 | 38.30 | 38.23 | 38.18 | 38.11 | 38.01 | 37.89 | 0.2% |
| Compact Cars | 30.07 | 30.69 | 30.70 | 30.85 | 31.67 | 31.60 | 31.64 | 31.81 | 32.01 | 32.22 | 32.35 | 32.47 | 32.64 | 32.66 | 32.61 | 32.52 | 32.43 | 32.39 | 32.35 | 32.28 | 32.21 | 32.12 | 0.3% |
| Midsize Cars | 28.44 | 29.03 | 29.06 | 29.26 | 29.89 | 29.84 | 29.96 | 30.18 | 30.44 | 30.67 | 30.85 | 31.01 | 31.21 | 31.24 | 31.24 | 31.20 | 31.17 | 31.15 | 31.14 | 31.13 | 31.11 | 31.08 | 0.4% |
| Large Cars | 26.76 | 27.09 | 27.12 | 27.41 | 28.18 | 28.19 | 28.31 | 28.55 | 28.81 | 29.09 | 29.37 | 29.70 | 30.11 | 30.20 | 30.29 | 30.35 | 30.35 | 30.38 | 30.43 | 30.47 | 30.50 | 30.52 | 0.6% |
| 2-Seater Cars | 29.22 | 29.70 | 29.95 | 30.37 | 31.31 | 31.40 | 31.76 | 32.21 | 32.61 | 32.98 | 33.32 | 33.62 | 33.93 | 34.05 | 34.16 | 34.25 | 34.33 | 34.41 | 34.48 | 34.54 | 34.61 | 34.66 | 0.8% |
| Small Pickup | 24.60 | 25.11 | 25.05 | 25.13 | 25.35 | 25.25 | 25.18 | 25.23 | 25.35 | 25.28 | 25.33 | 25.42 | 25.54 | 25.64 | 25.75 | 25.82 | 25.89 | 25.94 | 26.01 | 26.06 | 26.13 | 26.06 | 0.3% |
| Large Pickup | 18.19 | 18.32 | 18.28 | 18.31 | 18.42 | 18.32 | 18.39 | 18.56 | 18.68 | 18.66 | 18.76 | 18.94 | 19.11 | 19.29 | 19.42 | 19.55 | 19.68 | 19.82 | 19.97 | 20.13 | 20.29 | 20.26 | 0.5% |
| Small Van | 22.25 | 22.74 | 22.71 | 22.81 | 23.11 | 23.03 | 23.14 | 23.31 | 23.31 | 23.28 | 23.35 | 23.47 | 23.61 | 23.75 | 23.88 | 23.98 | 24.07 | 24.15 | 24.22 | 24.28 | 24.35 | 24.30 | 0.4% |
| Large Van | 17.77 | 18.16 | 18.27 | 18.52 | 18.83 | 18.81 | 18.97 | 19.25 | 19.50 | 19.51 | 19.65 | 19.87 | 20.08 | 20.28 | 20.44 | 20.59 | 20.73 | 20.89 | 21.05 | 21.25 | 21.46 | 21.46 | 0.9% |
| Small Utility | 20.67 | 21.17 | 21.16 | 21.30 | 21.60 | 21.53 | 21.54 | 21.68 | 21.87 | 21.86 | 21.94 | 22.08 | 22.24 | | | | | | | | | | |

**Table 57. New Light-Duty Vehicle Fuel Economy (2 of 4)
(Miles per Gallon)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 | |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|------|
| Ethanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A | |
| Subcompact Cars | 36.94 | 37.54 | 37.61 | 37.73 | 38.36 | 38.30 | 38.32 | 38.46 | 38.61 | 38.79 | 39.02 | 39.12 | 39.30 | 39.36 | 39.28 | 39.14 | 39.01 | 38.93 | 38.87 | 38.80 | 38.71 | 38.59 | 38.59 | 0.2% |
| Compact Cars | 30.66 | 31.28 | 31.30 | 31.44 | 32.26 | 32.19 | 32.22 | 32.39 | 32.60 | 32.81 | 32.94 | 33.06 | 33.23 | 33.26 | 33.20 | 33.10 | 33.02 | 32.97 | 32.93 | 32.87 | 32.79 | 32.70 | 32.70 | 0.3% |
| Midsize Cars | 29.00 | 29.60 | 29.63 | 29.83 | 30.45 | 30.41 | 30.52 | 30.75 | 31.01 | 31.24 | 31.42 | 31.58 | 31.79 | 31.81 | 31.81 | 31.77 | 31.74 | 31.72 | 31.71 | 31.69 | 31.67 | 31.64 | 31.64 | 0.4% |
| Large Cars | 27.28 | 27.62 | 27.65 | 27.93 | 28.71 | 28.72 | 28.85 | 29.08 | 29.35 | 29.63 | 29.91 | 30.25 | 30.65 | 30.75 | 30.84 | 30.90 | 30.90 | 30.93 | 30.98 | 31.02 | 31.04 | 31.08 | 31.08 | 0.6% |
| 2-Seater Cars | 29.79 | 30.28 | 30.52 | 30.96 | 31.89 | 31.98 | 32.35 | 32.80 | 33.21 | 33.59 | 33.93 | 34.23 | 34.55 | 34.67 | 34.78 | 34.87 | 34.95 | 35.04 | 35.10 | 35.17 | 35.23 | 35.29 | 35.29 | 0.8% |
| Small Pickup | 25.09 | 25.60 | 25.55 | 25.62 | 25.85 | 25.75 | 25.68 | 25.73 | 25.85 | 25.78 | 25.82 | 25.91 | 26.02 | 26.13 | 26.23 | 26.31 | 26.37 | 26.43 | 26.49 | 26.54 | 26.61 | 26.54 | 26.54 | 0.3% |
| Large Pickup | 18.54 | 18.68 | 18.64 | 18.67 | 18.78 | 18.68 | 18.75 | 18.92 | 19.04 | 19.02 | 19.12 | 19.30 | 19.47 | 19.65 | 19.79 | 19.92 | 20.05 | 20.19 | 20.33 | 20.50 | 20.67 | 20.63 | 20.63 | 0.5% |
| Small Van | 22.69 | 23.18 | 23.15 | 23.25 | 23.56 | 23.48 | 23.47 | 23.59 | 23.76 | 23.72 | 23.80 | 23.91 | 24.06 | 24.19 | 24.32 | 24.42 | 24.51 | 24.59 | 24.67 | 24.72 | 24.79 | 24.74 | 24.74 | 0.4% |
| Large Van | 18.12 | 18.51 | 18.63 | 18.88 | 19.20 | 19.18 | 19.34 | 19.62 | 19.87 | 19.88 | 20.02 | 20.23 | 20.45 | 20.64 | 20.82 | 20.97 | 21.11 | 21.26 | 21.43 | 21.63 | 21.85 | 21.84 | 21.84 | 0.9% |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Ethanol Flex | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 35.86 | 36.45 | 36.52 | 36.65 | 37.31 | 37.25 | 37.27 | 37.41 | 37.57 | 37.75 | 37.96 | 38.07 | 38.25 | 38.30 | 38.22 | 38.08 | 37.96 | 37.89 | 37.83 | 37.77 | 37.67 | 37.55 | 37.55 | 0.2% |
| Compact Cars | 29.77 | 30.39 | 30.40 | 30.55 | 31.38 | 31.31 | 31.35 | 31.52 | 31.72 | 31.93 | 32.06 | 32.18 | 32.35 | 32.37 | 32.32 | 32.23 | 32.14 | 32.10 | 32.06 | 32.00 | 31.92 | 31.83 | 31.83 | 0.3% |
| Midsize Cars | 28.17 | 28.75 | 28.78 | 28.98 | 29.61 | 29.57 | 29.68 | 29.90 | 30.16 | 30.38 | 30.56 | 30.73 | 30.93 | 30.95 | 30.96 | 30.92 | 30.89 | 30.87 | 30.86 | 30.85 | 30.83 | 30.80 | 30.80 | 0.4% |
| Large Cars | 26.50 | 26.83 | 26.86 | 27.15 | 27.92 | 27.92 | 28.05 | 28.28 | 28.55 | 28.83 | 29.10 | 29.43 | 29.83 | 29.93 | 30.02 | 30.07 | 30.07 | 30.10 | 30.16 | 30.19 | 30.22 | 30.25 | 30.25 | 0.6% |
| 2-Seater Cars | 28.94 | 29.42 | 29.66 | 30.08 | 31.02 | 31.11 | 31.47 | 31.91 | 32.31 | 32.68 | 33.02 | 33.31 | 33.62 | 33.74 | 33.85 | 33.94 | 34.03 | 34.10 | 34.17 | 34.23 | 34.30 | 34.35 | 34.35 | 0.8% |
| Small Pickup | 24.36 | 24.86 | 24.81 | 24.88 | 25.11 | 25.01 | 24.94 | 24.99 | 25.10 | 25.04 | 25.08 | 25.18 | 25.30 | 25.40 | 25.51 | 25.58 | 25.65 | 25.70 | 25.77 | 25.82 | 25.89 | 25.82 | 25.82 | 0.3% |
| Large Pickup | 18.01 | 18.14 | 18.10 | 18.13 | 18.24 | 18.15 | 18.22 | 18.38 | 18.50 | 18.48 | 18.59 | 18.76 | 18.93 | 19.11 | 19.24 | 19.37 | 19.50 | 19.64 | 19.78 | 19.94 | 20.11 | 20.07 | 20.07 | 0.5% |
| Small Van | 22.04 | 22.52 | 22.49 | 22.59 | 22.88 | 22.81 | 22.80 | 22.91 | 23.09 | 23.05 | 23.13 | 23.25 | 23.39 | 23.53 | 23.66 | 23.76 | 23.85 | 23.93 | 24.00 | 24.06 | 24.13 | 24.08 | 24.08 | 0.4% |
| Large Van | 17.59 | 17.98 | 18.10 | 18.34 | 18.65 | 18.63 | 18.79 | 19.06 | 19.31 | 19.32 | 19.46 | 19.69 | 19.90 | 20.09 | 20.25 | 20.40 | 20.54 | 20.70 | 20.87 | 21.06 | 21.26 | 21.26 | 21.26 | 0.9% |
| Small Utility | 20.46 | 20.96 | 20.95 | 21.09 | 21.39 | 21.32 | 21.34 | 21.47 | 21.66 | 21.65 | 21.73 | 21.88 | 22.03 | 22.17 | 22.31 | 22.42 | 22.52 | 22.60 | 22.67 | 22.75 | 22.84 | 22.82 | 22.82 | 0.5% |
| Large Utility | 15.90 | 16.23 | 16.29 | 16.46 | 16.68 | 16.68 | 16.83 | 17.06 | 17.27 | 17.30 | 17.45 | 17.67 | 17.87 | 18.02 | 18.14 | 18.25 | 18.36 | 18.48 | 18.62 | 18.74 | 18.90 | 18.88 | 18.88 | 0.8% |
| Compressed Natural Gas (CNG) | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 31.69 | 32.19 | 32.21 | 32.28 | 32.86 | 32.75 | 32.82 | 32.94 | 33.07 | 33.23 | 33.42 | 33.61 | 33.83 | 33.91 | 33.98 | 33.94 | 33.83 | 33.76 | 33.71 | 33.64 | 33.55 | 33.45 | 33.45 | 0.2% |
| Midsize Cars | 30.02 | 30.51 | 30.56 | 30.69 | 31.10 | 31.02 | 31.15 | 31.33 | 31.53 | 31.70 | 31.95 | 32.18 | 32.44 | 32.56 | 32.66 | 32.67 | 32.62 | 32.59 | 32.57 | 32.53 | 32.50 | 32.46 | 32.46 | 0.4% |
| Large Cars | 28.27 | 28.58 | 28.60 | 28.81 | 29.47 | 29.45 | 29.59 | 29.78 | 29.99 | 30.21 | 30.45 | 30.73 | 31.06 | 31.37 | 31.68 | 31.85 | 31.86 | 31.87 | 31.91 | 31.93 | 31.95 | 31.97 | 31.97 | 0.6% |
| 2-Seater Cars | 30.89 | 31.37 | 31.63 | 32.07 | 32.97 | 33.06 | 33.45 | 33.91 | 34.33 | 34.71 | 35.06 | 35.37 | 35.69 | 35.81 | 35.92 | 36.01 | 36.08 | 36.17 | 36.25 | 36.30 | 36.37 | 36.42 | 36.42 | 0.8% |
| Small Pickup | 25.95 | 26.46 | 26.39 | 26.46 | 26.68 | 26.55 | 26.47 | 26.52 | 26.63 | 26.50 | 26.49 | 26.53 | 26.59 | 26.66 | 26.71 | 26.74 | 26.75 | 26.77 | 26.88 | 26.99 | 27.10 | 27.10 | 27.10 | 0.2% |
| Large Pickup | 19.23 | 19.37 | 19.32 | 19.35 | 19.45 | 19.34 | 19.42 | 19.58 | 19.71 | 19.66 | 19.74 | 19.89 | 20.03 | 20.19 | 20.31 | 20.41 | 20.50 | 20.61 | 20.72 | 20.86 | 20.99 | 21.09 | 21.09 | 0.4% |
| Small Van | 23.52 | 24.00 | 23.97 | 24.06 | 24.36 | 24.27 | 24.25 | 24.37 | 24.55 | 24.45 | 24.49 | 24.56 | 24.66 | 24.75 | 24.84 | 24.90 | 24.94 | 24.99 | 25.11 | 25.21 | 25.30 | 25.33 | 25.33 | 0.3% |
| Large Van | 18.80 | 19.20 | 19.32 | 19.57 | 19.89 | 19.86 | 20.03 | 20.32 | 20.58 | 20.57 | 20.67 | 20.85 | 21.03 | 21.20 | 21.35 | 21.47 | 21.58 | 21.70 | 21.84 | 21.99 | 22.17 | 22.32 | 22.32 | 0.8% |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| CNG Bi-Fuel | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 29.35 | 29.84 | 29.86 | 29.94 | 30.56 | 30.46 | 30.51 | 30.64 | 30.77 | 30.92 | 31.10 | 31.28 | 31.49 | 31.58 | 31.65 | 31.62 | 31.51 | 31.46 | 31.40 | 31.33 | 31.26 | 31.17 | 31.17 | 0.3% |
| Midsize Cars | 27.81 | 28.29 | 28.34 | 28.47 | 28.90 | 28.84 | 28.96 | 29.14 | 29.33 | 29.49 | 29.72 | 29.94 | 30.18 | 30.30 | 30.41 | 30.43 | 30.38 | 30.35 | 30.33 | 30.31 | 30.29 | 30.25 | 30.25 | 0.4% |
| Large Cars | 26.19 | 26.50 | 26.52 | 26.78 | 27.38 | 27.36 | 27.49 | 27.68 | 27.89 | 28.10 | 28.33 | 28.61 | 28.93 | 29.22 | 29.52 | 29.65 | 29.64 | 29.67 | 29.71 | 29.74 | 29.75 | 29.77 | 29.77 | 0.6% |
| 2-Seater Cars | 28.60 | 29.08 | 29.31 | 29.73 | 30.64 | 30.73 | 31.08 | 31.52 | 31.92 | 32.28 | 32.61 | 32.89 | 33.20 | 33.32 | 33.43 | 33.52 | 33.60 | 33.67 | 33.74 | 33.80 | 33.86 | 33.92 | 33.92 | 0.8% |
| Small Pickup | 24.05 | 24.52 | 24.46 | 24.52 | 24.73 | 24.61 | 24.54 | 24.58 | 24.69 | 24.57 | 24.58 | 24.63 | 24.70 | 24.77 | 24.83 | 24.86 | 24.89 | 24.90 | 25.01 | 25.12 | 25.22 | 25.23 | 25.23 | 0.2% |
| Large Pickup | 17.82 | 17.95 | 17.91 | 17.93 | 18.03 | 17.93 | 18.00 | 18.15 | 18.27 | 18.24 | 18.32 | 18.47 | 18.61 | 18.76 | 18.87 | 18.97 | 19.06 | 19.17 | 19.28 | 19.40 | 19.52 | 19.63 | | |

**Table 57. New Light-Duty Vehicle Fuel Economy (3 of 4)
(Miles per Gallon)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| Liquefied Petroleum Gas (LPG) | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 36.77 | 37.23 | 37.27 | 37.33 | 37.77 | 37.68 | 37.73 | 37.83 | 37.92 | 38.06 | 38.27 | 38.48 | 38.73 | 38.84 | 38.90 | 38.83 | 38.69 | 38.60 | 38.53 | 38.44 | 38.34 | 38.21 | 0.2% |
| Compact Cars | 30.58 | 31.09 | 31.12 | 31.20 | 31.83 | 31.73 | 31.79 | 31.91 | 32.06 | 32.22 | 32.41 | 32.60 | 32.82 | 32.91 | 32.98 | 32.95 | 32.85 | 32.79 | 32.74 | 32.67 | 32.58 | 32.49 | 0.3% |
| Midsize Cars | 28.95 | 29.44 | 29.49 | 29.62 | 30.06 | 29.99 | 30.12 | 30.30 | 30.50 | 30.68 | 30.92 | 31.15 | 31.41 | 31.53 | 31.64 | 31.66 | 31.61 | 31.58 | 31.56 | 31.54 | 31.51 | 31.47 | 0.4% |
| Large Cars | 27.25 | 27.55 | 27.58 | 27.81 | 28.47 | 28.45 | 28.58 | 28.78 | 28.99 | 29.22 | 29.45 | 29.73 | 30.06 | 30.37 | 30.68 | 30.84 | 30.83 | 30.85 | 30.90 | 30.92 | 30.95 | 30.96 | 0.6% |
| 2-Seater Cars | 29.78 | 30.26 | 30.50 | 30.94 | 31.87 | 31.96 | 32.33 | 32.78 | 33.19 | 33.56 | 33.91 | 34.21 | 34.52 | 34.64 | 34.75 | 34.84 | 34.92 | 35.01 | 35.07 | 35.14 | 35.20 | 35.26 | 0.8% |
| Small Pickup | 25.01 | 25.50 | 25.44 | 25.51 | 25.74 | 25.63 | 25.55 | 25.61 | 25.73 | 25.60 | 25.61 | 25.66 | 25.74 | 25.81 | 25.87 | 25.90 | 25.92 | 25.94 | 26.06 | 26.17 | 26.27 | 26.28 | 0.2% |
| Large Pickup | 18.53 | 18.66 | 18.62 | 18.64 | 18.75 | 18.65 | 18.72 | 18.89 | 19.01 | 18.97 | 19.06 | 19.22 | 19.36 | 19.52 | 19.63 | 19.74 | 19.83 | 19.94 | 20.06 | 20.19 | 20.31 | 20.42 | 0.4% |
| Small Van | 22.66 | 23.14 | 23.10 | 23.20 | 23.50 | 23.42 | 23.41 | 23.53 | 23.71 | 23.62 | 23.67 | 23.75 | 23.85 | 23.95 | 24.05 | 24.11 | 24.16 | 24.21 | 24.32 | 24.43 | 24.51 | 24.55 | 0.4% |
| Large Van | 18.10 | 18.50 | 18.61 | 18.87 | 19.18 | 19.15 | 19.32 | 19.60 | 19.85 | 19.85 | 19.96 | 20.16 | 20.34 | 20.51 | 20.65 | 20.78 | 20.89 | 21.01 | 21.14 | 21.30 | 21.47 | 21.62 | 0.8% |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| LPG Bi-Fuel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 29.41 | 29.92 | 29.95 | 30.03 | 30.69 | 30.59 | 30.65 | 30.77 | 30.92 | 31.07 | 31.26 | 31.45 | 31.66 | 31.76 | 31.83 | 31.80 | 31.71 | 31.66 | 31.60 | 31.53 | 31.44 | 31.35 | 0.3% |
| Midsize Cars | 27.85 | 28.34 | 28.39 | 28.52 | 28.99 | 28.92 | 29.05 | 29.23 | 29.42 | 29.59 | 29.83 | 30.06 | 30.30 | 30.43 | 30.54 | 30.56 | 30.51 | 30.49 | 30.47 | 30.45 | 30.43 | 30.39 | 0.4% |
| Large Cars | 26.22 | 26.52 | 26.55 | 26.80 | 27.44 | 27.41 | 27.54 | 27.74 | 27.95 | 28.17 | 28.40 | 28.68 | 29.01 | 29.31 | 29.61 | 29.75 | 29.74 | 29.77 | 29.82 | 29.85 | 29.86 | 29.88 | 0.6% |
| 2-Seater Cars | 28.64 | 29.12 | 29.35 | 29.78 | 30.71 | 30.80 | 31.15 | 31.59 | 31.99 | 32.36 | 32.68 | 32.97 | 33.28 | 33.41 | 33.52 | 33.61 | 33.69 | 33.77 | 33.83 | 33.89 | 33.96 | 34.02 | 0.8% |
| Small Pickup | 24.07 | 24.55 | 24.49 | 24.56 | 24.79 | 24.68 | 24.61 | 24.66 | 24.78 | 24.66 | 24.68 | 24.74 | 24.81 | 24.89 | 24.95 | 24.99 | 25.01 | 25.03 | 25.15 | 25.26 | 25.36 | 25.37 | 0.2% |
| Large Pickup | 17.82 | 17.95 | 17.91 | 17.94 | 18.05 | 17.95 | 18.02 | 18.18 | 18.30 | 18.27 | 18.36 | 18.51 | 18.66 | 18.81 | 18.92 | 19.02 | 19.12 | 19.23 | 19.35 | 19.47 | 19.59 | 19.70 | 0.5% |
| Small Van | 21.80 | 22.27 | 22.24 | 22.33 | 22.63 | 22.55 | 22.54 | 22.65 | 22.82 | 22.75 | 22.80 | 22.89 | 23.00 | 23.09 | 23.19 | 23.26 | 23.31 | 23.36 | 23.47 | 23.57 | 23.66 | 23.70 | 0.4% |
| Large Van | 17.41 | 17.80 | 17.91 | 18.16 | 18.46 | 18.44 | 18.60 | 18.86 | 19.11 | 19.11 | 19.24 | 19.44 | 19.62 | 19.79 | 19.92 | 20.04 | 20.15 | 20.28 | 20.41 | 20.56 | 20.72 | 20.87 | 0.8% |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Electric | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 36.00 | 35.40 | 35.07 | 34.87 | 37.92 | 41.17 | 45.50 | 51.02 | 58.17 | 57.91 | 57.62 | 57.38 | 57.13 | 56.92 | 56.75 | 56.58 | 56.44 | 56.27 | 56.08 | 55.97 | 55.84 | 55.75 | 2.0% |
| Compact Cars | 31.29 | 30.86 | 30.62 | 30.47 | 33.09 | 35.98 | 39.78 | 44.63 | 50.92 | 50.74 | 50.58 | 50.44 | 50.30 | 50.19 | 50.09 | 49.95 | 49.84 | 49.70 | 49.56 | 49.50 | 49.41 | 49.34 | 2.1% |
| Midsize Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| 2-Seater Cars | 29.31 | 28.85 | 28.60 | 28.43 | 30.86 | 33.53 | 37.03 | 41.51 | 47.33 | 47.10 | 46.89 | 46.73 | 46.57 | 46.44 | 46.32 | 46.17 | 46.05 | 45.92 | 45.80 | 45.73 | 45.66 | 45.59 | 2.0% |
| Small Pickup | 27.63 | 27.18 | 26.87 | 26.65 | 28.99 | 31.45 | 34.64 | 38.71 | 44.04 | 43.66 | 43.31 | 43.01 | 42.72 | 42.43 | 42.15 | 41.89 | 41.63 | 41.40 | 41.21 | 41.04 | 40.86 | 40.70 | 1.8% |
| Large Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Van | 23.58 | 23.35 | 23.12 | 22.98 | 25.15 | 27.32 | 30.11 | 33.68 | 38.35 | 38.02 | 37.74 | 37.48 | 37.22 | 36.96 | 36.71 | 36.47 | 36.25 | 36.03 | 35.86 | 35.71 | 35.56 | 35.42 | 1.9% |
| Large Van | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel-Electric Hybrid | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 61.81 | 61.60 | 61.37 | 61.55 | 61.91 | 61.07 | 60.53 | 60.28 | 60.40 | 60.63 | 60.80 | 60.97 | 61.17 | 61.35 | 61.44 | 61.43 | 61.37 | 61.32 | 61.63 | 61.78 | 61.80 | 61.55 | 0.0% |
| Compact Cars | 51.23 | 51.11 | 50.96 | 51.14 | 51.53 | 50.80 | 50.38 | 50.21 | 50.35 | 50.57 | 50.75 | 50.91 | 51.11 | 51.28 | 51.38 | 51.40 | 51.36 | 51.34 | 51.60 | 51.74 | 51.78 | 51.60 | 0.0% |
| Midsize Cars | 48.10 | 48.02 | 47.87 | 48.03 | 48.35 | 47.72 | 47.45 | 47.41 | 47.66 | 47.99 | 48.28 | 48.56 | 48.84 | 49.10 | 49.28 | 49.40 | 49.48 | 49.52 | 49.83 | 50.04 | 50.15 | 50.05 | 0.2% |
| Large Cars | 44.56 | 44.48 | 44.34 | 44.46 | 44.94 | 44.41 | 44.23 | 44.30 | 44.67 | 45.09 | 45.50 | 45.90 | 46.26 | 46.62 | 46.90 | 47.15 | 47.33 | 47.47 | 47.90 | 48.19 | 48.40 | 48.41 | 0.4% |
| 2-Seater Cars | 46.71 | 46.60 | 46.45 | 46.61 | 46.99 | 46.52 | 46.49 | 46.70 | 47.22 | 47.79 | 48.32 | 48.85 | 49.32 | 49.79 | 50.21 | 50.59 | 50.92 | 51.14 | 51.65 | 52.06 | 52.37 | 52.45 | 0.5% |
| Small Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Van | 37.03 | 37.60 | 37.68 | 38.03 | 38.61 | 38.28 | 38.18 | 38.33 | 38.72 | 38.57 | 38.62 | 38.68 | 38.73 | 38.80 | 38.84 | 38.85 | 38.80 | 38.75 | 38.93 | 39.02 | 39.04 | 38.90 | 0.2% |
| Large Van | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Utility | 34.46 | 35.10 | 35.22 | 35.61 | 36.19 | 35.93 | 35.91 | 36.15 | 36.63 | 36.54 | 36.65 | 36.77 | 36.87 | 37.00 | 37.11 | 37.18 | 37.21 | 37.20 | 37.41 | 37.54 | 37.60 | 37.50 | 0.4% |
| Large Utility | 27.69 | 28.23 | 28.37 | 28.75 | 29.20 | 29.01 | 29.05 | 29.2 | | | | | | | | | | | | | | | |

**Table 57. New Light-Duty Vehicle Fuel Economy (4 of 4)
(Miles per Gallon)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 | |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| Fuel Cell Methanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 55.19 | 54.42 | 54.00 | 53.73 | 53.42 | 52.71 | 52.34 | 52.06 | 51.79 | 51.61 | 51.45 | 51.30 | 51.16 | 51.04 | 50.94 | 50.80 | 50.69 | 50.55 | 50.41 | 50.34 | 50.26 | 50.18 | 50.18 | -0.4% |
| Midsize Cars | 48.00 | 47.35 | 46.99 | 46.74 | 46.66 | 46.07 | 45.75 | 45.51 | 45.28 | 45.14 | 45.01 | 44.90 | 44.81 | 44.76 | 44.71 | 44.62 | 44.57 | 44.48 | 44.39 | 44.34 | 44.27 | 44.21 | 44.21 | -0.4% |
| Large Cars | 43.23 | 42.65 | 42.35 | 42.04 | 41.70 | 41.22 | 40.97 | 40.78 | 40.61 | 40.42 | 40.26 | 40.10 | 39.93 | 39.81 | 39.70 | 39.60 | 39.55 | 39.47 | 39.42 | 39.35 | 39.30 | 39.26 | 39.26 | -0.4% |
| 2-Seater Cars | 51.68 | 50.88 | 50.43 | 50.14 | 49.82 | 49.12 | 48.72 | 48.42 | 48.13 | 47.91 | 47.69 | 47.53 | 47.36 | 47.24 | 47.11 | 46.96 | 46.83 | 46.70 | 46.58 | 46.51 | 46.44 | 46.37 | 46.37 | -0.5% |
| Small Pickup | 48.74 | 47.93 | 47.38 | 47.00 | 46.80 | 46.08 | 45.57 | 45.15 | 44.79 | 44.40 | 44.05 | 43.74 | 43.45 | 43.15 | 42.87 | 42.60 | 42.34 | 42.10 | 41.91 | 41.74 | 41.56 | 41.40 | 41.40 | -0.7% |
| Large Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Van | 41.59 | 41.17 | 40.77 | 40.53 | 40.59 | 40.03 | 39.62 | 39.28 | 39.01 | 38.67 | 38.38 | 38.12 | 37.85 | 37.59 | 37.34 | 37.10 | 36.86 | 36.65 | 36.47 | 36.32 | 36.16 | 36.03 | 36.03 | -0.7% |
| Large Van | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Hydrogen | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 60.52 | 59.67 | 59.21 | 58.92 | 58.57 | 57.80 | 57.39 | 57.08 | 56.79 | 56.59 | 56.41 | 56.25 | 56.10 | 55.97 | 55.86 | 55.70 | 55.58 | 55.43 | 55.27 | 55.20 | 55.10 | 55.02 | 55.02 | -0.4% |
| Midsize Cars | 52.63 | 51.92 | 51.52 | 51.25 | 51.16 | 50.51 | 50.16 | 49.90 | 49.65 | 49.49 | 49.35 | 49.23 | 49.14 | 49.08 | 49.02 | 48.93 | 48.87 | 48.78 | 48.67 | 48.61 | 48.54 | 48.48 | 48.48 | -0.4% |
| Large Cars | 47.41 | 46.76 | 46.44 | 46.10 | 45.72 | 45.19 | 44.92 | 44.71 | 44.52 | 44.33 | 44.14 | 43.97 | 43.78 | 43.66 | 43.53 | 43.42 | 43.36 | 43.28 | 43.23 | 43.15 | 43.09 | 43.05 | 43.05 | -0.4% |
| 2-Seater Cars | 56.67 | 55.79 | 55.30 | 54.98 | 54.62 | 53.86 | 53.43 | 53.09 | 52.78 | 52.53 | 52.30 | 52.11 | 51.93 | 51.79 | 51.66 | 51.49 | 51.35 | 51.21 | 51.08 | 51.00 | 50.92 | 50.84 | 50.84 | -0.5% |
| Small Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Van | 45.60 | 45.14 | 44.71 | 44.44 | 44.51 | 43.89 | 43.44 | 43.07 | 42.77 | 42.40 | 42.09 | 41.79 | 41.51 | 41.22 | 40.94 | 40.68 | 40.42 | 40.18 | 39.99 | 39.83 | 39.65 | 39.50 | 39.50 | -0.7% |
| Large Van | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Fuel Cell Gasoline | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Subcompact Cars | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Compact Cars | 51.72 | 50.99 | 50.60 | 50.35 | 50.05 | 49.39 | 49.04 | 48.78 | 48.53 | 48.36 | 48.21 | 48.07 | 47.94 | 47.83 | 47.73 | 47.60 | 47.50 | 47.37 | 47.23 | 47.17 | 47.09 | 47.02 | 47.02 | -0.4% |
| Midsize Cars | 44.97 | 44.37 | 44.03 | 43.80 | 43.72 | 43.17 | 42.87 | 42.65 | 42.43 | 42.29 | 42.18 | 42.07 | 41.99 | 41.94 | 41.89 | 41.81 | 41.76 | 41.68 | 41.59 | 41.54 | 41.48 | 41.43 | 41.43 | -0.4% |
| Large Cars | 40.51 | 39.96 | 39.69 | 39.40 | 39.07 | 38.62 | 38.39 | 38.21 | 38.05 | 37.88 | 37.72 | 37.57 | 37.41 | 37.31 | 37.20 | 37.11 | 37.06 | 36.99 | 36.94 | 36.88 | 36.83 | 36.79 | 36.79 | -0.4% |
| 2-Seater Cars | 48.43 | 47.68 | 47.26 | 46.98 | 46.68 | 46.03 | 45.66 | 45.37 | 45.10 | 44.89 | 44.69 | 44.54 | 44.38 | 44.26 | 44.14 | 44.00 | 43.88 | 43.76 | 43.65 | 43.59 | 43.51 | 43.45 | 43.45 | -0.5% |
| Small Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Pickup | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Van | 38.97 | 38.58 | 38.21 | 37.98 | 38.04 | 37.50 | 37.12 | 36.81 | 36.55 | 36.23 | 35.97 | 35.72 | 35.47 | 35.22 | 34.98 | 34.76 | 34.54 | 34.34 | 34.18 | 34.03 | 33.89 | 33.76 | 33.76 | -0.7% |
| Large Van | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Small Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |
| Large Utility | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | N/A |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1997 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports for Auto Manufacturers, 1998; and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 58. New Light-Duty Vehicle Prices (1 of 4)
(Thousands 1990 Dollars)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gasoline | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 28.1 | 28.3 | 28.4 | 28.4 | 28.5 | 28.7 | 28.7 | 28.7 | 28.8 | 28.8 | 28.8 | 28.7 | 28.8 | 28.8 | 28.8 | 28.9 | 29.0 | 29.0 | 29.1 | 29.1 | 29.2 | 29.2 | 0.2% |
| Subcompact Cars | 13.0 | 13.3 | 13.4 | 13.5 | 13.6 | 13.8 | 13.9 | 13.9 | 13.9 | 14.0 | 14.0 | 14.0 | 14.1 | 14.1 | 14.2 | 14.2 | 14.3 | 14.3 | 14.4 | 14.5 | 14.5 | 14.6 | 0.5% |
| Compact Cars | 16.4 | 16.7 | 16.9 | 16.9 | 17.0 | 17.3 | 17.3 | 17.3 | 17.4 | 17.4 | 17.5 | 17.5 | 17.5 | 17.6 | 17.6 | 17.7 | 17.8 | 17.8 | 17.9 | 17.9 | 18.0 | 18.0 | 0.4% |
| Midsized Cars | 18.7 | 19.0 | 19.1 | 19.2 | 19.2 | 19.5 | 19.5 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 19.7 | 19.7 | 19.7 | 19.7 | 19.8 | 19.8 | 19.8 | 19.9 | 20.0 | 20.0 | 0.3% |
| Large Cars | 22.3 | 22.6 | 22.7 | 22.8 | 22.9 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.3 | 23.3 | 23.4 | 23.4 | 0.2% |
| 2-Seater Cars | 20.7 | 20.9 | 21.1 | 21.1 | 21.1 | 21.4 | 21.4 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.6 | 21.6 | 21.7 | 21.7 | 21.8 | 21.8 | 21.9 | 21.9 | 22.0 | 0.3% |
| Small Pickup | 13.1 | 13.2 | 13.3 | 13.4 | 13.4 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 13.8 | 13.8 | 13.8 | 13.9 | 13.9 | 14.0 | 14.0 | 14.1 | 14.2 | 0.4% |
| Large Pickup | 16.1 | 16.1 | 16.3 | 16.3 | 16.3 | 16.6 | 16.6 | 16.6 | 16.6 | 16.5 | 16.5 | 16.5 | 16.5 | 16.4 | 16.4 | 16.4 | 16.5 | 16.5 | 16.5 | 16.6 | 16.6 | 16.7 | 0.2% |
| Small Van | 18.7 | 18.9 | 19.1 | 19.1 | 19.2 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.5 | 19.6 | 19.6 | 19.7 | 19.7 | 19.8 | 19.9 | 0.3% |
| Large Van | 16.5 | 16.5 | 16.7 | 16.7 | 16.8 | 17.1 | 17.0 | 17.0 | 17.0 | 16.9 | 16.9 | 16.9 | 16.9 | 16.9 | 16.8 | 16.8 | 16.8 | 16.8 | 16.9 | 16.9 | 17.0 | 17.0 | 0.2% |
| Small Utility | 19.9 | 20.1 | 20.2 | 20.2 | 20.3 | 20.6 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.6 | 20.6 | 20.7 | 20.7 | 20.8 | 20.8 | 20.9 | 0.2% |
| Large Utility | 18.7 | 18.8 | 18.9 | 19.0 | 19.0 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.2 | 19.1 | 19.1 | 19.1 | 19.2 | 19.2 | 19.2 | 19.3 | 19.3 | 19.4 | 0.2% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Turbo Direct Injection Diesel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Compact Cars | 16.6 | 16.8 | 17.0 | 17.0 | 17.8 | 18.1 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.3 | 18.4 | 18.4 | 18.5 | 18.6 | 18.6 | 18.7 | 18.7 | 18.8 | 18.8 | 0.6% |
| Midsized Cars | 19.7 | 20.0 | 20.2 | 20.2 | 20.1 | 20.2 | 20.1 | 20.2 | 20.1 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.2 | 20.2 | 20.2 | 20.3 | 20.4 | 20.4 | 0.2% |
| Large Cars | 23.1 | 23.4 | 23.5 | 23.6 | 23.7 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.1 | 24.1 | 24.2 | 24.2 | 0.2% |
| 2-Seater Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Small Pickup | 14.6 | 14.8 | 14.9 | 15.0 | 15.0 | 15.1 | 15.0 | 15.2 | 15.2 | 15.2 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.1 | 15.2 | 15.2 | 15.3 | 15.4 | 15.5 | 15.5 | 0.3% |
| Large Pickup | 18.6 | 18.6 | 18.8 | 18.8 | 18.7 | 18.8 | 18.6 | 19.1 | 19.1 | 19.0 | 19.0 | 19.0 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 19.0 | 19.0 | 19.1 | 19.1 | 0.1% |
| Small Van | 20.5 | 20.8 | 20.9 | 21.0 | 21.0 | 21.1 | 21.0 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.5 | 21.6 | 21.7 | 0.2% |
| Large Van | 18.9 | 18.9 | 19.1 | 19.1 | 19.2 | 19.5 | 19.4 | 19.4 | 19.4 | 19.3 | 19.3 | 19.3 | 19.2 | 19.2 | 19.2 | 19.1 | 19.2 | 19.2 | 19.2 | 19.2 | 19.3 | 19.3 | 0.1% |
| Small Utility | 22.1 | 22.3 | 22.4 | 22.3 | 22.2 | 22.3 | 22.1 | 22.3 | 22.2 | 22.1 | 22.0 | 22.0 | 22.0 | 22.0 | 22.1 | 22.1 | 22.2 | 22.2 | 22.2 | 22.3 | 22.4 | 22.4 | 0.1% |
| Large Utility | 24.4 | 24.5 | 24.6 | 24.7 | 24.6 | 24.7 | 24.5 | 25.0 | 25.0 | 25.0 | 24.9 | 24.9 | 24.9 | 24.8 | 24.8 | 24.8 | 24.9 | 24.9 | 24.9 | 25.0 | 25.0 | 25.1 | 0.1% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 13.4 | 13.6 | 13.8 | 13.9 | 13.9 | 14.2 | 14.2 | 14.3 | 14.3 | 14.3 | 14.4 | 14.4 | 14.4 | 14.5 | 14.5 | 14.6 | 14.7 | 14.7 | 14.8 | 14.8 | 14.9 | 15.0 | 0.5% |
| Compact Cars | 16.9 | 17.2 | 17.4 | 17.4 | 17.5 | 17.8 | 17.8 | 17.9 | 17.9 | 17.8 | 17.7 | 17.6 | 17.6 | 17.9 | 18.0 | 18.0 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.4 | 0.4% |
| Midsized Cars | 19.6 | 19.9 | 20.1 | 20.1 | 20.2 | 20.5 | 20.5 | 20.5 | 20.5 | 20.5 | 20.4 | 20.3 | 20.2 | 20.2 | 20.1 | 20.1 | 20.1 | 20.2 | 20.2 | 20.3 | 20.4 | 20.4 | 0.2% |
| Large Cars | 22.7 | 23.0 | 23.1 | 23.2 | 23.3 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 0.2% |
| 2-Seater Cars | 21.0 | 21.3 | 21.4 | 21.5 | 21.5 | 21.8 | 21.8 | 21.8 | 21.8 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 22.0 | 22.0 | 22.1 | 22.2 | 22.2 | 22.3 | 22.3 | 0.3% |
| Small Pickup | 14.5 | 14.7 | 14.8 | 14.9 | 14.9 | 15.2 | 15.1 | 15.1 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 15.3 | 15.3 | 15.4 | 15.4 | 15.5 | 15.5 | 15.6 | 15.7 | 0.3% |
| Large Pickup | 18.0 | 18.1 | 18.2 | 18.2 | 18.3 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 18.5 | 18.6 | 18.6 | 0.1% |
| Small Van | 20.4 | 20.7 | 20.8 | 20.9 | 20.9 | 21.2 | 21.1 | 21.1 | 21.1 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.6 | 21.6 | 0.3% |
| Large Van | 18.3 | 18.4 | 18.5 | 18.6 | 18.6 | 18.9 | 18.9 | 18.8 | 18.8 | 18.8 | 18.8 | 18.7 | 18.7 | 18.7 | 18.7 | 18.6 | 18.7 | 18.7 | 18.7 | 18.7 | 18.8 | 18.8 | 0.1% |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol Flex | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 13.4 | 13.7 | 13.8 | 13.9 | 14.0 | 14.2 | 14.3 | 14.3 | 14.3 | 14.4 | 14.4 | 14.4 | 14.5 | 14.5 | 14.6 | 14.6 | 14.7 | 14.7 | 14.8 | 14.9 | 14.9 | 15.0 | 0.5% |
| Compact Cars | 16.8 | 17.1 | 17.3 | 17.3 | 17.4 | 17.7 | 17.7 | 17.8 | 17.8 | 17.8 | 17.9 | 17.9 | 17.9 | 18.0 | 18.0 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.4 | 0.4% |
| Midsized Cars | 19.1 | 19.4 | 19.5 | 19.6 | 19.7 | 19.9 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.1 | 20.1 | 20.2 | 19.8 | 19.9 | 20.0 | 20.0 | 20.1 | 0.2% |
| Large Cars | 22.7 | 23.0 | 23.1 | 23.2 | 23.3 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 23.8 | 0.2% |
| 2-Seater Cars | 21.1 | 21.3 | 21.5 | 21.5 | 21.6 | 21.8 | 21.8 | 21.9 | 21.9 | 21.9 | 21.9 | 21.9 | 22.0 | 22.0 | 22.0 | 22.1 | 22.1 | 22.2 | 22.2 | 22.3 | 22.4 | 22.4 | 0.3% |
| Small Pickup | 14.5 | 14.5 | 14.6 | 14.5 | 14.5 | 14.8 | 14.8 | 14.8 | 14.8 | 14.9 | 15.0 | 15.0 | 15.1 | 15.2 | 15.3 | 15.4 | 15.5 | 15.6 | 15.6 | 15.7 | 15.7 | 15.8 | 0.4% |
| Large Pickup | 18.2 | 18.2 | 18.2 | 18.2 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | 18.7 | 18.7 | 18.8 | 0.1% |
| Small Van | 20.5 | 20.8 | 21.0 | 21.0 | 21.0 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.5 | 21.6 | 21.6 | 21.7 | 21.8 | 0.3% |
| Large Van | 18.5 | 18.5 | 18.7 | 18.7 | 18.8 | 19.1 | 19.0 | 19.0 | 19.0 | 19.0 | 18.9 | 18.9 | 18.9 | 18.9 | 18.8 | 18.8 | 18.8 | 18.9 | 18.9 | 18.9 | 19.0 | 19.0 | 0.1% |
| Small Utility | 21.3 | 21.3 | 21.4 | 21.3 | 21.3 | 21.6 | 21.6 | 21.5 | 21.5 | 21.6 | 21.6 | 21.6 | 21.6 | 21.6 | 21.6 | 21.7 | 21.7 | 21.8 | 21.9 | 22.0 | 22.1 | 22.2 | 0.2% |
| Large Utility | 24.0 | 24.1 | 24.2 | 24.3 | 24.3 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.6 | 24.5 | 24.5 | 24.5 | 24.5 | 24.5 | 24.6 | 24.6 | 24.6 | 24.7 | 24.8 | 0.1% |

Table 58. New Light-Duty Vehicle Prices (3 of 4)
(Thousands 1990 Dollars)

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998-2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|
| Liquefied Petroleum Gas (LPG) | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 15.1 | 15.4 | 15.5 | 15.6 | 15.7 | 15.9 | 16.0 | 16.0 | 16.0 | 16.1 | 16.1 | 16.2 | 16.2 | 16.3 | 16.3 | 16.4 | 16.4 | 16.5 | 16.5 | 16.6 | 16.7 | 16.7 | 0.5% |
| Compact Cars | 19.1 | 19.3 | 19.5 | 19.6 | 19.6 | 19.9 | 19.9 | 20.0 | 20.0 | 20.0 | 20.1 | 20.1 | 20.2 | 20.2 | 20.3 | 20.3 | 20.4 | 20.4 | 20.5 | 20.6 | 20.6 | 20.7 | 0.4% |
| Midsize Cars | 22.5 | 22.8 | 23.0 | 23.0 | 23.0 | 23.3 | 23.3 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.5 | 23.5 | 23.5 | 23.6 | 23.6 | 23.7 | 23.7 | 23.8 | 23.9 | 0.3% |
| Large Cars | 23.8 | 24.1 | 24.2 | 24.3 | 24.4 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.8 | 24.8 | 24.9 | 0.2% |
| 2-Seater Cars | 21.6 | 21.8 | 22.0 | 22.0 | 22.1 | 22.3 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 22.4 | 22.5 | 22.5 | 22.5 | 22.6 | 22.7 | 22.7 | 22.7 | 22.8 | 22.9 | 22.9 | 0.3% |
| Small Pickup | 17.4 | 17.6 | 17.7 | 17.8 | 17.8 | 18.0 | 18.0 | 18.0 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.1 | 18.2 | 18.2 | 18.3 | 18.3 | 18.4 | 18.5 | 18.5 | 0.3% |
| Large Pickup | 21.6 | 21.7 | 21.8 | 21.9 | 21.9 | 22.2 | 22.2 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.2 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.0 | 22.1 | 22.2 | 22.2 | 0.1% |
| Small Van | 23.3 | 23.6 | 23.7 | 23.7 | 23.8 | 24.1 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.1 | 24.1 | 24.2 | 24.2 | 24.3 | 24.4 | 24.4 | 24.5 | 0.2% |
| Large Van | 21.9 | 22.0 | 22.1 | 22.2 | 22.2 | 22.5 | 22.5 | 22.5 | 22.5 | 22.4 | 22.4 | 22.4 | 22.3 | 22.3 | 22.3 | 22.2 | 22.3 | 22.3 | 22.3 | 22.3 | 22.4 | 22.4 | 0.1% |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| LPG Bi-Fuel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Compact Cars | 20.1 | 20.3 | 20.5 | 20.6 | 20.6 | 20.9 | 20.9 | 21.0 | 21.0 | 21.0 | 21.1 | 21.1 | 21.2 | 21.2 | 21.3 | 21.3 | 21.4 | 21.4 | 21.5 | 21.6 | 21.6 | 21.7 | 0.4% |
| Midsize Cars | 23.5 | 23.8 | 24.0 | 24.0 | 24.0 | 24.3 | 24.3 | 24.4 | 24.4 | 24.4 | 24.4 | 24.4 | 24.4 | 24.5 | 24.5 | 24.5 | 24.6 | 24.6 | 24.7 | 24.7 | 24.8 | 24.9 | 0.3% |
| Large Cars | 24.8 | 25.1 | 25.2 | 25.3 | 25.4 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.7 | 25.8 | 25.8 | 25.9 | 0.2% |
| 2-Seater Cars | 22.6 | 22.8 | 23.0 | 23.0 | 23.1 | 23.3 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 23.5 | 23.5 | 23.5 | 23.6 | 23.7 | 23.7 | 23.7 | 23.8 | 23.9 | 23.9 | 0.3% |
| Small Pickup | 18.4 | 18.6 | 18.7 | 18.8 | 18.8 | 19.0 | 19.0 | 19.0 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | 19.2 | 19.2 | 19.3 | 19.3 | 19.4 | 19.5 | 19.5 | 0.3% |
| Large Pickup | 22.6 | 22.7 | 22.8 | 22.9 | 22.9 | 23.2 | 23.2 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.0 | 23.1 | 23.2 | 23.2 | 0.1% |
| Small Van | 24.3 | 24.6 | 24.7 | 24.7 | 24.8 | 25.1 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.1 | 25.1 | 25.2 | 25.2 | 25.3 | 25.4 | 25.4 | 25.5 | 0.2% |
| Large Van | 22.9 | 23.0 | 23.1 | 23.2 | 23.2 | 23.5 | 23.5 | 23.5 | 23.5 | 23.4 | 23.4 | 23.4 | 23.3 | 23.3 | 23.3 | 23.2 | 23.3 | 23.3 | 23.3 | 23.3 | 23.4 | 23.4 | 0.1% |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Electric | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 28.0 | 28.0 | 28.0 | 27.8 | 28.2 | 28.9 | 29.2 | 29.5 | 29.8 | 29.5 | 29.3 | 29.1 | 28.9 | 28.7 | 28.5 | 28.4 | 28.2 | 28.3 | 28.4 | 28.4 | 28.4 | 28.5 | 0.1% |
| Compact Cars | 32.7 | 32.7 | 32.7 | 32.4 | 32.8 | 33.6 | 33.9 | 34.3 | 34.6 | 34.3 | 34.0 | 33.7 | 33.5 | 33.2 | 33.1 | 32.9 | 32.7 | 32.8 | 32.8 | 32.9 | 32.9 | 33.0 | 0.0% |
| Midsize Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| 2-Seater Cars | 33.7 | 33.7 | 33.6 | 33.4 | 23.8 | 24.6 | 25.0 | 25.4 | 25.7 | 25.4 | 25.1 | 24.8 | 24.6 | 24.3 | 24.1 | 24.0 | 23.8 | 23.8 | 23.9 | 23.9 | 24.0 | 24.0 | -1.5% |
| Small Pickup | 31.4 | 31.4 | 31.3 | 31.1 | 31.5 | 32.3 | 32.8 | 33.2 | 33.6 | 33.3 | 33.0 | 32.7 | 32.5 | 32.3 | 32.1 | 31.9 | 31.8 | 31.8 | 31.9 | 32.0 | 32.1 | 32.1 | 0.1% |
| Large Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Small Van | 38.4 | 38.3 | 38.2 | 37.9 | 38.4 | 39.2 | 39.7 | 40.1 | 40.6 | 40.3 | 39.9 | 39.6 | 39.3 | 39.0 | 38.8 | 38.6 | 38.4 | 38.5 | 38.6 | 38.7 | 38.8 | 38.9 | 0.1% |
| Large Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Diesel-Electric Hybrid | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 39.5 | 39.8 | 39.9 | 39.9 | 25.3 | 25.4 | 25.3 | 25.3 | 25.2 | 25.2 | 25.1 | 25.1 | 25.0 | 25.0 | 25.0 | 25.1 | 25.1 | 25.1 | 25.2 | 25.3 | 25.4 | 25.4 | -2.0% |
| Compact Cars | 46.4 | 46.7 | 46.8 | 46.8 | 29.7 | 29.9 | 29.8 | 29.7 | 29.6 | 29.5 | 29.5 | 29.4 | 29.3 | 29.3 | 29.3 | 29.3 | 29.4 | 29.5 | 29.5 | 29.6 | 29.7 | 29.7 | -2.0% |
| Midsize Cars | 52.1 | 52.4 | 52.5 | 52.4 | 32.9 | 33.0 | 32.9 | 32.7 | 32.6 | 32.5 | 32.4 | 32.3 | 32.2 | 32.1 | 32.1 | 32.1 | 32.1 | 32.2 | 32.2 | 32.3 | 32.3 | 32.4 | -2.1% |
| Large Cars | 56.5 | 56.7 | 56.8 | 56.7 | 34.8 | 34.9 | 34.7 | 34.6 | 34.4 | 34.2 | 34.1 | 33.9 | 33.8 | 33.7 | 33.7 | 33.6 | 33.6 | 33.6 | 33.7 | 33.8 | 33.8 | 33.9 | -2.3% |
| 2-Seater Cars | 48.7 | 49.0 | 49.1 | 49.1 | 30.6 | 30.7 | 30.6 | 30.4 | 30.3 | 30.2 | 30.0 | 29.9 | 29.8 | 29.8 | 29.7 | 29.7 | 29.6 | 29.7 | 29.7 | 29.8 | 29.9 | 29.9 | -2.2% |
| Small Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Large Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Small Van | 56.9 | 57.1 | 57.3 | 57.2 | 34.5 | 34.6 | 34.4 | 34.2 | 34.1 | 33.9 | 33.8 | 33.6 | 33.5 | 33.4 | 33.4 | 33.3 | 33.3 | 33.4 | 33.4 | 33.5 | 33.5 | 33.6 | -2.4% |
| Large Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Small Utility | 59.5 | 59.7 | 59.8 | 59.7 | 36.2 | 36.3 | 36.1 | 35.9 | 35.8 | 35.6 | 35.5 | 35.3 | 35.2 | 35.1 | 35.0 | 34.9 | 34.9 | 34.9 | 35.0 | 35.1 | 35.1 | 35.2 | -2.4% |
| Large Utility | 67.8 | 67.8 | 67.9 | 67.9 | 39.2 | 39.3 | 39.0 | 38.8 | 38.5 | 38.3 | 38.1 | 37.9 | 37.7 | 37.6 | 37.5 | 37.4 | 37.3 | 37.4 | 37.4 | 37.5 | 37.5 | 37.6 | -2.6% |

**Table 58. New Light-Duty Vehicle Prices (4 of 4)
(Thousands 1990 Dollars)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 | |
|--------------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|-----|
| Fuel Cell Methanol | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Compact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 74.8 | 68.2 | 62.5 | 57.6 | 53.3 | 49.6 | 46.4 | 43.7 | 41.4 | 39.4 | 37.7 | 36.3 | 35.1 | 34.0 | 33.1 | 32.3 | N/A | |
| Midsize Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 84.2 | 76.7 | 70.2 | 64.5 | 59.6 | 55.4 | 51.8 | 48.6 | 46.0 | 43.7 | 41.8 | 40.1 | 38.7 | 37.5 | 36.4 | 35.5 | N/A | |
| Large Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 92.0 | 83.5 | 76.2 | 70.0 | 64.5 | 59.8 | 55.8 | 52.3 | 49.4 | 46.9 | 44.7 | 42.8 | 41.2 | 39.8 | 38.6 | 37.6 | N/A | |
| 2-Seater Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 78.9 | 71.9 | 65.8 | 60.5 | 55.9 | 52.0 | 48.6 | 45.6 | 43.1 | 41.0 | 39.2 | 37.6 | 36.3 | 35.1 | 34.1 | 33.2 | N/A | |
| Small Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 79.7 | 72.4 | 65.9 | 60.4 | 55.6 | 51.3 | 47.7 | 44.6 | 42.0 | 39.7 | 37.7 | 36.0 | 34.5 | 33.2 | 32.1 | 31.2 | N/A | |
| Large Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 93.6 | 85.0 | 77.6 | 71.3 | 65.7 | 60.9 | 56.7 | 53.1 | 50.1 | 47.5 | 45.2 | 43.2 | 41.5 | 40.1 | 38.8 | 37.7 | N/A | |
| Large Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Hydrogen | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Compact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65.4 | 60.8 | 56.9 | 53.5 | 50.5 | 47.9 | 45.7 | 43.9 | 42.3 | 40.9 | 39.7 | 38.7 | 37.9 | 37.2 | 36.5 | 36.0 | N/A | |
| Midsize Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 72.8 | 67.5 | 63.0 | 59.1 | 55.7 | 52.7 | 50.2 | 48.0 | 46.2 | 44.7 | 43.3 | 42.2 | 41.2 | 40.4 | 39.7 | 39.0 | N/A | |
| Large Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 78.6 | 72.7 | 67.6 | 63.3 | 59.5 | 56.2 | 53.5 | 51.0 | 49.0 | 47.3 | 45.7 | 44.5 | 43.4 | 42.4 | 41.6 | 40.9 | N/A | |
| 2-Seater Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 68.5 | 63.6 | 59.4 | 55.7 | 52.5 | 49.7 | 47.4 | 45.3 | 43.6 | 42.2 | 40.9 | 39.8 | 38.9 | 38.1 | 37.4 | 36.8 | N/A | |
| Small Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Large Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 79.5 | 73.6 | 68.5 | 64.0 | 60.2 | 56.8 | 53.9 | 51.4 | 49.3 | 47.5 | 46.0 | 44.6 | 43.5 | 42.5 | 41.6 | 40.8 | N/A | |
| Large Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Fuel Cell Gasoline | | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Subcompact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A |
| Compact Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 82.1 | 74.5 | 67.9 | 62.2 | 57.3 | 53.1 | 49.4 | 46.3 | 43.6 | 41.3 | 39.4 | 37.7 | 36.3 | 35.0 | 34.0 | 33.0 | N/A | |
| Midsize Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 92.6 | 83.9 | 76.4 | 69.9 | 64.2 | 59.3 | 55.2 | 51.6 | 48.5 | 45.9 | 43.6 | 41.7 | 40.0 | 38.6 | 37.4 | 36.4 | N/A | |
| Large Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 101.3 | 91.5 | 83.1 | 75.9 | 69.7 | 64.2 | 59.6 | 55.6 | 52.2 | 49.3 | 46.7 | 44.6 | 42.7 | 41.1 | 39.8 | 38.6 | N/A | |
| 2-Seater Cars | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 86.8 | 78.7 | 71.6 | 65.6 | 60.3 | 55.7 | 51.8 | 48.4 | 45.5 | 43.1 | 40.9 | 39.1 | 37.6 | 36.2 | 35.1 | 34.1 | N/A | |
| Small Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Large Pickup | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 103.2 | 93.4 | 84.8 | 77.5 | 71.1 | 65.5 | 60.7 | 56.6 | 53.1 | 50.0 | 47.4 | 45.1 | 43.2 | 41.5 | 40.0 | 38.8 | N/A | |
| Large Van | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Small Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |
| Large Utility | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | N/A | |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.

**Table 59. New Light-Duty Vehicle Range (1 of 4)
(Miles)**

1998-

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Gasoline | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 468 | 478 | 480 | 486 | 500 | 500 | 505 | 511 | 517 | 522 | 527 | 529 | 531 | 533 | 534 | 534 | 535 | 536 | 536 | 537 | 537 | 537 | 0.6% |
| Subcompact Cars | 463 | 472 | 473 | 476 | 485 | 485 | 486 | 488 | 491 | 493 | 496 | 498 | 500 | 500 | 500 | 498 | 497 | 496 | 495 | 495 | 494 | 492 | 0.3% |
| Compact Cars | 460 | 470 | 471 | 474 | 487 | 487 | 488 | 491 | 494 | 498 | 500 | 503 | 507 | 507 | 507 | 506 | 505 | 504 | 504 | 503 | 502 | 501 | 0.4% |
| Midsized Cars | 458 | 467 | 468 | 472 | 482 | 482 | 484 | 487 | 492 | 496 | 499 | 503 | 507 | 508 | 508 | 508 | 507 | 507 | 507 | 507 | 507 | 507 | 0.5% |
| Large Cars | 501 | 508 | 509 | 515 | 529 | 529 | 532 | 537 | 542 | 548 | 553 | 559 | 567 | 569 | 571 | 572 | 572 | 572 | 573 | 574 | 575 | 575 | 0.6% |
| 2-Seater Cars | 463 | 471 | 473 | 477 | 489 | 489 | 492 | 497 | 501 | 505 | 509 | 511 | 514 | 514 | 515 | 515 | 515 | 515 | 515 | 515 | 515 | 514 | 0.5% |
| Small Pickup | 411 | 418 | 417 | 418 | 421 | 419 | 418 | 418 | 419 | 417 | 417 | 419 | 421 | 423 | 425 | 426 | 427 | 428 | 430 | 431 | 434 | 432 | 0.2% |
| Large Pickup | 398 | 401 | 401 | 401 | 404 | 402 | 403 | 407 | 409 | 409 | 411 | 415 | 419 | 423 | 426 | 429 | 432 | 435 | 438 | 441 | 445 | 444 | 0.5% |
| Small Van | 468 | 478 | 479 | 481 | 486 | 486 | 487 | 489 | 492 | 489 | 489 | 491 | 494 | 496 | 498 | 500 | 501 | 504 | 506 | 510 | 513 | 512 | 0.4% |
| Large Van | 436 | 445 | 448 | 454 | 462 | 462 | 466 | 472 | 478 | 479 | 482 | 488 | 493 | 498 | 502 | 506 | 509 | 513 | 517 | 522 | 527 | 527 | 0.9% |
| Small Utility | 415 | 425 | 425 | 428 | 434 | 433 | 433 | 436 | 440 | 439 | 440 | 443 | 446 | 449 | 451 | 454 | 455 | 457 | 459 | 461 | 464 | 464 | 0.5% |
| Large Utility | 402 | 410 | 412 | 416 | 422 | 422 | 425 | 431 | 437 | 437 | 441 | 447 | 452 | 456 | 459 | 461 | 464 | 467 | 471 | 474 | 478 | 478 | 0.8% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Turbo Direct Injection Diesel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Compact Cars | 598 | 612 | 612 | 615 | 632 | 631 | 632 | 635 | 639 | 643 | 646 | 648 | 652 | 652 | 651 | 649 | 648 | 647 | 646 | 645 | 643 | 641 | 0.3% |
| Midsized Cars | 622 | 635 | 636 | 641 | 655 | 654 | 657 | 662 | 667 | 672 | 676 | 680 | 684 | 685 | 685 | 684 | 683 | 683 | 683 | 683 | 682 | 682 | 0.4% |
| Large Cars | 691 | 700 | 701 | 709 | 729 | 729 | 732 | 739 | 745 | 753 | 760 | 769 | 779 | 782 | 784 | 785 | 785 | 786 | 787 | 789 | 789 | 790 | 0.6% |
| 2-Seater Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Pickup | 555 | 567 | 566 | 567 | 573 | 571 | 569 | 570 | 573 | 571 | 572 | 574 | 577 | 580 | 582 | 584 | 585 | 587 | 588 | 589 | 591 | 589 | 0.3% |
| Large Pickup | 542 | 546 | 545 | 546 | 549 | 546 | 549 | 553 | 557 | 556 | 560 | 565 | 570 | 575 | 579 | 583 | 587 | 591 | 596 | 601 | 606 | 605 | 0.5% |
| Small Van | 590 | 603 | 602 | 605 | 613 | 611 | 614 | 618 | 620 | 623 | 627 | 630 | 634 | 637 | 639 | 641 | 643 | 645 | 647 | 645 | 647 | 645 | 0.4% |
| Large Van | 588 | 601 | 605 | 613 | 624 | 623 | 629 | 638 | 646 | 646 | 651 | 659 | 666 | 672 | 678 | 683 | 687 | 693 | 698 | 705 | 712 | 712 | 0.9% |
| Small Utility | 548 | 561 | 561 | 565 | 572 | 571 | 571 | 575 | 580 | 580 | 582 | 586 | 590 | 594 | 597 | 600 | 603 | 605 | 607 | 609 | 612 | 611 | 0.5% |
| Large Utility | 638 | 651 | 654 | 660 | 669 | 670 | 675 | 685 | 693 | 695 | 701 | 709 | 717 | 723 | 728 | 733 | 737 | 742 | 748 | 753 | 759 | 758 | 0.8% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 292 | 298 | 298 | 299 | 305 | 305 | 305 | 306 | 307 | 309 | 310 | 311 | 313 | 313 | 312 | 311 | 310 | 310 | 309 | 309 | 308 | 307 | 0.2% |
| Compact Cars | 279 | 285 | 286 | 287 | 295 | 294 | 295 | 296 | 298 | 300 | 301 | 303 | 304 | 304 | 304 | 303 | 302 | 302 | 301 | 301 | 300 | 299 | 0.3% |
| Midsized Cars | 290 | 297 | 297 | 299 | 306 | 305 | 306 | 309 | 311 | 314 | 316 | 317 | 319 | 320 | 320 | 319 | 319 | 319 | 319 | 319 | 318 | 318 | 0.4% |
| Large Cars | 323 | 327 | 327 | 331 | 340 | 340 | 342 | 345 | 348 | 351 | 355 | 359 | 364 | 365 | 366 | 366 | 366 | 367 | 367 | 368 | 368 | 369 | 0.6% |
| 2-Seater Cars | 280 | 285 | 287 | 291 | 300 | 301 | 305 | 309 | 313 | 316 | 320 | 322 | 325 | 327 | 328 | 329 | 329 | 330 | 331 | 331 | 332 | 333 | 0.8% |
| Small Pickup | 259 | 265 | 264 | 265 | 267 | 266 | 266 | 266 | 267 | 267 | 267 | 268 | 269 | 270 | 272 | 272 | 273 | 274 | 274 | 275 | 276 | 275 | 0.3% |
| Large Pickup | 253 | 255 | 254 | 255 | 256 | 255 | 256 | 258 | 260 | 260 | 261 | 264 | 266 | 269 | 270 | 272 | 274 | 276 | 278 | 280 | 283 | 282 | 0.5% |
| Small Van | 275 | 281 | 281 | 282 | 286 | 285 | 285 | 286 | 289 | 288 | 289 | 291 | 292 | 294 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 301 | 0.4% |
| Large Van | 275 | 281 | 282 | 286 | 291 | 291 | 293 | 298 | 301 | 302 | 304 | 307 | 311 | 314 | 316 | 319 | 321 | 323 | 326 | 329 | 332 | 332 | 0.9% |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Methanol Flex | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 264 | 269 | 270 | 271 | 276 | 276 | 276 | 277 | 278 | 279 | 281 | 282 | 283 | 283 | 283 | 282 | 281 | 280 | 280 | 279 | 279 | 278 | 0.2% |
| Compact Cars | 253 | 258 | 258 | 260 | 267 | 266 | 267 | 268 | 270 | 272 | 273 | 274 | 275 | 275 | 274 | 273 | 273 | 273 | 273 | 272 | 272 | 271 | 0.3% |
| Midsized Cars | 263 | 268 | 269 | 271 | 276 | 276 | 277 | 279 | 282 | 284 | 285 | 287 | 289 | 289 | 289 | 289 | 288 | 288 | 288 | 288 | 288 | 288 | 0.4% |
| Large Cars | 292 | 296 | 296 | 299 | 308 | 308 | 309 | 312 | 315 | 318 | 321 | 325 | 329 | 330 | 331 | 331 | 332 | 332 | 332 | 333 | 333 | 334 | 0.6% |
| 2-Seater Cars | 253 | 258 | 260 | 263 | 272 | 273 | 276 | 279 | 283 | 286 | 289 | 292 | 294 | 296 | 297 | 297 | 298 | 299 | 299 | 300 | 300 | 301 | 0.8% |
| Small Pickup | 234 | 239 | 239 | 240 | 242 | 241 | 240 | 241 | 242 | 241 | 242 | 243 | 244 | 245 | 246 | 246 | 247 | 248 | 248 | 249 | 249 | 249 | 0.3% |
| Large Pickup | 229 | 231 | 230 | 230 | 232 | 231 | 232 | 234 | 235 | 235 | 236 | 239 | 241 | 243 | 245 | 246 | 248 | 250 | 252 | 254 | 256 | 255 | 0.5% |
| Small Van | 249 | 255 | 254 | 255 | 259 | 258 | 259 | 261 | 261 | 262 | 263 | 265 | 266 | 266 | 268 | 269 | 270 | 271 | 272 | 272 | 273 | 273 | 0.4% |
| Large Van | 248 | 254 | 256 | 259 | 263 | 263 | 265 | 269 | 273 | 273 | 275 | 278 | 281 | 284 | 286 | 288 | 290 | 292 | 295 | 298 | 300 | 300 | 0.9% |
| Small Utility | 231 | 237 | 237 | 238 | 242 | 241 | 241 | 243 | 245 | 245 | 246 | 247 | 249 | 251 | 252 | 254 | 255 | 255 | 256 | 257 | 258 | 258 | 0.5% |
| Large Utility | 269 | 275 | 276 | 279 | 283 | 283 | 285 | 289 | 293 | 293 | 296 | 300 | 303 | 305 | 307 | 309 | 311 | 313 | 316 | 318 | 320 | 320 | 0.8% |

**Table 59. New Light-Duty Vehicle Range (3 of 4)
(Miles)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Liquefied Petroleum Gas (LPG) | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 394 | 401 | 402 | 404 | 411 | 411 | 411 | 413 | 414 | 416 | 419 | 420 | 422 | 422 | 422 | 420 | 419 | 418 | 417 | 417 | 416 | 414 | 0.2% |
| Compact Cars | 377 | 385 | 385 | 387 | 398 | 397 | 398 | 400 | 402 | 405 | 407 | 408 | 410 | 411 | 410 | 409 | 408 | 407 | 407 | 406 | 405 | 404 | 0.3% |
| Midsized Cars | 392 | 400 | 401 | 403 | 412 | 412 | 413 | 417 | 420 | 423 | 426 | 428 | 431 | 431 | 431 | 431 | 430 | 430 | 430 | 430 | 430 | 429 | 0.4% |
| Large Cars | 435 | 441 | 441 | 446 | 459 | 459 | 461 | 465 | 469 | 474 | 478 | 484 | 491 | 492 | 494 | 494 | 494 | 495 | 496 | 496 | 497 | 497 | 0.6% |
| 2-Seater Cars | 378 | 384 | 387 | 393 | 405 | 406 | 411 | 417 | 422 | 427 | 431 | 435 | 439 | 441 | 442 | 443 | 445 | 445 | 446 | 447 | 448 | 449 | 0.8% |
| Small Pickup | 349 | 357 | 356 | 357 | 361 | 359 | 358 | 359 | 361 | 360 | 360 | 362 | 363 | 365 | 366 | 368 | 369 | 369 | 370 | 371 | 372 | 371 | 0.3% |
| Large Pickup | 341 | 344 | 343 | 344 | 346 | 344 | 345 | 348 | 351 | 350 | 352 | 356 | 359 | 362 | 365 | 367 | 370 | 372 | 375 | 378 | 381 | 381 | 0.5% |
| Small Van | 371 | 380 | 379 | 381 | 386 | 385 | 385 | 386 | 389 | 389 | 390 | 392 | 395 | 397 | 399 | 401 | 402 | 404 | 405 | 406 | 407 | 406 | 0.4% |
| Large Van | 370 | 379 | 381 | 386 | 393 | 392 | 396 | 401 | 407 | 407 | 410 | 415 | 419 | 423 | 427 | 430 | 433 | 436 | 440 | 444 | 448 | 448 | 0.9% |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| LPG Bi-Fuel | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Compact Cars | 355 | 362 | 363 | 364 | 374 | 374 | 374 | 376 | 379 | 381 | 383 | 384 | 386 | 386 | 386 | 385 | 384 | 383 | 383 | 382 | 381 | 380 | 0.3% |
| Midsized Cars | 369 | 377 | 377 | 380 | 388 | 388 | 389 | 392 | 395 | 398 | 401 | 403 | 405 | 406 | 406 | 405 | 405 | 405 | 405 | 404 | 404 | 404 | 0.4% |
| Large Cars | 410 | 415 | 415 | 420 | 432 | 432 | 434 | 438 | 442 | 446 | 450 | 455 | 462 | 463 | 465 | 465 | 465 | 466 | 467 | 467 | 468 | 468 | 0.6% |
| 2-Seater Cars | 355 | 361 | 364 | 370 | 381 | 382 | 387 | 392 | 397 | 402 | 406 | 409 | 413 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 422 | 0.8% |
| Small Pickup | 329 | 336 | 335 | 336 | 339 | 338 | 337 | 338 | 339 | 339 | 339 | 340 | 342 | 343 | 345 | 346 | 347 | 348 | 348 | 349 | 350 | 349 | 0.3% |
| Large Pickup | 321 | 324 | 323 | 323 | 325 | 324 | 325 | 328 | 330 | 330 | 332 | 335 | 338 | 341 | 343 | 346 | 348 | 350 | 353 | 356 | 359 | 358 | 0.5% |
| Small Van | 350 | 357 | 357 | 358 | 363 | 362 | 362 | 364 | 366 | 366 | 367 | 369 | 371 | 374 | 376 | 377 | 379 | 380 | 381 | 382 | 383 | 383 | 0.4% |
| Large Van | 349 | 356 | 359 | 364 | 370 | 369 | 372 | 378 | 383 | 383 | 386 | 390 | 394 | 398 | 402 | 405 | 407 | 410 | 414 | 418 | 422 | 422 | 0.9% |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Electric | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | N/A |
| Compact Cars | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | N/A |
| Midsized Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| 2-Seater Cars | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | N/A |
| Small Pickup | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | N/A |
| Large Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Van | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | N/A |
| Large Van | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Diesel-Electric Hybrid | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 603 | 614 | 615 | 618 | 629 | 629 | 629 | 631 | 634 | 637 | 640 | 642 | 645 | 646 | 645 | 642 | 640 | 639 | 638 | 637 | 636 | 634 | 0.2% |
| Compact Cars | 576 | 589 | 589 | 592 | 608 | 608 | 608 | 612 | 615 | 619 | 622 | 624 | 628 | 628 | 627 | 625 | 624 | 623 | 622 | 621 | 619 | 618 | 0.3% |
| Midsized Cars | 599 | 612 | 613 | 617 | 631 | 630 | 632 | 637 | 642 | 647 | 651 | 654 | 659 | 659 | 659 | 659 | 658 | 658 | 657 | 657 | 657 | 656 | 0.4% |
| Large Cars | 666 | 674 | 675 | 683 | 702 | 702 | 705 | 711 | 718 | 725 | 732 | 740 | 750 | 753 | 755 | 756 | 756 | 757 | 758 | 759 | 760 | 761 | 0.6% |
| 2-Seater Cars | 578 | 587 | 592 | 601 | 620 | 622 | 629 | 637 | 645 | 653 | 660 | 665 | 672 | 674 | 676 | 678 | 680 | 681 | 683 | 684 | 685 | 686 | 0.8% |
| Small Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Van | 568 | 581 | 580 | 582 | 590 | 589 | 588 | 591 | 595 | 595 | 597 | 600 | 604 | 607 | 610 | 613 | 615 | 617 | 619 | 621 | 623 | 622 | 0.4% |
| Large Van | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Utility | 527 | 540 | 540 | 544 | 551 | 550 | 550 | 553 | 558 | 558 | 560 | 564 | 568 | 572 | 575 | 578 | 581 | 583 | 585 | 587 | 589 | 589 | 0.5% |
| Large Utility | 614 | 627 | 629 | 636 | 645 | 645 | 650 | 659 | 668 | 669 | 675 | 683 | 691 | 697 | 701 | 706 | 710 | 715 | 720 | 725 | 731 | 730 | 0.8% |

**Table 59. New Light-Duty Vehicle Range (4 of 4)
(Miles)**

| | 1998 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 1998- 2020 |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---------------|
| Fuel Cell Methanol | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Compact Cars | 443 | 453 | 453 | 456 | 468 | 467 | 468 | 470 | 473 | 476 | 478 | 480 | 483 | 483 | 482 | 481 | 480 | 479 | 478 | 478 | 476 | 475 | 0.3% |
| Midsized Cars | 461 | 471 | 471 | 475 | 485 | 485 | 486 | 490 | 494 | 498 | 501 | 503 | 507 | 507 | 507 | 507 | 506 | 506 | 506 | 506 | 505 | 505 | 0.4% |
| Large Cars | 512 | 519 | 519 | 525 | 540 | 540 | 542 | 547 | 552 | 558 | 563 | 569 | 577 | 579 | 581 | 582 | 582 | 582 | 583 | 584 | 585 | 585 | 0.6% |
| 2-Seater Cars | 444 | 452 | 456 | 462 | 477 | 478 | 484 | 490 | 497 | 502 | 507 | 512 | 517 | 518 | 520 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 0.8% |
| Small Pickup | 411 | 420 | 419 | 420 | 424 | 423 | 421 | 422 | 424 | 423 | 424 | 425 | 427 | 429 | 431 | 432 | 434 | 434 | 436 | 437 | 438 | 437 | 0.3% |
| Large Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Van | 437 | 447 | 446 | 448 | 454 | 453 | 452 | 455 | 458 | 457 | 459 | 461 | 464 | 467 | 470 | 472 | 473 | 475 | 476 | 478 | 479 | 478 | 0.4% |
| Large Van | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Fuel Cell Hydrogen | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Compact Cars | 443 | 453 | 453 | 456 | 468 | 467 | 468 | 470 | 473 | 476 | 478 | 480 | 483 | 483 | 482 | 481 | 480 | 479 | 478 | 478 | 476 | 475 | 0.3% |
| Midsized Cars | 461 | 471 | 471 | 475 | 485 | 485 | 486 | 490 | 494 | 498 | 501 | 503 | 507 | 507 | 507 | 507 | 506 | 506 | 506 | 506 | 505 | 505 | 0.4% |
| Large Cars | 512 | 519 | 519 | 525 | 540 | 540 | 542 | 547 | 552 | 558 | 563 | 569 | 577 | 579 | 581 | 582 | 582 | 582 | 583 | 584 | 585 | 585 | 0.6% |
| 2-Seater Cars | 444 | 452 | 456 | 462 | 477 | 478 | 484 | 490 | 497 | 502 | 507 | 512 | 517 | 518 | 520 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 0.8% |
| Small Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Van | 437 | 447 | 446 | 448 | 454 | 453 | 452 | 455 | 458 | 457 | 459 | 461 | 464 | 467 | 470 | 472 | 473 | 475 | 476 | 478 | 479 | 478 | 0.4% |
| Large Van | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Fuel Cell Gasoline | | | | | | | | | | | | | | | | | | | | | | | |
| Minicompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Subcompact Cars | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Compact Cars | 443 | 453 | 453 | 456 | 468 | 467 | 468 | 470 | 473 | 476 | 478 | 480 | 483 | 483 | 482 | 481 | 480 | 479 | 478 | 478 | 476 | 475 | 0.3% |
| Midsized Cars | 461 | 471 | 471 | 475 | 485 | 485 | 486 | 490 | 494 | 498 | 501 | 503 | 507 | 507 | 507 | 507 | 506 | 506 | 506 | 506 | 505 | 505 | 0.4% |
| Large Cars | 512 | 519 | 519 | 525 | 540 | 540 | 542 | 547 | 552 | 558 | 563 | 569 | 577 | 579 | 581 | 582 | 582 | 582 | 583 | 584 | 585 | 585 | 0.6% |
| 2-Seater Cars | 444 | 452 | 456 | 462 | 477 | 478 | 484 | 490 | 497 | 502 | 507 | 512 | 517 | 518 | 520 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 0.8% |
| Small Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Pickup | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Van | 437 | 447 | 446 | 448 | 454 | 453 | 452 | 455 | 458 | 457 | 459 | 461 | 464 | 467 | 470 | 472 | 473 | 475 | 476 | 478 | 479 | 478 | 0.4% |
| Large Van | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Small Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |
| Large Utility | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N/A |

N/A = Not applicable.

Note: The historical data used for the projections were the most available as of July 31, 1999. The numbers presented for 1998 are estimates and may differ from official EIA data reports. Also, please see EIA data publications and the Short-Term Energy Outlook for the latest estimates for 1999.

Sources: 1998 derived using: Energy and Environmental Analysis Inc., Updates to the Fuels Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and and EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A. Projection: EIA, AEO2000 National Energy Modeling System run AEO2K.D100199A.