

Supplemental Tables to the Annual Energy Outlook 2006

Part II Transportation Demand Sector Data



Energy Information Administration

Supplemental Tables to the Annual Energy Outlook 2006

Table 33. Transportation Sector Energy Use by Mode and Type
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Use by Mode														
Highway														
Light-Duty Vehicles	15901.8	16210.4	16277.3	16399.3	16746.4	17041.2	17366.8	17709.9	17989.6	18248.2	18491.8	18750.9	19001.7	19242.7
Automobiles	9030.1	8973.7	8861.9	8837.3	8920	8985.4	9037.9	9064	9074.7	9075.7	9074.5	9080.7	9085.1	9091.6
Light Trucks	6845.8	7211	7389.9	7536.6	7800.7	8030	8303	8619.9	8888.9	9146.5	9391.2	9644.1	9890.5	10125
Motorcycles	25.9	25.8	25.5	25.4	25.6	25.8	25.9	26	26	26	26	26	26	26.1
Commercial Light Trucks 1/	588.7	610.7	619.5	626.9	634.4	642.7	649.8	657.6	666.3	674.7	682.7	692	701.7	711.3
Buses	262.6	265.3	263.1	264.6	267.6	271.1	275	279.1	281.4	283.2	284.5	285.5	285.9	286.2
Transit	91.2	92.2	91.4	91.9	93	94.2	95.6	97	97.8	98.4	98.9	99.2	99.4	99.4
Intercity	47.4	47.9	47.5	47.8	48.3	48.9	49.7	50.4	50.8	51.1	51.4	51.5	51.6	51.7
School	123.9	125.2	124.2	124.9	126.3	128	129.8	131.7	132.8	133.7	134.3	134.7	135	135.1
Freight Trucks 2/	4504.1	4695.8	4770.2	4903.7	5048.8	5163.5	5286.4	5415.6	5541.7	5652.3	5745.8	5833.5	5919.3	6005.4
Medium (1000-26000 pounds)	731.5	748.6	745	748.6	759.6	768.5	782.1	798.4	817.6	835.8	853.1	871.8	892	912.8
Large (> 26000 pounds)	3772.6	3947.2	4025.2	4155.1	4289.2	4395	4504.3	4617.2	4724.2	4816.4	4892.6	4961.7	5027.3	5092.5
Non-Highway														
Air 3/	2756.4	2823.1	2813.8	2883.4	3001.2	3086.1	3185.1	3317.1	3442.5	3511.6	3572.6	3628.7	3679.7	3737.6
General Aviation	159.8	164	165.4	164.9	171.6	175.4	180	186.2	192	195.2	198.1	200.7	203.1	205.8
Domestic Air Carriers	1520.8	1530.4	1495.8	1486.9	1493.7	1526.9	1561.1	1609	1648.3	1655	1658.2	1662.9	1663.6	1663
International Air Carriers	490.5	515.6	551.5	590.5	623.5	659.1	695	730.3	762.9	775.2	786	792.6	800.2	809.1
Freight Carriers	585.2	613.1	601.1	641.1	712.4	724.6	749	791.7	839.2	886.1	930.4	972.4	1012.8	1059.7
Water 4/	952.3	1010	1061.7	1067.9	1060.9	1054.4	1048.7	1041.3	1046.3	1051	1056.5	1060.7	1066.2	1073
Freight	788.9	844.7	894.2	899.5	892.1	885	879	871.2	875.5	879.5	884.2	887.7	892.3	898.3
Domestic Shipping	281	295.7	303.9	308.3	310.2	312.3	315.5	317.1	320.6	323.8	327.7	330.4	334.1	339.3
International Shipping	507.8	549	590.3	591.1	581.9	572.7	563.5	554.1	554.9	555.7	556.5	557.3	558.1	559
Recreational Boats	163.4	165.3	167.4	168.4	168.8	169.3	169.8	170.1	170.8	171.5	172.2	173.1	173.9	174.8
Rail	646.2	664.2	667.4	682.1	696.8	706.7	720.3	729.3	742.5	750.8	756.3	761.9	768.1	780.4
Freight	513.2	530	533.9	547.9	561.4	569.9	581.8	588.9	600.8	607.8	612.2	616.4	621.3	632.3
Passenger	133	134.2	133.5	134.1	135.4	136.8	138.6	140.4	141.7	143	144.2	145.5	146.8	148
Intercity	41.6	42	41.7	41.9	42.3	42.8	43.3	43.9	44.3	44.7	45.1	45.5	45.9	46.3
Transit	49.6	50	49.9	50.1	50.5	51.1	51.7	52.3	52.8	53.3	53.7	54.2	54.7	55.2
Commuter	41.8	42.2	41.9	42.1	42.5	43	43.6	44.2	44.6	44.9	45.3	45.7	46.1	46.5
Lubricants	150	146	144	146	146.7	147.3	147.8	148.2	148.8	149.4	149.9	150.4	150.9	151.4
Pipeline Fuel Natural Gas	685.6	686.4	720.9	700.7	680.3	673.9	663.2	647.3	655.9	668.8	681	687	735.4	780.8
Military Use														
Aviation	538.6	562.9	581.1	594.7	599.7	602.2	604.1	605.8	609.2	612.6	615.8	619.2	622.7	626.6
Residual Fuel Use	20.2	21	23.2	23.8	23.6	23.3	22.9	22.6	22.7	22.8	22.9	23.1	23.2	23.4
Distillate Fuel Use	113.5	121.9	124.2	127.1	128.6	129.6	130.4	131.2	131.9	132.7	133.4	134.1	134.9	135.7
Total	27119.9	27817.8	28066.5	28420.1	29034.9	29541.9	30100.6	30705	31279	31758.1	32193.2	32627	33089.8	33554.4

Table 33. Transportation Sector Energy Use by Mode and Type
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Use by Type														
Motor Gasoline	16624	16933	16987.7	17101.5	17429.8	17704.9	18009.2	18330.6	18594.1	18836.1	19062.9	19306	19542.5	19765.8
Distillate (diesel)	5666	5914	5997	6162.1	6345.7	6496.8	6660.7	6824.6	6985.6	7125.4	7246.1	7360.9	7475.8	7599.6
Jet Fuel (kerosene & naphtha)	3265	3355	3361.9	3449.1	3570.8	3658.4	3759.5	3893.3	4022.2	4094.8	4159.1	4218.6	4273.1	4335
Residual Oil	571	611	662	664.6	654.3	644	633.8	623.1	624.9	626.7	628.6	630.2	632.1	634.4
Aviation Gasoline	30	31	33	29	30.1	29.9	29.7	29.6	29.5	29.4	29.4	29.3	29.2	29.2
Liquefied Petroleum Gas	23	30	42.7	44.9	49	52.5	56	61.1	64.5	67.8	70.9	73.7	74.3	76.8
Lubricants	150	146	144	146	146.7	147.3	147.8	148.2	148.8	149.4	149.9	150.4	150.9	151.4
Petroleum Subtotal	26329	27020	27228.4	27597.1	28226.4	28733.8	29296.8	29910.5	30469.6	30929.6	31346.8	31769.1	32178	32592.2
Methanol	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol	1.1	1.1	1.7	1.9	2.1	2.2	2.4	2.5	2.7	3.1	3.3	3.5	3.7	3.9
Electricity	83.7	84.8	85.1	85.6	86.4	87.4	88.5	89.7	90.6	91.5	92.4	93.4	94.3	95.1
Compressed Natural Gas	20.5	25.3	30.5	34.7	39.6	44.6	49.7	54.9	60.1	65	69.5	73.9	78	81.9
Liquid Hydrogen	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.2	0.3	0.4
Pipeline Fuel Natural Gas	685.6	686.4	720.9	700.7	680.3	673.9	663.2	647.3	655.9	668.8	681	687	735.4	780.8
Total Consumption	27119.9	27817.8	28066.5	28420.1	29034.9	29541.9	30100.6	30705	31279	31758.1	32193.2	32627	33089.8	33554.4

Table 33. Transportation Sector Energy Use by Mode and Type
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Energy Use by Mode															
Highway															
Light-Duty Vehicles	19503.6	19782.2	20045.1	20298.7	20543.5	20788	21041	21298.2	21564.4	21840.2	22124.3	22406.4	22694.9	22982.5	1.40%
Automobiles	9110.2	9139.3	9164.2	9188.9	9213.7	9238.1	9290.3	9342.7	9398.1	9457.5	9519.3	9580	9643.6	9706.6	0.30%
Light Trucks	10367.3	10616.7	10854.7	11083.5	11303.3	11523.5	11724.2	11928.8	12139.5	12355.7	12577.8	12799	13023.8	13248.2	2.40%
Motorcycles	26.1	26.2	26.2	26.3	26.4	26.4	26.6	26.7	26.9	27	27.2	27.4	27.5	27.7	0.30%
Commercial Light Trucks 1/ Buses	721.6	731.9	740.8	749.6	758.6	768	777.7	788.3	800	812.5	825	837.1	850	864	1.30%
Transit	286.5	286.8	287.2	287.7	288.4	289	289.8	290.8	291.4	292.2	293.3	294.2	295.4	296.5	0.40%
Intercity	99.5	99.6	99.8	100	100.2	100.4	100.7	101	101.3	101.5	101.9	102.2	102.6	103	0.40%
School	51.7	51.8	51.8	51.9	52.1	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.3	53.5	0.40%
Freight Trucks 2/ Medium (1000-26000 pounds)	135.2	135.3	135.5	135.8	136.1	136.4	136.8	137.2	137.6	137.9	138.4	138.9	139.4	140	0.40%
Large (> 26000 pounds)	6100.2	6197.6	6283.5	6370.2	6465.6	6565.5	6671.6	6784.9	6898.4	7025	7157.6	7287.8	7424.4	7566.3	1.90%
Medium (1000-26000 pounds)	935.4	959.1	981.9	1005.9	1031.2	1058	1085.5	1113.6	1140.9	1169.6	1198.8	1224.8	1251.7	1279.2	2.10%
Large (> 26000 pounds)	5164.8	5238.6	5301.6	5364.4	5434.4	5507.5	5586.1	5671.3	5757.4	5855.4	5958.8	6063	6172.7	6287.1	1.80%
Non-Highway															
Air 3/ General Aviation	3805.8	3860.8	3907.8	3919.1	3931.7	3943.9	3957	3969.9	3984.8	4003.3	4026.6	4057.1	4097	4146.7	1.50%
Domestic Air Carriers	209	211.6	213.8	214.3	214.9	215.5	216.1	216.7	217.4	218.3	219.4	220.8	222.7	225.1	1.20%
International Air Carriers	1660.6	1656.7	1650.6	1622.6	1594.5	1567.2	1541.1	1515.6	1491.6	1470.3	1451.3	1435.4	1423.2	1414.7	-0.30%
Freight Carriers	819.7	832.5	850	859.9	870.4	881	891.5	901.3	910.9	920.4	930	940.2	951.6	964.2	2.40%
Water 4/ Freight	1116.5	1160	1193.3	1222.3	1251.9	1280.2	1308.3	1336.3	1364.9	1394.4	1425.9	1460.6	1499.5	1542.7	3.60%
Domestic Shipping	1077.9	1082.8	1086.5	1089.6	1092.7	1095.8	1099.5	1102.5	1105.6	1109.8	1113.2	1117	1120.5	1124.3	0.40%
International Shipping	902.2	906.1	908.9	911	913.2	915.5	918.3	920.5	922.7	926	928.5	931.5	934.2	937.1	0.40%
Recreational Boats	342.3	345.4	347.4	348.8	350.2	351.8	353.8	355.2	356.6	359.1	360.8	363	364.9	367.1	0.80%
Rail	559.9	560.7	561.5	562.2	563	563.8	564.5	565.3	566.1	566.9	567.7	568.5	569.3	570.1	0.10%
Freight	175.7	176.7	177.6	178.6	179.4	180.3	181.2	182	182.9	183.8	184.6	185.5	186.4	187.2	0.50%
Passenger	790.2	799.5	808.7	824.5	838.1	852.5	866.2	881.5	896.1	912.4	928.5	943.7	958.4	970.6	1.50%
Intercity	640.8	648.8	656.7	671.3	683.7	696.8	709.3	723.3	736.6	751.7	766.6	780.4	793.9	804.9	1.60%
Transit	149.4	150.7	152	153.2	154.5	155.7	156.9	158.2	159.4	160.7	162	163.2	164.5	165.7	0.80%
Commuter	46.7	47.1	47.6	47.9	48.3	48.7	49.1	49.5	49.9	50.3	50.7	51.1	51.4	51.8	0.80%
Lubricants	55.7	56.2	56.7	57.1	57.6	58.1	58.5	59	59.4	59.9	60.4	60.9	61.3	61.8	0.80%
Pipeline Fuel Natural Gas	47	47.4	47.8	48.2	48.6	48.9	49.3	49.7	50.1	50.5	50.9	51.3	51.7	52.1	0.80%
Domestic Shipping	152	152.6	153.2	153.8	154.5	155.1	155.8	156.5	157.3	158.1	158.9	159.6	160.4	161.1	0.40%
International Shipping	791.1	802.4	805	802.3	800.6	798	797	795.4	790.8	787.8	784.3	782	778.4	777.4	0.50%
Military Use	791	796	800.8	805.2	809.4	813.4	817.2	820.9	824.4	827.8	831.1	834.3	837.4	840.5	0.70%
Aviation	630.8	634.8	638.6	642.1	645.4	648.6	651.6	654.5	657.3	660	662.6	665.1	667.6	670	0.70%
Residual Fuel Use	23.5	23.7	23.8	23.9	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25	0.70%
Distillate Fuel Use	136.7	137.6	138.4	139.2	139.9	140.6	141.3	142	142.6	143.2	143.8	144.3	144.9	145.4	0.70%
Total	34019.8	34492.5	34918.6	35300.8	35682.9	36069.3	36472.9	36888.9	37313.2	37769.2	38242.7	38719.2	39216.7	39729.9	1.40%

Table 33. Transportation Sector Energy Use by Mode and Type
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Energy Use by Type															
Motor Gasoline	20007.5	20264.6	20501.9	20726.8	20938	21147.7	21365.3	21584.8	21811.1	22045.7	22284.9	22519.5	22755.5	22989.8	1.20%
Distillate (diesel)	7730.5	7866	7992.5	8129.1	8275.5	8431.3	8594.1	8768.6	8945.7	9141	9344.9	9548.6	9763.7	9983.9	2.00%
Jet Fuel (kerosene & naphtha)	4407.4	4466.4	4517.2	4532.1	4548	4563.4	4579.6	4595.3	4613.1	4634.3	4660.2	4693.2	4735.6	4787.7	1.40%
Residual Oil	636.2	638	639.4	640.6	641.9	643.1	644.5	645.7	647	648.5	649.8	651.2	652.6	654	0.30%
Aviation Gasoline	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29	29	29	29	29	29	29	-0.30%
Liquefied Petroleum Gas	79.4	82	84.3	86.6	91.1	93.3	95.4	97.3	99.2	101	102.8	104.5	106.1	107.8	5.00%
Lubricants	152	152.6	153.2	153.8	154.5	155.1	155.8	156.5	157.3	158.1	158.9	159.6	160.4	161.1	0.40%
Petroleum Subtotal	33042.2	33498.8	33917.8	34298.2	34678	35062.9	35463.7	35877.3	36302.4	36757.6	37230.5	37705.6	38202.9	38713.4	1.40%
Methanol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-11.50%
Ethanol	4.1	4.3	4.4	4.7	4.9	5	5.2	5.3	5.4	5.4	5.6	5.6	5.7	5.8	6.40%
Electricity	96.1	97	97.9	98.8	99.6	100.4	101.3	102.2	103	103.9	104.8	105.7	106.6	107.5	0.90%
Compressed Natural Gas	85.7	89.3	92.5	95.5	98.3	101	103.7	106.3	108.9	111.6	114.3	116.8	119.3	121.9	6.20%
Liquid Hydrogen	0.5	0.8	1.1	1.3	1.6	1.8	2.1	2.4	2.6	2.9	3.2	3.5	3.8	4	N/A
Pipeline Fuel Natural Gas	791.1	802.4	805	802.3	800.6	798	797	795.4	790.8	787.8	784.3	782	778.4	777.4	0.50%
Total Consumption	34019.8	34492.5	34918.6	35300.8	35682.9	36069.3	36472.9	36888.9	37313.2	37769.2	38242.7	38719.2	39216.7	39729.9	1.40%

Table 33. Transportation Sector Energy Use by Mode and Type
(trillion Btu)

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.

Sources: 2003 and 2004 values derived using: Energy Information Administration (EIA), Fuel Oil and Kerosene Sales 2003, DOE/EIA-0535(2003) (Washington, DC, November 2004); EIA, State Energy Data Report 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Light-Duty Vehicle														
Motor Gasoline	15622.82	15907.10	15955.14	16065.22	16389.00	16659.45	16958.92	17273.85	17527.50	17759.60	17976.75	18208.12	18432.10	18642.83
Ethanol	1.10	1.15	1.69	1.90	2.08	2.22	2.40	2.50	2.74	3.09	3.30	3.48	3.73	3.87
Compressed Natural Gas	17.75	21.06	24.20	25.92	27.95	29.82	31.69	33.56	35.45	37.18	38.77	40.27	41.64	42.95
Liquefied Petroleum Gas	14.03	20.97	33.29	34.93	38.19	41.01	43.74	48.04	50.80	53.55	56.13	58.52	58.71	60.75
Electricity	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
Distillate (diesel)	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
Total	15901.83	16210.44	16277.33	16399.31	16746.36	17041.18	17366.76	17709.90	17989.65	18248.21	18491.75	18750.86	19001.67	19242.65
Commercial Light Trucks Gasoline 1/														
	588.72	610.71	619.50	626.87	634.37	642.68	649.84	657.55	666.32	674.70	682.69	692.04	701.74	711.32
Freight Trucks 2/														
Motor Gasoline	248.57	249.39	245.19	240.50	237.13	232.97	230.15	228.57	229.01	229.79	230.76	232.25	234.22	236.40
Distillate (diesel)	4243.72	4433.07	4509.33	4644.38	4789.20	4904.31	5025.91	5152.66	5274.41	5380.44	5469.54	5552.43	5633.08	5713.92
Compressed Natural Gas	2.79	4.26	6.27	8.81	11.69	14.77	18.02	21.32	24.64	27.79	30.77	33.61	36.36	38.98
Liquefied Petroleum Gas	8.98	9.08	9.40	10.00	10.76	11.48	12.28	13.01	13.68	14.24	14.72	15.17	15.61	16.07
Total	4504.05	4695.80	4770.19	4903.70	5048.79	5163.53	5286.35	5415.57	5541.74	5652.26	5745.78	5833.46	5919.27	6005.37
Freight Rail 3/														
Distillate (diesel)	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
Total	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
Domestic Shipping														
Distillate (diesel)	202.73	215.30	216.25	219.37	221.97	224.79	228.41	230.90	233.49	235.80	238.64	240.57	243.32	247.09
Residual Oil	78.28	80.38	87.70	88.96	88.21	87.52	87.09	86.18	87.15	88.01	89.07	89.79	90.82	92.23
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
Total	281.01	295.67	303.94	308.33	310.19	312.30	315.49	317.08	320.63	323.81	327.71	330.35	334.14	339.32
International Shipping														
Distillate (diesel)	35.32	39.40	39.22	39.28	39.40	39.53	39.65	39.77	39.83	39.89	39.95	40.00	40.06	40.12
Residual Oil	472.53	509.64	551.08	551.85	542.51	533.21	523.81	514.34	515.08	515.83	516.57	517.31	518.07	518.83
Total	507.85	549.04	590.30	591.13	581.91	572.74	563.46	554.11	554.91	555.72	556.51	557.32	558.14	558.95
Air Transportation														
Jet Fuel	2726.39	2792.09	2780.81	2854.38	2971.16	3056.20	3155.39	3287.44	3412.98	3482.21	3543.26	3599.36	3650.44	3708.41
Aviation Gasoline	30.00	31.00	33.00	29.00	30.09	29.90	29.75	29.62	29.51	29.42	29.35	29.29	29.24	29.20
Total	2756.39	2823.09	2813.81	2883.38	3001.25	3086.11	3185.14	3317.06	3442.49	3511.64	3572.61	3628.65	3679.68	3737.61
Miscellaneous Transportation														
Military Use														
Jet Fuel	538.61	562.91	581.13	594.68	599.68	602.18	604.12	605.81	609.24	612.60	615.83	619.24	622.68	626.56
Residual Fuel	20.20	20.98	23.22	23.76	23.56	23.25	22.92	22.58	22.70	22.83	22.95	23.08	23.21	23.36
Distillate	113.47	121.89	124.20	127.12	128.61	129.58	130.42	131.21	131.95	132.68	133.39	134.14	134.90	135.75
Total	672.28	705.77	728.55	745.57	751.85	755.01	757.46	759.60	763.89	768.11	772.17	776.46	780.78	785.66

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bus Transportation														
Transit Bus (motor gasoline)	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22
Transit Bus (diesel)	91.05	91.98	91.22	91.74	92.77	94.00	95.36	96.75	97.56	98.20	98.65	98.97	99.13	99.22
Intercity Bus (diesel)	47.41	47.89	47.50	47.77	48.31	48.95	49.65	50.38	50.80	51.13	51.37	51.54	51.62	51.67
School Bus (motor gasoline)	0.27	0.27	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30
School Bus (diesel)	123.67	124.94	123.92	124.62	126.02	127.68	129.53	131.43	132.52	133.39	134.01	134.44	134.66	134.78
Total	262.60	265.29	263.12	264.61	267.58	271.11	275.04	279.06	281.39	283.23	284.54	285.47	285.93	286.18
Rail Transportation														
Intercity Rail (electricity)	15.72	15.83	15.80	15.87	16.00	16.17	16.36	16.57	16.73	16.87	17.02	17.17	17.32	17.47
Intercity Rail (diesel)	25.86	26.14	25.92	26.04	26.30	26.61	26.97	27.36	27.61	27.85	28.09	28.34	28.60	28.84
Transit Rail (electricity)	49.64	50.00	49.89	50.12	50.54	51.07	51.68	52.34	52.83	53.29	53.74	54.23	54.72	55.18
Commuter Rail (electricity)	15.79	15.91	15.88	15.95	16.08	16.25	16.44	16.65	16.81	16.96	17.10	17.26	17.41	17.56
Commuter Rail (diesel)	25.99	26.27	26.05	26.17	26.43	26.75	27.11	27.50	27.75	27.99	28.23	28.49	28.74	28.98
Total	132.99	134.16	133.54	134.13	135.36	136.85	138.57	140.42	141.73	142.96	144.18	145.49	146.78	148.03
Recreation Boats														
Lubricants	150.00	146.00	144.00	146.00	146.72	147.27	147.75	148.18	148.80	149.36	149.89	150.42	150.91	151.41
Pipeline Fuel Natural Gas	685.59	686.41	720.91	700.72	680.31	673.86	663.21	647.35	655.85	668.83	680.96	686.99	735.45	780.82
Total Miscellaneous	2066.89	2102.96	2157.55	2159.44	2150.64	2153.44	2151.81	2144.76	2162.46	2183.98	2203.98	2217.90	2273.79	2326.88
Total Consumption	27119.94	27817.77	28066.52	28420.12	29034.91	29541.88	30100.60	30704.96	31279.02	31758.12	32193.21	32626.96	33089.76	33554.43

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Light-Duty Vehicle															
Motor Gasoline	18870.50	19113.13	19337.49	19549.06	19746.10	19940.89	20142.89	20345.59	20553.60	20768.62	20988.03	21203.09	21418.51	21630.85	1.2%
Ethanol	4.11	4.26	4.39	4.74	4.88	5.02	5.17	5.29	5.39	5.42	5.64	5.59	5.71	5.81	6.4%
Compressed Natural Gas	44.22	45.47	46.65	47.81	48.91	49.99	51.00	52.00	53.01	54.02	55.05	56.06	57.08	58.08	4.0%
Liquefied Petroleum Gas	62.83	64.89	66.79	68.67	72.81	74.67	76.42	78.11	79.76	81.34	82.88	84.39	85.85	87.29	5.6%
Electricity	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Liquid Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
Distillate (diesel)	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
Total	19503.60	19782.16	20045.13	20298.69	20543.45	20788.01	21041.02	21298.18	21564.44	21840.19	22124.27	22406.36	22694.87	22982.54	1.4%
Commercial Light Trucks Gasoline 1/															
	721.60	731.88	740.84	749.62	758.62	767.95	777.65	788.28	800.02	812.55	825.01	837.09	849.95	863.96	1.3%
Freight Trucks 2/															
Motor Gasoline	239.15	242.32	245.46	249.05	253.27	258.00	263.04	268.36	274.09	280.28	286.68	293.24	300.12	307.29	0.8%
Distillate (diesel)	5802.95	5894.36	5974.66	6055.57	6144.61	6237.83	6336.97	6443.00	6548.91	6667.52	6791.78	6913.74	7041.71	7174.79	1.9%
Compressed Natural Gas	41.50	43.84	45.84	47.66	49.37	51.04	52.68	54.32	55.91	57.56	59.20	60.74	62.26	63.77	11.0%
Liquefied Petroleum Gas	16.59	17.10	17.55	17.95	18.32	18.65	18.95	19.23	19.44	19.67	19.94	20.12	20.30	20.47	3.2%
Total	6100.19	6197.62	6283.52	6370.23	6465.57	6565.52	6671.64	6784.91	6898.36	7025.03	7157.60	7287.84	7424.38	7566.32	1.9%
Freight Rail 3/															
Distillate (diesel)	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
Total	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
Domestic Shipping															
Distillate (diesel)	249.26	251.49	252.96	253.97	255.02	256.14	257.62	258.63	259.67	261.50	262.74	264.32	265.68	267.26	0.8%
Residual Oil	93.04	93.87	94.42	94.80	95.19	95.61	96.17	96.55	96.94	97.62	98.09	98.68	99.20	99.79	0.8%
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	N/A
Total	342.30	345.35	347.38	348.77	350.21	351.75	353.78	355.17	356.61	359.12	360.83	363.00	364.88	367.05	0.8%
International Shipping															
Distillate (diesel)	40.19	40.25	40.30	40.36	40.41	40.46	40.52	40.57	40.63	40.68	40.74	40.79	40.85	40.91	0.1%
Residual Oil	519.67	520.48	521.19	521.89	522.60	523.31	524.03	524.76	525.49	526.23	526.97	527.71	528.44	529.18	0.1%
Total	559.85	560.72	561.50	562.24	563.01	563.78	564.55	565.33	566.12	566.92	567.71	568.50	569.29	570.08	0.1%
Air Transportation															
Jet Fuel	3776.62	3831.64	3878.68	3890.02	3902.59	3914.81	3927.97	3940.82	3955.79	3974.29	3997.60	4028.08	4068.02	4117.71	1.5%
Aviation Gasoline	29.16	29.14	29.11	29.09	29.08	29.06	29.05	29.04	29.04	29.03	29.02	29.02	29.02	29.01	-0.3%
Total	3805.78	3860.78	3907.79	3919.11	3931.66	3943.87	3957.02	3969.86	3984.82	4003.32	4026.63	4057.10	4097.04	4146.72	1.5%
Miscellaneous Transportation															
Military Use															
Jet Fuel	630.79	634.80	638.56	642.10	645.42	648.58	651.62	654.50	657.29	659.99	662.59	665.12	667.60	670.03	0.7%
Residual Fuel	23.52	23.67	23.81	23.95	24.07	24.20	24.31	24.43	24.54	24.64	24.74	24.84	24.94	25.03	0.7%
Distillate	136.68	137.56	138.39	139.18	139.92	140.63	141.31	141.95	142.58	143.18	143.76	144.33	144.88	145.42	0.7%
Total	790.98	796.02	800.76	805.22	809.41	813.41	817.24	820.88	824.40	827.81	831.09	834.29	837.41	840.47	0.7%

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Bus Transportation															
Transit Bus (motor gasoline)	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.5%
Transit Bus (diesel)	99.32	99.42	99.57	99.74	99.98	100.20	100.48	100.82	101.04	101.32	101.67	102.01	102.41	102.81	0.4%
Intercity Bus (diesel)	51.72	51.77	51.85	51.94	52.06	52.18	52.32	52.50	52.61	52.76	52.94	53.12	53.33	53.54	0.4%
School Bus (motor gasoline)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.5%
School Bus (diesel)	134.91	135.05	135.25	135.49	135.81	136.11	136.49	136.95	137.25	137.63	138.11	138.57	139.11	139.66	0.4%
Total	286.46	286.75	287.18	287.69	288.38	289.01	289.81	290.79	291.43	292.25	293.25	294.24	295.38	296.54	0.4%
Rail Transportation															
Intercity Rail (electricity)	17.63	17.79	17.94	18.09	18.23	18.38	18.53	18.67	18.82	18.97	19.12	19.27	19.42	19.57	0.8%
Intercity Rail (diesel)	29.10	29.36	29.61	29.85	30.09	30.32	30.56	30.80	31.04	31.29	31.54	31.78	32.02	32.26	0.8%
Transit Rail (electricity)	55.68	56.19	56.67	57.13	57.59	58.05	58.51	58.98	59.45	59.92	60.40	60.87	61.34	61.80	0.8%
Commuter Rail (electricity)	17.72	17.88	18.03	18.18	18.33	18.47	18.62	18.77	18.92	19.07	19.22	19.37	19.52	19.66	0.8%
Commuter Rail (diesel)	29.24	29.50	29.76	30.00	30.24	30.47	30.71	30.95	31.20	31.44	31.69	31.94	32.18	32.42	0.8%
Total	149.37	150.72	152.02	153.25	154.48	155.70	156.93	158.17	159.43	160.69	161.97	163.23	164.48	165.71	0.8%
Recreation Boats															
Lubricants	175.73	176.72	177.64	178.55	179.43	180.30	181.16	182.02	182.89	183.77	184.65	185.51	186.36	187.19	0.5%
Pipeline Fuel Natural Gas	151.99	152.62	153.22	153.82	154.46	155.13	155.82	156.53	157.28	158.07	158.86	159.62	160.39	161.15	0.4%
Total Miscellaneous	791.08	802.36	804.96	802.32	800.59	797.99	797.05	795.42	790.76	787.78	784.29	781.98	778.39	777.36	0.5%
Total Miscellaneous	2345.60	2365.19	2375.78	2380.84	2386.75	2391.53	2398.00	2403.82	2406.20	2410.37	2414.11	2418.87	2422.40	2428.42	0.6%
Total Consumption	34019.77	34492.51	34918.64	35300.78	35682.94	36069.26	36472.95	36888.86	37313.20	37769.23	38242.74	38719.21	39216.72	39729.94	1.4%

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode
(trillion Btu)

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.

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

Sources: 2003 and 2004 compressed natural gas volumes: Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Other 2004 values derived using: EIA, Fuel Oil and Kerosene Sales 2003, DOE/EIA-0535(2003) (Washington, DC, November 2004), EIA, State Energy Data Report 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Light-Duty Consumption by Technology Type														
Conventional Vehicles 1/														
Gasoline ICE Vehicles	15373.31	15605.59	15595.65	15632.70	15856.24	16019.99	16211.77	16417.93	16567.08	16696.99	16814.52	16947.47	17071.88	17186.22
TDI Diesel ICE	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.50	0.46	0.38	0.36	0.34	0.32	0.31	0.29	0.27	0.25	0.22	0.20	0.19	0.17
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	297.62	364.88	425.84	477.17	553.34	627.50	701.83	775.70	845.08	910.54	972.08	1031.30	1086.37	1137.46
Ethanol ICE	0.29	0.32	0.35	0.39	0.43	0.47	0.52	0.56	0.61	0.65	0.70	0.74	0.79	0.84
Total Alcohol	298.41	365.66	426.57	477.92	554.11	628.30	702.65	776.55	845.95	911.44	973.00	1032.25	1087.34	1138.46
Natural Gas Technology														
Compressed Natural Gas ICE	0.20	0.22	0.23	0.25	0.27	0.29	0.30	0.32	0.34	0.36	0.37	0.39	0.40	0.41
Compressed Natural Gas Bi-fuel	25.34	30.17	34.79	37.27	40.16	42.82	45.47	48.13	50.84	53.32	55.60	57.76	59.74	61.61
Liquefied Petroleum Gas ICE	0.25	0.29	0.32	0.34	0.39	0.46	0.57	0.68	0.80	0.94	1.07	1.21	1.37	1.63
Liquefied Petroleum Gas Bi-fuel	56.10	70.03	110.31	120.45	130.64	139.91	148.76	157.51	166.30	175.03	183.21	190.74	197.43	203.60
Total Natural Gas Technology	81.90	100.70	145.65	158.31	171.45	183.47	195.09	206.64	218.28	229.64	240.25	250.09	258.94	267.26
Electric Technology														
Electric Vehicle	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.29	0.55	0.87	1.20	1.51
Electric-Gasoline Hybrid	4.64	8.52	18.22	34.16	50.06	74.56	99.86	127.76	157.78	189.12	221.66	255.67	294.42	335.24
Total Electricity	7.18	11.60	21.72	37.84	53.87	78.47	103.87	131.95	162.15	193.83	226.78	261.24	300.44	341.68
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
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
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
Total Fuel Cell	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
Light-Duty Consumption by Fuel Type 1/														
Motor Gasoline	15622.82	15907.10	15955.14	16065.22	16389.00	16659.45	16958.92	17273.85	17527.50	17759.60	17976.75	18208.12	18432.10	18642.83
Distillate (diesel)	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
Methanol	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol	1.10	1.15	1.69	1.90	2.08	2.22	2.40	2.50	2.74	3.09	3.30	3.48	3.73	3.87
Compressed Natural Gas	17.75	21.06	24.20	25.92	27.95	29.82	31.69	33.56	35.45	37.18	38.77	40.27	41.64	42.95
Liquefied Petroleum Gas	14.03	20.97	33.29	34.93	38.19	41.01	43.74	48.04	50.80	53.55	56.13	58.52	58.71	60.75
Electricity	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43

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

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Light-Duty Consumption by Technology Type															
Conventional Vehicles 1/															
Gasoline ICE Vehicles	17317.86	17464.38	17595.56	17716.71	17826.52	17934.22	18050.17	18167.22	18289.38	18417.88	18550.20	18677.98	18805.49	18929.23	0.7%
TDI Diesel ICE	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.15	0.13	0.12	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	-9.1%
Methanol ICE	0.00	0.00	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 Fuel ICE	1186.53	1233.74	1276.87	1316.27	1352.33	1385.63	1416.34	1445.21	1472.62	1498.94	1524.12	1547.57	1569.81	1590.76	5.8%
Ethanol ICE	0.89	0.94	0.99	1.04	1.09	1.13	1.19	1.24	1.29	1.34	1.39	1.44	1.49	1.53	6.2%
Total Alcohol	1187.56	1234.81	1277.98	1317.43	1353.53	1386.87	1417.62	1446.53	1473.98	1500.34	1525.57	1549.06	1571.33	1592.33	5.8%
Natural Gas Technology															
Compressed Natural Gas ICE	0.44	0.45	0.47	0.49	0.51	0.52	0.54	0.56	0.57	0.59	0.60	0.62	0.64	0.65	4.3%
Compressed Natural Gas Bi-fuel	63.42	65.23	66.92	68.56	70.14	71.68	73.13	74.56	76.01	77.47	78.94	80.39	81.85	83.29	4.0%
Liquefied Petroleum Gas ICE	1.99	2.35	2.67	3.00	3.26	3.49	3.70	3.88	4.04	4.19	4.34	4.48	4.60	4.73	11.4%
Liquefied Petroleum Gas Bi-fuel	209.58	215.44	220.93	226.33	231.75	237.23	242.39	247.48	252.51	257.33	262.03	266.64	271.17	275.61	5.4%
Total Natural Gas Technology	275.43	283.48	290.99	298.38	305.66	312.92	319.77	326.48	333.14	339.58	345.91	352.13	358.25	364.28	5.1%
Electric Technology															
Electric Vehicle	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Electric-Diesel Hybrid	1.89	2.25	2.59	2.96	3.30	3.63	3.92	4.18	4.41	4.60	4.75	4.87	4.97	5.02	N/A
Electric-Gasoline Hybrid	378.07	423.26	469.96	518.16	567.70	618.77	671.65	726.21	782.71	841.34	902.13	964.69	1029.40	1096.18	20.5%
Total Electricity	385.00	430.66	477.82	526.48	576.46	627.94	681.21	736.14	792.98	851.92	912.98	975.77	1040.70	1107.64	19.2%
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	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	N/A
Fuel Cell Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
Total Fuel Cell	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
Light-Duty Consumption by Fuel Type 1/															
Motor Gasoline	18870.50	19113.13	19337.49	19549.06	19746.10	19940.89	20142.89	20345.59	20553.60	20768.62	20988.03	21203.09	21418.51	21630.85	1.2%
Distillate (diesel)	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
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	-11.5%
Ethanol	4.11	4.26	4.39	4.74	4.88	5.02	5.17	5.29	5.39	5.42	5.64	5.59	5.71	5.81	6.4%
Compressed Natural Gas	44.22	45.47	46.65	47.81	48.91	49.99	51.00	52.00	53.01	54.02	55.05	56.06	57.08	58.08	4.0%
Liquefied Petroleum Gas	62.83	64.89	66.79	68.67	72.81	74.67	76.42	78.11	79.76	81.34	82.88	84.39	85.85	87.29	5.6%
Electricity	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Liquid Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A

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

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

Btu = British thermal unit.

ICE = Internal combustion engine.

N/A = Not applicable.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 36. Light-Duty Vehicle Sales by Technology Type
(thousands)
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	398.5	401.4	415.1	435.6	430.5	420.2	413.1	401.1	401.0	397.6	391.8	385.7	380.9	379.0
TDI Diesel ICE	2.1	1.3	1.5	1.5	2.2	2.1	2.0	1.9	2.0	2.0	2.1	2.2	2.2	2.4
Total Conventional	400.6	402.6	416.5	437.1	432.6	422.3	415.1	403.0	402.9	399.6	393.9	387.9	383.1	381.4
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	21.0	21.2	22.3	23.0	26.2	26.4	25.9	25.5	25.6	25.3	24.9	24.3	23.9	23.8
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
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
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.4
Electric-Gasoline Hybrid	2.6	4.9	6.5	10.9	9.7	13.4	13.6	16.1	17.9	18.9	19.6	20.4	21.8	23.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.4	2.4	2.5	2.7	2.7	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.4	2.4
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.4
Total Alternatives	26.8	29.3	32.1	37.5	39.4	43.3	43.0	45.1	47.0	47.9	48.4	48.6	49.8	50.8
Percent Alternative Car Sales	6.26	6.79	7.16	7.90	8.34	9.31	9.38	10.06	10.45	10.70	10.94	11.13	11.51	11.76
Total New Car Sales	427.4	432.0	448.7	474.6	472.0	465.7	458.1	448.1	450.0	447.5	442.3	436.4	433.0	432.2
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	367.8	373.0	356.3	318.3	319.8	324.3	337.0	350.2	353.8	357.7	359.7	362.3	360.5	360.5
TDI Diesel ICE	18.4	17.2	15.0	15.0	20.3	21.1	22.6	23.6	24.7	25.7	26.6	28.1	28.6	30.7
Total Conventional	386.2	390.1	371.2	333.3	340.1	345.4	359.6	373.8	378.5	383.3	386.2	390.3	389.1	391.2

Table 36. Light-Duty Vehicle Sales by Technology Type
(thousands)
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	20.6	21.0	22.6	20.3	33.7	34.3	36.0	37.6	37.9	38.3	38.5	38.7	38.4	38.4
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	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
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
Electric-Gasoline Hybrid	0.0	0.0	3.7	5.8	6.2	11.8	12.2	12.7	13.9	14.9	15.8	16.9	21.1	23.1
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.6	1.6	1.6	1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
Liquefied Petroleum Gas ICE	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
Liquefied Petroleum Gas Bi-fuel	5.3	5.4	5.2	4.7	5.0	5.1	5.4	5.6	5.7	5.7	5.8	5.9	5.9	5.9
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1
Total Alternatives	27.8	28.3	33.4	32.5	46.6	53.0	55.5	57.8	59.5	61.1	62.1	63.5	67.6	69.5
Percent Alternative Light Truck Sales	6.71	6.76	8.26	8.89	12.05	13.31	13.36	13.40	13.58	13.75	13.85	13.99	14.80	15.09
Total New Truck Sales	414.0	418.4	404.6	365.8	386.7	398.4	415.1	431.6	437.9	444.4	448.3	453.8	456.7	460.7
Percent Total Alternative Sales	6.48	6.77	7.68	8.33	10.01	11.15	11.27	11.70	11.99	12.22	12.40	12.59	13.20	13.48
EPACT Legislative Alternative Sales	13.83	13.98	13.79	13.08	13.56	13.79	14.13	14.44	14.61	14.75	14.80	14.88	14.92	15.01
ZEVP Legislative Alternative Sales	0.00	0.00	9.20	9.36	9.40	10.47	13.76	14.94	16.29	24.21	24.10	23.97	45.26	44.85
Total Vehicles Sales	841.4	850.4	853.3	840.4	858.7	864.1	873.2	879.7	887.9	891.9	890.6	890.3	889.7	892.9

Table 36. Light-Duty Vehicle Sales by Technology Type
(thousands)
New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	377.4	376.1	374.7	374.7	374.6	375.2	375.7	375.8	375.6	376.2	375.8	375.1	374.6	374.3	-0.3%
TDI Diesel ICE	2.5	2.7	2.8	3.1	3.4	3.7	3.8	4.1	4.5	4.7	4.9	5.1	5.6	5.8	6.1%
Total Conventional	379.9	378.8	377.6	377.7	378.0	378.9	379.6	379.9	380.1	380.8	380.7	380.3	380.1	380.1	-0.2%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	23.6	23.5	23.4	23.3	23.3	23.4	23.4	23.4	23.4	23.5	23.5	23.4	23.4	23.4	0.4%
Ethanol ICE	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	3.9%
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	0.2%
Electric-Diesel Hybrid	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	24.2	25.6	26.9	28.2	29.4	30.7	32.1	33.5	34.9	36.4	37.9	39.4	41.0	42.7	8.7%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.2%
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	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	N/A
Fuel Cell Hydrogen	0.4	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	N/A
Total Alternatives	51.8	53.5	54.7	55.9	57.1	58.5	59.9	61.4	62.7	64.3	65.8	67.3	68.9	70.5	3.4%
Percent Alternative Car Sales	12.01	12.39	12.66	12.89	13.13	13.37	13.63	13.91	14.17	14.45	14.74	15.04	15.34	15.65	3.3%
Total New Car Sales	431.7	432.3	432.3	433.6	435.2	437.4	439.4	441.3	442.9	445.1	446.6	447.6	449.0	450.7	0.2%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	363.5	366.3	367.9	367.8	368.5	370.5	375.2	377.8	378.3	382.8	385.7	387.0	386.9	388.4	0.2%
TDI Diesel ICE	32.6	35.2	37.1	40.0	44.4	47.9	48.7	52.0	57.1	58.3	61.0	63.5	68.8	71.5	5.6%
Total Conventional	396.1	401.4	405.0	407.8	413.0	418.4	423.9	429.8	435.4	441.1	446.7	450.5	455.7	459.9	0.6%

Table 36. Light-Duty Vehicle Sales by Technology Type
(thousands)
New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	38.7	39.0	39.2	39.2	39.3	39.5	40.1	40.5	40.6	41.2	41.6	41.8	41.9	42.1	2.7%
Ethanol ICE	0.0	0.0	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 Vehicle	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	1.1%
Electric-Diesel Hybrid	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	N/A
Electric-Gasoline Hybrid	24.3	25.8	27.3	28.8	30.3	32.0	33.9	35.7	37.6	39.8	41.9	44.0	46.2	48.5	N/A
Compressed Natural Gas ICE	0.0	0.0	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%
Compressed Natural Gas Bi-fuel	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.0%
Liquefied Petroleum Gas Bi-fuel	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.1	7.2	1.1%
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	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	N/A
Fuel Cell Hydrogen	0.1	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	N/A
Total Alternatives	71.3	73.5	75.1	76.8	78.6	80.7	83.2	85.7	87.9	90.8	93.6	96.0	98.4	101.1	5.0%
Percent Alternative Light Truck Sales	15.26	15.47	15.65	15.86	16.00	16.16	16.41	16.63	16.79	17.07	17.32	17.57	17.76	18.02	3.8%
Total New Truck Sales	467.4	474.9	480.2	484.6	491.6	499.1	507.2	515.5	523.3	531.8	540.2	546.5	554.1	560.9	1.1%
Percent Total Alternative Sales	13.70	14.00	14.23	14.46	14.65	14.86	15.12	15.38	15.59	15.88	16.15	16.43	16.67	16.96	3.6%
EPACT Legislative Alternative Sales	15.16	15.35	15.48	15.60	15.78	15.98	16.20	16.42	16.62	16.85	17.06	17.22	17.42	17.60	0.9%
ZEVP Legislative Alternative Sales	44.50	68.42	68.60	68.58	72.52	72.45	72.33	81.08	81.02	82.26	86.81	87.80	88.94	90.49	N/A
Total Vehicles Sales	899.1	907.2	912.5	918.2	926.8	936.5	946.6	956.8	966.2	977.0	986.8	994.1	1003.1	1011.6	0.7%

Table 36. Light-Duty Vehicle Sales by Technology Type
(thousands)
New England

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 37. Light-Duty Vehicle Sales by Technology Type
(thousands)
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	1106.2	1108.7	1141.5	1193.3	1176.5	1144.9	1121.8	1085.3	1081.1	1068.1	1049.1	1029.1	1013.2	1004.9
TDI Diesel ICE	6.3	3.7	4.3	4.4	5.9	5.7	5.5	5.2	5.3	5.5	5.7	5.8	6.0	6.4
Total Conventional	1112.4	1112.4	1145.8	1197.7	1182.4	1150.6	1127.2	1090.5	1086.4	1073.6	1054.7	1034.9	1019.2	1011.2
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	58.2	58.5	61.2	63.0	71.5	72.0	70.3	69.0	69.0	68.1	66.6	65.0	63.7	63.0
Ethanol ICE	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
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	1.0	1.1	1.1	1.0
Electric-Gasoline Hybrid	7.3	13.5	17.8	29.8	26.3	36.4	36.8	43.5	48.3	50.6	52.5	54.2	57.9	60.9
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.7	1.8	1.9	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.7	6.7	6.9	7.3	7.3	7.1	7.0	6.8	6.8	6.8	6.7	6.6	6.5	6.4
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.6
Total Alternatives	74.3	81.0	88.3	102.7	107.5	118.0	116.6	121.9	126.7	128.5	129.2	129.3	132.0	134.2
Percent Alternative Car Sales	6.26	6.78	7.16	7.90	8.33	9.30	9.37	10.05	10.44	10.69	10.91	11.11	11.46	11.71
Total New Car Sales	1186.7	1193.4	1234.2	1300.4	1290.0	1268.6	1243.8	1212.4	1213.1	1202.1	1184.0	1164.3	1151.1	1145.4
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	1017.6	1026.4	975.8	868.0	874.5	883.4	915.2	947.5	953.2	960.3	961.9	965.5	957.7	954.3
TDI Diesel ICE	55.2	52.0	45.8	45.6	55.0	57.6	61.4	64.0	67.5	70.0	72.3	76.0	77.3	82.8
Total Conventional	1072.9	1078.4	1021.6	913.6	929.5	941.1	976.6	1011.5	1020.7	1030.3	1034.2	1041.6	1035.0	1037.1

Table 37. Light-Duty Vehicle Sales by Technology Type
(thousands)
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	56.8	57.6	61.9	55.4	92.1	93.4	97.8	101.8	102.1	102.8	102.9	103.2	102.0	101.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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	0.1	0.0
Electric-Gasoline Hybrid	0.0	0.0	10.3	15.9	16.9	32.1	33.0	34.2	37.4	39.9	42.2	45.0	56.1	61.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.5	4.5	4.3	3.9	4.1	4.2	4.4	4.5	4.6	4.7	4.7	4.7	4.7	4.8
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Liquefied Petroleum Gas Bi-fuel	14.8	14.9	14.4	12.9	13.6	14.0	14.5	15.1	15.2	15.4	15.5	15.6	15.7	15.8
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2
Total Alternatives	76.7	77.6	91.4	88.7	127.2	144.3	150.4	156.3	160.0	163.6	166.0	169.1	179.3	183.9
Percent Alternative Light Truck Sales	6.67	6.72	8.21	8.85	12.04	13.30	13.34	13.38	13.55	13.71	13.83	13.97	14.77	15.06
Total New Truck Sales	1149.5	1156.0	1113.1	1002.3	1056.7	1085.4	1127.0	1167.8	1180.7	1193.9	1200.2	1210.7	1214.3	1221.0
Percent Total Alternative Sales	6.46	6.75	7.66	8.31	10.00	11.14	11.26	11.69	11.98	12.19	12.38	12.57	13.16	13.44
EPACT Legislative Alternative Sales	38.40	38.62	37.94	35.84	37.07	37.57	38.36	39.07	39.39	39.62	39.61	39.69	39.66	39.77
ZEVP Legislative Alternative Sales	0.00	0.00	13.39	13.94	13.88	13.89	18.68	20.64	22.98	34.73	37.47	37.19	70.14	69.43
Total Vehicles Sales	2336.3	2349.4	2347.2	2302.7	2346.7	2353.9	2370.8	2380.2	2393.7	2396.0	2384.2	2375.0	2365.4	2366.4

Table 37. Light-Duty Vehicle Sales by Technology Type
(thousands)
Middle Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	997.5	991.4	984.9	981.5	978.8	977.4	976.3	974.1	971.2	970.3	966.9	962.6	958.7	955.4	-0.6%
TDI Diesel ICE	6.7	7.2	7.5	8.2	9.1	9.9	10.1	10.8	11.9	12.2	12.9	13.6	14.7	15.4	5.6%
Total Conventional	1004.1	998.6	992.5	989.8	987.9	987.2	986.5	985.0	983.1	982.6	979.8	976.2	973.3	970.8	-0.5%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	62.4	61.9	61.4	61.1	60.9	60.8	60.8	60.7	60.5	60.5	60.4	60.1	59.9	59.7	0.1%
Ethanol ICE	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	3.7%
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-0.1%
Electric-Diesel Hybrid	1.0	0.9	0.9	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	N/A
Electric-Gasoline Hybrid	63.8	67.3	70.6	73.6	76.7	79.9	83.3	86.7	90.1	93.8	97.4	101.0	104.8	108.9	8.4%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5%
Compressed Natural Gas Bi-fuel	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.5	-0.1%
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	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	N/A
Fuel Cell Hydrogen	0.6	1.2	1.2	1.1	1.2	1.1	1.1	1.3	1.2	1.2	1.2	1.2	1.2	1.2	N/A
Total Alternatives	136.5	140.0	142.7	145.4	148.2	151.4	154.6	158.0	161.2	164.8	168.3	171.6	175.2	179.1	3.1%
Percent Alternative Car Sales	11.96	12.30	12.57	12.81	13.05	13.29	13.55	13.83	14.08	14.37	14.66	14.95	15.25	15.57	3.2%
Total New Car Sales	1140.6	1138.7	1135.2	1135.2	1136.1	1138.6	1141.0	1143.0	1144.3	1147.4	1148.1	1147.8	1148.5	1149.9	-0.1%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	959.4	963.6	964.9	960.8	960.3	962.4	972.2	976.3	975.0	984.1	988.5	988.9	985.7	986.1	-0.2%
TDI Diesel ICE	87.5	94.5	99.5	107.5	118.7	127.8	129.6	138.0	151.2	153.9	161.2	167.9	181.5	188.9	5.1%
Total Conventional	1046.9	1058.1	1064.4	1068.3	1078.9	1090.2	1101.7	1114.3	1126.2	1138.1	1149.7	1156.8	1167.2	1175.0	0.3%

Table 37. Light-Duty Vehicle Sales by Technology Type
(thousands)
Middle Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	102.0	102.6	102.7	102.3	102.4	102.6	103.7	104.5	104.6	105.9	106.6	106.8	106.6	106.9	2.4%
Ethanol ICE	0.0	0.0	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 Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	N/A
Electric-Gasoline Hybrid	64.1	67.8	71.4	75.2	78.9	83.0	87.7	92.3	96.8	102.1	107.4	112.6	117.8	123.3	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6%
Compressed Natural Gas Bi-fuel	4.8	4.9	4.9	4.9	5.0	5.1	5.1	5.2	5.3	5.3	5.4	5.5	5.5	5.6	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8%
Liquefied Petroleum Gas Bi-fuel	15.9	16.1	16.3	16.4	16.6	16.8	17.0	17.2	17.4	17.7	17.9	18.1	18.3	18.5	0.8%
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	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	N/A
Fuel Cell Hydrogen	0.2	0.5	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8	0.9	0.9	1.0	1.0	N/A
Total Alternatives	188.0	192.8	196.6	200.4	204.5	209.1	215.1	220.9	225.9	232.8	239.2	244.8	250.1	256.2	4.7%
Percent Alternative Light Truck Sales	15.22	15.41	15.59	15.79	15.93	16.09	16.34	16.55	16.71	16.98	17.22	17.46	17.65	17.90	3.8%
Total New Truck Sales	1234.8	1250.8	1261.0	1268.7	1283.4	1299.2	1316.9	1335.2	1352.1	1370.9	1389.0	1401.6	1417.3	1431.2	0.8%
Percent Total Alternative Sales	13.66	13.93	14.16	14.38	14.58	14.78	15.04	15.29	15.51	15.79	16.06	16.33	16.58	16.86	3.6%
EPACT Legislative Alternative Sales	40.06	40.43	40.65	40.84	41.20	41.61	42.06	42.52	42.94	43.42	43.87	44.17	44.56	44.91	0.6%
ZEVP Legislative Alternative Sales	68.80	105.64	105.82	105.73	111.70	111.49	111.20	124.50	124.29	126.06	132.89	134.29	135.90	138.16	N/A
Total Vehicles Sales	2375.4	2389.5	2396.2	2403.9	2419.5	2437.8	2457.9	2478.2	2496.4	2518.3	2537.1	2549.4	2565.8	2581.0	0.4%

Table 37. Light-Duty Vehicle Sales by Technology Type
(thousands)
Middle Atlantic

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)

East North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	1188.2	1195.3	1230.5	1285.9	1262.6	1226.8	1200.9	1161.1	1155.7	1141.3	1120.9	1099.4	1082.7	1073.6
TDI Diesel ICE	6.2	3.7	4.2	4.3	6.4	6.2	5.9	5.6	5.8	6.0	6.2	6.4	6.5	7.0
Total Conventional	1194.4	1199.0	1234.7	1290.1	1269.0	1233.0	1206.8	1166.7	1161.5	1147.3	1127.1	1105.7	1089.3	1080.6
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	62.5	63.1	66.0	68.0	76.7	77.1	75.3	73.8	73.8	72.7	71.1	69.4	68.0	67.3
Ethanol ICE	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	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	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.8	1.0	1.2	1.1	1.1
Electric-Gasoline Hybrid	7.6	14.2	18.7	31.3	27.8	38.5	38.9	46.0	51.0	53.5	55.4	57.3	61.2	64.3
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	7.2	7.2	7.5	7.9	7.8	7.6	7.5	7.3	7.3	7.2	7.1	7.0	6.9	6.9
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
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
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
Total Alternatives	79.6	86.9	94.7	109.8	115.1	125.9	124.3	129.9	134.9	136.7	137.2	137.3	139.7	142.0
Percent Alternative Car Sales	6.25	6.76	7.12	7.85	8.31	9.26	9.34	10.01	10.40	10.65	10.85	11.05	11.37	11.61
Total New Car Sales	1274.0	1285.9	1329.4	1400.0	1384.1	1358.9	1331.1	1296.6	1296.3	1284.0	1264.2	1243.1	1229.0	1222.5
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	1098.2	1111.8	1057.1	940.4	938.2	946.1	979.4	1012.8	1017.6	1024.9	1026.0	1029.8	1021.6	1017.5
TDI Diesel ICE	53.1	49.6	43.3	43.2	59.4	62.6	66.5	69.7	73.9	76.6	79.1	83.1	84.5	90.7
Total Conventional	1151.3	1161.5	1100.3	983.6	997.6	1008.7	1045.9	1082.5	1091.5	1101.5	1105.1	1112.9	1106.1	1108.2

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)

East North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	61.5	62.6	67.2	60.1	98.8	100.1	104.7	108.8	109.0	109.7	109.8	110.1	108.8	108.2
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
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	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	10.8	16.6	17.8	33.8	34.8	36.0	39.4	42.0	44.5	47.4	59.1	64.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.8	4.8	4.7	4.2	4.4	4.5	4.7	4.9	4.9	5.0	5.0	5.0	5.1	5.1
Liquefied Petroleum Gas ICE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	15.9	16.1	15.5	13.9	14.6	15.0	15.6	16.1	16.3	16.5	16.5	16.7	16.7	16.8
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
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
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
Total Alternatives	82.8	84.1	98.6	95.4	136.2	154.0	160.3	166.4	170.2	173.8	176.4	179.8	190.3	195.1
Percent Alternative Light Truck Sales	6.71	6.75	8.23	8.84	12.01	13.25	13.29	13.33	13.49	13.63	13.77	13.91	14.68	14.97
Total New Truck Sales	1234.1	1245.6	1199.0	1079.1	1133.8	1162.7	1206.1	1248.9	1261.7	1275.2	1281.6	1292.6	1296.4	1303.2
Percent Total Alternative Sales	6.48	6.76	7.65	8.28	9.98	11.10	11.22	11.64	11.93	12.13	12.32	12.50	13.07	13.34
EPACT Legislative Alternative Sales	41.23	41.61	40.87	38.58	39.77	40.25	41.06	41.79	42.10	42.31	42.29	42.37	42.34	42.45
ZEVP Legislative 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
Total Vehicles Sales	2508.1	2531.4	2528.4	2479.1	2517.8	2521.6	2537.3	2545.5	2558.0	2559.2	2545.8	2535.7	2525.3	2525.8

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)

East North Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	1065.4	1059.0	1051.6	1047.3	1044.1	1042.2	1040.3	1037.6	1034.0	1032.1	1027.9	1022.6	1017.7	1013.5	-0.6%
TDI Diesel ICE	7.3	7.9	8.2	9.0	9.7	10.5	11.1	11.8	12.9	13.6	14.4	15.1	16.4	17.3	6.1%
Total Conventional	1072.7	1066.9	1059.8	1056.3	1053.8	1052.6	1051.4	1049.5	1046.9	1045.7	1042.3	1037.7	1034.2	1030.8	-0.6%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	66.6	66.1	65.5	65.1	64.9	64.8	64.7	64.6	64.3	64.3	64.1	63.8	63.5	63.3	0.0%
Ethanol ICE	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	3.8%
Electric Vehicle	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	0.4	-0.2%
Electric-Diesel Hybrid	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	N/A
Electric-Gasoline Hybrid	67.4	71.1	74.6	77.7	80.9	84.3	87.8	91.3	94.9	98.7	102.4	106.2	110.1	114.3	8.3%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Compressed Natural Gas Bi-fuel	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	-0.1%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	-0.2%
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	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	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	N/A
Total Alternatives	144.4	147.4	150.2	153.0	155.9	159.2	162.5	165.9	169.2	173.0	176.4	179.8	183.5	187.4	3.0%
Percent Alternative Car Sales	11.86	12.14	12.41	12.65	12.89	13.13	13.39	13.65	13.91	14.19	14.48	14.77	15.07	15.38	3.2%
Total New Car Sales	1217.1	1214.3	1210.0	1209.3	1209.7	1211.8	1213.9	1215.4	1216.1	1218.7	1218.8	1217.5	1217.6	1218.2	-0.2%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	1022.5	1026.1	1027.2	1021.5	1024.2	1026.3	1032.0	1035.9	1034.7	1039.4	1043.1	1042.2	1036.6	1035.7	-0.3%
TDI Diesel ICE	95.8	103.9	109.0	118.4	126.1	135.4	142.1	151.2	164.5	172.5	180.6	188.4	204.6	213.2	5.8%
Total Conventional	1118.3	1130.0	1136.2	1139.9	1150.3	1161.7	1174.2	1187.1	1199.2	1211.8	1223.7	1230.6	1241.3	1249.0	0.3%

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)

East North Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	108.7	109.2	109.3	108.7	109.1	109.4	110.1	110.8	111.0	111.8	112.4	112.5	112.1	112.2	2.3%
Ethanol ICE	0.0	0.0	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 Vehicle	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N/A
Electric-Gasoline Hybrid	67.6	71.5	75.2	79.2	83.2	87.5	92.1	96.9	101.7	107.0	112.5	117.7	122.9	128.6	N/A
Compressed Natural Gas ICE	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	3.6%
Compressed Natural Gas Bi-fuel	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.9	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0%
Liquefied Petroleum Gas Bi-fuel	17.0	17.2	17.3	17.4	17.6	17.8	18.1	18.3	18.5	18.8	19.0	19.2	19.4	19.6	0.8%
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	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	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	N/A
Total Alternatives	199.3	204.0	207.9	211.6	216.3	221.1	226.8	232.6	237.8	244.2	250.7	256.2	261.3	267.3	4.5%
Percent Alternative Light Truck Sales	15.13	15.29	15.47	15.66	15.83	15.99	16.19	16.38	16.55	16.77	17.00	17.23	17.39	17.63	3.8%
Total New Truck Sales	1317.7	1333.9	1344.1	1351.5	1366.6	1382.8	1400.9	1419.7	1437.0	1456.0	1474.4	1486.7	1502.5	1516.2	0.8%
Percent Total Alternative Sales	13.56	13.79	14.02	14.24	14.45	14.66	14.89	15.12	15.34	15.60	15.86	16.12	16.35	16.63	3.5%
EPACT Legislative Alternative Sales	42.75	43.12	43.33	43.50	43.87	44.28	44.74	45.21	45.64	46.12	46.57	46.86	47.24	47.58	0.5%
ZEVP Legislative 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	N/A
Total Vehicles Sales	2534.7	2548.2	2554.1	2560.8	2576.3	2594.6	2614.8	2635.1	2653.0	2674.7	2693.2	2704.3	2720.1	2734.4	0.3%

Table 38. Light-Duty Vehicle Sales by Technology Type
(thousands)
East North Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 39. Light-Duty Vehicle Sales by Technology Type
(thousands)

West North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	502.3	504.9	519.4	543.1	540.9	529.3	520.5	505.0	504.0	499.1	491.5	483.4	477.3	474.5
TDI Diesel ICE	3.2	1.9	2.3	2.3	2.6	2.6	2.5	2.4	2.5	2.5	2.6	2.7	2.8	3.0
Total Conventional	505.5	506.8	521.6	545.4	543.6	531.9	523.0	507.4	506.5	501.6	494.1	486.1	480.1	477.5
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	26.4	26.6	27.8	28.7	32.9	33.3	32.6	32.1	32.2	31.8	31.2	30.5	30.0	29.7
Ethanol ICE	0.0	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
Electric Vehicle	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
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.5	0.5	0.5
Electric-Gasoline Hybrid	3.3	6.2	8.1	13.6	11.8	16.5	16.7	19.9	22.1	23.2	24.1	25.0	26.8	28.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	3.0	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.1	3.1	3.0	3.0
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
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
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
Total Alternatives	33.8	36.9	40.2	46.8	49.2	54.2	53.7	56.3	58.6	59.6	60.0	60.2	61.4	62.5
Percent Alternative Car Sales	6.26	6.79	7.16	7.90	8.30	9.25	9.32	9.99	10.38	10.62	10.82	11.02	11.34	11.58
Total New Car Sales	539.2	543.7	561.9	592.2	592.7	586.0	576.7	563.7	565.1	561.3	554.1	546.3	541.5	540.0
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	459.0	463.9	440.2	391.3	402.9	409.1	425.6	441.6	445.0	449.4	451.2	454.1	451.6	451.0
TDI Diesel ICE	28.8	27.8	25.2	25.0	24.3	25.9	27.5	29.0	30.8	32.0	33.2	35.0	35.7	38.5
Total Conventional	487.8	491.6	465.4	416.3	427.1	435.0	453.1	470.6	475.8	481.4	484.4	489.0	487.3	489.5

Table 39. Light-Duty Vehicle Sales by Technology Type
(thousands)

West North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	25.5	25.9	27.9	25.0	42.4	43.3	45.5	47.4	47.7	48.1	48.3	48.5	48.1	48.0
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	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
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
Electric-Gasoline Hybrid	0.0	0.0	4.7	7.2	7.5	14.5	14.9	15.5	17.1	18.2	19.4	20.7	25.8	28.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	2.0	2.1	2.0	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Liquefied Petroleum Gas ICE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.7	6.8	6.5	5.9	6.3	6.5	6.7	7.0	7.1	7.2	7.2	7.3	7.4	7.4
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
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
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
Total Alternatives	34.6	35.1	41.4	40.2	58.4	66.5	69.5	72.4	74.2	76.0	77.3	79.0	83.8	86.1
Percent Alternative Light Truck Sales	6.62	6.66	8.17	8.80	12.03	13.26	13.30	13.33	13.49	13.63	13.77	13.91	14.68	14.96
Total New Truck Sales	522.3	526.7	506.7	456.5	485.6	501.4	522.6	543.0	550.0	557.4	561.7	568.0	571.2	575.6
Percent Total Alternative Sales	6.44	6.72	7.64	8.29	9.98	11.09	11.21	11.63	11.92	12.12	12.31	12.49	13.05	13.33
EPACT Legislative Alternative Sales	17.45	17.60	17.27	16.32	17.03	17.36	17.79	18.17	18.35	18.50	18.54	18.62	18.65	18.75
ZEVP Legislative 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
Total Vehicles Sales	1061.6	1070.4	1068.6	1048.7	1078.3	1087.5	1099.3	1106.6	1115.2	1118.7	1115.8	1114.3	1112.6	1115.7

Table 39. Light-Duty Vehicle Sales by Technology Type
(thousands)
West North Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	472.0	470.4	468.3	467.7	467.6	467.9	468.4	468.5	468.1	468.5	467.9	466.7	465.8	465.1	-0.3%
TDI Diesel ICE	3.1	3.4	3.6	3.9	4.2	4.6	4.8	5.2	5.7	6.0	6.4	6.7	7.3	7.7	5.5%
Total Conventional	475.2	473.8	471.9	471.6	471.8	472.5	473.2	473.7	473.8	474.6	474.3	473.5	473.1	472.8	-0.3%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	29.5	29.3	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.1	29.1	29.0	0.3%
Ethanol ICE	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	3.9%
Electric Vehicle	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	0.1%
Electric-Diesel Hybrid	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	29.7	31.4	33.0	34.5	36.0	37.6	39.3	41.0	42.7	44.5	46.3	48.2	50.1	52.1	8.5%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9%
Compressed Natural Gas Bi-fuel	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.2%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.1%
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	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	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	N/A
Total Alternatives	63.7	65.2	66.7	68.1	69.6	71.2	72.9	74.6	76.3	78.2	80.0	81.8	83.6	85.7	3.3%
Percent Alternative Car Sales	11.83	12.10	12.38	12.62	12.85	13.10	13.35	13.61	13.87	14.15	14.44	14.73	15.02	15.34	3.2%
Total New Car Sales	538.9	539.0	538.5	539.7	541.3	543.7	546.1	548.3	550.1	552.8	554.3	555.2	556.7	558.4	0.1%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	454.4	457.3	458.9	457.8	460.2	462.5	466.3	469.4	470.3	473.7	476.7	477.7	476.5	477.3	0.1%
TDI Diesel ICE	40.8	44.3	46.8	51.0	54.5	58.7	61.9	66.1	72.2	76.0	79.8	83.5	91.0	95.2	4.9%
Total Conventional	495.2	501.6	505.7	508.7	514.7	521.2	528.3	535.5	542.4	549.6	556.6	561.2	567.5	572.5	0.6%

Table 39. Light-Duty Vehicle Sales by Technology Type
(thousands)
West North Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	48.3	48.7	48.8	48.7	49.0	49.3	49.7	50.2	50.4	50.9	51.4	51.5	51.5	51.7	2.7%
Ethanol ICE	0.0	0.0	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 Vehicle	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.1%
Electric-Diesel Hybrid	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	N/A
Electric-Gasoline Hybrid	29.7	31.5	33.3	35.1	37.0	39.0	41.2	43.5	45.8	48.3	50.9	53.4	56.0	58.7	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0%
Compressed Natural Gas Bi-fuel	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.3%
Liquefied Petroleum Gas Bi-fuel	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.3	8.4	8.5	8.7	8.7	8.9	9.0	1.1%
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	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	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	N/A
Total Alternatives	88.2	90.5	92.5	94.4	96.8	99.2	102.0	104.9	107.6	110.8	114.0	116.8	119.5	122.6	4.9%
Percent Alternative Light Truck Sales	15.12	15.29	15.46	15.66	15.83	15.99	16.19	16.38	16.55	16.77	17.00	17.23	17.39	17.63	3.8%
Total New Truck Sales	583.4	592.1	598.2	603.1	611.5	620.4	630.3	640.5	650.0	660.4	670.6	678.0	687.0	695.1	1.1%
Percent Total Alternative Sales	13.54	13.77	14.00	14.22	14.43	14.64	14.87	15.11	15.32	15.58	15.84	16.10	16.33	16.61	3.5%
EPACT Legislative Alternative Sales	18.93	19.14	19.28	19.41	19.63	19.87	20.13	20.40	20.64	20.92	21.18	21.37	21.60	21.81	0.8%
ZEVP Legislative 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	N/A
Total Vehicles Sales	1122.3	1131.2	1136.8	1142.8	1152.8	1164.2	1176.4	1188.8	1200.1	1213.2	1224.9	1233.2	1243.7	1253.5	0.6%

Table 39. Light-Duty Vehicle Sales by Technology Type
(thousands)
West North Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 40. Light-Duty Vehicle Sales by Technology Type
(thousands)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	1411.6	1431.3	1486.7	1569.3	1565.9	1540.7	1525.8	1492.1	1501.6	1499.2	1488.9	1476.9	1471.2	1475.9
TDI Diesel ICE	7.8	4.7	5.6	5.7	7.4	7.3	7.1	6.8	7.2	7.5	7.8	8.1	8.5	9.1
Total Conventional	1419.4	1436.1	1492.3	1575.0	1573.3	1547.9	1532.9	1498.9	1508.8	1506.6	1496.7	1485.0	1479.7	1485.0
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	74.2	75.5	79.7	82.9	95.1	96.9	95.7	94.9	95.9	95.5	94.5	93.2	92.4	92.5
Ethanol ICE	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
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0	1.3	1.6	1.5	1.4
Electric-Gasoline Hybrid	9.0	17.0	22.5	38.1	33.9	47.6	48.8	58.4	65.5	69.5	72.9	76.1	82.3	87.5
Compressed Natural Gas ICE	0.0	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
Compressed Natural Gas Bi-fuel	2.2	2.3	2.4	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	8.5	8.7	9.0	9.6	9.7	9.6	9.5	9.4	9.5	9.5	9.4	9.4	9.4	9.5
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
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
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
Total Alternatives	94.6	104.0	114.4	134.0	142.1	157.4	157.3	166.1	174.4	178.8	181.4	183.6	188.9	194.2
Percent Alternative Car Sales	6.25	6.75	7.12	7.84	8.28	9.23	9.31	9.98	10.36	10.61	10.81	11.00	11.32	11.56
Total New Car Sales	1514.0	1540.1	1606.7	1709.0	1715.3	1705.3	1690.2	1665.0	1683.2	1685.4	1678.1	1668.6	1668.5	1679.2
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	1300.0	1326.2	1271.5	1142.0	1169.4	1193.9	1250.1	1307.1	1327.9	1351.7	1368.4	1389.1	1393.9	1405.1
TDI Diesel ICE	68.6	65.4	58.9	59.3	66.8	71.9	77.8	82.9	89.3	94.0	98.4	104.8	107.9	117.1
Total Conventional	1368.6	1391.6	1330.3	1201.3	1236.2	1265.8	1327.9	1390.0	1417.1	1445.8	1466.8	1493.8	1501.8	1522.2

Table 40. Light-Duty Vehicle Sales by Technology Type
(thousands)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	72.6	74.5	80.7	73.0	123.1	126.3	133.6	140.4	142.2	144.7	146.4	148.4	148.4	149.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
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	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	12.9	20.2	21.6	41.8	43.6	45.7	50.6	54.5	58.4	62.9	79.4	87.4
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	5.7	5.8	5.6	5.1	5.5	5.7	6.0	6.2	6.4	6.5	6.6	6.8	6.9	7.0
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	18.9	19.2	18.7	17.0	18.1	18.8	19.8	20.7	21.1	21.6	21.9	22.4	22.7	23.1
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
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
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
Total Alternatives	98.0	100.3	118.7	115.9	169.0	193.3	203.6	213.8	221.1	228.1	234.2	241.3	258.3	267.8
Percent Alternative Light Truck Sales	6.68	6.72	8.19	8.80	12.02	13.25	13.29	13.33	13.50	13.63	13.77	13.91	14.67	14.96
Total New Truck Sales	1466.6	1491.9	1449.0	1317.3	1405.1	1459.0	1531.4	1603.8	1638.2	1673.9	1701.1	1735.2	1760.1	1790.0
Percent Total Alternative Sales	6.46	6.74	7.63	8.26	9.97	11.08	11.20	11.62	11.91	12.11	12.30	12.48	13.04	13.32
EPACT Legislative Alternative Sales	48.99	49.84	49.39	47.10	49.29	50.51	52.13	53.66	54.66	55.54	56.14	56.88	57.48	58.31
ZEVP Legislative 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
Total Vehicles Sales	2980.6	3032.0	3055.7	3026.3	3120.4	3164.4	3221.6	3268.8	3321.4	3359.3	3379.1	3403.8	3428.6	3469.3

Table 40. Light-Duty Vehicle Sales by Technology Type
(thousands)
South Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	1482.5	1491.9	1499.9	1512.3	1526.8	1543.3	1560.4	1576.7	1592.2	1610.4	1624.8	1637.9	1651.8	1666.5	0.6%
TDI Diesel ICE	9.7	10.5	11.2	12.4	13.5	14.9	15.9	17.2	18.7	19.9	21.3	22.7	24.7	26.3	6.8%
Total Conventional	1492.2	1502.4	1511.0	1524.8	1540.4	1558.2	1576.3	1593.9	1610.9	1630.4	1646.2	1660.6	1676.5	1692.9	0.6%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	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%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	92.7	93.1	93.4	94.1	94.9	95.9	97.0	98.1	99.1	100.3	101.3	102.2	103.1	104.1	1.2%
Ethanol ICE	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	4.9%
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	1.0%
Electric-Diesel Hybrid	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.7	N/A
Electric-Gasoline Hybrid	92.9	99.1	105.3	111.2	117.2	123.7	130.5	137.5	144.8	152.6	160.5	168.5	177.0	186.2	9.6%
Compressed Natural Gas ICE	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	2.2%
Compressed Natural Gas Bi-fuel	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.9	2.9	3.0	3.0	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	9.5	9.6	9.7	9.8	9.9	10.1	10.2	10.4	10.5	10.7	10.8	11.0	11.1	11.3	1.0%
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	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	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	N/A
Total Alternatives	199.8	206.5	213.1	219.8	226.8	234.5	242.5	250.7	259.1	268.4	277.4	286.3	296.0	306.3	4.2%
Percent Alternative Car Sales	11.81	12.09	12.36	12.60	12.83	13.08	13.33	13.59	13.86	14.13	14.42	14.71	15.01	15.32	3.2%
Total New Car Sales	1692.0	1709.0	1724.1	1744.5	1767.1	1792.7	1818.8	1844.7	1870.0	1898.7	1923.5	1946.9	1972.5	1999.1	1.0%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	1429.4	1452.9	1472.5	1482.9	1505.7	1528.3	1556.7	1583.2	1607.5	1637.3	1664.7	1686.8	1703.8	1725.7	1.0%
TDI Diesel ICE	125.4	137.5	146.5	161.5	174.5	190.1	202.5	218.4	235.6	249.6	265.6	279.7	305.1	321.8	6.3%
Total Conventional	1554.8	1590.3	1619.0	1644.4	1680.2	1718.4	1759.2	1801.6	1843.1	1887.0	1930.3	1966.5	2009.0	2047.5	1.5%

Table 40. Light-Duty Vehicle Sales by Technology Type
(thousands)

South Atlantic	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	152.0	154.6	156.7	157.8	160.4	162.9	166.0	169.3	172.3	176.0	179.4	182.0	184.1	186.8	3.6%
Ethanol ICE	0.0	0.0	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 Vehicle	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	2.0%
Electric-Diesel Hybrid	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	N/A
Electric-Gasoline Hybrid	93.1	99.7	106.2	113.3	120.6	128.4	137.1	146.1	155.6	165.9	176.7	187.4	198.6	210.5	N/A
Compressed Natural Gas ICE	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	5.4%
Compressed Natural Gas Bi-fuel	7.1	7.3	7.5	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.1	9.3	9.5	9.7	2.0%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9%
Liquefied Petroleum Gas Bi-fuel	23.6	24.2	24.7	25.2	25.8	26.4	27.1	27.8	28.5	29.3	30.0	30.7	31.4	32.1	2.0%
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	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	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	N/A
Total Alternatives	277.0	287.0	296.2	305.3	316.0	327.1	339.8	353.1	366.5	381.5	396.7	410.9	425.1	440.8	5.9%
Percent Alternative Light Truck Sales	15.12	15.29	15.47	15.66	15.83	15.99	16.19	16.39	16.59	16.82	17.05	17.28	17.47	17.71	3.8%
Total New Truck Sales	1831.8	1877.3	1915.2	1949.7	1996.2	2045.6	2099.0	2154.8	2209.6	2268.5	2327.0	2377.4	2434.1	2488.3	2.0%
Percent Total Alternative Sales	13.53	13.76	13.99	14.21	14.42	14.63	14.86	15.10	15.34	15.59	15.86	16.12	16.36	16.65	3.5%
EPACT Legislative Alternative Sales	59.43	60.69	61.74	62.76	64.09	65.51	67.04	68.62	70.18	71.86	73.50	74.93	76.53	78.08	1.7%
ZEVP Legislative 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	N/A
Total Vehicles Sales	3523.8	3586.3	3639.3	3694.2	3763.3	3838.2	3917.7	3999.4	4079.6	4167.2	4250.6	4324.3	4406.6	4487.4	1.5%

Table 40. Light-Duty Vehicle Sales by Technology Type
(thousands)
South Atlantic

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 41. Light-Duty Vehicle Sales by Technology Type
(thousands)
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	421.4	424.3	436.9	457.3	453.3	442.9	435.3	422.4	421.9	418.1	412.1	405.7	401.1	399.4
TDI Diesel ICE	2.5	1.5	1.8	1.8	2.2	2.2	2.1	2.0	2.1	2.1	2.2	2.3	2.4	2.5
Total Conventional	423.9	425.8	438.7	459.1	455.5	445.0	437.4	424.4	424.0	420.2	414.3	408.0	403.5	401.9
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	22.2	22.4	23.4	24.2	27.5	27.8	27.3	26.9	26.9	26.6	26.1	25.6	25.2	25.0
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
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
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.4
Electric-Gasoline Hybrid	2.7	5.1	6.7	11.2	9.9	13.8	14.0	16.6	18.5	19.4	20.2	21.0	22.5	23.8
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.5	2.6	2.7	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6
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
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
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
Total Alternatives	28.3	30.9	33.7	39.2	41.2	45.3	44.9	47.1	49.1	49.9	50.3	50.5	51.6	52.6
Percent Alternative Car Sales	6.25	6.77	7.13	7.86	8.29	9.24	9.31	9.99	10.38	10.62	10.82	11.02	11.33	11.58
Total New Car Sales	452.1	456.7	472.4	498.2	496.7	490.3	482.4	471.5	473.0	470.1	464.6	458.5	455.1	454.5
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	386.6	391.5	372.0	331.1	337.8	342.4	355.9	369.2	372.2	376.1	378.0	380.8	379.2	379.3
TDI Diesel ICE	22.2	21.3	19.2	19.2	20.2	21.5	23.1	24.5	26.1	27.2	28.2	29.8	30.4	32.8
Total Conventional	408.8	412.8	391.2	350.3	358.0	364.0	379.0	393.7	398.3	403.3	406.2	410.5	409.6	412.1

Table 41. Light-Duty Vehicle Sales by Technology Type
(thousands)
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	21.6	22.0	23.6	21.1	35.6	36.2	38.0	39.7	39.9	40.3	40.4	40.7	40.4	40.4
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	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
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
Electric-Gasoline Hybrid	0.0	0.0	3.8	6.0	6.3	12.1	12.5	13.0	14.3	15.3	16.2	17.3	21.7	23.7
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.7	1.7	1.7	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	5.7	5.7	5.5	5.0	5.2	5.4	5.6	5.9	5.9	6.0	6.1	6.2	6.2	6.3
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
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
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
Total Alternatives	29.1	29.6	34.8	33.7	48.9	55.5	58.1	60.5	62.1	63.6	64.8	66.3	70.4	72.5
Percent Alternative Light Truck Sales	6.65	6.69	8.17	8.79	12.02	13.24	13.28	13.32	13.48	13.62	13.76	13.90	14.67	14.95
Total New Truck Sales	438.0	442.4	426.0	384.0	406.8	419.5	437.0	454.2	460.4	466.9	471.0	476.8	480.1	484.5
Percent Total Alternative Sales	6.45	6.73	7.62	8.26	9.97	11.08	11.20	11.62	11.91	12.11	12.30	12.49	13.04	13.32
EPACT Legislative Alternative Sales	14.63	14.78	14.52	13.73	14.27	14.52	14.88	15.20	15.36	15.49	15.54	15.63	15.68	15.78
ZEVP Legislative 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
Total Vehicles Sales	890.1	899.2	898.4	882.3	903.5	909.8	919.4	925.7	933.4	937.1	935.5	935.4	935.1	939.1

Table 41. Light-Duty Vehicle Sales by Technology Type
(thousands)
East South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	398.0	397.3	396.3	396.5	397.1	398.2	399.3	400.2	400.7	401.9	402.2	402.0	402.0	402.2	-0.2%
TDI Diesel ICE	2.7	2.9	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.2	6.5	5.8%
Total Conventional	400.7	400.2	399.3	399.8	400.7	402.1	403.5	404.6	405.6	407.0	407.6	407.7	408.2	408.8	-0.2%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	24.9	24.8	24.7	24.7	24.7	24.7	24.8	24.9	24.9	25.0	25.1	25.1	25.1	25.1	0.4%
Ethanol ICE	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 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	0.2%
Electric-Diesel Hybrid	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	25.0	26.5	27.9	29.2	30.6	32.0	33.5	35.0	36.6	38.2	39.8	41.5	43.2	45.1	8.7%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5%
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	0.2%
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	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	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	N/A
Total Alternatives	53.7	55.1	56.4	57.7	59.1	60.6	62.2	63.8	65.3	67.1	68.8	70.4	72.2	74.1	3.4%
Percent Alternative Car Sales	11.83	12.10	12.38	12.61	12.85	13.10	13.35	13.61	13.87	14.15	14.44	14.73	15.03	15.34	3.2%
Total New Car Sales	454.4	455.3	455.7	457.6	459.8	462.7	465.6	468.4	470.9	474.1	476.4	478.1	480.4	482.8	0.2%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	382.8	385.9	388.0	387.7	390.5	393.1	397.1	400.5	403.2	407.1	410.6	412.3	412.9	414.6	0.2%
TDI Diesel ICE	34.8	37.9	40.0	43.6	46.7	50.5	53.3	57.0	61.0	64.2	67.6	70.8	76.5	80.0	5.2%
Total Conventional	417.6	423.8	428.0	431.3	437.3	443.6	450.5	457.6	464.2	471.3	478.2	483.1	489.4	494.7	0.7%

Table 41. Light-Duty Vehicle Sales by Technology Type
(thousands)
East South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	40.7	41.1	41.3	41.3	41.6	41.9	42.3	42.8	43.2	43.8	44.2	44.5	44.6	44.9	2.8%
Ethanol ICE	0.0	0.0	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 Vehicle	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	0.3	1.2%
Electric-Diesel Hybrid	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	N/A
Electric-Gasoline Hybrid	25.1	26.6	28.1	29.8	31.4	33.2	35.2	37.2	39.2	41.5	43.8	46.1	48.4	50.9	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8%
Compressed Natural Gas Bi-fuel	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	1.2%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4%
Liquefied Petroleum Gas Bi-fuel	6.3	6.5	6.5	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.8	1.2%
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	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	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	N/A
Total Alternatives	74.4	76.4	78.2	80.0	82.2	84.4	86.9	89.6	92.2	95.2	98.1	100.8	103.4	106.3	5.0%
Percent Alternative Light Truck Sales	15.11	15.28	15.45	15.65	15.82	15.98	16.17	16.37	16.57	16.80	17.03	17.26	17.44	17.69	3.8%
Total New Truck Sales	492.0	500.2	506.2	511.4	519.4	528.0	537.4	547.1	556.4	566.5	576.3	583.9	592.8	601.0	1.2%
Percent Total Alternative Sales	13.53	13.76	14.00	14.22	14.42	14.63	14.86	15.10	15.33	15.59	15.86	16.12	16.36	16.64	3.5%
EPACT Legislative Alternative Sales	15.96	16.17	16.32	16.46	16.68	16.91	17.16	17.42	17.67	17.94	18.20	18.40	18.64	18.86	0.9%
ZEVP Legislative 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	N/A
Total Vehicles Sales	946.4	955.5	962.0	968.9	979.2	990.7	1003.0	1015.5	1027.3	1040.6	1052.7	1062.0	1073.2	1083.8	0.7%

Table 41. Light-Duty Vehicle Sales by Technology Type
(thousands)
East South Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 42. Light-Duty Vehicle Sales by Technology Type
(thousands)

West South Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	819.3	830.5	860.7	906.3	895.8	877.4	866.0	844.4	847.7	844.3	836.7	828.1	823.2	824.2
TDI Diesel ICE	4.3	2.6	3.0	3.1	4.7	4.6	4.4	4.2	4.4	4.6	4.8	5.0	5.2	5.6
Total Conventional	823.6	833.2	863.7	909.4	900.5	882.0	870.4	848.7	852.1	848.9	841.5	833.1	828.4	829.8
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	43.1	43.8	46.2	47.9	54.4	55.2	54.3	53.7	54.1	53.8	53.1	52.3	51.7	51.6
Ethanol ICE	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
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.8	0.9	0.9	0.9
Electric-Gasoline Hybrid	5.2	9.8	12.9	21.8	19.6	27.3	27.9	33.3	37.2	39.4	41.2	42.9	46.3	49.1
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	4.9	5.0	5.2	5.6	5.5	5.5	5.4	5.3	5.4	5.3	5.3	5.3	5.3	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
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
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
Total Alternatives	54.9	60.3	66.1	77.2	81.5	89.9	89.5	94.3	98.7	101.0	102.2	103.3	106.0	108.8
Percent Alternative Car Sales	6.24	6.75	7.11	7.82	8.30	9.25	9.32	10.00	10.38	10.63	10.83	11.03	11.35	11.59
Total New Car Sales	878.4	893.4	929.8	986.6	982.0	971.8	959.9	942.9	950.8	949.9	943.7	936.4	934.4	938.6
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	756.6	771.8	738.3	661.8	664.1	674.9	704.4	734.7	744.4	755.9	763.4	773.1	774.0	778.2
TDI Diesel ICE	37.3	35.3	31.5	31.5	43.9	46.8	50.1	52.9	56.6	59.4	62.0	65.7	67.5	73.1
Total Conventional	793.9	807.0	769.7	693.4	708.1	721.7	754.5	787.6	801.0	815.3	825.4	838.8	841.5	851.4

Table 42. Light-Duty Vehicle Sales by Technology Type
(thousands)
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	42.3	43.4	46.9	42.3	69.9	71.4	75.3	79.0	79.8	80.9	81.7	82.6	82.4	82.8
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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
Electric-Gasoline Hybrid	0.0	0.0	7.4	11.6	12.5	24.0	24.9	26.0	28.7	30.9	33.0	35.4	44.6	49.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	3.3	3.4	3.3	3.0	3.1	3.2	3.4	3.5	3.6	3.7	3.7	3.8	3.8	3.9
Liquefied Petroleum Gas ICE	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	0.0
Liquefied Petroleum Gas Bi-fuel	11.0	11.2	10.8	9.8	10.4	10.7	11.2	11.7	11.9	12.2	12.3	12.6	12.7	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
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
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
Total Alternatives	57.0	58.4	68.8	67.0	96.4	109.8	115.2	120.7	124.4	128.1	131.2	134.9	144.1	149.1
Percent Alternative Light Truck Sales	6.70	6.75	8.21	8.82	11.98	13.20	13.25	13.29	13.45	13.58	13.72	13.86	14.62	14.90
Total New Truck Sales	850.9	865.4	838.6	760.4	804.4	831.5	869.7	908.2	925.4	943.4	956.6	973.7	985.6	1000.5
Percent Total Alternative Sales	6.47	6.75	7.63	8.26	9.95	11.07	11.19	11.61	11.89	12.10	12.28	12.47	13.03	13.30
EPACT Legislative Alternative Sales	28.43	28.91	28.58	27.19	28.22	28.78	29.61	30.39	30.88	31.30	31.57	31.92	32.19	32.59
ZEVP Legislative 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
Total Vehicles Sales	1729.3	1758.9	1768.4	1747.0	1786.4	1803.3	1829.6	1851.2	1876.2	1893.3	1900.3	1910.1	1920.0	1939.1

Table 42. Light-Duty Vehicle Sales by Technology Type
(thousands)

West South Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	826.3	830.1	833.3	839.2	846.2	854.3	862.7	870.8	878.4	887.4	894.6	900.8	907.5	914.8	0.4%
TDI Diesel ICE	5.9	6.4	6.8	7.5	8.2	9.0	9.6	10.4	11.3	12.0	12.9	13.7	14.9	15.9	7.2%
Total Conventional	832.2	836.5	840.1	846.7	854.4	863.3	872.3	881.2	889.7	899.5	907.4	914.5	922.5	930.7	0.4%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	51.6	51.8	51.9	52.2	52.6	53.1	53.6	54.2	54.6	55.3	55.8	56.2	56.6	57.1	1.0%
Ethanol ICE	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	4.8%
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8%
Electric-Diesel Hybrid	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	N/A
Electric-Gasoline Hybrid	52.1	55.5	58.8	62.0	65.3	68.8	72.5	76.4	80.3	84.6	88.8	93.2	97.9	102.8	9.5%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4%
Compressed Natural Gas Bi-fuel	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.7	0.9%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	5.3	5.4	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	6.0	6.0	6.1	6.2	0.8%
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	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	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	N/A
Total Alternatives	111.7	115.3	118.8	122.3	126.1	130.2	134.5	139.0	143.4	148.4	153.3	158.1	163.3	168.8	4.0%
Percent Alternative Car Sales	11.84	12.11	12.39	12.62	12.86	13.11	13.36	13.62	13.88	14.16	14.45	14.74	15.04	15.35	3.2%
Total New Car Sales	943.9	951.8	958.9	969.1	980.5	993.5	1006.8	1020.1	1033.1	1047.9	1060.7	1072.6	1085.7	1099.5	0.8%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	789.9	801.0	810.3	814.7	825.8	836.7	850.8	863.8	875.5	890.1	904.0	914.2	921.5	932.0	0.7%
TDI Diesel ICE	78.1	85.4	90.8	99.6	107.4	116.7	124.2	133.7	144.1	152.8	162.0	170.9	186.2	196.2	6.8%
Total Conventional	868.0	886.4	901.1	914.3	933.2	953.4	974.9	997.5	1019.6	1042.9	1066.0	1085.1	1107.7	1128.1	1.3%

Table 42. Light-Duty Vehicle Sales by Technology Type
(thousands)

West South Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	84.0	85.3	86.2	86.7	88.0	89.2	90.8	92.4	93.9	95.7	97.5	98.7	99.6	101.0	3.3%
Ethanol ICE	0.0	0.0	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 Vehicle	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.8%
Electric-Diesel Hybrid	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	0.2	N/A
Electric-Gasoline Hybrid	52.0	55.6	59.1	63.0	66.9	71.2	75.9	80.8	85.9	91.4	97.3	103.1	109.1	115.5	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9%
Compressed Natural Gas Bi-fuel	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3	1.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9%
Liquefied Petroleum Gas Bi-fuel	13.2	13.5	13.7	14.0	14.3	14.6	15.0	15.4	15.7	16.2	16.6	16.9	17.3	17.7	1.8%
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	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	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	N/A
Total Alternatives	153.9	159.1	164.0	168.8	174.4	180.3	187.0	194.1	201.2	209.1	217.2	224.7	232.1	240.4	5.6%
Percent Alternative Light Truck Sales	15.06	15.22	15.39	15.58	15.75	15.90	16.10	16.29	16.48	16.70	16.93	17.15	17.33	17.56	3.7%
Total New Truck Sales	1021.9	1045.5	1065.1	1083.0	1107.6	1133.7	1162.0	1191.6	1220.7	1252.0	1283.2	1309.8	1339.8	1368.5	1.8%
Percent Total Alternative Sales	13.51	13.74	13.97	14.19	14.39	14.60	14.83	15.06	15.29	15.55	15.80	16.07	16.30	16.58	3.5%
EPACT Legislative Alternative Sales	33.15	33.80	34.34	34.86	35.56	36.31	37.11	37.95	38.77	39.66	40.53	41.28	42.12	42.94	1.5%
ZEVP Legislative 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	N/A
Total Vehicles Sales	1965.8	1997.3	2024.0	2052.1	2088.0	2127.1	2168.8	2211.7	2253.8	2299.9	2343.9	2382.4	2425.5	2468.0	1.3%

Table 42. Light-Duty Vehicle Sales by Technology Type
(thousands)
West South Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 43. Light-Duty Vehicle Sales by Technology Type
(thousands)
Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	474.5	486.5	507.4	536.9	526.6	512.5	505.4	495.9	499.0	499.9	497.6	495.1	492.6	495.9
TDI Diesel ICE	2.4	1.4	1.6	1.7	3.0	3.0	2.8	2.7	2.8	2.9	3.0	3.1	3.3	3.6
Total Conventional	476.9	487.9	509.1	538.6	529.6	515.5	508.2	498.6	501.8	502.7	500.6	498.3	495.9	499.4
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	25.0	25.7	27.2	28.4	32.0	32.2	31.7	31.5	31.9	31.8	31.6	31.2	30.9	31.1
Ethanol ICE	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	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
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.5	0.6	0.6	0.6
Electric-Gasoline Hybrid	3.0	5.8	7.7	13.1	12.1	16.9	17.2	20.3	22.9	24.2	25.4	26.5	28.9	30.6
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.9	2.9	3.1	3.3	3.3	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.2
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
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
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
Total Alternatives	31.8	35.4	39.1	45.9	48.5	53.5	53.2	56.1	59.1	60.7	61.8	62.7	64.7	66.6
Percent Alternative Car Sales	6.25	6.76	7.13	7.85	8.39	9.40	9.47	10.12	10.54	10.77	10.98	11.17	11.53	11.76
Total New Car Sales	508.7	523.3	548.1	584.5	578.1	569.0	561.4	554.7	560.9	563.5	562.4	560.9	560.6	566.0
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	439.4	453.6	437.0	393.9	387.4	390.3	407.1	428.8	435.1	445.3	451.3	460.0	459.9	465.0
TDI Diesel ICE	20.1	18.9	16.5	16.6	29.3	31.7	33.7	34.3	37.0	37.9	40.1	41.9	44.3	47.7
Total Conventional	459.6	472.5	453.5	410.5	416.7	422.0	440.8	463.0	472.1	483.2	491.5	502.0	504.1	512.7

Table 43. Light-Duty Vehicle Sales by Technology Type
(thousands)
Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	24.6	25.6	27.8	25.2	40.8	41.3	43.5	46.1	46.6	47.7	48.3	49.2	49.0	49.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	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	0.3
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
Electric-Gasoline Hybrid	0.0	0.0	4.4	7.0	7.8	15.0	15.5	16.0	17.8	19.1	20.5	22.0	28.0	30.6
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.9	2.0	1.9	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.4	6.5	6.4	5.8	6.1	6.3	6.6	6.9	7.0	7.2	7.4	7.5	7.6	7.8
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
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
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
Total Alternatives	33.2	34.4	40.8	40.0	56.9	64.8	67.9	71.3	73.9	76.5	78.6	81.3	87.2	90.6
Percent Alternative Light Truck Sales	6.74	6.78	8.26	8.88	12.01	13.31	13.34	13.35	13.53	13.66	13.79	13.94	14.75	15.02
Total New Truck Sales	492.7	506.9	494.3	450.5	473.5	486.8	508.7	534.3	545.9	559.6	570.1	583.3	591.3	603.3
Percent Total Alternative Sales	6.49	6.77	7.66	8.30	10.02	11.20	11.31	11.70	12.02	12.21	12.40	12.58	13.19	13.44
EPACT Legislative Alternative Sales	16.46	16.94	16.85	16.11	16.61	16.85	17.31	17.88	18.22	18.57	18.81	19.12	19.31	19.65
ZEVP Legislative 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
Total Vehicles Sales	1001.4	1030.3	1042.5	1035.0	1051.6	1055.8	1070.0	1089.1	1106.9	1123.1	1132.5	1144.2	1151.9	1169.3

Table 43. Light-Duty Vehicle Sales by Technology Type
(thousands)
Mountain

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	497.8	502.1	506.4	512.4	517.7	524.4	531.2	538.4	545.6	552.5	558.6	563.8	569.0	574.8	0.6%
TDI Diesel ICE	3.8	4.1	4.4	4.8	5.3	5.8	6.2	6.7	7.3	7.9	8.4	9.0	9.8	10.4	7.9%
Total Conventional	501.6	506.2	510.8	517.2	523.0	530.2	537.4	545.2	552.8	560.4	567.1	572.8	578.8	585.2	0.7%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	31.1	31.3	31.5	31.9	32.2	32.6	33.0	33.5	33.9	34.4	34.8	35.2	35.5	35.9	1.3%
Ethanol ICE	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	5.4%
Electric Vehicle	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	1.1%
Electric-Diesel Hybrid	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	N/A
Electric-Gasoline Hybrid	32.6	34.8	37.0	39.1	41.3	43.6	46.1	48.6	51.2	54.1	57.0	59.9	63.1	66.4	9.8%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6%
Compressed Natural Gas Bi-fuel	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.3%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.7	3.7	3.8	3.8	3.9	1.1%
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	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	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	N/A
Total Alternatives	68.7	71.1	73.5	76.0	78.6	81.4	84.4	87.4	90.5	94.0	97.3	100.6	104.2	108.0	4.4%
Percent Alternative Car Sales	12.04	12.31	12.57	12.81	13.07	13.31	13.57	13.81	14.07	14.36	14.64	14.94	15.26	15.58	3.3%
Total New Car Sales	570.3	577.3	584.3	593.2	601.6	611.6	621.8	632.5	643.3	654.3	664.3	673.4	683.0	693.1	1.1%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	471.9	480.6	488.9	493.8	500.8	509.1	519.4	530.0	540.3	549.5	559.8	566.6	572.7	580.4	1.0%
TDI Diesel ICE	51.6	56.3	59.5	65.1	71.0	77.0	81.8	87.7	93.8	100.8	107.0	113.8	123.0	129.7	7.7%
Total Conventional	523.6	536.9	548.4	558.9	571.8	586.1	601.2	617.7	634.0	650.3	666.8	680.4	695.7	710.1	1.6%

Table 43. Light-Duty Vehicle Sales by Technology Type
(thousands)

Mountain	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	50.2	51.2	52.0	52.6	53.4	54.3	55.4	56.7	58.0	59.1	60.4	61.2	62.0	62.9	3.5%
Ethanol ICE	0.0	0.0	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 Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	2.1%
Electric-Diesel Hybrid	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	N/A
Electric-Gasoline Hybrid	32.8	35.0	37.3	39.8	42.5	45.2	48.3	51.5	54.8	58.6	62.4	66.3	70.4	74.7	N/A
Compressed Natural Gas ICE	0.0	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	10.8%
Compressed Natural Gas Bi-fuel	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	2.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.1%
Liquefied Petroleum Gas Bi-fuel	8.0	8.2	8.4	8.6	8.8	9.0	9.3	9.5	9.8	10.1	10.4	10.6	10.9	11.1	2.1%
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	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	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	N/A
Total Alternatives	93.8	97.3	100.7	104.1	107.8	111.8	116.4	121.2	126.2	131.4	136.9	141.9	147.1	152.7	5.9%
Percent Alternative Light Truck Sales	15.19	15.34	15.51	15.70	15.87	16.02	16.22	16.40	16.60	16.81	17.03	17.25	17.45	17.70	3.8%
Total New Truck Sales	617.4	634.2	649.0	663.0	679.6	697.9	717.6	738.9	760.2	781.8	803.7	822.3	842.8	862.7	2.1%
Percent Total Alternative Sales	13.68	13.90	14.12	14.33	14.55	14.75	14.99	15.21	15.44	15.69	15.95	16.21	16.47	16.75	3.5%
EPACT Legislative Alternative Sales	20.03	20.50	20.92	21.34	21.82	22.35	22.92	23.53	24.14	24.76	25.38	25.92	26.50	27.07	1.8%
ZEVP Legislative 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	N/A
Total Vehicles Sales	1187.6	1211.5	1233.3	1256.1	1281.3	1309.6	1339.3	1371.4	1403.5	1436.1	1468.0	1495.8	1525.8	1555.9	1.6%

Table 43. Light-Duty Vehicle Sales by Technology Type
(thousands)
Mountain

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 44. Light-Duty Vehicle Sales by Technology Type
(thousands)
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	1214.8	1226.1	1269.6	1335.7	1334.2	1300.4	1281.9	1253.0	1254.6	1248.6	1236.1	1224.4	1210.8	1213.3
TDI Diesel ICE	8.5	5.1	6.2	6.3	8.1	8.8	8.0	6.9	7.6	7.7	7.7	7.6	8.6	8.8
Total Conventional	1223.3	1231.2	1275.8	1342.0	1342.3	1309.3	1289.9	1259.9	1262.2	1256.3	1243.8	1232.0	1219.4	1222.0
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	63.9	64.7	68.0	70.5	81.0	81.7	80.3	79.7	80.1	79.5	78.4	77.3	76.1	76.1
Ethanol ICE	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
Electric Vehicle	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	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0	1.3	1.4	1.5	1.4
Electric-Gasoline Hybrid	8.3	15.7	20.8	34.9	30.5	43.1	43.7	51.5	57.8	60.9	63.5	65.9	71.2	75.1
Compressed Natural Gas ICE	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
Compressed Natural Gas Bi-fuel	1.9	2.0	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	7.3	7.4	7.7	8.2	8.2	8.1	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	1.2	1.2
Total Alternatives	82.0	90.3	99.3	116.7	122.7	135.9	134.9	142.1	149.0	152.2	154.4	155.7	160.6	164.4
Percent Alternative Car Sales	6.28	6.83	7.22	8.00	8.38	9.41	9.47	10.14	10.56	10.81	11.04	11.22	11.63	11.86
Total New Car Sales	1305.2	1321.5	1375.1	1458.7	1465.0	1445.2	1424.9	1402.0	1411.1	1408.5	1398.2	1387.8	1380.0	1386.5
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	1103.4	1119.5	1069.5	955.8	976.2	974.9	1020.6	1078.8	1084.3	1101.8	1116.9	1137.2	1122.3	1135.0
TDI Diesel ICE	77.8	75.9	69.4	69.3	80.4	98.3	98.3	90.1	102.6	104.2	103.2	102.5	116.8	117.4
Total Conventional	1181.2	1195.4	1138.9	1025.1	1056.6	1073.1	1118.9	1168.9	1186.8	1206.0	1220.2	1239.8	1239.1	1252.4

Table 44. Light-Duty Vehicle Sales by Technology Type
(thousands)
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	61.2	62.4	67.7	60.9	102.9	103.3	109.3	116.0	116.3	118.1	119.6	121.6	119.7	120.9
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	12.0	18.7	19.5	38.0	39.1	40.5	44.8	47.9	51.2	54.8	68.8	74.9
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.9	5.0	4.9	4.4	4.7	4.9	5.1	5.3	5.4	5.5	5.6	5.7	5.7	5.8
Liquefied Petroleum Gas ICE	0.1	0.2	0.1	0.1	0.3	0.7	1.2	1.5	1.6	1.9	1.8	1.9	2.4	3.7
Liquefied Petroleum Gas Bi-fuel	16.3	16.5	16.0	14.5	15.5	16.0	16.7	17.4	17.7	18.1	18.3	18.6	18.8	19.1
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.7	0.2	0.2	0.5	0.5
Total Alternatives	83.1	84.7	101.2	99.2	143.5	163.4	172.1	181.6	186.6	192.8	197.2	203.4	216.5	225.6
Percent Alternative Light Truck Sales	6.58	6.62	8.16	8.82	11.96	13.21	13.33	13.44	13.59	13.78	13.91	14.09	14.88	15.26
Total New Truck Sales	1264.3	1280.1	1240.2	1124.3	1200.1	1236.5	1291.0	1350.5	1373.4	1398.9	1417.4	1443.1	1455.7	1478.0
Percent Total Alternative Sales	6.43	6.73	7.67	8.36	9.99	11.16	11.30	11.76	12.05	12.29	12.49	12.69	13.30	13.61
EPACT Legislative Alternative Sales	42.24	42.76	42.27	40.20	42.10	42.80	43.95	45.19	45.82	46.42	46.78	47.31	47.54	48.14
ZEVP Legislative Alternative Sales	0.00	0.00	38.20	38.86	39.04	39.32	48.96	50.69	53.00	75.86	78.01	77.66	146.70	145.41
Total Vehicles Sales	2569.6	2601.5	2615.3	2582.9	2665.1	2681.7	2715.9	2752.5	2784.6	2807.3	2815.6	2830.9	2835.6	2864.4

Table 44. Light-Duty Vehicle Sales by Technology Type
(thousands)
Pacific

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	1211.9	1215.6	1218.8	1227.0	1233.5	1242.3	1251.6	1261.1	1270.9	1281.7	1289.5	1296.3	1304.2	1313.0	0.3%
TDI Diesel ICE	9.5	9.4	11.0	11.5	12.7	14.2	15.4	16.3	16.5	17.5	19.1	20.5	21.6	22.6	5.9%
Total Conventional	1221.5	1225.0	1229.8	1238.5	1246.2	1256.4	1267.0	1277.4	1287.4	1299.2	1308.6	1316.8	1325.8	1335.6	0.3%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	75.8	76.0	76.0	76.5	76.8	77.3	78.0	78.6	79.2	80.0	80.5	81.0	81.5	82.1	0.9%
Ethanol ICE	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	4.5%
Electric Vehicle	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	0.7%
Electric-Diesel Hybrid	1.3	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	N/A
Electric-Gasoline Hybrid	79.6	84.5	89.2	93.9	98.7	103.8	109.1	114.5	120.3	126.4	132.5	138.7	145.4	152.5	9.1%
Compressed Natural Gas ICE	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	1.3%
Compressed Natural Gas Bi-fuel	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	7.8	7.9	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.7	8.8	8.9	0.7%
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	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	N/A
Fuel Cell Hydrogen	1.2	2.6	2.5	2.4	2.5	2.4	2.3	2.7	2.5	2.5	2.6	2.6	2.6	2.5	N/A
Total Alternatives	168.7	175.0	179.8	184.8	190.2	195.8	201.7	208.2	214.5	221.5	228.3	235.0	242.3	250.1	4.0%
Percent Alternative Car Sales	12.14	12.50	12.75	12.99	13.24	13.48	13.73	14.02	14.28	14.57	14.85	15.14	15.45	15.77	3.3%
Total New Car Sales	1390.2	1400.1	1409.6	1423.3	1436.4	1452.3	1468.7	1485.6	1501.9	1520.7	1536.9	1551.8	1568.1	1585.7	0.7%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	1142.2	1169.7	1168.9	1182.3	1192.2	1200.8	1214.4	1234.4	1262.4	1282.2	1294.1	1304.7	1320.0	1337.1	0.7%
TDI Diesel ICE	129.9	125.6	149.9	153.1	168.2	186.9	202.2	212.2	211.6	222.4	242.1	256.8	270.0	278.9	5.1%
Total Conventional	1272.1	1295.3	1318.8	1335.4	1360.4	1387.7	1416.6	1446.6	1474.0	1504.6	1536.1	1561.5	1590.0	1616.0	1.2%

Table 44. Light-Duty Vehicle Sales by Technology Type
(thousands)
Pacific

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	121.7	124.7	124.6	126.1	127.3	128.3	129.8	132.4	135.6	138.1	139.8	141.1	143.0	145.1	3.3%
Ethanol ICE	0.0	0.0	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 Vehicle	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	1.7%
Electric-Diesel Hybrid	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	N/A
Electric-Gasoline Hybrid	79.6	85.0	89.4	95.3	101.1	107.1	113.6	120.8	128.9	137.0	145.1	153.3	162.4	171.9	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.2%
Compressed Natural Gas Bi-fuel	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.8	7.0	7.1	7.3	7.4	7.6	7.7	1.7%
Liquefied Petroleum Gas ICE	4.9	5.1	4.5	4.8	4.1	3.7	3.9	3.6	3.5	3.6	3.9	3.9	3.9	4.1	13.1%
Liquefied Petroleum Gas Bi-fuel	19.4	19.9	20.2	20.5	20.9	21.4	21.9	22.4	22.9	23.4	24.0	24.5	25.0	25.5	1.7%
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	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	N/A
Fuel Cell Hydrogen	0.5	1.1	1.1	1.1	1.3	1.3	1.3	1.6	1.7	1.8	1.9	2.0	2.1	2.2	N/A
Total Alternatives	233.0	242.7	247.0	255.3	262.2	269.5	278.4	288.8	300.7	312.3	323.1	333.4	345.1	357.7	5.7%
Percent Alternative Light Truck Sales	15.48	15.78	15.78	16.05	16.16	16.26	16.43	16.64	16.94	17.19	17.38	17.59	17.83	18.12	4.0%
Total New Truck Sales	1505.0	1538.0	1565.8	1590.7	1622.6	1657.2	1695.0	1735.3	1774.7	1816.9	1859.3	1894.9	1935.1	1973.7	1.7%
Percent Total Alternative Sales	13.87	14.22	14.34	14.60	14.79	14.96	15.18	15.43	15.72	15.99	16.24	16.49	16.77	17.08	3.6%
EPACT Legislative Alternative Sales	48.83	49.72	50.48	51.20	52.09	53.07	54.14	55.26	56.36	57.55	58.72	59.72	60.84	61.93	1.4%
ZEVP Legislative Alternative Sales	144.35	222.05	222.71	222.69	235.56	235.42	235.12	263.64	263.56	267.67	282.60	285.90	289.71	294.84	N/A
Total Vehicles Sales	2895.2	2938.1	2975.4	3013.9	3059.0	3109.4	3163.8	3220.9	3276.7	3337.6	3396.2	3446.7	3503.2	3559.4	1.2%

Table 44. Light-Duty Vehicle Sales by Technology Type
(thousands)
Pacific

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 45. Light-Duty Vehicle Sales by Technology Type
(thousands)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Car Sales 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	7536.7	7609.1	7867.8	8263.3	8186.2	7995.2	7870.8	7660.4	7666.5	7616.1	7524.6	7427.8	7353.0	7340.6
TDI Diesel ICE	43.2	26.0	30.6	31.1	42.5	42.3	40.3	37.7	39.6	40.8	42.1	43.2	45.5	48.3
Total Conventional	7579.9	7635.1	7898.3	8294.5	8228.8	8037.5	7911.1	7698.1	7706.1	7656.9	7566.7	7471.1	7398.6	7388.8
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	396.3	401.5	421.9	436.6	497.3	502.6	493.4	487.1	489.6	485.3	477.4	468.8	461.9	459.9
Ethanol ICE	0.6	0.6	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.3
Electric Vehicle	2.4	2.4	2.5	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.2	5.2	7.0	8.2	7.9	7.6
Electric-Gasoline Hybrid	49.1	92.1	121.8	204.9	181.6	253.5	257.7	305.5	341.3	359.5	374.9	389.3	418.9	442.5
Compressed Natural Gas ICE	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Compressed Natural Gas Bi-fuel	11.9	12.1	12.9	13.8	13.7	13.5	13.3	13.0	13.1	13.0	12.9	12.7	12.7	12.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	45.5	46.0	47.9	50.7	50.5	49.9	49.1	48.2	48.4	48.3	47.8	47.3	47.0	47.1
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	2.1	2.2
Total Alternatives	506.0	555.0	608.0	709.7	747.1	823.3	817.4	858.9	897.5	915.2	924.8	931.2	954.5	976.1
Percent Alternative Car Sales	6.26	6.78	7.15	7.88	8.32	9.29	9.36	10.04	10.43	10.68	10.89	11.08	11.43	11.67
Total New Car Sales	8085.9	8190.0	8506.3	9004.2	8975.8	8860.9	8728.4	8557.0	8603.6	8572.1	8491.6	8402.2	8353.1	8364.9
New Light Truck Sales 2/														
Conventional Vehicles														
Gasoline ICE Vehicles	6928.6	7037.6	6717.6	6002.6	6070.3	6139.2	6395.3	6670.6	6733.3	6823.1	6876.9	6951.7	6920.7	6946.0
TDI Diesel ICE	381.6	363.3	324.7	324.8	399.6	437.5	461.0	471.0	508.5	527.0	543.0	567.0	593.0	630.9
Total Conventional	7310.2	7400.9	7042.3	6327.4	6469.8	6576.7	6856.3	7141.6	7241.8	7350.1	7419.9	7518.7	7513.7	7576.8

Table 45. Light-Duty Vehicle Sales by Technology Type
(thousands)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	386.8	395.1	426.3	383.4	639.2	649.6	683.6	716.8	721.4	730.7	735.9	743.1	737.3	739.2
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	3.3	3.3	3.2	2.9	3.1	3.2	3.3	3.5	3.5	3.6	3.6	3.7	3.7	3.7
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	0.4	0.4
Electric-Gasoline Hybrid	0.0	0.0	70.1	109.1	116.2	223.1	230.3	239.6	263.8	282.6	301.2	322.4	404.5	442.1
Compressed Natural Gas ICE	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
Compressed Natural Gas Bi-fuel	30.5	30.9	30.0	27.1	28.7	29.6	30.9	32.2	32.7	33.2	33.6	34.1	34.4	34.8
Liquefied Petroleum Gas ICE	0.6	0.7	0.7	0.5	0.8	1.2	1.6	1.8	1.9	2.2	2.1	2.2	2.7	3.9
Liquefied Petroleum Gas Bi-fuel	101.1	102.4	99.0	89.5	94.9	97.8	102.0	106.3	108.0	109.8	111.1	112.7	113.7	115.1
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
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
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.5	1.2	0.3	0.3	0.9	0.8
Total Alternatives	522.3	532.4	629.3	612.7	883.0	1004.6	1052.3	1100.8	1132.0	1163.5	1188.0	1218.6	1297.6	1340.2
Percent Alternative Light Truck Sales	6.67	6.71	8.20	8.83	12.01	13.25	13.31	13.36	13.52	13.67	13.80	13.95	14.73	15.03
Total New Truck Sales	7832.5	7933.4	7671.6	6940.1	7352.8	7581.3	7908.6	8242.3	8373.8	8513.6	8607.9	8737.4	8811.3	8917.0
Percent Total Alternative Sales	6.46	6.74	7.65	8.29	9.98	11.12	11.24	11.67	11.95	12.17	12.36	12.54	13.12	13.40
EPACT Legislative Alternative Sales	261.67	265.04	261.49	248.16	257.92	262.45	269.21	275.79	279.39	282.50	284.07	286.42	287.78	290.45
ZEVP Legislative Alternative Sales	0.00	0.00	60.78	62.16	62.33	63.68	81.40	86.27	92.27	134.80	139.58	138.82	262.10	259.69
Total Vehicles Sales	15918.4	16123.4	16177.9	15944.3	16328.6	16442.2	16637.1	16799.3	16977.4	17085.8	17099.5	17139.6	17164.4	17281.9

Table 45. Light-Duty Vehicle Sales by Technology Type
(thousands)
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Car Sales 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	7328.8	7333.9	7334.3	7358.6	7386.5	7425.1	7466.0	7503.1	7536.7	7581.1	7608.3	7627.9	7651.2	7679.7	0.0%
TDI Diesel ICE	51.2	54.5	58.6	63.8	69.7	76.4	81.1	87.1	93.6	99.1	105.8	112.2	121.3	128.0	6.3%
Total Conventional	7380.0	7388.4	7392.9	7422.4	7456.2	7501.6	7547.1	7590.3	7630.3	7680.1	7714.1	7740.0	7772.5	7807.7	0.1%
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	458.1	457.8	456.8	457.9	459.4	461.7	464.5	467.1	469.1	472.6	474.7	476.0	477.7	479.8	0.7%
Ethanol ICE	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.8	4.4%
Electric Vehicle	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	0.5%
Electric-Diesel Hybrid	7.3	6.8	6.6	6.3	6.0	5.8	5.4	5.1	4.8	4.5	4.2	3.9	3.9	3.6	N/A
Electric-Gasoline Hybrid	467.4	495.7	523.3	549.3	576.0	604.5	634.1	664.5	695.7	729.4	762.6	796.6	832.6	870.9	9.0%
Compressed Natural Gas ICE	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	1.8%
Compressed Natural Gas Bi-fuel	12.7	12.8	12.8	13.0	13.0	13.2	13.3	13.4	13.5	13.7	13.8	13.9	14.0	14.1	0.6%
Liquefied Petroleum Gas ICE	0.0	0.0	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
Liquefied Petroleum Gas Bi-fuel	47.2	47.4	47.6	47.9	48.2	48.7	49.1	49.5	49.9	50.4	50.8	51.2	51.6	52.0	0.5%
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	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	N/A
Fuel Cell Hydrogen	2.2	4.6	4.5	4.3	4.5	4.3	4.2	4.8	4.5	4.5	4.6	4.6	4.5	4.5	N/A
Total Alternatives	999.1	1029.3	1055.8	1083.0	1111.6	1142.7	1175.2	1209.0	1242.2	1279.7	1315.5	1351.0	1389.1	1429.9	3.7%
Percent Alternative Car Sales	11.92	12.23	12.50	12.73	12.97	13.22	13.47	13.74	14.00	14.28	14.57	14.86	15.16	15.48	3.2%
Total New Car Sales	8379.0	8417.7	8448.6	8505.4	8567.8	8644.3	8722.3	8799.3	8872.5	8959.8	9029.6	9091.0	9161.6	9237.6	0.5%
New Light Truck Sales 2/															
Conventional Vehicles															
Gasoline ICE Vehicles	7016.1	7103.3	7147.6	7169.1	7228.3	7289.8	7384.1	7471.4	7547.1	7646.3	7727.2	7780.5	7816.8	7877.3	0.4%
TDI Diesel ICE	676.4	720.5	779.1	839.8	911.5	991.0	1046.4	1116.2	1191.1	1250.5	1327.0	1395.2	1506.7	1575.4	5.8%
Total Conventional	7692.5	7823.8	7926.7	8009.0	8139.8	8280.8	8430.5	8587.6	8738.1	8896.7	9054.2	9175.7	9323.4	9452.7	0.9%

Table 45. Light-Duty Vehicle Sales by Technology Type
(thousands)

United States	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	746.4	756.4	760.9	763.4	770.5	777.4	788.0	799.6	809.8	822.6	833.3	840.1	845.4	853.6	3.0%
Ethanol ICE	0.0	0.0	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 Vehicle	3.8	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.6	4.7	4.8	1.4%
Electric-Diesel Hybrid	1.7	1.6	1.6	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.1	2.0	N/A
Electric-Gasoline Hybrid	468.3	498.5	527.2	559.6	592.0	626.6	665.0	704.8	746.2	791.5	838.1	883.9	931.7	982.7	N/A
Compressed Natural Gas ICE	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	4.8%
Compressed Natural Gas Bi-fuel	35.4	36.1	36.6	37.1	37.8	38.5	39.3	40.1	40.9	41.8	42.6	43.3	44.1	44.9	1.4%
Liquefied Petroleum Gas ICE	5.2	5.3	4.8	5.0	4.3	4.0	4.1	3.8	3.7	3.8	4.1	4.1	4.1	4.3	7.5%
Liquefied Petroleum Gas Bi-fuel	117.1	119.3	121.1	122.7	124.9	127.3	129.9	132.6	135.3	138.1	140.9	143.2	145.9	148.3	1.4%
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	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	N/A
Fuel Cell Hydrogen	0.9	2.0	2.0	2.0	2.2	2.3	2.4	2.8	3.0	3.1	3.4	3.6	3.7	3.9	N/A
Total Alternatives	1378.9	1423.2	1458.2	1496.7	1538.8	1583.1	1635.7	1691.0	1746.0	1808.0	1869.5	1925.4	1982.1	2044.9	5.3%
Percent Alternative Light Truck Sales	15.20	15.39	15.54	15.75	15.90	16.05	16.25	16.45	16.65	16.89	17.11	17.34	17.53	17.79	3.8%
Total New Truck Sales	9071.4	9247.0	9384.9	9505.7	9678.5	9863.9	10066.1	10278.6	10484.1	10704.8	10923.7	11101.1	11305.5	11497.6	1.4%
Percent Total Alternative Sales	13.63	13.88	14.10	14.32	14.53	14.73	14.96	15.20	15.44	15.70	15.96	16.23	16.47	16.76	3.6%
EPACT Legislative Alternative Sales	294.32	298.92	302.54	305.97	310.72	315.89	321.49	327.33	332.96	339.09	345.02	349.86	355.45	360.78	1.2%
ZEVP Legislative Alternative Sales	257.65	396.11	397.12	397.00	419.78	419.36	418.64	469.22	468.88	475.98	502.30	507.99	514.55	523.49	N/A
Total Vehicles Sales	17450.4	17664.7	17833.6	18011.1	18246.3	18508.1	18788.4	19077.9	19356.7	19664.6	19953.3	20192.1	20467.2	20735.2	1.0%

Table 45. Light-Duty Vehicle Sales by Technology Type
(thousands)
United States

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2003 and 2004 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 Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 46. Light-Duty Vehicle Stock by Technology Type
(millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Light-Duty Car Stock 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	127.13	127.67	128.32	129.27	130.15	130.78	131.24	131.46	131.66	131.79	131.81	131.72	131.55	131.35
TDI Diesel ICE	0.53	0.51	0.50	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.58	0.59	0.61	0.63
Total Conventional	127.66	128.18	128.82	129.77	130.66	131.30	131.77	131.99	132.21	132.35	132.39	132.31	132.15	131.98
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	1.74	2.12	2.51	2.91	3.36	3.79	4.20	4.59	4.96	5.31	5.62	5.90	6.16	6.39
Ethanol ICE	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Natural Gas Technology														
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.15	0.19	0.24	0.28	0.33	0.37	0.41	0.44	0.48	0.51	0.54	0.57	0.59	0.61
Electric Technology														
Electric Vehicle	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04
Electric-Gasoline Hybrid	0.11	0.20	0.32	0.52	0.71	0.96	1.21	1.51	1.84	2.18	2.52	2.87	3.24	3.62
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
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
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	0.01
Total Alternatives	2.07	2.60	3.17	3.83	4.52	5.26	5.98	6.71	7.46	8.19	8.90	9.58	10.24	10.89
Total Car Stock	129.72	130.78	131.99	133.60	135.18	136.56	137.75	138.70	139.66	140.54	141.28	141.89	142.39	142.87
Light-Duty Truck Stock 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	71.24	74.89	78.12	80.57	82.96	85.26	87.68	90.22	92.69	95.10	97.42	99.67	101.73	103.67
TDI Diesel ICE	2.95	3.21	3.42	3.62	3.89	4.19	4.50	4.80	5.14	5.47	5.81	6.16	6.52	6.90
Total Conventional	74.18	78.09	81.53	84.19	86.85	89.45	92.18	95.03	97.83	100.58	103.24	105.83	108.25	110.57

Table 46. Light-Duty Vehicle Stock by Technology Type
(millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	1.63	2.01	2.41	2.77	3.36	3.95	4.56	5.19	5.80	6.40	6.97	7.52	8.04	8.53
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Technology														
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.32	0.34	0.37	0.39	0.41	0.43	0.45
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Liquefied Petroleum Gas Bi-fuel	0.38	0.48	0.57	0.66	0.74	0.83	0.91	0.99	1.08	1.16	1.23	1.30	1.37	1.44
Electric Technology														
Electric Vehicle	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05
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
Electric-Gasoline Hybrid	0.00	0.00	0.07	0.18	0.30	0.52	0.75	0.99	1.24	1.52	1.80	2.10	2.48	2.88
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
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
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
Total Alternatives	2.17	2.68	3.28	3.85	4.67	5.60	6.55	7.53	8.51	9.49	10.45	11.40	12.38	13.36
Total Truck Stock	76.35	80.77	84.81	88.04	91.52	95.05	98.73	102.56	106.34	110.07	113.69	117.23	120.63	123.93
Total Vehicle Stock	206.08	211.55	216.80	221.65	226.70	231.61	236.48	241.26	246.00	250.61	254.97	259.12	263.03	266.80

Table 46. Light-Duty Vehicle Stock by Technology Type
(millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Light-Duty Car Stock 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	131.14	130.93	130.72	130.52	130.36	130.23	130.13	130.07	130.04	130.07	130.13	130.21	130.33	130.49	0.1%
TDI Diesel ICE	0.65	0.68	0.70	0.74	0.77	0.82	0.86	0.91	0.97	1.03	1.09	1.16	1.24	1.32	3.7%
Total Conventional	131.79	131.61	131.42	131.26	131.13	131.04	130.99	130.98	131.01	131.10	131.22	131.38	131.57	131.80	0.1%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-9.6%
Methanol ICE	0.00	0.00	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 Fuel ICE	6.59	6.77	6.93	7.08	7.20	7.32	7.42	7.51	7.59	7.67	7.74	7.80	7.86	7.91	5.2%
Ethanol ICE	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	6.7%
Natural Gas Technology															
Compressed Natural Gas ICE	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	3.3%
Compressed Natural Gas Bi-fuel	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	5.1%
Liquefied Petroleum Gas ICE	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	0.63	0.65	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.75	0.76	0.76	0.77	0.78	5.5%
Electric Technology															
Electric Vehicle	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	4.4%
Electric-Diesel Hybrid	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	N/A
Electric-Gasoline Hybrid	4.01	4.41	4.82	5.23	5.66	6.09	6.53	6.98	7.44	7.90	8.38	8.87	9.37	9.88	16.2%
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	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	N/A
Fuel Cell Hydrogen	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	N/A
Total Alternatives	11.51	12.13	12.74	13.33	13.90	14.47	15.04	15.60	16.16	16.72	17.28	17.85	18.42	19.00	8.0%
Total Car Stock	143.31	143.74	144.16	144.58	145.04	145.52	146.03	146.58	147.17	147.82	148.50	149.22	149.99	150.80	0.5%
Light-Duty Truck Stock 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	105.54	107.34	109.05	110.65	112.18	113.63	115.06	116.46	117.85	119.23	120.60	121.94	123.22	124.48	2.0%
TDI Diesel ICE	7.31	7.74	8.21	8.72	9.29	9.91	10.57	11.27	12.02	12.81	13.64	14.51	15.45	16.43	6.5%
Total Conventional	112.84	115.08	117.26	119.37	121.46	123.54	125.63	127.74	129.87	132.04	134.24	136.45	138.68	140.91	2.3%

Table 46. Light-Duty Vehicle Stock by Technology Type
(millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7.4%
Methanol ICE	0.00	0.00	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 Fuel ICE	8.99	9.43	9.83	10.21	10.57	10.90	11.21	11.50	11.78	12.05	12.30	12.54	12.76	12.98	7.4%
Ethanol ICE	0.00	0.00	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
Natural Gas Technology															
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.7%
Compressed Natural Gas Bi-fuel	0.46	0.48	0.50	0.51	0.52	0.54	0.55	0.57	0.58	0.59	0.61	0.62	0.63	0.65	5.2%
Liquefied Petroleum Gas ICE	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	11.6%
Liquefied Petroleum Gas Bi-fuel	1.50	1.56	1.61	1.66	1.71	1.76	1.81	1.85	1.90	1.95	1.99	2.03	2.08	2.12	5.9%
Electric Technology															
Electric Vehicle	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	5.9%
Electric-Diesel Hybrid	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	N/A
Electric-Gasoline Hybrid	3.29	3.72	4.17	4.63	5.10	5.59	6.10	6.62	7.16	7.72	8.30	8.90	9.52	10.16	N/A
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	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	N/A
Fuel Cell Hydrogen	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	N/A
Total Alternatives	14.32	15.28	16.21	17.13	18.03	18.92	19.81	20.70	21.58	22.48	23.38	24.28	25.19	26.11	9.2%
Total Truck Stock	127.16	130.36	133.48	136.51	139.50	142.47	145.44	148.43	151.45	154.52	157.62	160.73	163.87	167.02	2.8%
Total Vehicle Stock	270.47	274.10	277.63	281.09	284.54	287.98	291.47	295.02	298.63	302.33	306.12	309.95	313.85	317.83	1.6%

Table 46. Light-Duty Vehicle Stock by Technology Type
(millions)

1/ Includes personal and fleet vehicles.

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type
(miles per gallon gasoline equivalent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Automobiles 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	28.92	29.04	29.15	29.21	29.47	29.75	30.53	31.12	31.45	31.54	31.58	31.68	31.77	31.86
TDI Diesel ICE	42.40	40.45	40.49	39.96	39.02	38.93	39.46	40.02	40.36	40.41	40.36	40.33	40.35	40.38
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	28.21	28.32	28.37	28.53	28.81	29.05	29.77	30.34	30.60	30.70	30.75	30.87	30.96	31.05
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	29.55	29.70	29.89	29.98	29.47	29.51	30.20	30.76	31.14	31.24	31.29	31.40	31.53	31.66
Ethanol ICE	28.75	28.86	28.90	29.03	29.31	29.55	30.27	30.87	31.12	31.22	31.27	31.39	31.50	31.59
Natural Gas Technology														
Compressed Natural Gas ICE	29.32	29.39	29.42	29.16	29.19	29.37	29.90	30.35	30.66	30.74	30.78	30.87	30.96	31.06
Compressed Natural Gas Bi-fuel	31.60	31.78	29.01	28.95	29.00	29.17	29.84	30.35	30.64	30.74	30.78	30.88	31.00	31.11
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.00	0.00	28.16	27.96	27.94	28.15	28.82	29.43	29.79	29.93	29.98	30.10	30.25	30.39
Electric Technology														
Electric Vehicle	31.45	34.62	38.10	42.43	48.12	47.72	47.92	48.14	48.13	48.09	48.04	48.00	47.97	47.94
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.81	53.64	49.13	48.60	47.86	47.69	47.57
Electric-Gasoline Hybrid	45.38	45.59	42.70	42.10	41.48	41.31	41.08	41.25	41.66	41.69	41.66	41.66	41.72	41.75
Fuel Cell Technology														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	39.55	39.85	40.14	40.20	40.16	40.12	40.08	40.04	40.01
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
Fuel Cell Hydrogen	0.00	0.00	58.49	57.73	57.12	56.59	57.03	57.33	57.29	57.24	51.33	51.29	51.25	50.54
Average New Car MPG	29.40	29.30	29.34	29.47	29.67	30.00	30.77	31.40	31.77	31.88	31.95	32.06	32.19	32.30
Light-Duty Trucks 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	21.33	21.48	21.71	21.82	21.95	22.01	22.40	22.76	22.99	23.13	23.20	23.31	23.42	23.55
TDI Diesel ICE	26.38	26.48	27.64	27.47	27.43	27.37	27.77	28.23	28.48	28.57	28.62	28.66	28.72	28.79
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	19.61	19.76	20.68	20.87	21.81	21.83	22.19	22.58	22.86	23.00	23.09	23.22	23.35	23.50
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Technology														
Compressed Natural Gas ICE	26.74	26.78	26.85	26.72	27.01	27.01	27.46	27.87	28.07	28.15	28.18	28.24	28.26	28.30
Compressed Natural Gas Bi-fuel	20.54	20.64	20.81	20.85	20.89	20.95	21.31	21.70	21.89	22.01	22.07	22.13	22.23	22.33
Liquefied Petroleum Gas ICE	26.00	26.07	26.35	26.35	26.09	25.57	25.54	25.84	26.04	25.95	26.10	26.15	25.81	25.31
Liquefied Petroleum Gas Bi-fuel	20.93	21.08	21.36	21.42	21.53	21.53	21.86	22.21	22.43	22.54	22.60	22.68	22.78	22.89

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type
(miles per gallon gasoline equivalent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electric Technology														
Electric Vehicle	24.43	26.88	29.89	33.02	37.79	37.64	38.13	38.43	38.43	38.36	38.30	38.24	38.17	38.11
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	42.01	41.84
Electric-Gasoline Hybrid	0.00	0.00	27.86	27.34	27.12	30.03	30.34	30.74	30.87	30.88	30.81	30.80	31.75	31.97
Fuel Cell Technology														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.95	35.97	36.44	36.38	36.32
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
Fuel Cell Hydrogen	0.00	0.00	43.12	42.23	42.15	41.98	42.52	42.86	42.86	42.78	42.71	42.61	42.53	42.46
Average New Truck MPG	21.60	21.50	21.89	22.04	22.24	22.41	22.80	23.17	23.44	23.59	23.67	23.80	23.99	24.16
Fleet Average Stock Car MPG 2/	22.37	22.49	22.58	22.68	22.62	22.71	22.83	22.96	23.11	23.26	23.43	23.62	23.81	24.00
Fleet Average Stock Truck MPG 2/	17.32	17.39	17.45	17.51	17.44	17.49	17.56	17.65	17.74	17.83	17.93	18.04	18.15	18.26
Fleet Average Stock Vehicle MPG 2/	20.19	20.23	20.25	20.29	20.20	20.23	20.29	20.36	20.43	20.52	20.61	20.72	20.83	20.94

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type
(miles per gallon gasoline equivalent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Automobiles 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	31.94	32.01	32.09	32.18	32.33	32.49	32.62	32.73	32.81	32.89	32.94	32.98	33.00	33.02	0.5%
TDI Diesel ICE	40.38	40.39	40.42	40.45	40.52	40.62	40.70	40.77	40.83	40.87	40.89	40.88	40.89	40.88	0.0%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	31.15	31.24	31.34	31.42	31.58	31.75	31.87	31.98	32.09	32.14	32.19	32.22	32.25	32.27	0.5%
Methanol ICE	0.00	0.00	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 Fuel ICE	31.77	31.89	32.00	32.11	32.28	32.46	32.61	32.72	32.82	32.90	32.96	33.01	33.03	33.07	0.4%
Ethanol ICE	31.68	31.77	31.87	31.96	32.12	32.29	32.42	32.53	32.65	32.72	32.78	32.82	32.85	32.88	0.5%
Natural Gas Technology															
Compressed Natural Gas ICE	31.13	31.21	31.27	31.34	31.49	31.62	31.76	31.86	31.91	31.98	32.04	32.09	32.13	32.15	0.3%
Compressed Natural Gas Bi-fuel	31.19	31.26	31.32	31.39	31.53	31.67	31.80	31.88	31.94	32.00	32.05	32.05	32.06	32.06	0.0%
Liquefied Petroleum Gas ICE	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	30.53	30.64	30.74	30.85	31.01	31.17	31.31	31.41	31.48	31.55	31.61	31.64	31.65	31.67	N/A
Electric Technology															
Electric Vehicle	47.91	47.88	47.86	47.83	47.87	47.93	47.98	48.01	48.05	48.08	48.11	48.13	48.15	48.17	1.3%
Electric-Diesel Hybrid	47.44	47.33	47.27	47.24	47.26	47.30	47.35	47.40	47.44	47.47	47.50	47.51	47.52	47.52	N/A
Electric-Gasoline Hybrid	41.78	41.83	41.88	41.91	41.97	42.05	42.13	42.19	42.25	42.29	42.31	42.32	42.32	42.31	-0.3%
Fuel Cell Technology															
Fuel Cell Gasoline	39.98	39.97	39.96	39.94	39.97	40.01	40.03	40.07	40.10	40.14	40.18	40.20	40.22	40.24	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	N/A
Fuel Cell Hydrogen	50.50	50.47	50.44	50.41	50.39	50.39	50.40	50.42	50.43	50.45	50.46	50.46	50.47	50.47	N/A
Average New Car MPG	32.40	32.50	32.61	32.72	32.90	33.08	33.24	33.36	33.47	33.57	33.65	33.71	33.77	33.82	0.6%
Light-Duty Trucks 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	23.67	23.83	23.97	24.12	24.32	24.50	24.66	24.79	24.92	25.04	25.12	25.18	25.23	25.27	0.6%
TDI Diesel ICE	28.85	28.97	29.02	29.11	29.26	29.40	29.56	29.65	29.76	29.86	29.92	29.96	29.98	30.02	0.5%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.00	0.00	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 ICE	0.00	0.00	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 Fuel ICE	23.65	23.80	23.97	24.13	24.34	24.54	24.73	24.86	24.98	25.10	25.18	25.24	25.30	25.34	1.0%
Ethanol ICE	0.00	0.00	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
Natural Gas Technology															
Compressed Natural Gas ICE	28.38	28.50	28.61	28.72	28.89	29.06	29.22	29.33	29.43	29.53	29.63	29.69	29.71	29.73	0.4%
Compressed Natural Gas Bi-fuel	22.41	22.53	22.62	22.72	22.86	22.97	23.09	23.16	23.25	23.33	23.36	23.38	23.39	23.40	0.5%
Liquefied Petroleum Gas ICE	25.05	25.18	25.49	25.57	26.01	26.33	26.46	26.74	26.92	27.04	27.07	27.17	27.24	27.20	0.2%
Liquefied Petroleum Gas Bi-fuel	22.99	23.12	23.24	23.36	23.52	23.67	23.80	23.91	24.02	24.12	24.18	24.21	24.24	24.27	0.5%

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type
(miles per gallon gasoline equivalent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Electric Technology															
Electric Vehicle	38.05	38.00	37.95	37.90	37.93	37.96	38.00	38.03	38.06	38.09	38.12	38.14	38.16	38.18	1.4%
Electric-Diesel Hybrid	35.04	34.85	34.70	37.48	37.44	37.43	37.45	37.48	37.53	37.60	37.65	37.72	37.77	37.83	N/A
Electric-Gasoline Hybrid	31.98	31.99	32.04	32.12	32.23	32.36	32.48	32.58	32.66	32.75	32.80	32.83	32.86	32.87	N/A
Fuel Cell Technology															
Fuel Cell Gasoline	36.26	36.20	36.15	36.11	36.14	36.17	36.21	36.24	36.27	36.30	36.32	36.35	36.37	36.39	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	N/A
Fuel Cell Hydrogen	42.39	42.33	42.27	42.21	42.24	42.28	42.31	42.34	41.84	41.82	41.79	41.75	41.71	41.67	N/A
Average New Truck MPG	24.32	24.49	24.67	24.85	25.09	25.31	25.50	25.66	25.83	25.98	26.09	26.18	26.28	26.36	0.8%
Fleet Average Stock Car MPG 2/	24.19	24.37	24.57	24.75	24.96	25.16	25.29	25.42	25.55	25.68	25.80	25.91	26.03	26.13	0.6%
Fleet Average Stock Truck MPG 2/	18.37	18.47	18.58	18.68	18.79	18.90	19.05	19.20	19.34	19.48	19.62	19.76	19.89	20.01	0.5%
Fleet Average Stock Vehicle MPG 2/	21.05	21.16	21.27	21.38	21.49	21.62	21.73	21.86	21.98	22.09	22.20	22.31	22.41	22.51	0.4%

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type
(miles per gallon gasoline equivalent)

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.

MPG = Miles per Gallon.

ICE = Internal combustion engine.

Sources: 2003 and 2004 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-Model Year Fuel Economy Reports from Auto Manufacturers, 2000; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type
(billion miles, unless otherwise noted)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Conventional Vehicles 1/														
Gasoline ICE Vehicles	2491.0	2511.7	2483.4	2493.1	2522.1	2557.7	2600.7	2647.5	2680.0	2710.4	2740.9	2775.1	2807.7	2839.2
TDI Diesel ICE	42.1	44.5	45.5	47.2	50.2	53.7	57.6	61.6	65.6	69.7	73.9	78.3	83.0	88.1
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	45.0	55.1	64.0	72.2	83.9	95.8	107.8	120.1	131.5	142.5	153.0	163.2	172.8	181.9
Ethanol ICE	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	0.2
Natural Gas Technology														
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compressed Natural Gas Bi-fuel	3.6	4.3	5.0	5.4	5.8	6.2	6.7	7.1	7.5	7.9	8.3	8.6	8.9	9.2
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
Liquefied Petroleum Gas Bi-fuel	10.5	13.3	15.9	17.4	18.9	20.4	21.8	23.3	24.8	26.2	27.5	28.7	29.9	31.0
Electric Technology														
Electric Vehicle	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5
Electric-Gasoline Hybrid	1.3	2.4	4.5	8.1	11.4	16.8	22.5	28.8	35.6	42.6	50.0	57.7	66.6	76.0
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
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
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	0.1	0.1	0.1
VMT Equation Components														
Total VMT (billion miles)	2594.2	2632.1	2619.2	2644.4	2693.3	2751.7	2818.2	2889.6	2946.4	3000.8	3055.2	3113.6	3171.2	3227.7
VMT/Driving Population (thousand miles)	13.2	13.2	13.0	13.0	13.1	13.2	13.4	13.6	13.8	13.9	14.1	14.2	14.4	14.5
Driving Population (million)	226.5	229.1	231.7	234.4	237.0	239.5	241.8	244.1	246.3	248.5	250.5	252.5	254.5	256.6
Price Effects														
Motor Gasoline Price (1987 dollars / million Btu)	8.93	10.29	12.48	12.65	12.19	11.96	11.56	11.08	11.11	11.05	11.00	10.92	10.96	11.04
Fleet Miles per Gallon	20.27	20.27	20.28	20.31	20.20	20.24	20.29	20.35	20.42	20.50	20.60	20.71	20.83	20.94
Real Cost of Driving per Mile (1987 cents)	7.525	8.673	10.518	10.642	10.308	10.099	9.731	9.305	9.293	9.205	9.119	9.005	8.993	9.009
Point Price Elasticity	-0.065	-0.075	-0.092	-0.094	-0.090	-0.087	-0.083	-0.078	-0.077	-0.076	-0.074	-0.073	-0.072	-0.071
Income Effects														
Disposable Income (billion 1987 dollars)	6731.8	6959.9	7106.0	7385.3	7613.9	7880.5	8131.0	8366.8	8568.3	8793.3	9038.8	9319.0	9615.1	9913.8
Point Income Elasticity	605.881	618.393	634.488	653.128	661.112	669.748	674.730	677.153	680.087	685.300	691.868	699.948	709.080	718.307
Demographic Driving Population Effect														
Percentage Female Driving Population	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Point Demographic Elasticity	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type
(billion miles, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Conventional Vehicles 1/															
Gasoline ICE Vehicles	2874.3	2910.9	2946.2	2979.2	3012.5	3045.5	3079.1	3113.5	3148.1	3183.2	3218.6	3253.0	3286.7	3319.0	1.1%
TDI Diesel ICE	93.6	99.6	106.2	113.4	121.3	130.1	139.4	149.4	160.3	171.7	183.8	196.5	210.3	224.7	6.4%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.8%
Methanol ICE	0.0	0.0	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
Ethanol-Flex Fuel ICE	190.7	199.2	207.2	214.6	221.6	228.3	234.6	240.7	246.5	252.2	257.6	262.7	267.6	272.1	6.3%
Ethanol ICE	0.2	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	6.9%
Natural Gas Technology															
Compressed Natural Gas ICE	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	4.8%
Compressed Natural Gas Bi-fuel	9.5	9.9	10.1	10.4	10.7	11.0	11.2	11.5	11.8	12.0	12.3	12.5	12.8	13.1	4.3%
Liquefied Petroleum Gas ICE	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	11.8%
Liquefied Petroleum Gas Bi-fuel	32.1	33.2	34.2	35.2	36.1	37.1	38.0	38.9	39.8	40.7	41.7	42.6	43.4	44.3	4.7%
Electric Technology															
Electric Vehicle	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	4.3%
Electric-Diesel Hybrid	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	N/A
Electric-Gasoline Hybrid	85.9	96.3	107.1	118.2	129.7	141.6	154.0	166.8	180.1	193.8	208.1	222.8	238.0	253.7	19.7%
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	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	N/A
Fuel Cell Hydrogen	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	N/A
VMT Equation Components															
Total VMT (billion miles)	3288.7	3351.9	3414.2	3474.3	3535.6	3597.5	3660.5	3725.2	3791.2	3858.4	3927.1	3995.3	4064.2	4132.4	1.8%
VMT/Driving Population (thousand miles)	14.7	14.8	15.0	15.1	15.2	15.4	15.5	15.7	15.8	15.9	16.1	16.2	16.4	16.5	0.9%
Driving Population (million)	258.8	260.9	263.1	265.3	267.5	269.7	271.9	274.2	276.6	278.9	281.3	283.7	286.1	288.5	0.9%
Price Effects															
Motor Gasoline Price (1987 dollars / million Btu)	11.10	11.18	11.28	11.42	11.49	11.57	11.63	11.68	11.73	11.79	11.83	11.90	11.95	12.02	0.6%
Fleet Miles per Gallon	21.07	21.18	21.30	21.41	21.54	21.67	21.79	21.91	22.04	22.15	22.27	22.38	22.49	22.59	0.4%
Real Cost of Driving per Mile (1987 cents)	9.006	9.023	9.045	9.110	9.117	9.124	9.119	9.104	9.097	9.096	9.079	9.086	9.082	9.090	0.2%
Point Price Elasticity	-0.070	-0.070	-0.069	-0.069	-0.069	-0.068	-0.067	-0.067	-0.066	-0.065	-0.065	-0.064	-0.064	-0.063	-0.7%
Income Effects															
Disposable Income (billion 1987 dollars)	10262.9	10637.1	10993.2	11353.8	11710.9	12069.5	12434.0	12810.9	13201.3	13605.7	14017.0	14431.1	14851.1	15270.5	3.1%
Point Income Elasticity	729.797	742.161	753.014	764.243	774.622	784.615	794.394	804.251	814.320	824.662	834.733	844.710	854.569	864.197	1.3%
Demographic Driving Population Effect															
Percentage Female Driving Population	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	N/A
Point Demographic Elasticity	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	N/A

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type
(billion miles, unless otherwise noted)

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

VMT = Vehicle miles traveled.

ICE = Internal combustion engine.

MmBtu = Million British thermal units.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: 24 and Annual (Oak Ridge, TN, December 2004); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Personal Vehicles														
EPA Rated New Vehicle Fuel Efficiency														
Conventional Cars (MPG)														
Minicompact	25.426	25.594	25.670	26.313	26.872	27.390	28.285	28.941	29.191	29.332	29.382	29.459	29.543	29.620
Subcompact	28.743	28.823	28.779	29.050	29.461	29.847	30.744	31.410	31.722	31.843	31.916	32.053	32.180	32.310
Compact	31.616	31.800	31.925	32.315	32.629	32.903	33.839	34.501	34.832	34.911	34.923	34.972	35.026	35.088
Midsized	27.661	27.779	27.841	28.043	28.316	28.560	29.266	29.823	30.082	30.184	30.233	30.341	30.421	30.512
Large	26.465	26.501	26.459	26.396	26.480	26.634	27.208	27.679	27.935	28.043	28.094	28.218	28.331	28.433
Two Seater	25.038	25.106	25.087	25.121	25.301	25.622	26.167	26.609	26.882	27.008	27.088	27.206	27.316	27.386
Average New Car	28.999	29.121	29.250	29.275	29.523	29.807	30.588	31.176	31.524	31.612	31.653	31.742	31.839	31.927
Average New Car On-Road MPG	22.069	22.274	22.448	22.543	22.647	22.916	23.559	24.050	24.352	24.458	24.551	24.694	24.844	24.987
Conventional Light Trucks														
Small Pickup	24.447	24.705	25.054	25.365	25.568	25.644	26.090	26.518	26.765	26.908	27.020	27.157	27.308	27.449
Large Pickup	18.905	19.053	19.331	19.409	19.522	19.550	19.816	20.148	20.356	20.485	20.561	20.653	20.772	20.887
Small Van	24.703	24.799	25.006	25.089	25.225	25.217	25.601	25.944	26.166	26.265	26.318	26.386	26.506	26.635
Large Van	25.672	25.841	26.145	26.172	26.297	26.266	26.706	27.059	27.298	27.378	27.403	27.484	27.575	27.687
Small Utility	22.738	22.904	23.212	23.434	23.741	23.890	24.470	24.950	25.207	25.346	25.429	25.574	25.737	25.899
Large Utility	19.020	19.165	19.395	19.449	19.521	19.648	20.006	20.341	20.571	20.710	20.790	20.885	21.003	21.120
Average New Light Truck	21.304	21.458	21.690	21.801	21.933	21.986	22.382	22.750	22.981	23.116	23.193	23.304	23.410	23.536
Average New LT On-Road MPG	17.601	17.727	17.889	17.950	17.900	17.894	18.157	18.393	18.512	18.558	18.575	18.626	18.675	18.738
Degradation Factors 1/														
Cars	0.761	0.765	0.767	0.770	0.767	0.769	0.770	0.771	0.772	0.774	0.776	0.778	0.780	0.783
Light Trucks	0.826	0.826	0.825	0.823	0.816	0.814	0.811	0.809	0.806	0.803	0.801	0.799	0.798	0.796
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
Subcompact	0.000	0.000	58.488	57.732	57.121	56.594	57.034	31.082	35.684	36.545	36.847	37.244	37.823	38.287
Compact	34.477	36.174	34.935	36.412	36.144	37.333	37.721	38.769	39.392	39.641	39.842	40.058	40.373	40.586
Midsized	27.938	28.052	30.541	31.674	31.632	32.470	32.935	33.843	34.232	34.483	34.655	34.797	35.019	35.155
Large	28.560	28.588	27.146	26.901	26.384	26.245	29.412	30.806	31.268	31.539	31.722	32.002	32.335	32.638
Two Seater	36.023	36.054	35.879	35.611	35.436	35.365	35.915	36.440	36.586	36.608	36.579	36.579	36.589	36.613
Average New Alternative Cars	31.114	32.319	32.600	33.644	32.457	33.171	33.734	34.641	35.308	35.584	35.785	35.999	36.337	36.570

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Light Trucks														
Small Pickup	24.700	24.973	25.342	25.638	25.810	25.870	26.307	26.735	26.984	27.128	27.240	27.406	27.551	27.690
Large Pickup	19.094	19.239	19.510	20.976	21.332	21.185	21.263	21.436	21.762	21.973	22.141	22.339	22.595	22.782
Small Van	24.952	25.052	25.266	25.340	25.463	25.455	25.842	31.001	31.810	31.989	32.121	32.252	32.504	32.666
Large Van	26.627	26.753	26.184	25.776	25.734	25.728	26.171	26.680	27.060	27.173	27.223	27.371	31.760	32.641
Small Utility	24.433	26.879	43.116	42.231	23.387	25.997	26.396	26.774	27.248	27.514	27.656	27.913	28.247	28.503
Large Utility	19.211	19.358	21.330	21.697	21.636	21.647	21.933	22.236	22.565	22.762	22.900	23.068	23.277	23.455
Average New Alt. Light Trucks	19.390	19.539	21.398	22.060	22.550	23.624	23.963	24.355	24.740	24.954	25.084	25.279	26.005	26.332
Fleet Vehicles														
EPA Rated New Vehicle Fuel Efficiency														
Cars	28.638	28.753	28.755	28.963	29.197	29.459	30.228	30.822	31.108	31.214	31.264	31.373	31.469	31.570
Light Trucks	21.331	21.482	21.821	21.898	22.015	22.065	22.422	22.775	23.003	23.126	23.196	23.287	23.406	23.526
Average On-Road MPG														
Cars	21.525	21.766	21.978	22.146	22.174	22.360	22.667	23.045	23.434	23.808	24.076	24.265	24.415	24.560
Light Trucks	16.912	17.154	17.530	17.705	17.685	17.757	17.860	17.971	18.084	18.197	18.324	18.425	18.492	18.541
New Vehicle Sales Shares (%)														
Conventional Cars														
Minicompact	1.538	1.538	1.625	1.384	1.319	1.339	1.318	1.309	1.361	1.350	1.350	1.346	1.360	1.364
Subcompact	8.945	8.937	9.274	8.031	7.748	7.847	7.779	7.747	8.053	7.989	7.992	7.968	8.040	8.062
Compact	42.579	42.637	43.656	39.836	38.780	39.226	38.874	38.711	39.697	39.537	39.550	39.505	39.757	39.821
Midsize	32.438	32.374	31.608	34.479	35.264	34.955	35.191	35.314	34.612	34.738	34.722	34.754	34.574	34.524
Large	12.964	12.978	12.310	14.685	15.297	15.046	15.249	15.331	14.702	14.811	14.810	14.851	14.696	14.655
Two Seater	1.536	1.536	1.528	1.586	1.592	1.586	1.588	1.588	1.575	1.576	1.575	1.576	1.573	1.573
Conventional Light Trucks														
Small Pickup	5.392	5.358	5.200	5.592	5.946	5.895	5.987	6.017	5.867	5.905	5.902	5.915	5.874	5.863
Large Pickup	25.125	25.017	25.196	24.509	24.691	24.702	24.785	24.785	24.941	24.926	24.924	24.893	24.901	24.918
Small Van	5.185	5.203	5.386	4.602	4.521	4.590	4.554	4.529	4.682	4.660	4.665	4.657	4.695	4.705
Large Van	11.415	11.333	11.448	10.674	11.032	11.090	11.167	11.193	11.271	11.281	11.281	11.254	11.260	11.264
Small Utility	28.634	28.728	28.489	29.724	29.385	29.323	29.235	29.230	29.038	29.045	29.040	29.070	29.045	29.031
Large Utility	24.250	24.361	24.281	24.899	24.425	24.401	24.271	24.245	24.202	24.185	24.187	24.211	24.226	24.221
New Vehicle Average Horsepower														
Conventional Cars														
Minicompact	246.596	246.882	247.863	253.089	258.106	262.960	263.918	265.754	267.657	269.409	270.710	271.930	273.112	274.210
Subcompact	175.981	176.253	177.356	182.553	185.799	188.830	189.183	189.687	190.474	191.201	191.913	192.677	193.361	194.000
Compact	138.162	138.633	137.411	144.623	149.445	153.284	155.356	157.376	158.663	160.462	162.304	164.377	166.233	167.943
Midsize	185.057	185.296	184.331	191.251	197.372	202.683	206.167	208.527	210.384	212.438	214.447	216.716	218.544	220.283
Large	205.625	205.237	204.277	209.758	215.776	221.361	223.748	225.655	227.164	229.239	231.263	233.633	235.795	237.690
Two Seater	253.952	253.677	252.677	260.838	269.046	276.648	281.540	285.931	288.990	291.761	294.318	297.181	299.649	301.604
Average New Car	168.949	169.178	167.733	176.655	182.646	187.009	189.733	191.871	192.733	194.699	196.532	198.648	200.276	201.887
Conventional Light Trucks														
Small Pickup	151.559	153.154	151.484	160.976	168.249	173.463	176.881	179.731	181.490	183.793	186.136	188.759	191.249	193.508
Large Pickup	215.602	216.632	213.355	224.311	235.879	244.929	251.359	257.381	260.023	263.442	266.752	270.422	273.810	276.684
Small Van	181.285	181.416	178.386	188.645	195.682	200.748	204.001	207.181	209.227	211.575	213.914	216.515	218.978	221.297
Large Van	196.004	196.770	193.524	203.406	212.987	219.464	223.815	228.139	230.363	233.208	236.034	239.254	242.163	244.990
Small Utility	187.500	188.482	186.201	195.237	201.275	205.760	207.788	210.116	211.720	213.478	215.150	217.021	218.816	220.392
Large Utility	230.299	231.261	226.690	238.397	247.809	255.656	261.233	265.526	267.532	270.603	273.699	277.117	280.247	282.904
Average New Light Truck	203.650	204.624	201.486	211.762	220.261	226.996	231.326	235.321	237.486	240.132	242.758	245.671	248.409	250.797

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
New Vehicle Average Weight														
Conventional Cars														
Minicompact	3487.738	3489.350	3529.081	3546.904	3560.527	3572.926	3524.456	3494.203	3495.154	3498.844	3503.261	3506.860	3509.388	3512.182
Subcompact	2961.943	2964.650	2999.589	3038.833	3071.329	3099.924	3076.028	3060.067	3062.159	3064.882	3068.092	3070.789	3072.972	3075.129
Compact	2852.337	2855.881	2890.291	2926.695	2953.927	2977.044	2949.051	2930.309	2926.228	2928.423	2931.499	2934.209	2936.448	2938.617
Midsized	3320.914	3324.373	3364.079	3402.913	3436.552	3467.494	3441.977	3414.168	3411.361	3414.441	3418.058	3420.930	3422.994	3425.154
Large	3608.386	3612.278	3655.557	3704.219	3751.608	3790.803	3762.698	3734.985	3729.267	3733.004	3736.828	3740.515	3744.123	3747.189
Two Seater	3151.498	3154.330	3191.563	3232.854	3269.162	3296.317	3282.757	3267.747	3268.434	3271.276	3274.748	3277.545	3279.680	3281.307
Average New Car	3126.522	3129.764	3159.368	3227.515	3268.252	3293.611	3269.352	3247.335	3236.282	3240.426	3243.755	3247.112	3247.530	3249.307
Conventional Light Trucks														
Small Pickup	3714.207	3721.975	3729.313	3827.498	3875.081	3915.708	3895.776	3875.288	3875.975	3882.718	3889.014	3894.459	3899.944	3905.502
Large Pickup	5048.500	5058.658	5068.231	5197.162	5255.169	5307.081	5287.430	5268.164	5269.116	5280.322	5290.042	5298.979	5307.867	5316.615
Small Van	4237.275	4244.671	4251.362	4356.932	4400.446	4434.689	4407.281	4388.221	4390.099	4398.135	4405.836	4412.367	4418.541	4425.409
Large Van	4637.782	4646.192	4653.871	4769.765	4830.072	4881.356	4859.436	4846.016	4843.686	4853.122	4862.170	4870.778	4876.577	4884.345
Small Utility	4056.603	4063.349	4068.895	4154.171	4162.610	4179.386	4126.272	4093.546	4093.241	4100.791	4107.688	4114.404	4121.225	4127.916
Large Utility	5235.709	5244.287	5250.647	5370.958	5420.313	5459.708	5431.067	5400.005	5391.323	5399.219	5408.979	5417.952	5426.843	5435.683
Average New Light Truck	4648.995	4657.232	4666.770	4769.544	4806.861	4844.380	4811.627	4785.865	4786.407	4794.667	4803.241	4810.877	4819.011	4827.020
Average Weight for the Stock														
Conventional Cars	3156	3152	3151	3154	3160	3167	3173	3178	3183	3189	3194	3199	3204	3208
Conventional Light Trucks	4177	4229	4277	4326	4376	4425	4468	4505	4539	4571	4600	4626	4650	4671

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Personal Vehicles															
EPA Rated New Vehicle Fuel Efficiency															
Conventional Cars (MPG)															
Minicompact	29.692	29.759	29.842	29.926	30.070	30.216	30.312	30.421	30.528	30.581	30.601	30.608	30.621	30.634	0.7%
Subcompact	32.423	32.543	32.674	32.781	32.984	33.184	33.373	33.506	33.638	33.715	33.787	33.839	33.890	33.931	0.6%
Compact	35.129	35.177	35.243	35.311	35.462	35.603	35.743	35.825	35.917	35.994	36.046	36.048	36.066	36.085	0.5%
Midsized	30.600	30.684	30.766	30.841	30.994	31.143	31.257	31.365	31.433	31.501	31.545	31.573	31.600	31.624	0.5%
Large	28.521	28.594	28.674	28.766	28.924	29.088	29.255	29.365	29.427	29.517	29.605	29.677	29.697	29.719	0.4%
Two Seater	27.463	27.544	27.627	27.726	27.889	28.034	28.169	28.276	28.389	28.465	28.504	28.536	28.570	28.596	0.5%
Average New Car	31.997	32.069	32.150	32.235	32.386	32.540	32.677	32.778	32.860	32.938	32.992	33.025	33.046	33.071	0.5%
Average New Car On-Road MPG	25.123	25.250	25.392	25.530	25.732	25.935	26.047	26.136	26.205	26.266	26.310	26.340	26.360	26.384	0.7%
Conventional Light Trucks															
Small Pickup	27.594	27.757	27.919	28.049	28.237	28.403	28.611	28.754	28.851	28.952	29.037	29.095	29.127	29.151	0.6%
Large Pickup	20.997	21.133	21.261	21.392	21.557	21.703	21.826	21.940	22.066	22.182	22.249	22.293	22.328	22.355	0.6%
Small Van	26.766	26.925	27.030	27.165	27.365	27.564	27.760	27.868	28.025	28.162	28.238	28.282	28.333	28.379	0.5%
Large Van	27.810	27.971	28.122	28.242	28.433	28.633	28.829	28.992	29.126	29.275	29.381	29.438	29.493	29.545	0.5%
Small Utility	26.035	26.194	26.346	26.509	26.741	26.954	27.182	27.318	27.474	27.570	27.638	27.697	27.759	27.806	0.7%
Large Utility	21.237	21.380	21.528	21.678	21.864	22.032	22.152	22.268	22.372	22.480	22.563	22.621	22.670	22.708	0.7%
Average New Light Truck	23.665	23.816	23.966	24.113	24.312	24.495	24.659	24.790	24.923	25.038	25.119	25.176	25.234	25.274	0.6%
Average New LT On-Road MPG	18.809	18.888	18.972	19.048	19.172	19.282	19.414	19.522	19.630	19.720	19.784	19.832	19.880	19.914	0.4%
Degradation Factors 1/															
Cars	0.785	0.787	0.790	0.792	0.795	0.797	0.797	0.797	0.797	0.797	0.797	0.798	0.798	0.798	0.2%
Light Trucks	0.795	0.793	0.792	0.790	0.789	0.787	0.787	0.788	0.788	0.788	0.788	0.788	0.788	0.788	-0.2%
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	N/A
Subcompact	38.760	39.207	39.651	40.070	40.514	40.912	41.258	41.558	41.846	42.099	42.294	42.461	42.630	42.789	N/A
Compact	40.786	40.988	41.183	41.315	41.514	41.704	41.892	42.044	42.191	42.319	42.432	42.510	42.597	42.675	0.6%
Midsized	35.299	35.500	35.647	35.785	35.987	36.186	36.361	36.534	36.691	36.810	36.915	37.003	37.091	37.169	1.1%
Large	32.894	33.172	33.430	33.665	33.969	34.268	34.540	34.758	34.945	35.141	35.324	35.484	35.624	35.742	0.9%
Two Seater	36.638	36.671	36.712	36.762	36.850	36.969	37.092	37.190	37.283	37.344	37.364	37.382	37.406	37.422	0.1%
Average New Alternative Cars	36.784	37.035	37.252	37.431	37.654	37.882	38.089	38.270	38.441	38.589	38.716	38.827	38.928	39.024	0.7%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Light Trucks															
Small Pickup	27.839	28.008	28.175	32.010	32.216	32.412	32.619	32.873	33.154	33.437	33.706	33.973	34.224	34.467	1.2%
Large Pickup	22.970	23.173	23.386	23.598	23.851	24.106	24.335	24.517	24.702	24.878	25.029	25.145	25.266	25.368	1.1%
Small Van	32.821	32.997	33.167	33.360	33.616	33.862	34.105	34.291	34.494	34.683	34.852	34.963	35.090	35.207	1.3%
Large Van	32.823	33.023	33.227	33.420	33.674	33.937	34.186	34.418	34.641	34.861	35.045	35.222	35.369	35.477	1.1%
Small Utility	28.752	29.006	29.272	29.524	29.834	30.142	30.428	30.653	30.886	31.073	31.229	31.371	31.516	31.640	0.6%
Large Utility	23.651	23.851	24.055	24.254	24.496	24.734	24.964	25.141	25.305	25.488	25.634	25.747	25.860	25.963	1.1%
Average New Alt. Light Trucks	26.543	26.762	26.995	27.252	27.527	27.803	28.058	28.262	28.462	28.650	28.808	28.940	29.078	29.187	1.6%
Fleet Vehicles															
EPA Rated New Vehicle Fuel Efficiency															
Cars	31.660	31.748	31.842	31.928	32.095	32.258	32.403	32.512	32.599	32.674	32.733	32.768	32.797	32.823	0.5%
Light Trucks	23.646	23.793	23.927	24.064	24.247	24.418	24.570	24.688	24.812	24.930	25.007	25.056	25.100	25.135	0.6%
Average On-Road MPG															
Cars	24.717	24.860	25.012	25.154	25.322	25.503	25.618	25.740	25.845	25.927	25.995	26.050	26.092	26.127	0.7%
Light Trucks	18.593	18.647	18.714	18.779	18.860	18.948	19.072	19.198	19.318	19.425	19.518	19.598	19.664	19.718	0.5%
New Vehicle Sales Shares (%)															
Conventional Cars															
Minicompact	1.360	1.361	1.363	1.369	1.363	1.363	1.361	1.359	1.360	1.361	1.358	1.361	1.359	1.361	-0.5%
Subcompact	8.043	8.051	8.064	8.095	8.062	8.062	8.053	8.050	8.051	8.059	8.047	8.064	8.055	8.065	-0.4%
Compact	39.789	39.823	39.840	39.931	39.805	39.809	39.766	39.748	39.750	39.764	39.726	39.786	39.744	39.767	-0.3%
Midsize	34.543	34.517	34.512	34.450	34.544	34.545	34.579	34.583	34.585	34.575	34.605	34.562	34.588	34.572	0.3%
Large	14.693	14.677	14.650	14.586	14.656	14.650	14.669	14.689	14.683	14.671	14.693	14.657	14.683	14.664	0.5%
Two Seater	1.571	1.571	1.570	1.569	1.571	1.571	1.571	1.571	1.570	1.570	1.571	1.570	1.570	1.570	0.1%
Conventional Light Trucks															
Small Pickup	5.868	5.863	5.863	5.848	5.859	5.863	5.866	5.876	5.879	5.877	5.886	5.880	5.889	5.887	0.4%
Large Pickup	24.891	24.887	24.912	24.926	24.939	24.953	24.961	24.974	24.978	24.984	24.986	24.994	24.998	25.005	0.0%
Small Van	4.700	4.705	4.709	4.720	4.699	4.698	4.693	4.696	4.693	4.698	4.695	4.705	4.699	4.703	-0.4%
Large Van	11.246	11.240	11.257	11.272	11.267	11.267	11.271	11.281	11.287	11.289	11.304	11.322	11.319	11.324	0.0%
Small Utility	29.056	29.059	29.038	29.015	29.024	29.016	29.012	28.997	28.988	28.985	28.974	28.955	28.955	28.947	0.0%
Large Utility	24.238	24.245	24.221	24.218	24.212	24.203	24.198	24.176	24.175	24.167	24.156	24.144	24.138	24.133	0.0%
New Vehicle Average Horsepower															
Conventional Cars															
Minicompact	275.358	276.428	277.380	278.132	278.672	279.147	279.657	280.065	280.497	280.494	280.546	280.549	280.560	280.529	0.5%
Subcompact	194.575	195.137	195.643	196.125	196.403	196.610	196.788	197.001	197.162	197.303	197.407	197.484	197.536	197.585	0.4%
Compact	169.728	171.458	172.997	174.393	175.717	176.722	177.685	178.622	179.451	180.192	180.835	181.383	181.914	182.364	1.1%
Midsize	222.229	224.038	225.470	226.695	227.825	228.715	229.575	230.332	230.987	231.562	231.951	232.305	232.656	232.969	0.9%
Large	239.683	241.388	242.973	244.551	245.911	247.133	248.359	249.301	250.122	250.881	251.554	252.212	252.530	252.852	0.8%
Two Seater	303.903	306.053	307.787	309.450	310.875	311.996	313.131	314.155	315.081	315.765	316.079	316.540	317.079	317.481	0.9%
Average New Car	203.685	205.320	206.724	207.943	209.199	210.123	211.050	211.874	212.582	213.196	213.727	214.134	214.555	214.881	0.9%
Conventional Light Trucks															
Small Pickup	196.045	198.579	200.909	202.838	204.585	206.168	207.935	209.285	210.428	211.369	212.238	212.800	213.205	213.409	1.3%
Large Pickup	279.497	282.285	284.773	287.057	288.878	290.667	292.345	293.015	292.969	292.946	292.964	292.964	292.960	292.954	1.2%
Small Van	223.831	226.334	228.291	230.310	231.898	233.171	234.375	235.383	236.476	237.324	238.067	238.330	238.689	238.961	1.1%
Large Van	248.076	251.133	253.934	256.086	258.017	259.757	261.211	262.473	263.744	264.810	265.647	265.838	266.154	266.367	1.2%
Small Utility	221.905	223.073	223.886	224.607	224.884	225.074	225.217	225.350	225.377	225.357	225.421	225.404	225.361	225.331	0.7%
Large Utility	285.532	287.997	290.266	292.380	293.983	295.464	296.714	297.812	298.277	298.873	298.758	298.611	298.445	298.283	1.0%
Average New Light Truck	253.179	255.421	257.375	259.131	260.447	261.658	262.746	263.482	263.857	264.204	264.377	264.410	264.429	264.432	1.0%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
New Vehicle Average Weight															
Conventional Cars															
Minicompact	3514.756	3517.790	3520.747	3523.125	3520.739	3517.301	3514.129	3511.766	3509.472	3508.474	3507.873	3507.513	3507.004	3506.614	0.0%
Subcompact	3076.924	3078.406	3079.735	3081.342	3078.779	3075.887	3073.709	3072.031	3070.066	3068.600	3067.039	3066.131	3065.068	3064.192	0.1%
Compact	2940.451	2942.000	2943.398	2944.905	2942.441	2939.680	2937.364	2935.731	2933.896	2932.473	2931.100	2930.426	2929.552	2928.826	0.1%
Midsized	3427.220	3429.375	3431.303	3433.676	3431.665	3429.117	3426.794	3424.761	3422.526	3420.764	3419.153	3418.225	3417.149	3416.268	0.1%
Large	3749.667	3751.153	3752.329	3754.155	3750.909	3747.598	3745.022	3741.656	3738.356	3735.020	3731.610	3729.688	3727.698	3725.956	0.1%
Two Seater	3283.460	3285.407	3287.167	3288.963	3286.252	3282.308	3279.041	3276.422	3273.711	3271.701	3269.767	3268.601	3267.232	3266.099	0.1%
Average New Car	3251.672	3253.200	3254.555	3255.683	3254.198	3251.356	3249.279	3247.387	3245.139	3243.174	3241.699	3240.274	3239.463	3238.314	0.1%
Conventional Light Trucks															
Small Pickup	3910.979	3916.183	3921.333	3926.542	3924.666	3922.909	3921.160	3920.147	3919.199	3918.071	3917.736	3917.509	3917.324	3917.026	0.2%
Large Pickup	5325.279	5333.646	5341.715	5349.003	5346.153	5343.241	5339.818	5337.671	5335.393	5333.717	5333.238	5332.740	5332.177	5331.675	0.2%
Small Van	4432.137	4438.357	4444.918	4450.674	4447.568	4442.941	4437.300	4433.688	4429.835	4426.238	4422.810	4419.784	4416.780	4414.005	0.2%
Large Van	4892.114	4899.805	4908.666	4916.387	4914.047	4909.992	4905.443	4902.407	4899.545	4896.703	4893.604	4890.559	4887.723	4884.859	0.2%
Small Utility	4134.299	4140.284	4145.669	4150.609	4147.280	4143.739	4139.814	4136.762	4133.694	4129.874	4127.118	4124.691	4122.179	4120.125	0.1%
Large Utility	5444.647	5453.486	5462.182	5470.062	5467.013	5463.487	5457.366	5453.214	5448.871	5444.828	5441.699	5438.547	5435.060	5431.673	0.1%
Average New Light Truck	4834.473	4841.925	4849.327	4856.243	4853.257	4849.918	4845.592	4842.532	4839.533	4836.465	4834.225	4832.258	4830.000	4828.060	0.1%
Average Weight for the Stock															
Conventional Cars	3212	3217	3221	3224	3228	3230	3233	3235	3237	3238	3239	3240	3240	3241	0.1%
Conventional Light Trucks	4691	4709	4725	4745	4757	4768	4777	4785	4793	4799	4805	4809	4813	4816	0.5%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

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

2/ Environmental Protection Agency rated miles per gallon.

Sources: 2003 and 2004 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, 2000; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); 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, Planning, and Analysis (Oak Ridge, TN, March 1992); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Cars 1/														
Conventional Gasoline	737.12	722.51	695.28	693.80	709.60	714.93	706.90	684.23	665.10	648.39	636.31	627.92	619.13	611.53
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
Methanol														
Flex	0.26	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	30.95	38.88	41.64	42.56	43.53	44.15	44.19	43.44	42.60	41.59	40.71	40.03	39.43	38.90
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	4.40	5.34	6.25	6.83	7.05	7.22	7.33	7.28	7.15	6.99	6.84	6.71	6.61	6.53
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.00	0.00	25.89	27.89	28.38	28.63	28.67	28.28	27.74	27.07	26.44	25.91	25.48	25.15
Electric	1.00	1.15	1.20	1.11	1.04	0.98	0.92	0.88	0.85	0.84	0.83	0.82	0.81	0.81
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
Electric-Gasoline 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
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
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
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
Total Fleet Cars	773.72	768.02	770.28	772.19	789.61	795.92	788.01	764.12	743.45	724.88	711.13	701.39	691.46	682.91
Light Trucks 1/														
Conventional Gasoline	683.09	633.79	570.63	548.10	543.49	537.58	533.97	537.38	552.18	564.33	573.86	581.70	587.12	592.58
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
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
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	37.77	50.20	61.78	62.60	61.51	60.43	59.56	59.68	61.07	62.48	63.54	64.40	64.99	65.56
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	17.84	20.79	23.55	22.62	22.57	22.42	22.32	22.49	23.10	23.61	24.00	24.33	24.58	24.82
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	51.37	63.83	75.72	74.45	73.82	73.11	72.66	73.14	75.15	76.88	78.23	79.34	80.11	80.90
Electric	1.35	1.68	1.95	1.95	1.82	1.68	1.56	1.49	1.48	1.51	1.55	1.58	1.61	1.63
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
Electric-Gasoline 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
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
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
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
Total Fleet Light Trucks	791.43	770.28	733.64	709.71	703.22	695.20	690.07	694.17	712.98	728.80	741.18	751.35	758.40	765.49
Total Fleet Vehicles	1565.15	1538.30	1503.92	1481.90	1492.83	1491.12	1478.08	1458.29	1456.43	1453.68	1452.31	1452.74	1449.86	1448.40
Commercial Light Trucks 2/	588.72	610.71	619.50	626.87	634.37	642.68	649.84	657.55	666.32	674.70	682.69	692.04	701.74	711.32

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Cars 1/															
Conventional Gasoline	605.44	602.11	600.01	599.04	598.28	597.87	599.81	601.89	604.55	607.88	611.37	614.85	618.55	622.28	-0.6%
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	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	-21.7%
Neat	0.00	0.00	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	38.43	38.11	37.87	37.73	37.62	37.54	37.61	37.71	37.85	38.03	38.23	38.44	38.66	38.89	0.0%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	6.46	6.41	6.37	6.36	6.35	6.34	6.37	6.39	6.42	6.46	6.49	6.53	6.58	6.62	0.8%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	24.85	24.62	24.46	24.37	24.30	24.26	24.32	24.40	24.50	24.63	24.76	24.90	25.05	25.21	N/A
Electric	0.80	0.80	0.80	0.80	0.80	0.80	0.81	0.81	0.82	0.82	0.83	0.84	0.84	0.85	-1.2%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Cars	675.98	672.05	669.51	668.30	667.34	666.82	668.91	671.20	674.14	677.82	681.69	685.56	689.68	693.84	-0.4%
Light Trucks 1/															
Conventional Gasoline	598.23	604.86	611.23	618.16	625.34	632.70	639.18	646.47	654.87	664.23	674.36	684.55	695.02	705.67	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	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	N/A
Neat	0.00	0.00	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	66.15	66.85	67.52	68.25	69.01	69.80	70.49	71.26	72.14	73.13	74.22	75.32	76.46	77.62	1.7%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	25.08	25.38	25.68	26.00	26.34	26.70	27.01	27.36	27.76	28.20	28.67	29.15	29.64	30.14	1.4%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	81.72	82.67	83.58	84.58	85.62	86.70	87.65	88.70	89.91	91.25	92.69	94.15	95.65	97.18	1.6%
Electric	1.66	1.69	1.72	1.75	1.78	1.81	1.84	1.88	1.91	1.95	1.98	2.02	2.06	2.09	0.9%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Light Trucks	772.83	781.44	789.73	798.74	808.10	817.71	826.17	835.67	846.58	858.76	871.93	885.20	898.82	912.70	0.7%
Total Fleet Vehicles	1448.81	1453.49	1459.25	1467.04	1475.44	1484.53	1495.09	1506.88	1520.72	1536.58	1553.62	1570.76	1588.50	1606.55	0.2%
Commercial Light Trucks 2/	721.60	731.88	740.84	749.62	758.62	767.95	777.65	788.28	800.02	812.55	825.01	837.09	849.95	863.96	1.3%

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology
(trillion Btu)

1/ Includes all fleets of 10 or more.

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

ICE = Internal combustion engine.

N/A = Not Applicable.

Sources: 2003 and 2004 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 (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); 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, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 51. Transportation Fleet Car and Truck Sales by Type and Technology
(thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Cars 1/														
Conventional Gasoline	1448.86	1467.52	1524.19	1613.41	1608.32	1587.73	1563.99	1533.27	1541.63	1535.99	1521.55	1505.54	1496.74	1498.86
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
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
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	81.29	82.34	85.51	90.52	90.23	89.08	87.75	86.02	86.49	86.18	85.37	84.47	83.97	84.09
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	11.79	11.94	12.40	13.12	13.08	12.92	12.72	12.47	12.54	12.49	12.38	12.25	12.18	12.19
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	45.46	46.04	47.82	50.62	50.46	49.81	49.07	48.10	48.37	48.19	47.74	47.23	46.96	47.03
Electric	2.41	2.44	2.54	2.68	2.68	2.64	2.60	2.55	2.56	2.55	2.53	2.50	2.49	2.49
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
Electric-Gasoline 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
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
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
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
Total Fleet Cars	1589.80	1610.28	1672.46	1770.36	1764.78	1742.17	1716.14	1682.42	1691.59	1685.41	1669.57	1652.00	1642.34	1644.66
Light Trucks 1/														
Conventional Gasoline	784.50	794.61	768.38	695.12	736.45	759.34	792.13	825.55	838.72	852.72	862.17	875.13	882.54	893.13
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
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
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	82.51	83.57	80.81	73.11	77.46	79.86	83.31	86.83	88.21	89.68	90.68	92.04	92.82	93.93
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	30.34	30.73	29.72	26.88	28.48	29.37	30.63	31.93	32.44	32.98	33.34	33.84	34.13	34.54
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	101.04	102.35	98.97	89.53	94.85	97.80	102.03	106.33	108.03	109.83	111.05	112.72	113.67	115.03
Electric	3.28	3.32	3.21	2.91	3.08	3.17	3.31	3.45	3.51	3.56	3.60	3.66	3.69	3.73
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
Electric-Gasoline 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
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
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
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
Total Fleet Light Trucks	1001.67	1014.58	981.09	887.55	940.32	969.55	1011.41	1054.09	1070.90	1088.78	1100.84	1117.39	1126.85	1140.37
Total Fleet Vehicles	2591.47	2624.86	2653.55	2657.91	2705.10	2711.72	2727.55	2736.51	2762.49	2774.18	2770.41	2769.39	2769.18	2785.03
Commercial Light Trucks 2/	605.77	657.11	668.39	666.76	697.77	702.65	729.83	725.78	736.87	724.45	721.77	729.96	743.76	760.37

Table 51. Transportation Fleet Car and Truck Sales by Type and Technology
(thousands)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Cars 1/															
Conventional Gasoline	1501.38	1508.31	1513.86	1524.04	1535.20	1548.91	1562.89	1576.70	1589.82	1605.45	1617.96	1628.96	1641.62	1655.22	0.5%
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	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	0.5%
Neat	0.00	0.00	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	84.23	84.62	84.93	85.51	86.13	86.90	87.69	88.46	89.20	90.07	90.78	91.39	92.10	92.87	0.5%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	12.21	12.27	12.31	12.40	12.49	12.60	12.71	12.83	12.93	13.06	13.16	13.25	13.35	13.46	0.5%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	47.10	47.32	47.50	47.82	48.17	48.60	49.03	49.47	49.88	50.37	50.76	51.11	51.50	51.93	0.5%
Electric	2.50	2.51	2.52	2.53	2.55	2.58	2.60	2.62	2.64	2.67	2.69	2.71	2.73	2.75	0.5%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Cars	1647.44	1655.04	1661.12	1672.29	1684.54	1699.59	1714.92	1730.08	1744.47	1761.63	1775.35	1787.43	1801.31	1816.24	0.5%
Light Trucks 1/															
Conventional Gasoline	908.59	926.18	939.99	952.09	969.40	987.96	1008.22	1029.50	1050.09	1072.19	1094.11	1111.88	1132.36	1151.60	1.4%
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	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	1.4%
Neat	0.00	0.00	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	95.56	97.41	98.86	100.13	101.96	103.91	106.04	108.28	110.44	112.77	115.07	116.94	119.09	121.12	1.4%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	35.14	35.82	36.35	36.82	37.49	38.21	38.99	39.81	40.61	41.47	42.31	43.00	43.79	44.54	1.4%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	117.03	119.29	121.07	122.63	124.86	127.25	129.86	132.60	135.25	138.10	140.92	143.21	145.85	148.33	1.4%
Electric	3.80	3.87	3.93	3.98	4.05	4.13	4.21	4.30	4.39	4.48	4.57	4.65	4.73	4.81	1.4%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Light Trucks	1160.11	1182.57	1200.21	1215.65	1237.76	1261.46	1287.32	1314.49	1340.78	1369.00	1396.99	1419.68	1445.83	1470.40	1.4%
Total Fleet Vehicles	2807.54	2837.61	2861.33	2887.94	2922.30	2961.04	3002.24	3044.57	3085.25	3130.63	3172.34	3207.11	3247.14	3286.63	0.9%
Commercial Light Trucks 2/	772.57	784.29	791.27	800.00	809.91	821.91	834.14	847.11	859.45	873.12	885.95	896.53	908.77	920.65	1.3%

Table 51. Transportation Fleet Car and Truck Sales by Type and Technology
(thousands)

1/ Includes all fleets of 10 or more.

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

ICE = Internal combustion engine.

N/A = Not Applicable.

Sources: 2003 and 2004 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 (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology
(thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cars 1/																
Conventional Gasoline	6277.98	6152.62	5905.51	5941.61	6092.20	6204.64	6239.83	6165.60	6102.23	6052.56	6011.33	5981.65	5938.11	5902.69	5883.49	5886.09
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
Methanol																
Flex	2.42	1.11	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol																
Flex	268.70	337.03	359.58	371.00	377.78	384.13	387.32	385.01	381.72	378.50	375.62	373.30	370.85	368.78	367.39	367.17
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	41.20	50.27	57.69	62.26	62.95	63.72	64.40	64.45	64.17	63.63	63.09	62.61	62.20	61.90	61.64	61.53
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	145.38	187.00	216.66	233.58	236.45	239.56	242.03	241.92	240.67	238.63	236.65	234.91	233.38	232.22	231.26	230.89
Electric	9.48	11.13	12.07	11.89	12.05	12.24	12.37	12.34	12.25	12.14	12.04	11.96	11.89	11.82	11.77	11.76
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
Electric-Gasoline 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
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
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
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
Total Fleet Cars	6745.17	6739.16	6551.59	6620.35	6781.44	6904.30	6945.95	6869.31	6801.04	6745.46	6698.73	6664.43	6616.43	6577.41	6555.56	6557.44
Light Trucks 1/																
Conventional Gasoline	4581.91	4271.54	3895.60	3779.79	3743.13	3720.83	3723.55	3781.95	3913.42	4029.98	4130.78	4213.48	4271.90	4325.83	4381.62	4444.96
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
Methanol																
Flex	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol																
Flex	251.80	332.29	408.30	418.14	413.43	411.36	411.62	417.07	429.77	442.98	454.22	463.71	470.56	476.57	482.77	489.69
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	116.16	135.96	154.38	149.65	148.22	147.35	147.35	149.48	154.63	159.27	163.30	166.61	168.95	171.09	173.29	175.79
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	341.40	424.73	503.48	500.80	495.90	493.04	493.08	500.10	517.02	532.58	546.06	557.21	565.08	572.25	579.64	587.99
Electric	10.99	13.82	16.48	17.06	16.85	16.77	16.79	16.99	17.46	18.01	18.47	18.86	19.15	19.40	19.65	19.93
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
Electric-Gasoline 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
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
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
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
Total Fleet Light Trucks	5302.33	5178.38	4978.24	4865.44	4817.53	4789.35	4792.39	4865.58	5032.30	5182.82	5312.83	5419.88	5495.65	5565.15	5636.98	5718.36
Total Fleet Vehicles	12047.50	11917.54	11529.83	11485.79	11598.96	11693.65	11738.34	11734.89	11833.34	11928.27	12011.56	12084.31	12112.08	12142.55	12192.54	12275.80
Commercial Light Trucks 2/	5940.07	6223.38	6547.10	6877.97	7234.47	7580.84	7931.76	8250.05	8547.34	8798.56	9015.08	9210.36	9392.36	9565.98	9729.31	9883.73

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology
(thousands)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Cars 1/													
Conventional Gasoline	5902.35	5927.04	5960.09	6000.06	6047.97	6099.54	6152.90	6208.31	6262.29	6313.46	6364.04	6413.01	0.2%
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	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	-21.0%
Neat	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	367.85	369.25	371.17	373.56	376.40	379.52	382.79	386.23	389.60	392.81	395.97	399.08	0.7%
Neat	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
Compressed Natural Gas	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
Compressed Natural Gas Bi-fuel	61.57	61.75	62.05	62.42	62.87	63.36	63.90	64.46	65.03	65.57	66.10	66.63	1.1%
Liquefied Petroleum Gas	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
Liquefied Petroleum Gas Bi-fuel	231.08	231.82	232.94	234.36	236.06	237.95	239.96	242.09	244.21	246.24	248.24	250.22	1.1%
Electric	11.77	11.82	11.87	11.95	12.04	12.13	12.24	12.35	12.46	12.56	12.66	12.76	0.5%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Cars	6574.63	6601.68	6638.12	6682.36	6735.33	6792.51	6851.79	6913.44	6973.58	7030.64	7087.02	7141.71	0.2%
Light Trucks 1/													
Conventional Gasoline	4509.73	4578.18	4653.26	4731.89	4813.67	4902.47	4999.08	5100.80	5205.84	5308.47	5410.42	5510.90	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	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	-8.2%
Neat	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	496.80	504.23	512.43	521.10	530.13	539.82	550.34	561.49	573.03	584.35	595.61	606.72	2.3%
Neat	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
Compressed Natural Gas	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
Compressed Natural Gas Bi-fuel	178.34	181.04	184.01	187.12	190.35	193.85	197.66	201.68	205.83	209.89	213.93	217.91	1.8%
Liquefied Petroleum Gas	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
Liquefied Petroleum Gas Bi-fuel	596.52	605.53	615.45	625.86	636.66	648.35	661.07	674.51	688.39	701.98	715.48	728.80	2.1%
Electric	20.22	20.52	20.85	21.21	21.57	21.97	22.39	22.84	23.31	23.77	24.23	24.69	2.3%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Light Trucks	5801.61	5889.50	5986.00	6087.18	6192.39	6306.45	6430.54	6561.32	6696.40	6828.47	6959.69	7089.01	1.2%
Total Fleet Vehicles	12376.25	12491.18	12624.12	12769.53	12927.72	13098.96	13282.33	13474.77	13669.98	13859.10	14046.70	14230.72	0.7%
Commercial Light Trucks 2/	10026.70	10161.20	10290.51	10418.94	10548.23	10680.55	10816.36	10957.66	11104.11	11253.41	11406.86	11563.42	2.4%

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology
(thousands)

1/ Includes all fleets of 10 or more.

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

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 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 (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2002 (Washington, DC, November 2003); 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 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology
(billion miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Cars 1/														
Conventional Gasoline	128.10	126.09	121.43	122.14	125.46	127.86	128.59	126.95	125.56	124.38	123.41	122.70	121.70	120.90
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
Methanol														
Flex	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	5.48	6.91	7.39	7.63	7.78	7.92	7.98	7.93	7.85	7.78	7.71	7.66	7.60	7.55
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.84	1.03	1.19	1.28	1.30	1.31	1.33	1.33	1.32	1.31	1.30	1.28	1.27	1.27
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	2.97	3.83	4.46	4.80	4.87	4.94	4.99	4.98	4.95	4.90	4.86	4.82	4.78	4.76
Electric	0.19	0.23	0.25	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.24
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
Electric-Gasoline 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
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
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
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
Total Fleet Cars	137.64	138.11	134.72	136.09	139.65	142.28	143.14	141.44	139.94	138.62	137.52	136.71	135.60	134.72
Light Trucks 1/														
Conventional Gasoline	93.49	87.54	80.10	77.70	77.08	76.68	76.73	77.87	80.52	82.82	84.80	86.43	87.55	88.60
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
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
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	5.14	6.81	8.40	8.60	8.51	8.48	8.48	8.59	8.84	9.10	9.33	9.51	9.64	9.76
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	2.37	2.79	3.17	3.08	3.05	3.04	3.04	3.08	3.18	3.27	3.35	3.42	3.46	3.50
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	6.97	8.70	10.35	10.29	10.21	10.16	10.16	10.30	10.64	10.94	11.21	11.43	11.58	11.72
Electric	0.22	0.28	0.34	0.35	0.35	0.35	0.35	0.35	0.36	0.37	0.38	0.39	0.39	0.40
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
Electric-Gasoline 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
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
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
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
Total Fleet Light Truck	108.19	106.13	102.37	100.01	99.21	98.70	98.76	100.19	103.55	106.51	109.07	111.18	112.63	113.99
Total Fleet Vehicles	245.83	244.24	237.09	236.10	238.86	240.98	241.90	241.63	243.49	245.13	246.60	247.88	248.23	248.70
Commercial Light Trucks 2/														
	65.78	68.73	70.19	71.47	72.74	74.05	75.35	76.79	78.40	79.97	81.49	83.18	84.92	86.67

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology
(billion miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Cars 1/															
Conventional Gasoline	120.45	120.46	120.76	121.23	121.87	122.65	123.60	124.62	125.67	126.76	127.82	128.81	129.80	130.75	0.1%
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	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	-21.0%
Neat	0.00	0.00	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	7.52	7.51	7.53	7.55	7.59	7.64	7.69	7.75	7.82	7.89	7.95	8.01	8.08	8.14	0.6%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	1.26	1.26	1.26	1.26	1.27	1.28	1.28	1.29	1.31	1.32	1.33	1.34	1.35	1.36	1.1%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	4.73	4.73	4.73	4.74	4.76	4.79	4.82	4.86	4.90	4.94	4.98	5.02	5.06	5.10	1.1%
Electric	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.5%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Cars	134.21	134.20	134.51	135.03	135.73	136.60	137.64	138.77	139.95	141.16	142.34	143.45	144.54	145.61	0.2%
Light Trucks 1/															
Conventional Gasoline	89.70	90.97	92.26	93.64	95.15	96.73	98.37	100.16	102.10	104.15	106.25	108.31	110.35	112.36	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	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	-8.2%
Neat	0.00	0.00	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	9.88	10.02	10.16	10.31	10.48	10.65	10.83	11.03	11.24	11.46	11.70	11.92	12.15	12.37	2.3%
Neat	0.00	0.00	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
Compressed Natural Gas	0.00	0.00	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
Compressed Natural Gas Bi-fuel	3.55	3.60	3.65	3.70	3.76	3.83	3.89	3.96	4.04	4.12	4.20	4.28	4.36	4.44	1.8%
Liquefied Petroleum Gas	0.00	0.00	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
Liquefied Petroleum Gas Bi-fuel	11.87	12.03	12.20	12.39	12.58	12.79	13.01	13.25	13.50	13.77	14.05	14.32	14.59	14.86	2.1%
Electric	0.40	0.41	0.41	0.42	0.43	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.49	0.50	2.2%
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	N/A
Electric-Gasoline 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	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	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	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	N/A
Total Fleet Light Truck	115.40	117.03	118.69	120.46	122.40	124.43	126.55	128.84	131.34	133.97	136.68	139.32	141.95	144.53	1.2%
Total Fleet Vehicles	249.61	251.22	253.20	255.49	258.13	261.03	264.19	267.62	271.29	275.13	279.01	282.77	286.49	290.14	0.7%
Commercial Light Trucks 2/															
	88.51	90.36	92.06	93.75	95.50	97.31	99.19	101.19	103.33	105.58	107.81	109.97	112.20	114.56	2.0%

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology
(billion miles)

1/ Includes all fleets of 10 or more.

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

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 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 (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 54. Air Travel Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cost (1987 dollars per million Btu)	4.5	6.1	8.5	8.7	7.1	7.0	6.7	6.5	6.6	6.6	6.5	6.6	6.6	6.7
Yield-domestic (ticket price) 1/	10.9	10.4	11.0	10.8	10.1	9.8	9.4	9.1	8.8	8.5	8.2	7.9	7.7	7.4
Yield-international (1996 dollars) 1/	9.0	9.2	9.1	8.8	8.3	8.0	7.8	7.5	7.2	7.0	6.8	6.5	6.3	6.1
Travel Demand (billion miles)														
Revenue Passenger Miles, Domestic	465.4	493.3	491.5	495.2	503.5	520.9	538.9	561.8	582.7	594.4	605.7	618.1	629.9	641.3
Load Factor, Domestic 2/	0.73	0.75	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.78
Revenue Passenger Miles, International	155.1	174.3	189.7	205.4	219.1	233.9	249.1	264.1	278.8	287.2	295.4	302.5	310.4	318.9
Load Factor, International 2/	0.75	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Revenue Ton Miles, Freight (billion)	27.4	29.4	29.3	31.6	35.4	36.4	37.9	40.4	43.2	46.2	49.2	52.2	55.2	58.6
Seat Miles Demanded (billion)														
Narrow Body Aircraft	919.4	980.3	990.1	1015.3	1046.3	1091.7	1138.6	1192.4	1240.5	1266.3	1291.0	1315.6	1340.2	1365.0
Wide Body Aircraft	564.1	600.7	597.7	605.4	618.9	642.4	666.8	697.0	723.3	737.8	751.6	766.4	780.7	794.6
Regional Jets	261.2	296.2	308.5	324.0	337.7	355.0	372.7	390.4	405.9	413.6	420.8	426.6	433.2	439.3
Aircraft Sales	94.1	83.4	83.9	85.9	89.7	94.3	99.2	105.0	111.3	115.0	118.6	122.6	126.4	131.1
Narrow Body Aircraft	98.0	125.0	205.0	211.5	214.3	214.5	210.4	201.5	194.0	195.0	197.1	200.9	205.6	211.6
Wide Body Aircraft	30.0	18.0	53.3	55.5	56.7	57.3	56.6	54.7	53.1	53.9	54.9	56.4	58.2	60.4
Regional Jets	303.0	286.0	151.7	156.0	157.6	157.3	153.7	146.8	140.9	141.2	142.2	144.5	147.4	151.2
Total Aircraft Sales	431.0	429.0	410.1	423.0	428.5	429.1	420.7	402.9	388.1	390.0	394.3	401.7	411.3	423.2
Aircraft Stock														
Narrow Body Aircraft	4894.0	4822.0	5063.8	5132.4	5206.3	5282.9	5358.0	5426.6	5489.3	5554.0	5619.5	5687.1	5761.1	5844.5
Wide Body Aircraft	1394.0	1381.0	1387.3	1400.8	1412.8	1422.8	1429.6	1432.4	1433.3	1435.3	1439.5	1445.7	1454.6	1466.7
Regional Jets	1586.0	1843.0	1435.9	1585.3	1735.3	1883.9	2027.9	2163.8	2292.4	2419.9	2547.6	2676.0	2805.4	2936.3
Total Aircraft Stock	7874.0	8046.0	7887.0	8118.5	8354.3	8589.6	8815.6	9022.7	9215.0	9409.2	9606.7	9808.8	10021.0	10247.5
Aircraft Active Stock														
Narrow Body Aircraft	4065.0	3876.0	3830.4	3846.9	3895.7	4000.8	4109.1	4248.1	4363.4	4411.9	4456.1	4497.2	4514.5	4533.4
Wide Body Aircraft	1090.0	712.0	735.8	766.4	792.4	826.4	860.6	894.4	922.8	932.9	941.9	947.7	955.0	961.3
Regional Jets	1530.0	1200.0	1307.4	1423.6	1537.6	1645.7	1744.0	1828.5	1899.7	1962.7	2017.9	2065.8	2107.0	2142.2
Total Active Stock	6685.0	5788.0	5873.5	6037.0	6225.8	6473.0	6713.7	6971.0	7185.9	7307.4	7415.8	7510.8	7576.5	7637.0
Aircraft Parked Stock														
Narrow Body Aircraft	829.0	577.0	61.9	121.9	161.4	165.0	158.6	112.8	63.4	60.0	30.6	0.0	0.0	0.0
Wide Body Aircraft	304.0	237.0	121.4	102.5	89.5	75.5	60.1	49.0	41.8	51.2	65.1	77.6	94.8	118.3
Regional Jets	56.0	90.0	128.6	161.6	197.6	238.2	283.9	335.3	392.7	457.2	529.7	610.2	698.4	794.1
Total Parked Stock	1189.0	904.0	311.9	386.1	448.5	478.6	502.6	497.0	497.9	568.4	625.5	687.7	793.2	912.4
Aircraft Cargo Stock														
Narrow Body Aircraft	537.0	549.0	1171.4	1163.6	1149.1	1117.1	1090.4	1065.7	1062.6	1082.1	1132.9	1189.9	1246.6	1311.1
Wide Body Aircraft	430.0	424.0	530.2	531.8	530.9	520.9	508.9	489.0	468.6	451.3	432.5	420.4	404.7	387.0
Total Cargo Stock	967.0	973.0	1701.6	1695.5	1680.0	1638.0	1599.2	1554.8	1531.2	1533.4	1565.4	1610.3	1651.3	1698.1

Table 54. Air Travel Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Advanced Technology Penetration														
Ultra-high Bypass	0.00	0.00	0.00	0.00	0.00	0.22	0.32	0.43	0.62	0.77	0.87	0.93	0.97	0.98
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
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
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
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
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
New Aircraft Efficiency 3/														
Narrow Body Aircraft	64.5	64.9	64.9	65.0	65.2	67.0	68.2	70.0	72.8	75.4	77.5	79.1	80.0	80.5
Wide Body Aircraft	62.9	63.2	63.3	63.4	63.6	65.4	66.6	68.4	71.1	73.7	75.8	77.3	78.2	78.8
Regional Jets	42.5	42.7	42.8	42.9	43.0	44.2	45.0	46.2	48.0	49.7	51.1	52.1	52.7	53.1
Average Aircraft	62.5	63.4	63.0	63.0	63.0	64.0	65.0	66.5	68.8	71.0	73.0	75.0	76.8	77.1
Aircraft Stock Efficiency 3/														
Narrow Body Aircraft	57.6	57.9	58.6	59.3	59.9	60.5	61.0	61.5	62.1	62.8	63.6	64.5	65.5	66.5
Wide Body Aircraft	56.3	56.4	57.8	58.4	59.0	59.7	60.3	60.9	61.6	62.6	63.7	64.8	66.0	67.2
Regional Jets	41.5	41.7	41.6	41.8	41.9	42.1	42.4	42.7	43.0	43.5	44.0	44.5	45.1	45.7
Average Aircraft	55.3	55.5	56.4	57.0	57.5	58.0	58.5	59.0	59.6	60.3	61.1	62.0	63.0	63.9
Fuel Consumption (trillion Btu)														
Commercial														
Jet Fuel	2726.4	2792.1	2780.8	2854.4	2971.2	3056.2	3155.4	3287.4	3413.0	3482.2	3543.3	3599.4	3650.4	3708.4
Aviation Gasoline	30.0	31.0	33.0	29.0	30.1	29.9	29.7	29.6	29.5	29.4	29.4	29.3	29.2	29.2
Military														
Jet Fuel	538.6	562.9	581.1	594.7	599.7	602.2	604.1	605.8	609.2	612.6	615.8	619.2	622.7	626.6

Table 54. Air Travel Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Cost (1987 dollars per million Btu)	6.7	6.9	6.9	7.0	7.1	7.2	7.2	7.2	7.3	7.4	7.5	7.6	7.7	7.7	0.9%
Yield-domestic (ticket price) 1/	7.1	6.9	6.6	6.4	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.1	-2.0%
Yield-international (1996 dollars) 1/	5.8	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.5	-1.9%
Travel Demand (billion miles)															
Revenue Passenger Miles, Domestic	652.2	662.4	671.1	671.8	672.2	672.6	673.0	673.6	674.4	675.4	676.8	678.4	680.4	682.8	1.3%
Load Factor, Domestic 2/	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.3%
Revenue Passenger Miles, International	328.2	338.6	350.7	360.4	370.6	380.9	391.2	401.5	411.7	421.7	431.6	441.4	450.9	460.2	3.8%
Load Factor, International 2/	0.79	0.79	0.79	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.1%
Revenue Ton Miles, Freight (billion)	62.6	66.0	68.8	71.6	74.4	77.1	79.9	82.8	85.7	88.7	91.8	94.9	98.3	101.7	4.9%
Seat Miles Demanded (billion)															
Narrow Body Aircraft	1390.1	1415.5	1441.0	1451.8	1462.7	1473.7	1484.7	1495.8	1506.9	1518.7	1530.6	1542.6	1554.8	1567.1	1.8%
Wide Body Aircraft	808.2	821.2	833.0	835.4	837.5	839.0	841.1	843.4	845.9	848.6	851.6	854.9	858.6	862.5	1.4%
Regional Jets	447.2	455.9	466.4	472.3	479.6	487.6	495.0	504.3	513.4	522.2	530.9	539.3	547.6	555.5	2.4%
Aircraft Sales															
Narrow Body Aircraft	134.8	138.3	141.6	144.2	145.6	147.1	148.5	148.1	147.7	147.8	148.1	148.3	148.7	149.1	2.3%
Wide Body Aircraft	217.8	222.2	222.7	229.1	235.0	240.8	246.8	253.3	260.3	267.2	273.6	279.0	284.9	290.8	3.3%
Regional Jets	62.7	64.4	65.1	67.5	69.8	72.1	74.4	77.0	79.7	82.4	85.0	87.4	89.8	93.1	6.5%
Total Aircraft Sales	155.2	157.7	157.6	161.6	165.2	168.7	172.4	176.3	180.6	184.8	188.6	191.7	195.0	197.8	-1.4%
Aircraft Stock															
Narrow Body Aircraft	435.6	444.3	445.4	458.3	470.1	481.6	493.6	506.6	520.5	534.4	547.1	558.1	569.8	581.6	1.2%
Wide Body Aircraft	5934.7	6024.7	6110.0	6196.0	6283.3	6372.3	6463.8	6558.5	6656.9	6760.3	6869.2	6981.4	7098.5	7218.1	1.6%
Regional Jets	1480.7	1495.7	1510.6	1528.1	1549.0	1573.2	1599.9	1630.1	1662.9	1698.0	1734.9	1773.0	1813.1	1855.1	1.1%
Total Aircraft Stock	3068.8	3201.2	3330.5	3460.7	3591.1	3721.2	3850.8	3980.0	4108.8	4236.7	4363.2	4487.2	4608.8	4726.8	3.7%
Aircraft Active Stock															
Narrow Body Aircraft	10484.2	10721.6	10951.1	11184.8	11423.4	11666.7	11914.6	12168.6	12428.6	12695.0	12967.3	13241.7	13520.4	13800.1	2.1%
Wide Body Aircraft	4564.3	4603.6	4684.3	4680.6	4660.2	4637.2	4617.6	4599.0	4581.7	4565.7	4551.0	4537.8	4526.1	4515.7	0.6%
Regional Jets	971.2	982.9	998.1	1007.4	1018.9	1033.7	1051.7	1072.3	1095.1	1120.1	1147.5	1177.4	1209.9	1245.4	2.2%
Total Active Stock	2171.7	2194.7	2209.4	2220.9	2230.2	2238.6	2247.9	2259.9	2276.2	2297.5	2323.9	2354.7	2389.7	2427.7	2.7%
Aircraft Parked Stock															
Narrow Body Aircraft	0.0	0.0	0.0	117.2	266.9	436.2	606.2	728.4	786.5	828.9	851.7	928.9	1020.0	1114.7	2.6%
Wide Body Aircraft	136.2	148.0	158.9	189.8	223.4	254.8	278.9	296.6	300.8	301.0	306.7	319.7	328.2	332.7	1.3%
Regional Jets	897.1	1006.5	1121.1	1239.8	1360.9	1482.6	1602.9	1720.1	1832.6	1939.2	2039.2	2132.6	2219.1	2299.2	13.3%
Total Parked Stock	1033.3	1154.5	1280.0	1546.8	1851.2	2173.7	2488.0	2745.1	2919.9	3069.1	3197.7	3381.2	3567.3	3746.6	5.6%
Aircraft Cargo Stock															
Narrow Body Aircraft	1370.4	1421.2	1425.6	1398.2	1356.2	1298.9	1240.0	1231.1	1288.7	1365.7	1466.4	1514.7	1552.4	1587.6	4.2%
Wide Body Aircraft	373.2	364.7	353.6	330.9	306.7	284.6	269.3	261.1	267.0	276.9	280.8	275.9	274.9	277.0	-1.6%
Total Cargo Stock	1743.6	1785.9	1779.2	1729.1	1662.9	1583.5	1509.3	1492.1	1555.7	1642.6	1747.2	1790.6	1827.3	1864.6	2.5%

Table 54. Air Travel Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Advanced Technology Penetration															
Ultra-high Bypass	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	26.0%
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	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	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	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	N/A
Weight Reducing Materials	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22.6%
New Aircraft Efficiency 3/															
Narrow Body Aircraft	80.8	80.9	81.0	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.2	0.9%
Wide Body Aircraft	79.0	79.2	79.3	79.4	79.4	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.6	79.6	0.9%
Regional Jets	53.2	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	0.9%
Average Aircraft	70.3	70.4	70.6	70.6	70.6	70.5	70.5	70.5	70.4	70.4	70.3	70.3	70.2	70.1	0.7%
Aircraft Stock Efficiency 3/															
Narrow Body Aircraft	67.5	68.5	69.3	70.4	71.4	72.5	73.5	74.6	75.7	76.8	77.8	78.8	79.6	80.1	1.3%
Wide Body Aircraft	68.3	69.4	70.4	71.5	72.6	73.6	74.6	75.5	76.3	77.1	77.7	78.3	78.7	79.0	1.3%
Regional Jets	46.3	46.9	47.5	48.1	48.7	49.3	49.9	50.5	51.0	51.5	51.9	52.2	52.5	52.8	0.9%
Average Aircraft	64.8	65.8	66.6	67.6	68.6	69.6	70.5	71.5	72.4	73.4	74.2	75.0	75.6	76.0	1.2%
Fuel Consumption (trillion Btu)															
Commercial															
Jet Fuel	3776.6	3831.6	3878.7	3890.0	3902.6	3914.8	3928.0	3940.8	3955.8	3974.3	3997.6	4028.1	4068.0	4117.7	1.5%
Aviation Gasoline	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	-0.3%
Military															
Jet Fuel	630.8	634.8	638.6	642.1	645.4	648.6	651.6	654.5	657.3	660.0	662.6	665.1	667.6	670.0	0.7%

Table 54. Air Travel Energy Use

1/ Fraction of seats filled.

2/ 1992 cents per passenger mile.

3/ Seat miles per gallon.

Btu = British thermal unit.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Model Maintenance Re-Estimation of the AirTravel Demand Model, Subtask 22-1(a), (September 30, 1997); Federal Aviation Administration (FAA), FAA Aviation Forecasts, Fiscal Years 1998-2009, FAA-APO 98-1, and previous editions; United States Department of Transportation (DOT), Research and Special Programs Administration (RSPA), Fuel Cost and Consumption Tables, annual summaries, 1979-1990; U.S. Department of Transportation, RSPA, Air Carrier Financial Statistics Quarterly, December 1999/1998; U.S. Department of Transportation, RSPA, Air Carrier Statistics Monthly, December 1999/1998 (Washington, DC, 1999); 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 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Department of Defense, Defense Energy Support Center, Fact Book: Fiscal Year 1999; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Existing Trucks by Size Class														
Vehicle Miles Traveled (billion miles)														
Medium														
Diesel	33.51	34.76	34.89	35.47	36.39	37.19	38.18	39.27	40.42	41.50	42.51	43.60	44.77	45.98
Gasoline	14.73	14.79	14.51	14.20	13.97	13.70	13.51	13.40	13.42	13.46	13.52	13.60	13.72	13.86
Liquefied Petroleum Gas	0.41	0.40	0.40	0.42	0.44	0.47	0.50	0.53	0.57	0.60	0.62	0.65	0.68	0.70
Compressed Natural Gas	0.09	0.13	0.19	0.26	0.35	0.45	0.56	0.68	0.80	0.92	1.04	1.16	1.28	1.39
Medium Subtotal	48.75	50.07	50.00	50.35	51.16	51.81	52.75	53.88	55.21	56.48	57.70	59.01	60.44	61.92
Heavy														
Diesel	165.58	173.76	177.52	183.41	189.40	194.08	198.92	204.06	209.19	214.00	218.57	223.35	228.42	233.64
Gasoline	1.83	1.89	1.92	1.96	1.98	2.00	2.02	2.05	2.09	2.13	2.17	2.21	2.26	2.32
Liquefied Petroleum Gas	0.06	0.09	0.12	0.15	0.17	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.27
Compressed Natural Gas	0.08	0.13	0.19	0.27	0.36	0.45	0.53	0.62	0.70	0.77	0.84	0.89	0.95	1.00
Heavy Subtotal	167.55	175.86	179.75	185.79	191.92	196.72	201.69	206.95	212.22	217.15	221.83	226.72	231.89	237.22
Total Vehicle Miles Traveled	216.30	225.93	229.74	236.13	243.07	248.52	254.44	260.84	267.43	273.63	279.52	285.73	292.34	299.15
Consumption (trillion Btu)														
Medium														
Diesel	505.80	522.53	522.90	530.40	543.42	554.86	569.33	585.32	602.30	618.07	632.83	648.50	665.37	682.80
Gasoline	216.38	216.40	211.76	206.63	202.84	198.43	195.28	193.27	193.06	193.18	193.49	194.25	195.38	196.66
Liquefied Petroleum Gas	7.86	7.57	7.40	7.48	7.78	8.11	8.56	9.04	9.51	9.94	10.32	10.69	11.05	11.43
Compressed Natural Gas	1.41	2.07	2.96	4.11	5.52	7.09	8.83	10.68	12.62	14.53	16.40	18.24	20.07	21.83
Medium Subtotal	731.46	748.57	745.02	748.62	759.55	768.48	782.01	798.30	817.48	835.72	853.04	871.68	891.88	912.72
Heavy														
Diesel	3737.92	3910.54	3986.43	4114.19	4246.24	4350.17	4457.53	4568.50	4673.53	4764.08	4838.75	4906.34	4970.48	5034.30
Gasoline	32.19	32.99	33.43	33.84	34.22	34.40	34.66	35.05	35.65	36.25	36.86	37.53	38.30	39.15
Liquefied Petroleum Gas	1.11	1.51	2.00	2.52	2.99	3.37	3.71	3.98	4.17	4.31	4.40	4.48	4.56	4.65
Compressed Natural Gas	1.38	2.19	3.31	4.70	6.18	7.69	9.19	10.65	12.02	13.26	14.37	15.37	16.29	17.14
Heavy Subtotal	3772.59	3947.23	4025.17	4155.24	4289.63	4395.63	4505.09	4618.17	4725.37	4817.90	4894.38	4963.72	5029.64	5095.24
Medium and Heavy Total														
Diesel	4243.72	4433.07	4509.33	4644.58	4789.66	4905.03	5026.86	5153.83	5275.83	5382.15	5471.58	5554.84	5635.86	5717.10
Gasoline	248.57	249.39	245.19	240.47	237.06	232.83	229.95	228.32	228.71	229.43	230.35	231.78	233.68	235.81
Liquefied Petroleum Gas	8.98	9.08	9.40	10.00	10.76	11.48	12.28	13.01	13.68	14.24	14.72	15.17	15.61	16.07
Compressed Natural Gas	2.79	4.26	6.27	8.81	11.69	14.77	18.02	21.32	24.64	27.79	30.77	33.61	36.36	38.98
Total	4504.05	4695.80	4770.19	4903.87	5049.18	5164.11	5287.10	5416.48	5542.85	5653.62	5747.42	5835.40	5921.51	6007.96

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Efficiency (gasoline equivalent MPG)														
Medium														
Diesel	8.33	8.36	8.38	8.39	8.40	8.41	8.42	8.42	8.43	8.43	8.43	8.44	8.44	8.44
Gasoline	8.51	8.53	8.56	8.58	8.60	8.62	8.65	8.67	8.69	8.71	8.74	8.76	8.79	8.82
Liquefied Petroleum Gas	6.57	6.68	6.82	6.94	7.06	7.16	7.25	7.33	7.40	7.46	7.51	7.55	7.60	7.64
Compressed Natural Gas	7.80	7.86	7.89	7.90	7.91	7.92	7.93	7.94	7.95	7.96	7.97	7.97	7.98	7.98
Medium Average	8.37	8.39	8.41	8.43	8.44	8.45	8.46	8.47	8.48	8.48	8.49	8.49	8.50	8.51
Heavy														
Diesel	5.54	5.56	5.57	5.58	5.58	5.58	5.58	5.59	5.60	5.62	5.65	5.69	5.75	5.80
Gasoline	7.12	7.16	7.20	7.23	7.25	7.27	7.29	7.31	7.33	7.34	7.36	7.37	7.39	7.40
Liquefied Petroleum Gas	7.11	7.17	7.20	7.22	7.24	7.24	7.25	7.25	7.26	7.26	7.26	7.26	7.26	7.27
Compressed Natural Gas	7.18	7.21	7.24	7.25	7.26	7.26	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27
Heavy Average	5.55	5.57	5.59	5.59	5.60	5.60	5.60	5.60	5.62	5.64	5.67	5.71	5.77	5.82
Average	6.01	6.02	6.02	6.02	6.02	6.02	6.02	6.02	6.03	6.05	6.08	6.12	6.17	6.23
Stock (millions)														
Medium														
Diesel	2.12	2.20	2.28	2.36	2.44	2.51	2.58	2.64	2.70	2.75	2.80	2.85	2.90	2.96
Gasoline	1.97	1.93	1.90	1.87	1.84	1.81	1.78	1.75	1.72	1.70	1.67	1.64	1.62	1.61
Liquefied Petroleum Gas	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
Compressed Natural Gas	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.08	0.09
Medium Subtotal	4.14	4.19	4.25	4.30	4.35	4.40	4.45	4.49	4.53	4.56	4.59	4.62	4.67	4.71
Heavy														
Diesel	4.30	4.44	4.61	4.77	4.91	5.04	5.16	5.27	5.36	5.45	5.54	5.63	5.71	5.80
Gasoline	0.34	0.33	0.32	0.31	0.30	0.29	0.29	0.28	0.27	0.27	0.27	0.26	0.26	0.26
Liquefied Petroleum Gas	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Compressed Natural Gas	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05
Heavy Subtotal	4.65	4.78	4.94	5.10	5.23	5.36	5.47	5.58	5.68	5.77	5.86	5.94	6.04	6.13
Total Stock	8.79	8.96	9.18	9.40	9.58	9.75	9.92	10.07	10.21	10.33	10.45	10.57	10.70	10.84
New Trucks by Size Class														
Fuel Efficiency (gasoline equivalent MPG)														
Medium														
Diesel	8.59	8.52	8.51	8.50	8.49	8.48	8.47	8.47	8.46	8.46	8.46	8.46	8.46	8.46
Gasoline	8.97	8.95	8.94	8.94	8.93	8.95	8.97	8.99	9.01	9.03	9.06	9.10	9.14	9.19
Liquefied Petroleum Gas	8.00	7.98	7.97	7.95	7.94	7.95	7.97	7.98	7.99	8.00	8.00	8.00	8.00	8.00
Compressed Natural Gas	7.97	7.95	7.94	7.94	7.93	7.95	7.97	7.98	7.99	8.00	8.00	8.00	8.00	8.00
Medium Average	8.66	8.60	8.59	8.57	8.56	8.55	8.54	8.54	8.54	8.54	8.55	8.55	8.56	8.57
Heavy														
Diesel	5.69	5.65	5.63	5.60	5.60	5.59	5.61	5.64	5.71	5.80	5.92	6.06	6.17	6.23
Gasoline	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Liquefied Petroleum Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28
Compressed Natural Gas	7.27	7.27	7.28	7.28	7.28	7.28	7.28	7.28	7.27	7.27	7.28	7.28	7.28	7.28
Heavy Average	5.71	5.66	5.64	5.62	5.62	5.62	5.63	5.67	5.74	5.82	5.94	6.08	6.19	6.25
Average	6.10	6.02	5.99	5.96	5.97	5.97	5.99	6.03	6.09	6.17	6.28	6.41	6.52	6.57

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sales (millions)														
Medium														
Diesel	0.12	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17
Gasoline	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Medium Subtotal	0.18	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.25
Heavy														
Diesel	0.24	0.31	0.35	0.35	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33	0.34	0.35
Gasoline	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Heavy Subtotal	0.25	0.32	0.36	0.37	0.35	0.35	0.35	0.34	0.34	0.34	0.34	0.35	0.36	0.36
Total Sales	0.42	0.53	0.59	0.59	0.57	0.57	0.58	0.57	0.57	0.56	0.57	0.58	0.60	0.61
Railroads														
Ton Miles by Rail (billion)	1489.02	1539.44	1552.17	1594.69	1635.60	1662.05	1698.42	1721.13	1757.72	1780.00	1794.67	1808.96	1825.44	1859.71
Fuel Efficiency (ton miles per thousand Btu)	2.90	2.90	2.91	2.91	2.91	2.92	2.92	2.92	2.92	2.93	2.93	2.93	2.94	2.94
Fuel Consumption (trillion Btu)														
Distillate (diesel)	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
Residual Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Shipping														
Ton Miles Shipping (billion)	597.44	629.23	649.20	659.93	665.19	670.89	678.80	683.13	692.21	700.51	710.40	717.61	727.34	740.13
Fuel Efficiency (ton miles per thousand Btu)	2.13	2.13	2.14	2.14	2.14	2.15	2.15	2.16	2.16	2.17	2.17	2.17	2.18	2.18
Fuel Consumption (trillion Btu)														
Distillate (diesel)	202.73	215.30	216.25	219.37	221.97	224.79	228.41	230.90	233.49	235.80	238.64	240.57	243.32	247.09
Residual Oil	78.28	80.38	87.70	88.96	88.21	87.52	87.09	86.18	87.15	88.01	89.07	89.79	90.82	92.23
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
International Shipping														
Gross Trade (billion 2000 \$)	2069.78	2278.46	2432.97	2581.23	2749.35	2948.21	3141.66	3336.37	3542.48	3767.37	3999.61	4250.25	4520.91	4810.57
Exports (billion 2000 dollars)	719.75	783.55	840.32	905.13	1007.81	1124.16	1231.96	1340.38	1463.91	1598.44	1737.68	1883.09	2036.57	2213.91
Imports (billion 2000 dollars)	1350.03	1494.91	1592.65	1676.10	1741.54	1824.05	1909.70	1996.00	2078.57	2168.94	2261.93	2367.16	2484.34	2596.66
Fuel Consumption (trillion Btu)														
Distillate (diesel)	35.32	39.40	39.22	39.28	39.40	39.53	39.65	39.77	39.83	39.89	39.95	40.00	40.06	40.12
Residual Oil	472.53	509.64	551.08	551.85	542.51	533.21	523.81	514.34	515.08	515.83	516.57	517.31	518.07	518.83

Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Existing Trucks by Size Class															
Vehicle Miles Traveled (billion miles)															
Medium															
Diesel	47.27	48.63	49.94	51.30	52.74	54.25	55.80	57.38	59.02	60.73	62.46	64.20	65.98	67.78	2.6%
Gasoline	14.02	14.21	14.41	14.63	14.89	15.17	15.48	15.80	16.14	16.50	16.88	17.26	17.66	18.07	0.8%
Liquefied Petroleum Gas	0.73	0.76	0.78	0.81	0.83	0.86	0.88	0.90	0.92	0.93	0.95	0.97	0.98	0.99	3.5%
Compressed Natural Gas	1.50	1.61	1.70	1.80	1.88	1.97	2.06	2.14	2.21	2.29	2.37	2.44	2.51	2.58	12.2%
Medium Subtotal	63.53	65.21	66.83	68.53	70.34	72.25	74.21	76.21	78.29	80.46	82.66	84.86	87.12	89.42	2.3%
Heavy															
Diesel	239.40	245.31	250.55	255.58	260.80	266.27	271.89	277.73	283.99	290.73	297.61	304.41	311.35	318.50	2.4%
Gasoline	2.38	2.45	2.51	2.57	2.64	2.72	2.79	2.87	2.96	3.05	3.14	3.24	3.33	3.44	2.3%
Liquefied Petroleum Gas	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	5.0%
Compressed Natural Gas	1.04	1.08	1.11	1.14	1.15	1.17	1.19	1.21	1.24	1.26	1.29	1.31	1.34	1.36	9.6%
Heavy Subtotal	243.10	249.13	254.46	259.58	264.89	270.46	276.17	282.11	288.48	295.33	302.34	309.26	316.32	323.61	2.4%
Total Vehicle Miles Traveled	306.63	314.33	321.29	328.11	335.24	342.71	350.38	358.32	366.77	375.79	385.00	394.12	403.45	413.02	2.3%
Consumption (trillion Btu)															
Medium															
Diesel	701.54	721.15	740.11	759.80	780.42	802.09	824.30	846.98	868.61	891.35	914.35	934.26	954.83	975.76	2.4%
Gasoline	198.34	200.35	202.39	204.86	207.87	211.32	215.03	218.96	223.21	227.80	232.55	237.43	242.58	247.94	0.5%
Liquefied Petroleum Gas	11.83	12.24	12.62	12.97	13.32	13.63	13.93	14.20	14.40	14.60	14.82	14.96	15.09	15.22	2.7%
Compressed Natural Gas	23.56	25.20	26.70	28.13	29.51	30.87	32.18	33.46	34.66	35.87	37.06	38.16	39.26	40.34	12.1%
Medium Subtotal	935.27	958.95	981.82	1005.76	1031.12	1057.92	1085.44	1113.59	1140.88	1169.62	1198.78	1224.82	1251.76	1279.26	2.1%
Heavy															
Diesel	5105.01	5177.26	5239.11	5300.85	5369.83	5441.96	5519.49	5603.48	5688.42	5784.97	5886.96	5989.75	6097.94	6210.91	1.8%
Gasoline	40.15	41.23	42.26	43.31	44.43	45.62	46.86	48.15	49.53	51.02	52.56	54.11	55.73	57.42	2.2%
Liquefied Petroleum Gas	4.76	4.86	4.93	4.98	5.00	5.01	5.02	5.03	5.04	5.07	5.12	5.16	5.20	5.25	4.9%
Compressed Natural Gas	17.94	18.63	19.14	19.52	19.86	20.17	20.50	20.86	21.25	21.69	22.14	22.58	23.00	23.43	9.5%
Heavy Subtotal	5167.86	5241.99	5305.45	5368.67	5439.12	5512.76	5591.86	5677.52	5764.24	5862.75	5966.77	6071.60	6181.88	6297.00	1.8%
Medium and Heavy Total															
Diesel	5806.55	5898.42	5979.22	6060.65	6150.24	6244.05	6343.79	6450.46	6557.03	6676.33	6801.30	6924.01	7052.77	7186.67	1.9%
Gasoline	238.49	241.58	244.65	248.17	252.30	256.94	261.89	267.11	272.74	278.82	285.11	291.55	298.31	305.35	0.8%
Liquefied Petroleum Gas	16.59	17.10	17.55	17.95	18.32	18.65	18.95	19.23	19.44	19.67	19.94	20.12	20.30	20.47	3.2%
Compressed Natural Gas	41.50	43.84	45.84	47.66	49.37	51.04	52.68	54.32	55.91	57.56	59.20	60.74	62.26	63.77	11.0%
Total	6103.13	6200.94	6287.27	6374.43	6470.24	6570.68	6677.31	6791.11	6905.12	7032.37	7165.55	7296.42	7433.63	7576.27	1.9%

Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Efficiency (gasoline equivalent MPG)															
Medium															
Diesel	8.44	8.44	8.44	8.45	8.46	8.46	8.47	8.48	8.53	8.57	8.62	8.66	8.69	8.72	0.2%
Gasoline	8.85	8.88	8.90	8.93	8.95	8.98	9.00	9.02	9.03	9.05	9.07	9.08	9.09	9.11	0.3%
Liquefied Petroleum Gas	7.67	7.70	7.73	7.76	7.80	7.84	7.89	7.94	7.99	8.03	8.07	8.10	8.13	8.16	0.8%
Compressed Natural Gas	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	8.00	8.00	8.00	8.00	8.00	8.00	0.1%
Medium Average	8.51	8.52	8.53	8.53	8.54	8.55	8.56	8.57	8.61	8.65	8.68	8.72	8.75	8.77	0.2%
Heavy															
Diesel	5.87	5.93	5.98	6.03	6.07	6.12	6.16	6.20	6.24	6.29	6.32	6.36	6.39	6.41	0.6%
Gasoline	7.41	7.42	7.43	7.44	7.44	7.45	7.46	7.46	7.47	7.47	7.47	7.48	7.48	7.48	0.2%
Liquefied Petroleum Gas	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.28	7.28	7.28	7.29	7.30	7.31	7.33	0.1%
Compressed Natural Gas	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.28	7.28	7.28	7.28	7.28	7.28	7.28	0.0%
Heavy Average	5.88	5.94	6.00	6.05	6.09	6.14	6.18	6.21	6.26	6.30	6.34	6.37	6.40	6.43	0.6%
Average	6.28	6.34	6.39	6.44	6.48	6.52	6.56	6.60	6.64	6.68	6.72	6.76	6.79	6.82	0.5%
Stock (millions)															
Medium															
Diesel	3.01	3.06	3.11	3.16	3.20	3.25	3.29	3.34	3.38	3.43	3.48	3.53	3.58	3.62	1.9%
Gasoline	1.59	1.58	1.56	1.55	1.54	1.53	1.53	1.52	1.52	1.52	1.52	1.52	1.53	1.53	-0.9%
Liquefied Petroleum Gas	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.7%
Compressed Natural Gas	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.17	11.6%
Medium Subtotal	4.76	4.81	4.85	4.89	4.94	4.98	5.03	5.07	5.13	5.18	5.24	5.29	5.35	5.40	1.0%
Heavy															
Diesel	5.89	5.97	6.04	6.10	6.16	6.21	6.26	6.31	6.36	6.42	6.48	6.53	6.58	6.64	1.6%
Gasoline	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.28	0.28	-0.6%
Liquefied Petroleum Gas	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	5.8%
Compressed Natural Gas	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	11.1%
Heavy Subtotal	6.22	6.31	6.38	6.45	6.50	6.56	6.61	6.67	6.73	6.79	6.85	6.91	6.96	7.02	1.5%
Total Stock	10.98	11.12	11.24	11.34	11.44	11.54	11.64	11.74	11.85	11.97	12.08	12.20	12.31	12.43	1.3%
New Trucks by Size Class															
Fuel Efficiency (gasoline equivalent MPG)															
Medium															
Diesel	8.46	8.46	8.46	8.46	8.56	8.56	8.56	8.56	9.05	9.04	9.05	9.05	9.05	9.05	0.2%
Gasoline	9.24	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	0.1%
Liquefied Petroleum Gas	8.00	8.00	8.00	8.00	8.27	8.27	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	0.2%
Compressed Natural Gas	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	0.0%
Medium Average	8.57	8.58	8.58	8.58	8.66	8.66	8.66	8.66	9.04	9.03	9.04	9.04	9.04	9.04	0.2%
Heavy															
Diesel	6.30	6.36	6.37	6.38	6.39	6.46	6.48	6.49	6.61	6.61	6.61	6.61	6.61	6.63	0.6%
Gasoline	7.50	7.50	7.50	7.50	7.50	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	0.0%
Liquefied Petroleum Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.33	7.38	7.38	7.38	0.1%
Compressed Natural Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	0.0%
Heavy Average	6.32	6.38	6.38	6.39	6.41	6.48	6.49	6.51	6.62	6.63	6.63	6.63	6.63	6.64	0.6%
Average	6.64	6.69	6.70	6.71	6.73	6.80	6.81	6.82	6.95	6.95	6.95	6.98	6.98	7.00	0.6%

Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Sales (millions)															
Medium															
Diesel	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20	1.2%
Gasoline	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.8%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0%
Compressed Natural Gas	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.6%
Medium Subtotal	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.28	0.28	0.28	1.2%
Heavy															
Diesel	0.35	0.35	0.34	0.34	0.34	0.34	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.7%
Gasoline	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	1.7%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.8%
Compressed Natural Gas	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.5%
Heavy Subtotal	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.8%
Total Sales	0.62	0.62	0.61	0.61	0.61	0.61	0.62	0.63	0.64	0.65	0.66	0.66	0.67	0.68	0.9%
Railroads															
Ton Miles by Rail (billion)	1886.78	1912.25	1937.61	1982.73	2021.48	2062.70	2101.82	2145.71	2187.60	2234.87	2281.44	2325.24	2367.88	2403.15	1.7%
Fuel Efficiency (ton miles per thousand Btu)	2.94	2.95	2.95	2.95	2.95	2.96	2.96	2.96	2.97	2.97	2.97	2.97	2.98	2.98	0.1%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
Residual Oil	0.00	0.00	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
Electricity	0.00	0.00	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
Domestic Shipping															
Ton Miles Shipping (billion)	748.18	756.41	762.43	767.07	771.85	776.85	782.96	787.67	792.48	799.73	805.21	811.72	817.64	824.20	1.0%
Fuel Efficiency (ton miles per thousand Btu)	2.19	2.19	2.20	2.20	2.21	2.21	2.21	2.22	2.22	2.23	2.23	2.24	2.24	2.25	0.2%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	249.26	251.49	252.96	253.97	255.02	256.14	257.62	258.63	259.67	261.50	262.74	264.32	265.68	267.26	0.8%
Residual Oil	93.04	93.87	94.42	94.80	95.19	95.61	96.17	96.55	96.94	97.62	98.09	98.68	99.20	99.79	0.8%
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	N/A
International Shipping															
Gross Trade (billion 2000 \$)	5154.37	5504.75	5832.19	6167.19	6529.97	6914.25	7321.42	7758.86	8227.10	8724.78	9254.94	9810.78	10401.59	11031.78	6.3%
Exports (billion 2000 dollars)	2424.12	2618.86	2798.97	2985.74	3185.53	3395.19	3617.22	3855.28	4110.80	4384.41	4675.87	4988.04	5321.99	5678.73	7.9%
Imports (billion 2000 dollars)	2730.25	2885.88	3033.21	3181.45	3344.44	3519.07	3704.20	3903.58	4116.30	4340.36	4579.07	4822.74	5079.59	5353.04	5.0%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	40.19	40.25	40.30	40.36	40.41	40.46	40.52	40.57	40.63	40.68	40.74	40.79	40.85	40.91	0.1%
Residual Oil	519.67	520.48	521.19	521.89	522.60	523.31	524.03	524.76	525.49	526.23	526.97	527.71	528.44	529.18	0.1%

Table 55. Freight Transportation Energy Use

MPG = Miles per gallon.

Btu = British thermal unit.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); 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, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Car														
Unit Body Construction	94.97	94.97	95.23	94.31	94.07	94.17	94.55	94.89	95.10	95.06	95.06	95.05	95.10	95.11
Material Substitution II	51.00	50.99	50.97	53.35	57.03	60.76	66.31	69.04	68.93	68.88	68.84	68.69	68.48	68.31
Material Substitution III	0.68	1.10	1.69	3.38	5.94	9.56	15.74	22.23	23.93	23.92	23.92	23.92	23.92	23.93
Material Substitution IV	0.00	0.00	0.00	0.03	0.16	0.41	0.83	1.45	2.09	2.59	2.93	3.44	4.00	4.44
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	0.03	0.14	0.31
Drag Reduction II	55.24	55.19	54.94	58.75	60.52	51.15	34.17	20.71	16.21	14.38	13.95	12.21	11.22	10.14
Drag Reduction III	1.72	2.63	3.96	9.93	20.51	29.83	39.97	46.13	46.94	47.46	47.09	47.56	47.05	46.76
Drag Reduction IV	0.31	0.77	1.43	3.68	8.10	15.38	25.86	33.09	36.48	37.09	37.10	37.24	37.47	37.48
Drag Reduction V	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.37	1.07	1.87	2.98	4.26	5.62
Roll-Over Technology	0.00	0.00	25.00	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Side Impact Technology	0.00	0.00	25.00	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Advanced Low Loss Torque Converter	16.13	17.70	21.78	35.23	45.69	51.51	56.59	60.97	64.20	66.63	68.22	70.88	71.69	72.80
Early Torque Converter Lockup	0.65	1.83	3.79	11.66	21.59	31.08	41.08	48.93	53.53	55.66	56.59	58.95	61.52	62.16
Aggressive Shift Logic	4.07	4.21	4.45	5.93	9.06	13.86	20.47	26.39	26.64	26.66	26.66	26.66	26.63	26.62
4-Speed Automatic	68.00	67.83	67.07	68.13	67.69	65.38	61.07	59.01	56.80	56.14	55.78	55.36	54.92	54.68
5-Speed Automatic	8.79	8.86	8.90	9.31	9.54	9.70	9.93	10.16	10.24	10.30	10.31	10.42	10.43	10.45
6-Speed Automatic	0.00	0.02	0.12	0.30	0.54	0.84	1.25	1.67	2.11	2.33	2.44	2.59	2.75	2.81
6-Speed Manual	1.37	1.52	1.79	2.46	3.25	4.09	5.01	5.58	5.78	5.78	5.78	5.82	5.85	5.88
CVT	0.30	0.48	0.73	1.12	1.58	2.14	2.93	3.74	4.10	4.18	4.35	4.50	4.57	4.64
Automated Manual Trans	0.00	0.00	0.00	0.04	0.27	1.65	5.29	7.41	9.68	10.05	10.11	10.14	10.26	10.33
Roller Cam	96.15	96.24	96.26	97.24	97.87	98.38	98.90	99.15	99.16	99.18	99.18	99.18	99.18	99.18
OHC/AdvOHV-4 Cylinder	3.03	3.03	3.11	1.84	1.78	1.81	1.79	1.78	1.85	1.84	1.84	1.84	1.85	1.86
OHC/AdvOHV-6 Cylinder	4.23	4.14	3.91	3.57	3.07	2.76	2.55	2.55	2.44	2.46	2.46	2.47	2.44	2.44
OHC/AdvOHV-8 Cylinder	2.38	2.38	2.29	2.61	2.69	2.64	2.64	2.63	2.53	2.54	2.54	2.55	2.53	2.52
4-Valve/4-Cylinder	52.79	52.81	53.49	51.92	51.24	51.51	51.29	51.20	51.86	51.74	51.75	51.71	51.88	51.92
4-Valve/6-Cylinder	21.69	21.77	21.62	23.24	24.07	24.25	24.57	24.62	24.38	24.42	24.42	24.43	24.37	24.36
4-Valve/8-Cylinder	7.41	7.49	7.44	8.52	8.80	8.74	8.82	8.87	8.71	8.74	8.74	8.75	8.71	8.70
5-Valve/6-Cylinder	2.63	2.64	2.63	2.78	2.82	2.81	2.81	2.82	2.79	2.80	2.80	2.80	2.79	2.79
VVT-4 Cylinder	21.06	25.08	28.82	38.41	43.45	45.45	48.36	48.76	49.38	49.14	49.00	48.80	48.78	48.58
VVT-6 Cylinder	3.71	3.94	4.15	5.44	6.04	6.61	7.94	9.44	9.68	9.67	9.66	9.68	9.66	9.66
VVT-8 Cylinder	0.93	1.30	1.52	1.92	2.24	2.55	3.12	3.73	3.89	3.80	3.71	3.58	3.48	3.43
VVL-4 Cylinder	8.36	8.76	9.12	12.28	12.85	13.19	13.67	14.07	14.30	14.28	14.27	14.26	14.27	14.27
VVL-6 Cylinder	0.99	1.37	1.78	2.82	3.46	3.78	4.20	4.61	4.75	4.82	4.83	4.93	4.92	4.93
VVL-8 Cylinder	1.22	1.44	1.61	2.00	2.10	2.09	2.13	2.16	2.08	2.01	1.93	1.83	1.76	1.76
Camless Valve Actuation-4cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.34	0.57	0.82	1.12	1.42	1.84
Camless Valve Actuation-6cyl	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.31	0.54	0.80	1.05	1.33	1.68	2.00
Camless Valve Actuation-8cyl	0.00	0.00	0.00	0.00	0.02	0.12	0.27	0.45	0.65	0.84	1.02	1.26	1.43	1.55
Cylinder Deactivation	0.00	0.02	0.14	0.36	0.66	1.09	1.49	1.79	2.00	2.12	2.18	2.31	2.46	2.61
Turbocharging/Supercharging	0.33	0.57	0.83	1.31	1.61	1.83	2.09	2.33	2.45	2.54	2.61	2.70	2.72	2.75
Engine Friction Reduction I	71.57	71.57	71.63	63.25	56.47	48.62	37.54	28.81	24.68	21.64	20.06	17.66	16.04	14.18
Engine Friction Reduction II	19.80	21.53	22.96	35.57	43.53	51.32	61.94	68.92	70.15	70.42	70.45	70.71	70.68	70.41
Engine Friction Reduction III	0.00	0.00	0.00	0.00	0.00	0.07	0.52	2.27	5.18	7.94	9.49	11.63	13.28	15.36
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	0.04
Stoichiometric GDI/4-Cylinder	0.00	0.00	0.00	0.03	0.16	0.40	0.82	1.43	2.04	2.50	3.08	3.68	4.31	4.79

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stoichiometric GDI/6-Cylinder	0.00	0.00	0.00	0.02	0.14	0.33	0.61	1.01	1.39	1.71	2.08	2.47	2.86	3.16
Lean Burn GDI	0.00	0.00	0.00	0.03	0.19	0.51	1.10	1.99	2.76	3.24	3.49	3.98	4.52	4.92
5W-30 Engine Oil	40.71	40.71	40.59	41.29	46.36	51.60	58.71	58.32	54.63	52.49	51.93	50.46	48.88	47.27
5W-20 Engine Oil	0.07	0.35	1.08	3.83	10.55	19.67	29.01	37.04	41.99	44.77	45.42	47.14	49.12	51.22
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric Power Steering	0.00	0.02	0.12	0.30	0.55	0.90	1.36	1.86	2.26	2.55	2.76	3.01	3.26	3.44
Improved Alternator	0.00	0.00	0.03	0.18	0.48	0.95	1.74	2.71	3.44	3.83	3.98	4.42	4.79	5.14
Improved Oil/Water Pump	1.48	2.42	3.80	9.80	20.45	29.76	40.07	48.53	51.76	52.87	53.08	54.27	54.48	54.94
Electric Oil/Water Pump	0.00	0.00	0.00	0.00	0.03	0.16	0.43	0.84	1.34	1.80	2.17	2.64	3.16	3.69
Tires II	57.12	57.11	56.82	64.32	71.90	78.14	81.31	76.31	71.33	68.13	66.36	62.94	60.26	57.20
Tires III	0.00	0.00	0.06	0.45	2.21	6.92	15.24	22.79	28.67	31.87	33.64	37.06	39.67	42.44
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	0.06	0.36
Front Wheel Drive	82.72	82.72	82.67	82.84	82.89	82.90	82.95	83.01	82.97	82.99	82.99	82.99	82.99	82.98
Four Wheel Drive Improvements	0.33	0.51	0.71	1.17	1.73	2.30	2.81	3.12	3.17	3.17	3.17	3.17	3.17	3.17
42V-Launch Assist and Regen	0.00	0.00	0.00	0.02	0.11	0.24	0.41	0.63	0.86	1.08	1.28	1.46	1.67	1.83
42V-Engine Off at Idle	0.00	0.00	0.02	0.11	0.24	0.41	0.63	0.86	1.08	1.28	1.46	1.67	1.83	1.99
Tier 2 Emissions Technology	0.00	0.00	0.00	33.33	66.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Increased Size/Weight	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00
Variable Compression Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.12
Light Truck														
Unit Body Construction	22.77	22.92	23.44	23.95	27.68	30.70	34.31	35.58	35.97	35.91	35.92	35.92	36.00	36.01
Material Substitution II	36.36	36.42	36.52	37.97	44.07	50.63	58.15	62.79	63.41	63.57	63.56	63.55	63.53	63.52
Material Substitution III	0.15	0.36	0.69	1.59	3.00	5.06	8.71	13.49	15.46	15.51	15.51	15.54	15.54	15.54
Material Substitution IV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.27	0.49	0.82	1.19	1.59
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
Drag Reduction II	48.47	48.83	49.54	58.77	61.49	54.79	41.60	27.15	17.58	11.08	8.36	7.16	5.20	3.26
Drag Reduction III	5.25	7.35	10.53	21.43	31.56	40.63	51.78	59.62	63.18	65.11	65.72	63.73	61.80	59.90
Drag Reduction IV	0.00	0.00	0.00	0.09	0.42	1.92	6.34	13.23	19.24	23.80	25.92	29.06	32.84	36.33
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	0.04	0.17	0.51
Roll-Over Technology	0.00	0.00	0.00	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Side Impact Technology	0.00	0.00	0.00	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Advanced Low Loss Torque Converter	0.00	0.00	0.18	1.49	5.85	12.21	21.05	29.82	37.57	44.75	51.12	58.32	64.61	70.99
Early Torque Converter Lockup	0.00	0.00	0.00	0.18	1.22	4.94	11.20	19.39	27.16	32.96	38.16	44.53	50.89	56.45
Aggressive Shift Logic	0.00	0.00	0.00	0.06	0.27	1.07	3.47	8.53	13.52	16.29	17.72	18.96	20.93	23.01
4-Speed Automatic	84.17	84.11	84.23	83.15	82.58	82.13	81.02	79.94	79.53	78.82	78.16	77.20	75.88	74.82
5-Speed Automatic	6.26	6.46	6.60	7.38	7.83	8.46	9.63	10.72	10.99	11.01	11.01	11.02	11.01	11.02
6-Speed Automatic	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.28	0.53	0.85	1.13	1.46	1.93	2.32
6-Speed Manual	0.46	0.68	0.93	1.66	2.63	3.90	4.86	5.18	5.23	5.24	5.24	5.24	5.23	5.22
CVT	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.08	0.14	0.22	0.30	0.38	0.51	0.62
Automated Manual Trans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.67	1.35	2.20	3.06	3.71
Roller Cam	85.66	87.41	89.35	91.93	94.11	96.21	98.11	99.15	99.97	99.97	99.97	99.97	99.97	99.97
OHC/AdvOHV-4 Cylinder	2.23	1.79	1.37	0.66	0.31	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OHC/AdvOHV-6 Cylinder	45.24	43.56	42.02	33.01	29.05	28.98	28.87	28.85	28.97	28.95	28.95	28.95	28.99	29.00
OHC/AdvOHV-8 Cylinder	28.30	27.77	27.15	22.28	19.22	18.80	18.81	18.81	18.84	18.83	18.83	18.82	18.82	18.82
4-Valve/4-Cylinder	6.78	7.20	7.48	8.63	9.20	9.37	9.52	9.54	9.41	9.44	9.44	9.45	9.41	9.40
4-Valve/6-Cylinder	11.10	12.84	14.57	22.75	26.55	26.72	26.75	26.75	26.78	26.78	26.78	26.77	26.78	26.78
4-Valve/8-Cylinder	5.21	6.36	7.33	12.68	15.67	16.04	16.04	16.05	16.01	16.01	16.00	16.01	16.00	16.00
5-Valve/6-Cylinder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VVT-4 Cylinder	4.76	5.94	6.95	8.92	9.51	9.46	9.52	9.54	9.41	9.44	9.44	9.43	9.35	9.26
VVT-6 Cylinder	1.01	1.79	2.59	5.32	7.45	8.42	11.07	14.46	15.14	15.14	15.13	15.10	15.07	15.03
VVT-8 Cylinder	0.62	1.18	1.77	3.78	5.76	6.66	9.20	12.54	12.58	12.56	12.51	12.45	12.38	12.30
VVL-4 Cylinder	0.14	0.40	0.80	2.49	3.79	4.16	4.71	5.20	5.27	5.11	4.93	4.70	4.33	3.97
VVL-6 Cylinder	0.82	1.48	2.12	4.12	5.67	6.18	6.46	6.83	7.02	7.00	6.96	6.89	6.81	6.70
VVL-8 Cylinder	0.00	0.00	0.00	0.03	0.10	0.23	0.40	0.69	0.98	1.20	1.35	1.56	1.80	2.03

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Camless Valve Actuation-4cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.15
Camless Valve Actuation-6cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09	0.21	0.40	0.67
Camless Valve Actuation-8cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.15	0.26	0.42	0.59
Cylinder Deactivation	0.00	0.02	0.08	0.22	0.44	0.88	1.65	2.66	3.39	3.67	3.70	3.97	4.32	4.69
Turbocharging/Supercharging	0.33	0.55	0.75	1.20	1.48	1.57	1.72	1.90	2.00	2.07	2.11	2.13	2.17	2.19
Engine Friction Reduction I	65.84	70.81	74.08	72.82	65.85	56.48	45.29	36.53	30.54	25.72	21.70	17.10	12.01	8.37
Engine Friction Reduction II	6.55	10.79	14.92	25.82	34.15	43.52	54.71	63.31	68.73	71.89	73.49	74.06	74.46	73.76
Engine Friction Reduction III	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.73	2.40	4.81	8.84	13.53	17.80
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	0.07
Stoichiometric GDI/4-Cylinder	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.24	0.49	0.82	1.13	1.51	2.14	2.72
Stoichiometric GDI/6-Cylinder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.11	0.26	0.47	0.80	1.17	1.57
Lean Burn GDI	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.15	0.38	0.70	1.23	1.81	2.42
5W-30 Engine Oil	48.72	48.67	48.49	53.83	62.21	68.53	66.97	60.24	53.70	49.00	46.62	42.45	38.27	34.22
5W-20 Engine Oil	0.10	0.38	1.26	5.16	13.03	21.78	31.49	39.76	46.30	51.00	53.38	57.55	61.73	65.78
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric Power Steering	0.00	0.00	0.01	0.07	0.17	0.32	0.59	0.92	1.21	1.43	1.59	1.83	2.04	2.25
Improved Alternator	0.00	0.00	0.03	0.14	0.41	0.94	2.07	3.73	5.14	5.79	5.92	6.46	7.07	7.69
Improved Oil/Water Pump	5.29	7.42	10.63	21.55	31.68	40.76	51.97	60.64	65.71	68.48	69.72	70.39	71.71	72.52
Electric Oil/Water Pump	0.00	0.00	0.00	0.00	0.00	0.03	0.13	0.37	0.76	1.30	1.82	2.46	3.17	3.92
Tires II	57.66	58.13	60.89	74.89	84.58	87.66	83.74	75.35	69.00	64.33	60.88	55.59	50.60	45.71
Tires III	0.00	0.00	0.08	0.51	2.76	7.89	16.26	24.65	31.00	35.67	39.12	44.41	49.31	53.92
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	0.10	0.38
Front Wheel Drive	17.63	17.69	18.26	15.81	15.52	15.74	15.62	15.55	16.04	15.97	15.98	15.95	16.07	16.11
Four Wheel Drive Improvements	0.60	0.93	1.32	2.36	4.29	6.69	10.66	14.90	15.39	15.39	15.39	15.39	15.38	15.37
42V-Launch Assist and Regen	0.00	0.00	0.00	0.02	0.08	0.18	0.32	0.54	0.78	1.01	1.22	1.40	1.62	1.81
42V-Engine Off at Idle	0.00	0.00	0.02	0.08	0.18	0.32	0.54	0.78	1.01	1.22	1.40	1.62	1.81	2.00
Tier 2 Emissions Technology	0.00	0.00	0.00	33.33	66.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Increased Size/Weight	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00
Variable Compression Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06
Light-Duty Vehicle Total														
Unit Body Construction	59.45	59.52	61.19	60.64	61.80	62.87	64.39	64.74	64.86	64.58	64.33	64.02	63.83	63.61
Material Substitution II	43.80	43.82	44.12	45.99	50.73	55.76	62.23	65.86	66.11	66.14	66.10	65.99	65.86	65.76
Material Substitution III	0.42	0.74	1.21	2.52	4.51	7.34	12.22	17.79	19.59	19.59	19.55	19.51	19.49	19.46
Material Substitution IV	0.00	0.00	0.00	0.01	0.08	0.21	0.41	0.73	1.08	1.39	1.66	2.06	2.51	2.92
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	0.01	0.06	0.15
Drag Reduction II	51.91	52.06	52.38	58.75	60.99	52.95	37.89	23.98	16.91	12.68	11.04	9.56	8.04	6.47
Drag Reduction III	3.46	4.95	7.07	15.43	25.88	35.16	45.88	52.99	55.24	56.56	56.77	56.05	54.85	53.76
Drag Reduction IV	0.16	0.39	0.75	1.96	4.37	8.74	16.09	23.00	27.66	30.24	31.29	32.95	35.02	36.87
Drag Reduction V	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.18	0.52	0.90	1.44	2.09	2.90
Roll-Over Technology	0.00	0.00	13.14	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Side Impact Technology	0.00	0.00	13.14	50.00	75.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Advanced Low Loss Torque Converter	8.19	8.99	11.54	19.09	26.32	32.13	38.79	45.13	50.58	55.36	59.33	64.29	67.95	71.83
Early Torque Converter Lockup	0.33	0.93	1.99	6.17	11.69	18.19	26.12	33.91	40.04	43.96	47.02	51.39	55.90	59.12
Aggressive Shift Logic	2.07	2.14	2.34	3.12	4.79	7.56	11.96	17.31	19.93	21.31	22.01	22.62	23.62	24.70
4-Speed Automatic	75.95	75.84	75.21	75.32	74.93	73.64	71.06	69.64	68.43	67.83	67.41	66.82	66.01	65.41
5-Speed Automatic	7.55	7.68	7.81	8.39	8.71	9.09	9.78	10.45	10.62	10.67	10.68	10.73	10.74	10.75
6-Speed Automatic	0.00	0.01	0.06	0.16	0.28	0.44	0.68	0.97	1.30	1.57	1.76	2.00	2.32	2.55
6-Speed Manual	0.93	1.11	1.38	2.07	2.95	4.00	4.94	5.38	5.50	5.50	5.50	5.52	5.52	5.53
CVT	0.15	0.24	0.38	0.58	0.81	1.09	1.48	1.88	2.08	2.14	2.24	2.34	2.42	2.50
Automated Manual Trans	0.00	0.00	0.00	0.02	0.14	0.83	2.64	3.65	4.82	5.22	5.56	5.98	6.46	6.80
Roller Cam	90.99	91.90	92.98	94.70	96.04	97.31	98.51	99.15	99.57	99.59	99.59	99.60	99.60	99.60
OHC/AdvOHV-4 Cylinder	2.64	2.42	2.29	1.28	1.07	0.96	0.89	0.88	0.91	0.89	0.89	0.87	0.87	0.87
OHC/AdvOHV-6 Cylinder	24.41	23.54	21.98	17.65	15.70	15.69	15.73	15.91	16.00	16.11	16.23	16.37	16.49	16.60
OHC/AdvOHV-8 Cylinder	15.14	14.87	14.08	12.03	10.73	10.61	10.74	10.85	10.87	10.94	11.01	11.08	11.14	11.21

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4-Valve/4-Cylinder	30.15	30.37	31.67	31.20	30.80	30.73	30.38	30.02	30.16	29.94	29.76	29.53	29.41	29.26
4-Valve/6-Cylinder	16.48	17.37	18.27	23.01	25.28	25.47	25.66	25.70	25.61	25.64	25.65	25.66	25.65	25.65
4-Valve/8-Cylinder	6.33	6.93	7.39	10.51	12.14	12.34	12.44	12.52	12.44	12.48	12.51	12.56	12.56	12.59
5-Valve/6-Cylinder	1.34	1.34	1.38	1.45	1.45	1.42	1.41	1.39	1.37	1.36	1.34	1.33	1.31	1.30
VVT-4 Cylinder	13.04	15.66	18.45	24.30	26.95	27.70	28.91	28.83	28.94	28.68	28.44	28.14	27.92	27.62
VVT-6 Cylinder	2.38	2.88	3.41	5.38	6.73	7.50	9.50	11.99	12.47	12.49	12.50	12.52	12.52	12.52
VVT-8 Cylinder	0.78	1.24	1.63	2.81	3.95	4.58	6.16	8.21	8.34	8.31	8.28	8.23	8.19	8.16
VVL-4 Cylinder	4.31	4.64	5.18	7.59	8.45	8.74	9.19	9.56	9.68	9.55	9.42	9.25	9.01	8.78
VVL-6 Cylinder	0.90	1.42	1.94	3.44	4.53	4.96	5.33	5.74	5.91	5.94	5.94	5.96	5.92	5.88
VVL-8 Cylinder	0.62	0.73	0.85	1.06	1.13	1.17	1.26	1.41	1.52	1.59	1.63	1.69	1.78	1.90
Camless Valve Actuation-4cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.16	0.27	0.40	0.54	0.70	0.94
Camless Valve Actuation-6cyl	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.15	0.26	0.40	0.55	0.74	1.00	1.29
Camless Valve Actuation-8cyl	0.00	0.00	0.00	0.00	0.01	0.06	0.13	0.22	0.33	0.44	0.57	0.74	0.90	1.04
Cylinder Deactivation	0.00	0.02	0.11	0.29	0.56	0.99	1.57	2.23	2.71	2.92	2.97	3.18	3.45	3.72
Turbocharging/Supercharging	0.33	0.56	0.79	1.26	1.55	1.71	1.91	2.11	2.22	2.30	2.35	2.40	2.43	2.45
Engine Friction Reduction I	68.75	71.20	72.79	67.83	61.03	52.49	41.42	32.73	27.67	23.74	20.91	17.37	13.91	11.08
Engine Friction Reduction II	13.28	16.24	19.15	30.91	38.97	47.47	58.32	66.07	69.42	71.17	72.03	72.47	72.68	72.20
Engine Friction Reduction III	0.00	0.00	0.00	0.00	0.00	0.03	0.26	1.20	2.91	5.08	7.06	10.16	13.41	16.66
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	0.06
Stoichiometric GDI/4-Cylinder	0.00	0.00	0.00	0.01	0.08	0.21	0.45	0.83	1.25	1.63	2.06	2.54	3.16	3.69
Stoichiometric GDI/6-Cylinder	0.00	0.00	0.00	0.01	0.07	0.17	0.31	0.51	0.73	0.96	1.25	1.59	1.97	2.31
Lean Burn GDI	0.00	0.00	0.00	0.02	0.10	0.26	0.55	1.00	1.42	1.76	2.04	2.53	3.09	3.59
5W-30 Engine Oil	44.65	44.63	44.34	47.29	54.07	59.95	62.85	59.30	54.15	50.69	49.17	46.25	43.27	40.31
5W-20 Engine Oil	0.08	0.37	1.17	4.46	11.76	20.71	30.25	38.43	44.20	47.98	49.55	52.60	55.79	58.98
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric Power Steering	0.00	0.01	0.07	0.19	0.36	0.61	0.97	1.38	1.73	1.97	2.15	2.39	2.62	2.81
Improved Alternator	0.00	0.00	0.03	0.16	0.45	0.94	1.91	3.23	4.31	4.84	4.99	5.49	5.99	6.50
Improved Oil/Water Pump	3.35	4.88	7.04	15.42	25.91	35.19	46.03	54.69	58.89	60.92	61.73	62.73	63.60	64.31
Electric Oil/Water Pump	0.00	0.00	0.00	0.00	0.01	0.10	0.28	0.60	1.05	1.54	1.98	2.55	3.16	3.81
Tires II	57.39	57.61	58.75	69.38	78.06	82.83	82.53	75.82	70.14	66.17	63.51	59.08	55.15	51.07
Tires III	0.00	0.00	0.07	0.48	2.48	7.40	15.75	23.73	29.86	33.83	36.49	40.92	44.77	48.56
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	0.08	0.37
Front Wheel Drive	50.69	50.72	52.13	50.76	50.15	49.78	49.24	48.72	48.75	48.45	48.17	47.82	47.58	47.34
Four Wheel Drive Improvements	0.46	0.71	1.00	1.74	2.98	4.47	6.74	9.10	9.42	9.47	9.52	9.58	9.63	9.68
42V-Launch Assist and Regen	0.00	0.00	0.00	0.02	0.09	0.21	0.37	0.59	0.82	1.04	1.25	1.43	1.64	1.82
42V-Engine Off at Idle	0.00	0.00	0.02	0.09	0.21	0.37	0.59	0.82	1.04	1.25	1.43	1.64	1.82	2.00
Tier 2 Emissions Technology	0.00	0.00	0.00	33.33	66.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Increased Size/Weight	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00
Variable Compression Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.09

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Car															
Unit Body Construction	95.10	95.10	95.11	95.14	95.11	95.11	95.11	95.10	95.10	95.11	95.10	95.11	95.10	95.11	0.0%
Material Substitution II	68.07	67.85	67.65	67.34	66.95	66.43	65.84	65.41	64.96	64.63	64.33	64.17	63.96	63.78	0.9%
Material Substitution III	23.92	23.92	23.93	23.93	23.93	23.93	23.93	23.92	23.93	23.93	23.93	23.93	23.93	23.93	12.6%
Material Substitution IV	4.89	5.26	5.63	5.88	6.19	6.53	6.75	6.89	7.03	7.15	7.25	7.31	7.40	7.48	N/A
Material Substitution V	0.54	0.84	1.16	1.51	1.89	2.30	2.74	3.10	3.46	3.74	4.00	4.14	4.30	4.43	N/A
Drag Reduction II	9.26	8.66	8.10	7.48	6.69	6.19	5.45	4.97	4.52	4.25	4.12	4.13	4.04	3.98	-9.6%
Drag Reduction III	46.13	44.91	43.71	42.69	41.38	39.77	38.57	38.14	37.92	37.61	37.45	37.45	37.43	37.41	10.8%
Drag Reduction IV	37.55	37.73	37.73	37.74	37.97	38.34	38.72	38.95	39.23	39.46	39.60	39.59	39.64	39.67	16.4%
Drag Reduction V	7.07	8.70	10.47	12.10	13.97	15.70	17.26	17.94	18.32	18.68	18.83	18.83	18.89	18.93	N/A
Roll-Over Technology	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
Side Impact Technology	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
Advanced Low Loss Torque Converter	73.69	73.68	73.67	73.64	73.84	74.16	74.42	74.51	74.64	74.73	74.77	74.74	74.75	74.74	5.7%
Early Torque Converter Lockup	63.07	63.96	63.98	64.02	64.31	64.68	64.98	65.11	65.26	65.38	65.43	65.41	65.43	65.44	14.8%
Aggressive Shift Logic	26.63	26.63	26.62	26.61	26.63	26.62	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	7.4%
4-Speed Automatic	54.52	54.45	54.22	54.07	54.06	53.95	53.87	53.83	53.77	53.70	53.69	53.65	53.62	53.57	-0.9%
5-Speed Automatic	10.48	10.48	10.48	10.47	10.48	10.50	10.51	10.52	10.53	10.53	10.53	10.53	10.53	10.53	0.7%
6-Speed Automatic	2.91	2.95	3.16	3.23	3.28	3.33	3.36	3.38	3.40	3.42	3.43	3.43	3.43	3.44	22.6%
6-Speed Manual	5.89	5.90	5.90	5.90	5.90	5.92	5.93	5.93	5.94	5.95	5.95	5.95	5.95	5.95	5.4%
CVT	4.69	4.71	4.72	4.73	4.77	4.82	4.86	4.89	4.92	4.95	4.98	5.00	5.03	5.07	9.5%
Automated Manual Trans	10.31	10.32	10.33	10.35	10.32	10.32	10.31	10.31	10.31	10.31	10.30	10.32	10.31	10.31	N/A
Roller Cam	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	0.1%
OHC/AdvOHV-4 Cylinder	1.85	1.86	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	-1.9%
OHC/AdvOHV-6 Cylinder	2.44	2.44	2.43	2.42	2.44	2.43	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	-2.0%
OHC/AdvOHV-8 Cylinder	2.52	2.52	2.52	2.51	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.2%
4-Valve/4-Cylinder	51.89	51.91	51.93	51.99	51.91	51.92	51.89	51.88	51.88	51.89	51.87	51.91	51.88	51.90	-0.1%
4-Valve/6-Cylinder	24.37	24.36	24.36	24.33	24.36	24.36	24.37	24.38	24.38	24.38	24.37	24.38	24.38	24.37	0.4%
4-Valve/8-Cylinder	8.70	8.70	8.69	8.68	8.70	8.69	8.70	8.70	8.70	8.70	8.70	8.69	8.70	8.70	0.6%
5-Valve/6-Cylinder	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	0.2%
VVT-4 Cylinder	48.32	48.04	47.82	47.65	47.40	47.22	47.08	46.70	46.54	46.48	46.41	46.41	46.35	46.33	2.4%
VVT-6 Cylinder	9.67	9.65	9.64	9.64	9.65	9.68	9.70	9.72	9.74	9.75	9.76	9.75	9.76	9.76	3.5%
VVT-8 Cylinder	3.39	3.33	3.26	3.18	3.15	3.08	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.05	3.3%
VVL-4 Cylinder	14.26	14.27	14.17	14.01	13.63	13.35	13.18	12.98	12.91	12.91	12.91	12.91	12.91	12.91	1.5%
VVL-6 Cylinder	4.93	4.92	4.91	4.90	4.82	4.75	4.67	4.63	4.61	4.60	4.59	4.59	4.57	4.56	4.7%
VVL-8 Cylinder	1.77	1.77	1.77	1.77	1.77	1.78	1.78	1.79	1.79	1.79	1.79	1.79	1.79	1.79	0.9%
Camless Valve Actuation-4cyl	2.21	2.60	2.91	3.23	3.49	3.75	3.92	4.40	4.62	4.72	4.78	4.82	4.87	4.92	N/A
Camless Valve Actuation-6cyl	2.32	2.58	2.85	3.05	3.26	3.40	3.74	3.88	3.94	3.98	4.01	4.03	4.06	4.08	N/A
Camless Valve Actuation-8cyl	1.65	1.76	1.86	1.97	2.03	2.15	2.22	2.24	2.25	2.26	2.27	2.27	2.28	2.28	N/A
Cylinder Deactivation	2.77	2.85	2.93	3.01	3.05	3.08	3.11	3.12	3.13	3.14	3.15	3.15	3.15	3.15	21.1%
Turbocharging/Supercharging	2.77	2.77	2.77	2.77	2.77	2.77	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	6.3%
Engine Friction Reduction I	12.69	11.15	9.84	8.77	7.20	6.01	4.82	4.00	3.36	2.94	2.94	2.94	2.94	2.94	-11.6%
Engine Friction Reduction II	69.92	69.61	68.31	66.98	65.34	63.63	61.70	59.49	57.23	55.35	53.82	52.76	51.97	51.43	3.4%
Engine Friction Reduction III	17.14	18.48	20.33	21.69	23.58	24.86	26.12	27.12	27.79	28.21	28.44	28.45	28.61	28.73	N/A
Engine Friction Reduction IV	0.26	0.76	1.52	2.56	3.88	5.49	7.36	9.39	11.61	13.50	14.79	15.84	16.48	16.90	N/A
Stoichiometric GDI/4-Cylinder	5.27	5.65	6.03	6.31	7.47	8.17	8.60	8.87	9.08	9.21	9.33	9.40	9.52	9.62	N/A

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Stoichiometric GDI/6-Cylinder	3.47	3.71	3.95	4.10	4.60	4.86	4.99	5.06	5.14	5.20	5.25	5.27	5.32	5.36	N/A
Lean Burn GDI	5.33	5.64	5.96	6.14	6.45	6.73	6.88	6.95	7.03	7.08	7.11	7.12	7.14	7.17	N/A
5W-30 Engine Oil	46.86	46.12	45.46	45.34	45.11	44.82	44.44	44.20	43.93	43.74	43.63	43.64	43.59	43.51	0.3%
5W-20 Engine Oil	51.83	52.87	53.80	54.05	54.49	55.06	55.56	55.80	56.07	56.26	56.37	56.36	56.41	56.46	21.6%
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	N/A
Electric Power Steering	3.62	3.72	3.82	3.93	4.00	4.07	4.13	4.16	4.20	4.24	4.26	4.27	4.30	4.32	22.4%
Improved Alternator	5.41	5.72	5.86	6.03	6.21	6.34	6.44	6.49	6.54	6.58	6.61	6.60	6.62	6.63	N/A
Improved Oil/Water Pump	55.25	55.25	55.25	55.23	55.33	55.59	55.97	56.16	56.41	56.59	56.69	56.68	56.73	56.77	12.9%
Electric Oil/Water Pump	4.13	4.60	4.96	5.35	5.64	5.98	6.28	6.43	6.56	6.67	6.75	6.80	6.88	6.95	N/A
Tires II	54.23	50.42	47.30	43.38	38.58	33.35	28.78	25.02	22.08	18.95	16.22	14.55	13.53	12.52	-5.7%
Tires III	44.62	47.08	48.22	49.52	50.98	52.14	53.06	53.36	53.69	53.90	54.00	53.92	53.62	53.31	N/A
Tires IV	1.15	2.49	4.48	7.10	10.43	14.52	18.17	21.62	24.22	27.15	29.77	31.53	32.85	34.17	N/A
Front Wheel Drive	82.99	82.99	82.98	82.98	82.98	82.99	82.99	82.99	82.99	82.98	82.99	82.99	82.99	82.98	0.0%
Four Wheel Drive Improvements	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	7.3%
42V-Launch Assist and Regen	1.99	2.10	2.21	2.26	2.32	2.37	2.39	2.40	2.40	2.41	2.42	2.42	2.42	2.43	N/A
42V-Engine Off at Idle	2.10	2.21	2.26	2.32	2.37	2.39	2.40	2.40	2.41	2.42	2.42	2.42	2.43	2.43	N/A
Tier 2 Emissions Technology	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
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%
Variable Compression Ratio	0.27	0.44	0.66	0.88	1.11	1.40	1.65	1.91	2.10	2.29	2.41	2.52	2.58	2.72	N/A
Light Truck															
Unit Body Construction	36.02	36.03	36.03	36.04	36.00	35.99	35.97	35.97	35.95	35.96	35.95	35.96	35.94	35.95	1.7%
Material Substitution II	63.51	63.50	63.49	63.47	63.47	63.46	63.46	63.41	63.35	63.29	63.24	63.20	63.16	63.14	2.1%
Material Substitution III	15.55	15.59	15.58	15.58	15.59	15.62	15.68	15.72	15.78	15.81	15.82	15.81	15.82	15.82	15.6%
Material Substitution IV	2.01	2.46	2.94	3.39	3.89	4.38	4.89	5.17	5.48	5.73	5.83	5.88	5.95	6.01	N/A
Material Substitution V	0.00	0.02	0.06	0.14	0.26	0.43	0.62	0.82	1.04	1.26	1.49	1.70	1.92	2.11	N/A
Drag Reduction II	2.39	1.25	0.56	0.28	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-49.0%
Drag Reduction III	56.52	52.91	48.68	45.23	40.93	36.05	32.91	30.83	28.35	27.21	26.70	26.39	25.79	25.25	4.9%
Drag Reduction IV	39.96	43.66	47.19	49.18	51.71	54.14	55.15	55.29	55.49	55.24	54.57	54.19	53.91	53.69	N/A
Drag Reduction V	1.13	2.18	3.58	5.31	7.34	9.82	11.94	13.88	16.16	17.55	18.73	19.41	20.30	21.05	N/A
Roll-Over Technology	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
Side Impact Technology	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
Advanced Low Loss Torque Converter	76.75	82.54	84.62	87.16	88.76	89.00	89.12	89.12	89.18	89.18	89.18	89.18	89.17	89.18	N/A
Early Torque Converter Lockup	62.01	67.22	72.58	75.04	78.14	80.87	81.43	81.49	81.68	81.74	81.75	81.75	81.77	81.78	N/A
Aggressive Shift Logic	24.76	26.85	28.94	30.16	31.81	33.65	34.35	34.55	34.81	34.91	34.95	34.95	34.98	35.01	N/A
4-Speed Automatic	73.72	72.59	71.45	70.58	70.07	69.76	68.88	68.49	68.36	68.31	68.27	68.28	68.24	68.22	-0.8%
5-Speed Automatic	11.02	11.02	11.02	11.01	11.02	11.02	11.02	11.01	11.01	11.01	11.01	11.01	11.01	11.00	2.1%
6-Speed Automatic	2.70	3.06	3.42	3.76	4.15	4.38	5.06	5.34	5.42	5.44	5.45	5.45	5.45	5.45	N/A
6-Speed Manual	5.22	5.22	5.22	5.22	5.22	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	8.2%
CVT	0.73	0.84	0.94	1.04	1.13	1.21	1.40	1.50	1.54	1.57	1.59	1.61	1.63	1.65	N/A
Automated Manual Trans	4.37	5.05	5.73	6.17	6.18	6.19	6.19	6.20	6.20	6.20	6.21	6.21	6.22	6.21	N/A
Roller Cam	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	0.5%
OHC/AdvOHV-4 Cylinder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-46.3%
OHC/AdvOHV-6 Cylinder	29.01	29.01	29.01	29.02	28.99	28.98	28.97	28.97	28.97	28.97	28.97	28.98	28.97	28.97	-1.6%
OHC/AdvOHV-8 Cylinder	18.81	18.81	18.81	18.82	18.83	18.83	18.84	18.83	18.84	18.84	18.84	18.84	18.84	18.84	-1.5%
4-Valve/4-Cylinder	9.41	9.40	9.40	9.39	9.40	9.40	9.40	9.41	9.41	9.41	9.42	9.41	9.42	9.41	1.0%
4-Valve/6-Cylinder	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.79	26.78	26.79	2.9%
4-Valve/8-Cylinder	16.00	15.99	15.99	15.99	16.00	16.00	16.00	16.00	16.00	16.00	16.00	15.99	15.99	15.99	3.6%
5-Valve/6-Cylinder	0.00	0.00	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
VVT-4 Cylinder	9.14	8.95	8.74	8.49	8.17	7.84	7.50	7.20	6.87	6.56	6.27	6.19	6.02	5.94	0.0%
VVT-6 Cylinder	14.97	14.91	14.82	14.66	14.49	14.31	14.12	13.94	13.75	13.64	13.41	13.33	13.29	13.26	8.0%
VVT-8 Cylinder	12.23	12.14	12.06	11.97	11.89	11.79	11.70	11.60	11.55	11.43	11.38	11.37	11.36	11.35	9.1%
VVL-4 Cylinder	3.46	3.24	3.10	2.99	2.87	2.74	2.41	2.26	2.13	2.05	1.99	1.95	1.82	1.69	5.7%
VVL-6 Cylinder	6.56	6.42	6.29	6.25	6.25	6.25	6.25	6.25	6.23	6.23	6.15	6.03	5.94	5.88	5.5%
VVL-8 Cylinder	2.27	2.52	2.77	2.89	3.05	3.19	3.23	3.24	3.25	3.26	3.26	3.26	3.26	3.26	N/A

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Camless Valve Actuation-4cyl	0.27	0.46	0.67	0.90	1.23	1.56	1.90	2.21	2.55	2.85	3.15	3.22	3.40	3.47	N/A
Camless Valve Actuation-6cyl	0.97	1.29	1.71	2.10	2.53	2.94	3.37	3.76	4.16	4.38	4.92	5.13	5.22	5.27	N/A
Camless Valve Actuation-8cyl	0.77	1.00	1.21	1.43	1.66	1.90	2.14	2.38	2.51	2.82	2.96	2.99	3.02	3.04	N/A
Cylinder Deactivation	5.08	5.27	5.47	5.66	5.75	5.85	5.92	5.95	5.98	5.99	5.99	5.99	5.99	5.99	23.6%
Turbocharging/Supercharging	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	5.5%
Engine Friction Reduction I	6.16	3.69	2.49	1.62	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-47.9%
Engine Friction Reduction II	71.34	68.34	64.57	59.33	52.49	44.09	34.88	28.14	23.09	17.55	15.67	14.75	13.59	12.78	0.7%
Engine Friction Reduction III	22.25	27.15	31.06	35.23	40.47	45.66	50.51	52.72	54.80	56.50	55.21	53.63	52.01	51.23	N/A
Engine Friction Reduction IV	0.26	0.81	1.89	3.82	6.65	10.24	14.60	19.14	22.11	25.95	29.12	31.61	34.40	35.99	N/A
Stoichiometric GDI/4-Cylinder	3.31	3.49	3.59	3.61	3.60	3.58	3.95	4.03	3.99	3.90	3.78	3.80	3.89	3.97	N/A
Stoichiometric GDI/6-Cylinder	2.13	2.66	3.17	3.59	4.01	4.42	4.85	5.07	5.84	6.23	6.35	6.44	6.54	6.62	N/A
Lean Burn GDI	3.13	3.86	4.59	5.23	5.90	6.37	6.65	6.69	7.16	7.31	7.19	7.22	7.31	7.38	N/A
5W-30 Engine Oil	32.73	30.62	29.01	28.85	28.54	28.06	27.72	27.65	27.48	27.44	27.44	27.44	27.44	27.40	-2.2%
5W-20 Engine Oil	67.27	69.38	70.99	71.15	71.46	71.94	72.28	72.35	72.52	72.56	72.56	72.56	72.56	72.56	22.4%
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	N/A
Electric Power Steering	2.43	2.63	2.73	2.85	2.97	3.04	3.09	3.11	3.15	3.17	3.19	3.20	3.22	3.24	N/A
Improved Alternator	8.31	9.02	9.36	9.77	10.21	10.47	10.66	10.72	10.81	10.85	10.86	10.86	10.87	10.88	N/A
Improved Oil/Water Pump	72.52	72.52	72.52	72.52	72.52	72.52	72.52	72.52	72.54	72.55	72.54	72.54	72.54	72.54	9.2%
Electric Oil/Water Pump	4.73	5.56	6.44	7.34	8.39	9.23	10.08	10.78	11.23	11.54	11.76	11.90	12.11	12.30	N/A
Tires II	40.46	34.06	28.76	21.69	14.25	9.92	5.77	4.03	2.30	1.09	0.31	0.00	0.00	0.00	-49.0%
Tires III	58.24	62.66	64.45	66.69	68.74	67.54	66.15	63.21	60.11	56.33	52.70	48.87	46.64	44.53	N/A
Tires IV	1.31	3.28	6.78	11.61	17.02	22.54	28.08	32.77	37.58	42.57	46.99	51.13	53.36	55.47	N/A
Front Wheel Drive	16.09	16.10	16.12	16.16	16.09	16.09	16.07	16.08	16.07	16.09	16.08	16.11	16.09	16.10	-0.4%
Four Wheel Drive Improvements	15.38	15.37	15.37	15.37	15.38	15.38	15.38	15.38	15.38	15.38	15.38	15.37	15.38	15.37	11.4%
42V-Launch Assist and Regen	2.00	2.17	2.34	2.42	2.51	2.59	2.61	2.63	2.63	2.64	2.65	2.65	2.65	2.66	N/A
42V-Engine Off at Idle	2.17	2.34	2.42	2.51	2.59	2.61	2.63	2.63	2.64	2.65	2.65	2.65	2.66	2.66	N/A
Tier 2 Emissions Technology	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
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%
Variable Compression Ratio	0.15	0.26	0.41	0.57	0.74	0.96	1.15	1.34	1.51	1.67	1.81	1.94	2.00	2.11	N/A
Light-Duty Vehicle Total															
Unit Body Construction	63.32	63.04	62.79	62.58	62.32	62.09	61.85	61.62	61.39	61.18	60.95	60.75	60.54	60.35	0.1%
Material Substitution II	65.62	65.49	65.37	65.21	65.02	64.77	64.50	64.28	64.05	63.86	63.70	63.60	63.49	63.40	1.4%
Material Substitution III	19.42	19.40	19.36	19.33	19.30	19.28	19.29	19.28	19.28	19.27	19.24	19.21	19.19	19.16	13.3%
Material Substitution IV	3.34	3.74	4.16	4.51	4.91	5.33	5.70	5.92	6.15	6.34	6.43	6.48	6.55	6.61	N/A
Material Substitution V	0.25	0.39	0.56	0.76	0.99	1.26	1.55	1.81	2.08	2.32	2.55	2.72	2.91	3.07	N/A
Drag Reduction II	5.56	4.64	3.97	3.51	2.99	2.73	2.39	2.16	1.95	1.81	1.74	1.73	1.68	1.64	-12.4%
Drag Reduction III	51.71	49.25	46.43	44.09	41.13	37.69	35.39	34.00	32.47	31.65	31.24	31.03	30.63	30.27	7.2%
Drag Reduction IV	38.85	40.95	42.90	44.04	45.59	47.16	47.96	48.20	48.50	48.51	48.24	48.07	47.98	47.91	20.3%
Drag Reduction V	3.88	5.16	6.70	8.36	10.29	12.41	14.27	15.64	17.09	18.03	18.77	19.17	19.72	20.18	N/A
Roll-Over Technology	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
Side Impact Technology	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
Advanced Low Loss Torque Converter	75.33	78.49	79.66	81.09	82.12	82.45	82.68	82.78	82.93	83.02	83.09	83.13	83.18	83.22	8.9%
Early Torque Converter Lockup	62.50	65.73	68.68	70.09	71.98	73.72	74.23	74.38	74.62	74.76	74.85	74.90	74.97	75.04	18.4%
Aggressive Shift Logic	25.63	26.74	27.89	28.56	29.50	30.55	30.97	31.11	31.29	31.38	31.44	31.46	31.51	31.55	10.9%
4-Speed Automatic	64.85	64.29	63.65	63.17	62.94	62.78	62.31	62.13	62.08	62.08	62.11	62.14	62.16	62.18	-0.8%
5-Speed Automatic	10.77	10.78	10.77	10.77	10.78	10.79	10.80	10.80	10.80	10.81	10.81	10.81	10.81	10.81	1.3%
6-Speed Automatic	2.80	3.01	3.30	3.53	3.76	3.91	4.32	4.49	4.55	4.58	4.59	4.60	4.61	4.62	27.2%
6-Speed Manual	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.54	5.53	5.53	5.53	5.53	5.53	6.4%
CVT	2.56	2.61	2.65	2.70	2.75	2.80	2.92	2.97	3.00	3.02	3.03	3.03	3.04	3.06	10.3%
Automated Manual Trans	7.12	7.46	7.81	8.05	8.03	8.01	7.99	7.97	7.97	7.95	7.93	7.93	7.92	7.91	N/A
Roller Cam	99.61	99.61	99.61	99.62	99.62	99.62	99.63	99.63	99.63	99.63	99.63	99.64	99.64	99.64	0.3%
OHC/AdvOHV-4 Cylinder	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.81	0.80	0.79	0.78	0.78	0.77	0.77	-4.3%
OHC/AdvOHV-6 Cylinder	16.73	16.86	16.97	17.07	17.17	17.26	17.36	17.46	17.56	17.66	17.76	17.85	17.94	18.02	-1.0%
OHC/AdvOHV-8 Cylinder	11.28	11.36	11.43	11.49	11.57	11.63	11.70	11.76	11.82	11.88	11.94	12.00	12.05	12.11	-0.8%

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
4-Valve/4-Cylinder	29.04	28.84	28.66	28.52	28.33	28.17	28.00	27.83	27.68	27.52	27.36	27.22	27.07	26.94	-0.5%
4-Valve/6-Cylinder	25.67	25.67	25.68	25.68	25.70	25.71	25.73	25.74	25.75	25.75	25.77	25.77	25.78	25.79	1.5%
4-Valve/8-Cylinder	12.63	12.66	12.69	12.71	12.75	12.78	12.81	12.83	12.86	12.89	12.92	12.93	12.96	12.98	2.4%
5-Valve/6-Cylinder	1.29	1.28	1.26	1.25	1.24	1.23	1.22	1.21	1.20	1.19	1.18	1.17	1.16	1.15	-0.6%
VVT-4 Cylinder	27.25	26.82	26.44	26.08	25.63	25.23	24.82	24.33	23.93	23.58	23.23	23.05	22.78	22.60	1.4%
VVT-6 Cylinder	12.52	12.51	12.47	12.40	12.33	12.27	12.19	12.11	12.02	11.98	11.87	11.83	11.82	11.82	5.6%
VVT-8 Cylinder	8.15	8.11	8.07	8.02	8.00	7.95	7.92	7.89	7.90	7.87	7.87	7.88	7.91	7.93	7.4%
VVL-4 Cylinder	8.45	8.28	8.11	7.94	7.66	7.42	7.12	6.91	6.77	6.68	6.61	6.55	6.43	6.32	1.2%
VVL-6 Cylinder	5.81	5.74	5.67	5.64	5.61	5.59	5.56	5.55	5.54	5.53	5.49	5.42	5.37	5.34	5.2%
VVL-8 Cylinder	2.04	2.18	2.32	2.39	2.48	2.57	2.60	2.61	2.62	2.63	2.64	2.64	2.65	2.65	5.1%
Camless Valve Actuation-4cyl	1.17	1.44	1.68	1.95	2.24	2.53	2.78	3.16	3.44	3.65	3.84	3.89	4.01	4.07	N/A
Camless Valve Actuation-6cyl	1.59	1.88	2.22	2.53	2.86	3.14	3.53	3.81	4.07	4.21	4.53	4.67	4.74	4.78	N/A
Camless Valve Actuation-8cyl	1.18	1.35	1.50	1.67	1.82	2.01	2.18	2.32	2.40	2.58	2.67	2.69	2.71	2.73	N/A
Cylinder Deactivation	4.01	4.16	4.32	4.47	4.55	4.63	4.69	4.72	4.76	4.78	4.79	4.80	4.81	4.82	22.8%
Turbocharging/Supercharging	2.46	2.45	2.45	2.45	2.45	2.45	2.44	2.44	2.44	2.44	2.44	2.44	2.43	2.43	5.8%
Engine Friction Reduction I	9.18	7.10	5.82	4.83	3.42	2.65	2.11	1.74	1.45	1.25	1.24	1.23	1.22	1.21	-14.5%
Engine Friction Reduction II	70.68	68.92	66.27	62.77	58.21	52.72	46.62	41.74	37.77	33.67	31.79	30.68	29.55	28.72	2.2%
Engine Friction Reduction III	19.89	23.19	26.20	29.15	32.95	36.48	39.84	41.62	43.19	44.44	43.90	43.08	42.28	41.95	N/A
Engine Friction Reduction IV	0.26	0.79	1.72	3.25	5.42	8.15	11.43	14.91	17.60	20.64	23.06	25.00	26.95	28.11	N/A
Stoichiometric GDI/4-Cylinder	4.22	4.48	4.69	4.82	5.33	5.61	5.98	6.13	6.18	6.16	6.12	6.15	6.23	6.30	N/A
Stoichiometric GDI/6-Cylinder	2.75	3.14	3.52	3.82	4.27	4.61	4.91	5.06	5.54	5.79	5.89	5.95	6.03	6.10	N/A
Lean Burn GDI	4.15	4.68	5.21	5.64	6.14	6.53	6.76	6.80	7.10	7.21	7.16	7.18	7.24	7.29	N/A
5W-30 Engine Oil	39.26	37.70	36.46	36.25	35.92	35.46	35.03	34.83	34.55	34.39	34.28	34.23	34.15	34.05	-1.0%
5W-20 Engine Oil	60.14	61.83	63.20	63.47	63.90	64.49	64.97	65.17	65.45	65.61	65.72	65.77	65.85	65.92	22.1%
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	N/A
Electric Power Steering	2.98	3.13	3.22	3.33	3.43	3.49	3.54	3.57	3.60	3.63	3.64	3.65	3.67	3.68	24.9%
Improved Alternator	6.97	7.51	7.78	8.09	8.43	8.65	8.81	8.89	8.98	9.03	9.06	9.08	9.10	9.13	N/A
Improved Oil/Water Pump	64.54	64.62	64.69	64.76	64.87	65.05	65.28	65.42	65.60	65.74	65.84	65.89	65.97	66.04	10.5%
Electric Oil/Water Pump	4.45	5.12	5.77	6.44	7.17	7.80	8.42	8.89	9.22	9.46	9.65	9.76	9.93	10.09	N/A
Tires II	46.82	41.54	37.16	31.43	25.08	20.26	15.84	13.13	10.81	8.71	7.03	6.10	5.62	5.17	-8.9%
Tires III	51.94	55.54	57.10	58.98	60.83	60.74	60.42	58.93	57.35	55.30	53.25	50.99	49.54	48.15	N/A
Tires IV	1.24	2.92	5.74	9.59	14.09	19.00	23.74	27.93	31.84	36.00	39.72	42.91	44.84	46.68	N/A
Front Wheel Drive	47.00	46.68	46.40	46.17	45.87	45.62	45.36	45.11	44.85	44.61	44.35	44.14	43.90	43.69	-0.6%
Four Wheel Drive Improvements	9.74	9.79	9.85	9.89	9.94	9.99	10.04	10.08	10.13	10.17	10.22	10.26	10.30	10.34	10.8%
42V-Launch Assist and Regen	2.00	2.14	2.28	2.35	2.42	2.49	2.51	2.53	2.53	2.54	2.55	2.56	2.56	2.57	N/A
42V-Engine Off at Idle	2.14	2.28	2.34	2.42	2.49	2.51	2.53	2.53	2.54	2.55	2.56	2.56	2.56	2.57	N/A
Tier 2 Emissions Technology	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
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%
Variable Compression Ratio	0.20	0.34	0.52	0.71	0.91	1.15	1.37	1.59	1.76	1.94	2.06	2.18	2.24	2.36	N/A

Table 56. Technology Market Penetration in Light-Duty Vehicles
(percent)

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Gasoline														
Mini-compact Cars	25.43	25.59	25.67	26.31	26.87	27.39	28.28	28.94	29.19	29.33	29.38	29.46	29.54	29.62
Subcompact Cars	28.74	28.82	28.78	29.05	29.46	29.85	30.74	31.41	31.72	31.84	31.92	32.05	32.18	32.31
Compact Cars	31.62	31.80	31.92	32.32	32.63	32.90	33.84	34.50	34.83	34.91	34.92	34.97	35.03	35.09
Midsized Cars	27.66	27.78	27.84	28.04	28.32	28.56	29.27	29.82	30.08	30.18	30.23	30.34	30.42	30.51
Large Cars	26.47	26.50	26.46	26.40	26.48	26.63	27.21	27.68	27.93	28.04	28.09	28.22	28.33	28.43
Two Seater Cars	25.04	25.11	25.09	25.12	25.30	25.62	26.17	26.61	26.88	27.01	27.09	27.21	27.32	27.39
Small Pickup	24.45	24.71	25.05	25.36	25.57	25.64	26.09	26.52	26.77	26.91	27.02	27.16	27.31	27.45
Large Pickup	18.91	19.05	19.33	19.41	19.52	19.55	19.82	20.15	20.36	20.48	20.56	20.65	20.77	20.89
Small Van	24.70	24.80	25.01	25.09	25.23	25.22	25.60	25.94	26.17	26.27	26.32	26.39	26.51	26.64
Large Van	25.67	25.84	26.14	26.17	26.30	26.27	26.71	27.06	27.30	27.38	27.40	27.48	27.58	27.69
Small Utility	22.74	22.90	23.21	23.43	23.74	23.89	24.47	24.95	25.21	25.35	25.43	25.57	25.74	25.90
Large Utility	19.02	19.16	19.39	19.45	19.52	19.65	20.01	20.34	20.57	20.71	20.79	20.89	21.00	21.12
Turbo Direct Injection Diesel														
Mini-compact 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
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.32	41.31	41.26	41.19	41.15	41.13	41.13
Compact Cars	42.40	42.52	42.57	42.40	42.22	42.18	42.91	43.59	43.83	43.90	43.83	43.77	43.72	43.68
Midsized Cars	0.00	37.37	37.30	36.98	36.72	36.63	37.17	37.71	37.94	37.96	37.90	37.86	37.86	37.88
Large Cars	0.00	0.00	0.00	0.00	35.18	34.81	35.03	35.45	35.73	35.84	35.84	35.91	35.99	36.07
Two 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
Small Pickup	0.00	0.00	0.00	0.00	33.77	33.41	33.64	33.99	34.26	34.37	34.42	34.55	34.69	34.79
Large Pickup	25.34	25.51	25.80	25.71	25.80	25.68	25.91	26.11	26.29	26.35	26.37	26.39	26.46	26.54
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.43	34.43	34.41	34.35	34.34	34.37	34.40
Large Van	34.47	34.64	34.94	34.69	34.58	34.53	34.93	35.32	35.60	35.67	35.60	35.57	35.59	35.63
Small Utility	0.00	0.00	31.04	30.56	30.43	30.47	31.03	31.52	31.78	31.85	31.86	31.94	32.03	32.11
Large Utility	25.44	25.55	25.78	25.75	25.73	25.72	26.14	26.45	26.62	26.70	26.71	26.74	26.81	26.90
Methanol														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two 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
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
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
Small 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
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
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
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

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Methanol Flex														
Mini-compact 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
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
Compact 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
Midsized Cars	28.21	28.32	28.37	28.53	28.81	29.05	29.77	30.34	30.60	30.70	30.75	30.87	30.96	31.05
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
Two 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
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
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
Small 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
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
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
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
Ethanol														
Mini-compact 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
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
Compact 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
Midsized Cars	28.75	28.86	28.90	29.03	29.31	29.55	30.27	30.87	31.12	31.22	31.27	31.39	31.50	31.59
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
Two 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
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
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
Small 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
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
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
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
Ethanol Flex														
Mini-compact 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
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.08	31.22	31.34	31.43	31.65	31.93	32.21
Compact Cars	31.92	32.11	32.23	32.60	32.90	33.16	34.09	34.76	35.13	35.21	35.22	35.28	35.34	35.40
Midsized Cars	27.94	28.05	28.10	28.28	28.55	28.80	29.51	30.08	30.34	30.44	30.50	30.61	30.70	30.79
Large Cars	0.00	0.00	0.00	0.00	26.38	26.24	26.70	27.15	27.46	27.63	27.71	27.89	28.08	28.27
Two 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
Small Pickup	24.70	24.97	25.34	25.64	25.81	25.87	26.31	26.74	26.98	27.13	27.24	27.41	27.55	27.69
Large Pickup	19.09	19.24	19.51	19.58	19.69	19.73	19.99	20.32	20.53	20.66	20.75	20.85	20.97	21.09
Small Van	24.95	25.05	25.27	25.34	25.46	25.45	25.84	26.19	26.42	26.52	26.57	26.64	26.77	26.90
Large Van	0.00	0.00	26.17	25.76	25.72	25.70	26.14	26.65	27.03	27.15	27.20	27.35	27.48	27.63
Small Utility	0.00	0.00	0.00	0.00	23.39	23.35	23.75	24.28	24.65	24.84	24.94	25.15	25.39	25.60
Large Utility	19.21	19.36	19.60	19.64	19.71	19.83	20.20	20.53	20.77	20.91	20.99	21.10	21.22	21.34
Compressed Natural Gas														
Mini-compact 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
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
Compact Cars	34.09	34.27	34.38	34.62	34.84	35.07	35.96	36.60	36.95	37.02	37.02	37.06	37.08	37.11
Midsized 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
Large Cars	28.56	28.59	28.51	28.40	28.42	28.57	29.05	29.47	29.71	29.80	29.83	29.93	30.00	30.09
Two 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
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
Large Pickup	20.31	20.47	20.74	20.81	20.87	20.84	21.12	21.40	21.61	21.72	21.78	21.87	21.96	22.05
Small 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
Large Van	27.63	27.73	27.98	27.94	28.01	28.01	28.47	28.87	29.08	29.15	29.15	29.20	29.30	29.37
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
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

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Compressed Natural Gas Bi-Fuel														
Mini-compact 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
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
Compact Cars	31.60	31.78	31.89	32.18	32.49	32.76	33.61	34.23	34.52	34.58	34.59	34.62	34.64	34.67
Midsized 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
Large Cars	0.00	0.00	26.36	26.08	25.96	26.05	26.56	26.98	27.25	27.38	27.44	27.59	27.77	27.93
Two 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
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
Large Pickup	18.49	18.61	18.80	18.85	18.87	18.93	19.25	19.64	19.82	19.94	20.00	20.08	20.17	20.26
Small 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
Large Van	25.24	25.30	25.39	25.40	25.49	25.52	25.99	26.37	26.59	26.67	26.71	26.75	26.85	26.96
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
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
Liquefied Petroleum Gas														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two 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
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
Large Pickup	19.64	19.79	20.07	20.13	20.23	20.24	20.50	20.82	21.03	21.15	21.22	21.32	21.43	21.54
Small 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
Large Van	26.68	26.86	27.16	27.14	27.24	27.18	27.62	27.99	28.22	28.30	28.31	28.38	28.47	28.57
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
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
Liquefied Petroleum Gas Bi-Fuel														
Mini-compact 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
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
Compact Cars	0.00	0.00	31.72	31.51	31.49	31.82	32.69	33.55	34.02	34.16	34.20	34.28	34.40	34.51
Midsized Cars	0.00	0.00	27.71	27.56	27.59	27.82	28.48	29.06	29.41	29.54	29.60	29.71	29.84	29.96
Large Cars	0.00	0.00	26.36	26.09	25.97	26.07	26.65	27.13	27.44	27.58	27.65	27.81	28.00	28.19
Two 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
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
Large Pickup	18.89	19.05	19.33	19.40	19.51	19.50	19.78	20.12	20.32	20.44	20.51	20.59	20.70	20.80
Small 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
Large Van	25.63	25.76	26.03	26.03	26.13	26.16	26.63	26.98	27.22	27.30	27.32	27.39	27.48	27.58
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
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
Electric														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two Seater Cars	31.45	34.62	38.10	42.43	48.12	47.72	47.92	48.14	48.13	48.09	48.04	48.00	47.97	47.94
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
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
Small 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
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
Small Utility	24.43	26.88	29.89	33.02	37.79	37.64	38.13	38.43	38.43	38.36	38.30	38.24	38.17	38.11
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

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Diesel-Electric Hybrid														
Mini-compact 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
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
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.81	53.64	53.47	53.30	53.14	53.01	52.93
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.93	47.75	47.56	47.40	47.28
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.82	44.70	44.60
Two 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
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
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
Small 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	42.01	41.84
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
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
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
Gasoline-Electric Hybrid														
Mini-compact 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
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.40	45.25	45.13	45.03	44.97	44.94
Compact Cars	45.57	45.74	45.77	45.63	45.28	44.94	45.39	45.82	45.99	45.92	45.82	45.73	45.67	45.64
Midsized Cars	0.00	0.00	40.14	39.70	39.29	38.96	39.31	39.74	39.92	39.90	39.83	39.78	39.76	39.76
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	38.48	38.42	38.46	38.44	38.40	38.38	38.38	38.40
Two Seater Cars	36.02	36.05	35.88	35.61	35.44	35.36	35.92	36.44	36.59	36.61	36.58	36.58	36.59	36.61
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
Large Pickup	0.00	0.00	0.00	27.45	27.12	26.93	27.10	27.24	27.37	27.40	27.38	27.42	27.42	27.46
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.90	36.81	36.71	36.58	36.47	36.40	36.38
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	39.66	39.51
Small Utility	0.00	0.00	0.00	0.00	0.00	33.85	33.73	33.78	33.89	33.92	33.88	33.89	33.91	33.95
Large Utility	0.00	0.00	27.86	27.31	27.12	27.03	27.33	27.67	27.84	27.87	27.85	27.89	27.91	27.95
Fuel Cell Methanol														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two 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
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
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
Small 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
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
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
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
Fuel Cell Hydrogen														
Mini-compact 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
Subcompact Cars	0.00	0.00	58.49	57.73	57.12	56.59	57.03	57.33	57.29	57.24	57.18	57.13	57.09	57.05
Compact 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
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.33	51.28	51.25	51.22
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	46.82
Two 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
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
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
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.76	39.71	39.64
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
Small Utility	0.00	0.00	43.12	42.23	42.15	41.98	42.52	42.86	42.86	42.78	42.71	42.64	42.57	42.50
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

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact 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
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
Compact 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
Midsized 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
Large Cars	0.00	0.00	0.00	0.00	0.00	39.55	39.85	40.14	40.20	40.16	40.12	40.08	40.04	40.01
Two 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
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
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
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.09	34.03	33.98	33.93	33.88
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
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.56	36.50	36.44	36.38	36.32
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

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Gasoline															
Mini-compact Cars	29.69	29.76	29.84	29.93	30.07	30.22	30.31	30.42	30.53	30.58	30.60	30.61	30.62	30.63	0.7%
Subcompact Cars	32.42	32.54	32.67	32.78	32.98	33.18	33.37	33.51	33.64	33.71	33.79	33.84	33.89	33.93	0.6%
Compact Cars	35.13	35.18	35.24	35.31	35.46	35.60	35.74	35.83	35.92	35.99	36.05	36.05	36.07	36.08	0.5%
Midsized Cars	30.60	30.68	30.77	30.84	30.99	31.14	31.26	31.36	31.43	31.50	31.54	31.57	31.60	31.62	0.5%
Large Cars	28.52	28.59	28.67	28.77	28.92	29.09	29.26	29.37	29.43	29.52	29.60	29.68	29.70	29.72	0.4%
Two Seater Cars	27.46	27.54	27.63	27.73	27.89	28.03	28.17	28.28	28.39	28.46	28.50	28.54	28.57	28.60	0.5%
Small Pickup	27.59	27.76	27.92	28.05	28.24	28.40	28.61	28.75	28.85	28.95	29.04	29.09	29.13	29.15	0.6%
Large Pickup	21.00	21.13	21.26	21.39	21.56	21.70	21.83	21.94	22.07	22.18	22.25	22.29	22.33	22.35	0.6%
Small Van	26.77	26.92	27.03	27.16	27.37	27.56	27.76	27.87	28.02	28.16	28.24	28.28	28.33	28.38	0.5%
Large Van	27.81	27.97	28.12	28.24	28.43	28.63	28.83	28.99	29.13	29.28	29.38	29.44	29.49	29.54	0.5%
Small Utility	26.04	26.19	26.35	26.51	26.74	26.95	27.18	27.32	27.47	27.57	27.64	27.70	27.76	27.81	0.7%
Large Utility	21.24	21.38	21.53	21.68	21.86	22.03	22.15	22.27	22.37	22.48	22.56	22.62	22.67	22.71	0.7%
Turbo Direct Injection Diesel															
Mini-compact 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	N/A
Subcompact Cars	41.14	41.15	41.19	41.24	41.35	41.48	41.59	41.70	41.80	41.87	41.93	41.96	42.00	42.02	N/A
Compact Cars	43.64	43.60	43.58	43.56	43.62	43.69	43.76	43.81	43.86	43.89	43.89	43.87	43.86	43.84	0.1%
Midsized Cars	37.87	37.88	37.89	37.90	37.96	38.04	38.12	38.18	38.24	38.27	38.28	38.28	38.26	38.24	0.1%
Large Cars	36.14	36.22	36.30	36.38	36.52	36.65	36.78	36.87	36.97	37.05	37.12	37.11	37.13	37.15	N/A
Two 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	N/A
Small Pickup	34.86	34.96	35.07	35.14	35.28	35.41	35.53	35.57	35.62	35.67	35.71	35.69	35.70	35.70	N/A
Large Pickup	26.60	26.70	26.73	26.80	26.92	27.04	27.15	27.20	27.27	27.33	27.34	27.36	27.37	27.39	0.3%
Small Van	34.43	34.49	34.56	34.65	34.79	34.94	35.08	35.19	35.31	35.42	35.46	35.51	35.56	35.60	N/A
Large Van	35.64	35.70	35.75	35.82	35.92	36.04	36.17	36.24	36.33	36.43	36.51	36.53	36.56	36.60	0.2%
Small Utility	32.17	32.25	32.32	32.41	32.57	32.74	32.91	33.03	33.17	33.24	33.30	33.35	33.40	33.43	N/A
Large Utility	26.97	27.08	27.14	27.22	27.38	27.53	27.68	27.76	27.86	27.97	28.02	28.03	28.06	28.09	0.4%
Methanol															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized 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	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	N/A
Two 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	N/A
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	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	N/A
Small 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	N/A
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	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	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	N/A

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Methanol Flex															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized Cars	31.15	31.24	31.34	31.42	31.58	31.75	31.87	31.98	32.09	32.14	32.19	32.22	32.25	32.27	0.5%
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	N/A
Two 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	N/A
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	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	N/A
Small 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	N/A
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	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	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	N/A
Ethanol															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized Cars	31.68	31.77	31.87	31.96	32.12	32.29	32.42	32.53	32.65	32.72	32.78	32.82	32.85	32.88	0.5%
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	N/A
Two 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	N/A
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	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	N/A
Small 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	N/A
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	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	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	N/A
Ethanol Flex															
Mini-compact 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	N/A
Subcompact Cars	32.52	32.78	33.05	33.31	33.64	33.91	34.14	34.29	34.46	34.59	34.66	34.70	34.74	34.78	N/A
Compact Cars	35.45	35.50	35.57	35.64	35.80	35.95	36.09	36.18	36.28	36.36	36.41	36.42	36.44	36.46	0.5%
Midsized Cars	30.89	30.98	31.07	31.15	31.31	31.47	31.59	31.70	31.80	31.86	31.90	31.93	31.96	31.98	0.5%
Large Cars	28.45	28.60	28.75	28.88	29.07	29.26	29.44	29.56	29.63	29.72	29.81	29.89	29.91	29.94	N/A
Two 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	N/A
Small Pickup	27.84	28.01	28.17	28.31	28.50	28.68	28.89	29.04	29.15	29.25	29.34	29.42	29.47	29.50	0.6%
Large Pickup	21.22	21.36	21.49	21.63	21.80	21.98	22.13	22.25	22.38	22.49	22.57	22.62	22.65	22.68	0.6%
Small Van	27.04	27.20	27.32	27.46	27.67	27.87	28.07	28.18	28.35	28.49	28.58	28.62	28.68	28.73	0.5%
Large Van	27.80	27.99	28.15	28.29	28.49	28.70	28.90	29.07	29.20	29.35	29.45	29.53	29.57	29.61	N/A
Small Utility	25.80	25.98	26.20	26.38	26.64	26.88	27.12	27.25	27.42	27.52	27.59	27.65	27.72	27.76	N/A
Large Utility	21.47	21.62	21.77	21.93	22.12	22.30	22.46	22.58	22.68	22.81	22.90	22.96	23.01	23.05	0.7%
Compressed Natural Gas															
Mini-compact 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	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	N/A
Compact Cars	37.13	37.14	37.16	37.19	37.30	37.42	37.52	37.60	37.66	37.70	37.73	37.73	37.73	37.72	0.4%
Midsized 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	N/A
Large Cars	30.17	30.25	30.30	30.37	30.52	30.65	30.79	30.89	30.94	31.00	31.07	31.11	31.16	31.17	0.3%
Two 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	N/A
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	N/A
Large Pickup	22.13	22.23	22.33	22.43	22.57	22.71	22.82	22.90	22.98	23.05	23.11	23.14	23.15	23.17	0.5%
Small 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	N/A
Large Van	29.43	29.55	29.66	29.78	29.95	30.14	30.31	30.43	30.53	30.64	30.74	30.80	30.82	30.85	0.4%
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	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	N/A

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Compressed Natural Gas Bi-Fuel															
Mini-compact 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	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	N/A
Compact Cars	34.68	34.68	34.71	34.74	34.86	34.97	35.08	35.13	35.20	35.24	35.27	35.24	35.23	35.22	0.4%
Midsized 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	N/A
Large Cars	28.07	28.18	28.27	28.37	28.52	28.67	28.83	28.93	28.97	29.05	29.12	29.14	29.16	29.17	N/A
Two 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	N/A
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	N/A
Large Pickup	20.34	20.44	20.54	20.63	20.76	20.85	20.95	21.01	21.09	21.14	21.17	21.18	21.19	21.20	0.5%
Small 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	N/A
Large Van	27.06	27.20	27.28	27.38	27.55	27.72	27.90	27.99	28.12	28.24	28.30	28.32	28.34	28.37	0.4%
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	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	N/A
Liquefied Petroleum Gas															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized 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	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	N/A
Two 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	N/A
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	N/A
Large Pickup	21.65	21.77	21.90	22.02	22.18	22.34	22.46	22.58	22.69	22.79	22.88	22.93	22.96	22.99	0.6%
Small 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	N/A
Large Van	28.68	28.83	28.97	29.09	29.29	29.49	29.67	29.83	29.94	30.08	30.22	30.31	30.35	30.38	0.5%
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	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	N/A
Liquefied Petroleum Gas Bi-Fuel															
Mini-compact 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	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	N/A
Compact Cars	34.61	34.68	34.76	34.85	35.01	35.15	35.29	35.38	35.48	35.56	35.61	35.61	35.62	35.63	N/A
Midsized Cars	30.10	30.20	30.31	30.42	30.57	30.72	30.84	30.94	31.01	31.06	31.10	31.13	31.15	31.16	N/A
Large Cars	28.35	28.48	28.59	28.71	28.88	29.05	29.22	29.32	29.38	29.47	29.56	29.62	29.63	29.65	N/A
Two 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	N/A
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	N/A
Large Pickup	20.90	21.02	21.14	21.26	21.41	21.54	21.65	21.74	21.84	21.93	21.98	22.01	22.03	22.05	0.6%
Small 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	N/A
Large Van	27.69	27.84	27.98	28.08	28.26	28.45	28.63	28.78	28.91	29.04	29.14	29.17	29.21	29.26	0.5%
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	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	N/A
Electric															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized 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	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	N/A
Two Seater Cars	47.91	47.88	47.86	47.83	47.87	47.93	47.98	48.01	48.05	48.08	48.11	48.13	48.15	48.17	1.3%
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	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	N/A
Small 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	N/A
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	N/A
Small Utility	38.05	38.00	37.95	37.90	37.93	37.96	38.00	38.03	38.06	38.09	38.12	38.14	38.16	38.18	1.4%
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	N/A

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Diesel-Electric Hybrid															
Mini-compact 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	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	N/A
Compact Cars	52.84	52.76	52.70	52.66	52.67	52.70	52.73	52.75	52.76	52.76	52.75	52.73	52.71	52.69	N/A
Midsized Cars	47.16	47.07	47.01	46.98	46.99	47.02	47.05	47.08	47.10	47.12	47.12	47.11	47.10	47.09	N/A
Large Cars	44.50	44.42	44.35	44.31	44.33	44.38	44.45	44.51	44.57	44.62	44.66	44.69	44.71	44.72	N/A
Two 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	N/A
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	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	N/A
Small Van	41.67	41.52	41.41	41.34	41.35	41.38	41.44	41.51	41.59	41.67	41.75	41.81	41.86	41.89	N/A
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	N/A
Small Utility	0.00	0.00	0.00	41.95	41.86	41.79	41.76	41.75	41.76	41.80	41.85	41.91	41.97	42.03	N/A
Large Utility	33.62	33.48	33.37	33.30	33.30	33.33	33.38	33.45	33.54	33.63	33.69	33.76	33.85	33.91	N/A
Gasoline-Electric Hybrid															
Mini-compact 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	N/A
Subcompact Cars	44.93	44.95	44.98	45.01	45.09	45.19	45.30	45.38	45.46	45.54	45.59	45.62	45.65	45.67	N/A
Compact Cars	45.61	45.58	45.57	45.57	45.62	45.68	45.74	45.79	45.84	45.87	45.88	45.88	45.88	45.87	0.0%
Midsized Cars	39.76	39.77	39.80	39.82	39.89	39.97	40.05	40.11	40.16	40.21	40.22	40.22	40.23	40.21	N/A
Large Cars	38.42	38.45	38.51	38.59	38.73	38.87	38.99	39.07	39.15	39.22	39.27	39.30	39.33	39.32	N/A
Two Seater Cars	36.64	36.67	36.71	36.76	36.85	36.97	37.09	37.19	37.28	37.34	37.36	37.38	37.41	37.42	0.1%
Small Pickup	0.00	0.00	0.00	40.30	40.19	40.09	40.02	39.97	39.95	39.94	39.95	39.94	39.96	39.98	N/A
Large Pickup	27.51	27.56	27.62	27.67	27.80	27.91	28.02	28.07	28.14	28.21	28.26	28.27	28.28	28.29	N/A
Small Van	36.35	36.34	36.36	36.41	36.52	36.64	36.76	36.85	36.94	37.03	37.12	37.14	37.18	37.22	N/A
Large Van	39.35	39.22	39.13	39.07	39.09	39.14	39.21	39.30	39.40	39.50	39.59	39.65	39.72	39.74	N/A
Small Utility	33.99	34.05	34.13	34.19	34.33	34.51	34.67	34.81	34.94	35.06	35.13	35.19	35.25	35.30	N/A
Large Utility	28.01	28.07	28.16	28.23	28.38	28.53	28.68	28.80	28.87	28.98	29.05	29.07	29.11	29.14	N/A
Fuel Cell Methanol															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized 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	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	N/A
Two 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	N/A
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	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	N/A
Small 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	N/A
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	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	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	N/A
Fuel Cell Hydrogen															
Mini-compact 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	N/A
Subcompact Cars	57.02	56.99	56.97	56.94	56.98	57.04	57.08	57.11	57.14	57.17	57.20	57.22	57.24	57.25	N/A
Compact Cars	0.00	59.63	59.60	59.57	59.62	59.68	59.73	59.76	59.80	59.83	59.85	59.87	59.89	59.90	N/A
Midsized Cars	51.19	51.16	51.13	51.09	51.12	51.16	51.20	51.23	51.26	51.29	51.31	51.32	51.34	51.35	N/A
Large Cars	46.79	46.77	46.75	46.73	46.77	46.81	46.85	46.89	46.93	46.97	47.01	47.04	47.06	47.09	N/A
Two 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	N/A
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	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	N/A
Small Van	39.58	39.53	39.47	39.42	39.45	39.49	39.54	39.57	39.60	39.64	39.67	39.69	39.72	39.75	N/A
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	N/A
Small Utility	42.43	42.37	42.32	42.27	42.30	42.34	42.38	42.41	42.44	42.48	42.51	42.53	42.56	42.58	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.20	32.22	32.24	32.26	32.28	32.30	N/A

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Cell Gasoline															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized 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	N/A
Large Cars	39.98	39.97	39.96	39.94	39.97	40.01	40.03	40.07	40.10	40.14	40.18	40.20	40.22	40.24	N/A
Two 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	N/A
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	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	N/A
Small Van	33.83	33.78	33.73	33.69	33.71	33.74	33.79	33.81	33.84	33.87	33.90	33.92	33.94	33.97	N/A
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	N/A
Small Utility	36.26	36.21	36.16	36.12	36.15	36.18	36.22	36.24	36.27	36.30	36.33	36.35	36.37	36.39	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	N/A

Table 57. New Light-Duty Vehicle Fuel Economy
(miles per gallon)

Sources: 2003 and 2004 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-Model Year Fuel Economy Reports from Auto Manufacturers, 2000; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Gasoline														
Mini-compact Cars	57.1	57.1	57.2	57.6	57.8	58.1	58.2	58.3	58.4	58.5	58.5	58.5	58.6	58.6
Subcompact Cars	20.4	20.4	20.6	20.8	21.0	21.2	21.3	21.4	21.5	21.5	21.6	21.6	21.7	21.7
Compact Cars	20.5	20.5	20.7	21.0	21.2	21.4	21.6	21.7	21.8	21.8	21.9	21.9	22.0	22.0
Midsize Cars	26.9	26.9	27.0	27.3	27.6	27.8	27.9	28.1	28.2	28.2	28.3	28.3	28.4	28.4
Large Cars	34.4	34.4	34.5	34.7	34.9	35.1	35.3	35.4	35.5	35.5	35.6	35.6	35.7	35.7
Two Seater Cars	45.6	45.6	45.7	46.0	46.2	46.4	46.6	46.7	46.8	46.8	46.9	46.9	46.9	47.0
Small Pickup	18.8	18.8	18.8	19.4	19.6	19.8	20.0	20.1	20.2	20.3	20.3	20.4	20.4	20.5
Large Pickup	26.1	26.1	26.1	26.6	26.9	27.1	27.3	27.4	27.5	27.6	27.6	27.7	27.8	27.8
Small Van	27.5	27.5	27.5	28.1	28.3	28.5	28.6	28.7	28.8	28.8	28.9	29.0	29.0	29.1
Large Van	23.6	23.6	23.6	24.1	24.4	24.6	24.7	24.8	24.9	24.9	25.0	25.0	25.1	25.2
Small Utility	28.4	28.4	28.4	29.0	29.2	29.4	29.6	29.7	29.8	29.8	29.9	29.9	30.0	30.1
Large Utility	37.0	37.0	37.0	37.5	37.8	38.0	38.1	38.3	38.4	38.4	38.5	38.5	38.6	38.7
Turbo Direct Injection Diesel														
Mini-compact 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
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	23.0	23.0	23.1	23.1	23.1
Compact Cars	21.7	21.9	21.9	22.2	22.4	22.5	22.7	22.8	22.8	22.9	22.9	22.9	23.0	23.0
Midsize Cars	0.0	29.1	29.0	29.2	29.4	29.5	29.7	29.8	29.8	29.9	29.9	29.9	30.0	30.0
Large Cars	0.0	0.0	0.0	0.0	37.2	37.3	37.3	37.4	37.5	37.5	37.5	37.6	37.6	37.6
Two 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
Small Pickup	0.0	0.0	0.0	0.0	22.7	22.9	22.9	23.0	23.0	23.1	23.1	23.1	23.1	23.1
Large Pickup	27.6	27.6	27.6	28.2	28.4	28.6	28.7	28.8	28.9	28.9	29.0	29.0	29.1	29.1
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	31.6	31.6	31.6	31.7	31.7	31.7
Large Van	25.3	25.3	25.5	26.0	26.1	26.3	26.4	26.4	26.5	26.5	26.5	26.5	26.6	26.6
Small Utility	0.0	0.0	30.5	31.0	31.2	31.3	31.5	31.6	31.6	31.7	31.7	31.8	31.8	31.9
Large Utility	38.5	38.5	38.5	39.0	39.2	39.4	39.6	39.7	39.7	39.8	39.8	39.9	39.9	40.0
Methanol														
Mini-compact 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
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
Compact 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
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
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
Two 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
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
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
Small 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
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
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
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

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Methanol Flex														
Mini-compact 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
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
Compact 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
Midsized Cars	29.3	29.4	29.5	29.8	30.0	30.2	30.4	30.5	30.6	30.6	30.7	30.7	30.8	30.8
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
Two 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
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
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
Small 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
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
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
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
Ethanol														
Mini-compact 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
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
Compact 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
Midsized Cars	29.2	29.2	29.3	29.6	29.8	30.0	30.2	30.3	30.4	30.4	30.5	30.5	30.6	30.6
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
Two 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
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
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
Small 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
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
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
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
Ethanol Flex														
Mini-compact 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
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3	23.0	23.0	23.1	23.1	23.2	23.3
Compact Cars	21.2	21.2	21.2	21.6	21.8	22.0	22.2	22.4	22.4	22.5	22.5	22.6	22.6	22.7
Midsized Cars	27.3	27.3	27.4	27.7	27.9	28.1	28.3	28.4	28.5	28.6	28.6	28.7	28.7	28.8
Large Cars	0.0	0.0	0.0	0.0	35.8	35.5	35.6	35.8	35.8	35.9	36.0	36.0	36.1	36.1
Two 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
Small Pickup	21.5	21.5	21.5	22.1	22.3	22.5	22.7	22.7	22.8	22.9	22.9	23.0	23.0	23.0
Large Pickup	27.0	27.1	27.1	27.7	28.0	28.2	28.3	28.4	28.5	28.5	28.5	28.6	28.7	28.7
Small Van	29.8	29.8	29.8	30.6	30.8	31.0	31.0	31.2	31.2	31.2	31.3	31.3	31.4	31.4
Large Van	0.0	0.0	24.8	24.9	25.0	25.2	25.3	25.4	25.5	25.5	25.5	25.6	25.7	25.7
Small Utility	0.0	0.0	0.0	0.0	29.5	29.7	29.8	30.0	30.1	30.1	30.2	30.2	30.3	30.3
Large Utility	37.3	37.3	37.3	37.9	38.1	38.4	38.5	38.6	38.7	38.8	38.8	38.9	39.0	39.0
Compressed Natural Gas														
Mini-compact 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
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
Compact Cars	27.0	27.0	27.1	27.4	27.6	27.9	28.0	28.1	28.2	28.3	28.3	28.4	28.4	28.5
Midsized 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
Large Cars	41.2	41.2	41.3	41.5	41.7	41.9	42.0	42.1	42.2	42.2	42.3	42.3	42.4	42.4
Two 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
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
Large Pickup	32.9	32.9	32.9	33.4	33.7	33.9	34.0	34.2	34.3	34.3	34.4	34.5	34.5	34.6
Small 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
Large Van	30.4	30.4	30.4	30.9	31.1	31.3	31.5	31.6	31.6	31.7	31.7	31.8	31.9	31.9
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Compressed Natural Gas Bi-Fuel														
Mini-compact 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
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
Compact Cars	25.8	25.8	25.9	26.2	26.5	26.7	26.8	27.0	27.1	27.1	27.2	27.2	27.3	27.3
Midsized 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
Large Cars	0.0	0.0	40.3	40.5	40.7	40.8	41.0	41.1	41.2	41.2	41.3	41.3	41.4	41.4
Two 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
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
Large Pickup	32.0	32.0	32.0	32.6	32.8	33.1	33.2	33.4	33.5	33.5	33.6	33.6	33.7	33.8
Small 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
Large Van	29.5	29.5	29.5	30.0	30.3	30.5	30.6	30.7	30.8	30.8	30.9	30.9	31.0	31.1
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
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
Liquefied Petroleum Gas														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two 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
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
Large Pickup	32.1	32.2	32.2	32.7	33.0	33.2	33.4	33.5	33.6	33.6	33.7	33.8	33.8	33.9
Small 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
Large Van	29.7	29.7	29.7	30.2	30.5	30.7	30.8	30.9	31.0	31.0	31.1	31.1	31.2	31.2
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
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
Liquefied Petroleum Gas Bi-Fuel														
Mini-compact 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
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
Compact Cars	0.0	0.0	25.4	25.6	25.8	26.0	26.2	26.3	26.4	26.5	26.6	26.6	26.7	26.7
Midsized Cars	0.0	0.0	32.0	32.2	32.4	32.6	32.8	33.0	33.1	33.1	33.2	33.3	33.3	33.4
Large Cars	0.0	0.0	39.5	39.7	39.8	40.0	40.1	40.2	40.3	40.4	40.4	40.5	40.5	40.6
Two 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
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
Large Pickup	31.0	31.0	31.0	31.6	31.9	32.1	32.2	32.4	32.5	32.5	32.6	32.7	32.7	32.8
Small 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
Large Van	28.5	28.5	28.5	29.1	29.3	29.5	29.6	29.8	29.8	29.9	29.9	30.0	30.1	30.1
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
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
Electric														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two Seater Cars	70.2	70.1	70.8	71.4	72.0	71.8	71.4	71.0	70.6	70.3	70.0	69.7	69.4	69.4
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
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
Small 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
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
Small Utility	55.6	55.5	56.2	57.1	57.8	57.4	56.7	56.2	55.8	55.4	55.0	54.7	54.3	54.3
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

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Diesel-Electric Hybrid														
Mini-compact 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
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
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	27.8	27.7	27.7	27.6	27.6	27.7
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	33.8	33.8	33.7	33.8
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8	42.7	42.8
Two 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
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
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
Small 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	37.3	37.3
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
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
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
Gasoline-Electric Hybrid														
Mini-compact 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
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	25.7	25.6	25.5	25.4	25.4
Compact Cars	24.9	23.7	24.0	23.9	24.2	23.9	24.1	24.1	24.0	23.9	23.8	23.7	23.6	23.6
Midsized Cars	0.0	0.0	30.8	30.0	30.1	30.1	30.1	30.1	30.1	30.1	30.0	30.0	30.0	30.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	39.4	38.4	38.3	38.2	38.2	38.2	38.1	38.1
Two Seater Cars	52.0	51.3	51.3	51.5	51.5	51.6	51.6	51.7	51.6	51.6	51.6	51.5	51.5	51.5
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
Large Pickup	0.0	0.0	0.0	32.9	32.1	32.2	32.3	32.3	32.1	32.0	31.9	31.8	31.6	31.6
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4	34.6	34.5	34.4	34.2	34.2	34.1
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	29.1	28.4
Small Utility	0.0	0.0	0.0	0.0	0.0	32.9	32.5	32.5	32.4	32.4	32.3	32.3	32.2	32.3
Large Utility	0.0	0.0	42.1	41.8	41.9	41.9	41.9	41.9	41.8	41.7	41.7	41.6	41.5	41.5
Fuel Cell Methanol														
Mini-compact 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
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
Compact 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
Midsized 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
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
Two 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
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
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
Small 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
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
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
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
Fuel Cell Hydrogen														
Mini-compact 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
Subcompact Cars	0.0	0.0	74.3	72.9	71.4	69.9	67.8	66.0	64.3	62.9	61.4	60.1	58.7	57.4
Compact 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
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.7	71.2	69.7	68.3
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	78.5
Two 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
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
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
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.3	79.4	77.6
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
Small Utility	0.0	0.0	97.8	96.3	93.8	91.5	88.4	85.8	83.6	81.7	79.8	78.0	76.2	74.5
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

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact 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
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
Compact 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
Midsized 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
Large Cars	0.0	0.0	0.0	0.0	0.0	117.6	113.4	109.5	106.0	103.0	100.2	97.3	94.6	92.2
Two 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
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
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
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.3	105.1	101.8	98.6	95.8
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
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.2	101.1	98.1	95.2	92.5
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
Average Price														
Cars	25.3	25.3	25.4	26.0	26.4	26.5	26.7	26.9	26.9	26.9	27.0	27.0	27.1	27.1
Trucks	28.9	28.9	29.0	29.6	29.8	30.1	30.2	30.3	30.4	30.5	30.5	30.6	30.7	30.7
Light Duty Vehicles	27.1	27.1	27.1	27.6	27.9	28.2	28.4	28.6	28.6	28.7	28.8	28.8	28.9	29.0

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Gasoline															
Mini-compact Cars	58.7	58.7	58.7	58.8	58.8	58.8	58.8	58.9	58.9	58.9	58.9	58.9	58.9	58.9	0.1%
Subcompact Cars	21.7	21.8	21.8	21.8	21.9	21.9	21.9	21.9	22.0	22.0	22.0	22.0	22.0	22.0	0.3%
Compact Cars	22.1	22.1	22.1	22.2	22.2	22.3	22.3	22.3	22.4	22.4	22.4	22.4	22.4	22.4	0.3%
Midsized Cars	28.5	28.5	28.6	28.6	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	0.3%
Large Cars	35.8	35.8	35.9	35.9	36.0	36.0	36.0	36.1	36.1	36.1	36.1	36.2	36.2	36.2	0.2%
Two Seater Cars	47.0	47.0	47.1	47.1	47.2	47.2	47.2	47.3	47.3	47.3	47.3	47.3	47.3	47.3	0.1%
Small Pickup	20.5	20.6	20.6	20.7	20.7	20.8	20.8	20.9	20.9	20.9	20.9	21.0	21.0	21.0	0.4%
Large Pickup	27.9	28.0	28.0	28.1	28.1	28.2	28.2	28.3	28.3	28.3	28.3	28.3	28.3	28.3	0.3%
Small Van	29.1	29.2	29.3	29.3	29.4	29.4	29.5	29.5	29.6	29.6	29.6	29.7	29.7	29.7	0.3%
Large Van	25.2	25.3	25.4	25.4	25.5	25.5	25.6	25.6	25.7	25.7	25.7	25.7	25.8	25.8	0.3%
Small Utility	30.1	30.2	30.2	30.3	30.3	30.4	30.4	30.5	30.5	30.5	30.5	30.5	30.6	30.6	0.3%
Large Utility	38.7	38.8	38.9	38.9	39.0	39.0	39.1	39.1	39.2	39.2	39.2	39.2	39.2	39.3	0.2%
Turbo Direct Injection Diesel															
Mini-compact 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	N/A
Subcompact Cars	23.2	23.2	23.3	23.3	23.3	23.3	23.4	23.4	23.4	23.4	23.4	23.5	23.5	23.5	N/A
Compact Cars	23.0	23.0	23.1	23.1	23.1	23.1	23.1	23.1	23.2	23.2	23.2	23.2	23.2	23.2	0.2%
Midsized Cars	30.0	30.1	30.1	30.1	30.1	30.1	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	0.1%
Large Cars	37.7	37.7	37.7	37.7	37.7	37.7	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	N/A
Two 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	N/A
Small Pickup	23.1	23.2	23.2	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.0	23.0	N/A
Large Pickup	29.2	29.2	29.3	29.3	29.4	29.4	29.4	29.5	29.5	29.5	29.5	29.6	29.6	29.6	0.3%
Small Van	31.7	31.8	31.8	31.8	31.8	31.8	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	N/A
Large Van	26.6	26.7	26.7	26.7	26.8	26.8	26.8	26.9	26.9	27.0	27.0	27.0	27.0	27.0	0.2%
Small Utility	31.9	32.0	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.3	32.3	32.3	32.3	32.3	N/A
Large Utility	40.0	40.1	40.1	40.2	40.2	40.3	40.3	40.4	40.4	40.4	40.5	40.5	40.5	40.5	0.2%
Methanol															
Mini-compact 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	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	N/A
Compact 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	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	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	N/A
Two 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	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	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	N/A
Small 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	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	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	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	N/A

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Methanol Flex															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized Cars	30.9	30.9	31.0	31.0	31.0	31.1	31.1	31.1	31.2	31.2	31.2	31.2	31.2	31.2	0.2%
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	N/A
Two 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	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	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	N/A
Small 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	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	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	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	N/A
Ethanol															
Mini-compact 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	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	N/A
Compact 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	N/A
Midsized Cars	30.7	30.7	30.8	30.8	30.8	30.9	30.9	30.9	30.9	30.9	31.0	31.0	31.0	31.0	0.2%
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	N/A
Two 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	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	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	N/A
Small 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	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	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	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	N/A
Ethanol Flex															
Mini-compact 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	N/A
Subcompact Cars	23.3	23.4	23.5	23.5	23.6	23.6	23.6	23.7	23.7	23.7	23.7	23.7	23.7	23.7	N/A
Compact Cars	22.7	22.8	22.8	22.8	22.9	22.9	22.9	23.0	23.0	23.0	23.0	23.0	23.0	23.0	0.3%
Midsized Cars	28.8	28.9	28.9	28.9	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	0.3%
Large Cars	36.2	36.3	36.3	36.4	36.4	36.5	36.5	36.5	36.6	36.6	36.6	36.6	36.6	36.6	N/A
Two 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	N/A
Small Pickup	23.1	23.1	23.2	23.2	23.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	0.3%
Large Pickup	28.8	28.8	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	0.3%
Small Van	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.7	31.7	31.8	31.8	31.8	31.8	31.8	0.2%
Large Van	25.8	25.9	25.9	26.0	26.0	26.1	26.1	26.2	26.2	26.2	26.3	26.3	26.3	26.3	N/A
Small Utility	30.4	30.5	30.5	30.6	30.6	30.7	30.7	30.8	30.8	30.8	30.8	30.9	30.9	30.9	N/A
Large Utility	39.1	39.1	39.2	39.3	39.3	39.4	39.4	39.4	39.5	39.5	39.5	39.5	39.5	39.6	0.2%
Compressed Natural Gas															
Mini-compact 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	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	N/A
Compact Cars	28.5	28.6	28.6	28.7	28.7	28.8	28.8	28.8	28.9	28.9	28.9	28.9	29.0	29.0	0.3%
Midsized 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	N/A
Large Cars	42.5	42.5	42.6	42.6	42.7	42.7	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	0.2%
Two 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	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	N/A
Large Pickup	34.7	34.7	34.8	34.9	34.9	35.0	35.0	35.1	35.1	35.2	35.2	35.2	35.2	35.2	0.3%
Small 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	N/A
Large Van	32.0	32.1	32.1	32.2	32.2	32.3	32.4	32.4	32.5	32.5	32.6	32.6	32.6	32.6	0.3%
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	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	N/A

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Compressed Natural Gas Bi-Fuel															
Mini-compact 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	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	N/A
Compact Cars	27.4	27.5	27.5	27.6	27.6	27.7	27.7	27.7	27.8	27.8	27.8	27.9	27.9	27.9	0.3%
Midsized 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	N/A
Large Cars	41.5	41.6	41.6	41.7	41.7	41.8	41.8	41.8	41.9	41.9	41.9	41.9	42.0	42.0	N/A
Two 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	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	N/A
Large Pickup	33.9	33.9	34.0	34.1	34.1	34.2	34.3	34.3	34.3	34.4	34.4	34.4	34.4	34.5	0.3%
Small 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	N/A
Large Van	31.1	31.2	31.3	31.3	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.8	31.8	31.8	0.3%
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	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	N/A
Liquefied Petroleum Gas															
Mini-compact 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	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	N/A
Compact 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	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	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	N/A
Two 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	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	N/A
Large Pickup	33.9	34.0	34.1	34.1	34.2	34.2	34.3	34.3	34.3	34.3	34.3	34.3	34.4	34.4	0.3%
Small 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	N/A
Large Van	31.3	31.4	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.7	31.8	31.8	31.8	31.8	0.3%
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	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	N/A
Liquefied Petroleum Gas Bi-Fuel															
Mini-compact 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	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	N/A
Compact Cars	26.8	26.8	26.9	26.9	27.0	27.0	27.1	27.1	27.1	27.2	27.2	27.2	27.2	27.2	N/A
Midsized Cars	33.4	33.5	33.6	33.6	33.7	33.7	33.7	33.8	33.8	33.8	33.8	33.8	33.9	33.9	N/A
Large Cars	40.7	40.7	40.8	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.1	41.1	41.1	41.1	N/A
Two 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	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	N/A
Large Pickup	32.9	32.9	33.0	33.1	33.1	33.2	33.2	33.3	33.3	33.4	33.4	33.4	33.4	33.4	0.3%
Small 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	N/A
Large Van	30.2	30.3	30.3	30.4	30.4	30.5	30.6	30.6	30.7	30.7	30.7	30.8	30.8	30.8	0.3%
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	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	N/A
Electric															
Mini-compact 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	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	N/A
Compact 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	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	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	N/A
Two Seater Cars	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.3	69.3	69.3	69.3	0.0%
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	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	N/A
Small 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	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	N/A
Small Utility	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.3	54.3	54.3	54.3	54.3	-0.1%
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	N/A

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Diesel-Electric Hybrid															
Mini-compact 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	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	N/A
Compact Cars	27.7	27.7	27.8	27.8	27.8	27.9	27.9	27.9	27.9	28.0	28.0	28.0	28.0	28.0	N/A
Midsized Cars	33.9	34.0	34.0	34.1	34.1	34.2	34.3	34.3	34.4	34.5	34.5	34.6	34.6	34.7	N/A
Large Cars	42.8	42.8	42.8	42.8	42.9	42.9	42.9	43.0	43.0	43.0	43.0	43.0	43.1	43.1	N/A
Two 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	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	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	N/A
Small Van	37.4	37.4	37.4	37.5	37.5	37.5	37.6	37.6	37.6	37.7	37.7	37.7	37.7	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	N/A
Small Utility	0.0	0.0	0.0	38.5	38.5	38.5	38.5	38.5	38.6	38.6	38.6	38.6	38.6	38.6	N/A
Large Utility	47.2	47.3	47.3	47.3	47.3	47.4	47.4	47.4	47.5	47.5	47.5	47.6	47.6	47.6	N/A
Gasoline-Electric Hybrid															
Mini-compact 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	N/A
Subcompact Cars	25.3	25.3	25.3	25.3	25.2	25.2	25.2	25.1	25.1	25.1	25.0	25.0	24.9	24.9	N/A
Compact Cars	23.6	23.5	23.5	23.5	23.6	23.6	23.6	23.7	23.7	23.7	23.7	23.7	23.7	23.7	0.0%
Midsized Cars	30.1	30.1	30.1	30.2	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3	30.3	30.3	N/A
Large Cars	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.0	38.0	N/A
Two Seater Cars	51.6	51.6	51.6	51.6	51.7	51.7	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.8	0.0%
Small Pickup	0.0	0.0	0.0	27.5	27.5	27.5	27.5	27.5	27.4	27.3	27.2	27.1	27.0	26.9	N/A
Large Pickup	31.6	31.6	31.6	31.6	31.6	31.5	31.5	31.5	31.5	31.4	31.4	31.3	31.3	31.3	N/A
Small Van	34.1	34.1	34.0	34.0	33.9	33.9	33.9	33.8	33.7	33.7	33.6	33.6	33.5	33.4	N/A
Large Van	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5	N/A
Small Utility	32.3	32.3	32.4	32.4	32.4	32.5	32.5	32.5	32.6	32.6	32.6	32.6	32.6	32.6	N/A
Large Utility	41.6	41.6	41.6	41.7	41.7	41.8	41.8	41.9	41.9	41.9	42.0	42.0	42.0	42.0	N/A
Fuel Cell Methanol															
Mini-compact 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	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	N/A
Compact 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	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	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	N/A
Two 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	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	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	N/A
Small 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	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	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	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	N/A
Fuel Cell Hydrogen															
Mini-compact 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	N/A
Subcompact Cars	56.3	55.1	54.1	53.0	52.0	51.0	50.1	49.2	48.3	47.5	46.8	46.1	45.4	44.7	N/A
Compact Cars	0.0	55.7	54.7	53.6	52.7	51.7	50.9	50.0	49.2	48.4	47.7	47.0	46.4	45.8	N/A
Midsized Cars	67.0	65.7	64.5	63.3	62.2	61.1	60.1	59.1	58.1	57.2	56.4	55.6	54.9	54.1	N/A
Large Cars	77.1	75.7	74.4	73.1	71.8	70.6	69.5	68.4	67.4	66.4	65.5	64.6	63.8	63.0	N/A
Two 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	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	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	N/A
Small Van	76.0	74.3	72.8	71.3	69.9	68.4	67.1	65.8	64.5	63.4	62.3	61.3	60.3	59.4	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	N/A
Small Utility	73.0	71.5	70.1	68.6	67.3	66.0	64.7	63.5	62.3	61.3	60.3	59.3	58.4	57.5	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	79.2	77.9	76.6	75.4	74.2	N/A

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Cell Gasoline															
Mini-compact 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	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	N/A
Compact 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	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	0.0	0.0	0.0	N/A
Large Cars	89.7	87.4	85.2	83.0	83.0	83.0	82.9	82.9	82.9	82.8	82.8	82.8	82.7	82.7	N/A
Two 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	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	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	N/A
Small Van	92.9	90.3	87.7	85.2	85.2	85.1	85.0	85.0	85.0	84.9	84.9	84.8	84.8	84.8	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	N/A
Small Utility	89.8	87.4	84.9	82.6	82.6	82.5	82.5	82.5	82.4	82.4	82.3	82.3	82.3	82.3	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	N/A
Average Price															
Cars	27.2	27.2	27.3	27.3	27.4	27.4	27.4	27.5	27.5	27.5	27.5	27.6	27.6	27.6	0.3%
Trucks	30.8	30.9	31.0	31.0	31.1	31.2	31.2	31.3	31.3	31.3	31.4	31.4	31.4	31.4	0.3%
Light Duty Vehicles	29.1	29.1	29.2	29.3	29.3	29.4	29.5	29.5	29.6	29.6	29.6	29.7	29.7	29.7	0.4%

Table 58. New Light-Duty Vehicle Prices
(thousand 2004 dollars)

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 59. New Light-Duty Vehicle Range
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Gasoline														
Mini-compact Cars	420	422	424	434	443	452	467	478	482	484	485	486	487	489
Subcompact Cars	408	409	409	413	419	424	437	447	451	452	453	455	457	459
Compact Cars	458	461	463	468	473	477	490	500	505	506	506	507	508	508
Midsized Cars	472	474	475	478	483	488	500	509	513	515	516	518	519	521
Large Cars	486	487	486	485	487	489	500	509	513	515	516	518	521	522
Two Seater Cars	405	407	406	407	410	415	424	431	435	437	439	441	442	443
Small Pickup	448	453	459	465	468	470	478	486	490	493	495	497	500	503
Large Pickup	484	488	495	497	500	501	507	516	521	525	526	529	532	535
Small Van	559	561	566	568	571	570	579	587	592	594	595	597	599	602
Large Van	834	840	850	851	855	854	868	879	887	890	891	893	896	900
Small Utility	430	433	439	443	449	452	463	472	477	480	481	484	487	490
Large Utility	515	519	526	527	529	532	542	551	557	561	563	566	569	572
Turbo Direct Injection Diesel														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	603	609	611	612	614	617	619
Compact Cars	619	622	625	632	638	644	662	675	681	683	683	684	685	686
Midsized Cars	0	639	641	646	652	658	674	687	693	695	697	699	701	703
Large Cars	0	0	0	0	657	661	675	687	693	696	697	700	703	705
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	632	634	645	656	662	665	668	671	675	679
Large Pickup	654	659	668	671	675	676	685	696	704	708	711	714	718	722
Small Van	0	0	0	0	0	0	0	792	799	802	803	806	809	813
Large Van	1126	1134	1147	1148	1154	1152	1172	1187	1198	1201	1202	1206	1210	1215
Small Utility	0	0	592	598	606	610	625	637	644	647	650	653	657	661
Large Utility	696	701	710	712	714	719	732	744	752	757	760	764	768	772
Methanol														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Methanol Flex														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	269	270	271	273	275	278	285	290	293	294	294	295	296	297
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	358	360	361	364	367	371	380	387	390	392	392	394	395	396
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol Flex														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	326	329	330	331	332	334	335
Compact Cars	334	336	338	342	345	348	358	365	368	369	369	370	370	371
Midsized Cars	344	346	347	349	353	356	365	372	375	376	377	378	379	380
Large Cars	0	0	0	0	355	357	365	371	375	376	377	378	380	381
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	327	331	335	339	342	343	349	354	358	360	361	363	365	367
Large Pickup	353	356	361	363	365	365	370	377	381	383	384	386	388	390
Small Van	408	410	413	414	417	416	423	428	432	434	434	436	438	440
Large Van	0	0	620	621	624	623	634	642	648	650	650	652	654	657
Small Utility	0	0	0	0	328	330	338	345	348	350	351	353	355	358
Large Utility	376	379	384	385	386	389	396	402	407	410	411	413	415	418
Compressed Natural Gas														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	275	276	278	281	284	286	294	300	303	304	304	304	305	305
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	292	292	292	291	292	294	300	305	308	309	310	311	312	313
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	290	293	297	298	300	300	304	310	313	315	316	317	319	321
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	501	504	510	510	513	512	521	528	532	534	534	536	538	540
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Compressed Natural Gas Bi-Fuel														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	229	230	231	234	236	238	245	250	252	253	253	253	254	254
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	243	243	243	245	250	254	257	258	258	259	260	261
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	242	244	247	248	250	250	254	258	261	262	263	264	266	267
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	417	420	425	425	427	427	434	440	444	445	445	447	448	450
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gas														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	411	415	421	422	425	425	431	439	443	446	448	450	452	455
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	709	714	722	723	726	726	738	748	754	756	757	759	762	765
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liquefied Petroleum Gas Bi-Fuel														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	370	375	378	381	392	400	404	405	405	405	406	407
Midsized Cars	0	0	380	383	387	390	400	407	411	412	413	414	415	416
Large Cars	0	0	389	388	389	392	400	407	411	412	413	415	416	418
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	387	390	396	398	400	400	406	413	417	420	421	423	426	428
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	667	672	680	680	684	683	694	704	710	712	712	715	717	720
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Electric														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Diesel-Electric Hybrid														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	650	656	658	658	659	660	661
Midsized Cars	0	0	0	0	0	0	0	0	0	670	671	673	675	677
Large Cars	0	0	0	0	0	0	0	0	0	0	0	674	677	679
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	779	783
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasoline-Electric Hybrid														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	563	566	567	569	571	573
Compact Cars	573	576	578	585	591	596	613	625	631	632	633	633	634	636
Midsized Cars	0	0	594	598	604	609	625	636	642	644	645	647	649	651
Large Cars	0	0	0	0	0	0	625	636	642	644	645	648	651	653
Two Seater Cars	507	508	508	508	512	519	530	539	544	547	548	551	553	554
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	621	625	626	634	645	652	656	658	661	665	669
Small Van	0	0	0	0	0	0	0	733	740	742	744	746	749	753
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	1120	1125
Small Utility	0	0	0	0	0	565	579	590	596	599	601	605	609	612
Large Utility	0	0	657	659	661	665	677	689	697	701	704	707	711	715
Fuel Cell Methanol														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Cell Hydrogen														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	409	413	419	424	437	447	451	452	453	455	457	459
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	516	518	519	521
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	522
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	597	599	602
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	439	443	449	452	463	472	477	480	481	484	487	490
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	489	500	509	513	515	516	518	521	522
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	594	595	597	599	602
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	480	481	484	487	490
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Gasoline															
Mini-compact Cars	490	491	492	494	496	499	500	502	504	505	505	505	505	505	0.7%
Subcompact Cars	460	462	463	465	468	470	473	475	477	478	479	479	480	481	0.6%
Compact Cars	509	510	511	512	514	516	518	519	520	522	522	522	523	523	0.5%
Midsized Cars	522	523	525	526	529	531	533	535	536	537	538	539	539	539	0.5%
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	0.4%
Two Seater Cars	445	446	447	449	452	454	456	458	460	461	462	462	463	463	0.5%
Small Pickup	505	509	512	514	517	521	524	527	529	531	532	533	534	534	0.6%
Large Pickup	538	541	544	548	552	556	559	562	565	568	570	571	572	572	0.6%
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	0.5%
Large Van	904	909	914	918	924	931	937	942	947	951	955	957	959	960	0.5%
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	0.7%
Large Utility	575	579	583	587	592	597	600	603	606	609	611	613	614	615	0.7%
Turbo Direct Injection Diesel															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	621	623	626	628	631	635	639	641	644	645	646	647	648	649	N/A
Compact Cars	687	688	689	691	694	696	699	701	703	704	705	705	706	706	0.5%
Midsized Cars	705	707	709	710	714	717	720	722	724	725	726	727	728	728	0.5%
Large Cars	707	709	711	714	717	722	726	728	730	732	734	736	737	737	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	682	687	691	694	699	703	708	711	714	716	719	720	721	722	N/A
Large Pickup	726	730	735	739	745	750	754	758	763	767	769	770	772	773	0.6%
Small Van	817	822	825	829	836	842	848	851	856	860	862	864	865	867	N/A
Large Van	1220	1227	1234	1239	1247	1256	1265	1272	1278	1284	1289	1292	1294	1296	0.5%
Small Utility	665	669	673	677	683	688	694	697	701	704	706	707	709	710	N/A
Large Utility	777	782	787	793	800	806	810	814	818	822	825	827	829	831	0.7%
Methanol															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	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	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	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	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Methanol Flex															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	298	298	299	300	301	303	304	305	306	306	307	307	307	307	0.5%
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	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	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Ethanol															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	397	398	399	400	402	404	405	407	408	408	409	409	410	410	0.5%
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	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	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Ethanol Flex															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	336	337	338	339	341	343	345	347	348	349	349	350	350	351	N/A
Compact Cars	372	372	373	374	375	377	378	379	380	381	381	381	382	382	0.5%
Midsized Cars	381	382	383	384	386	388	389	391	391	392	393	393	393	394	0.5%
Large Cars	383	384	385	386	388	390	392	394	395	396	397	398	398	399	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	369	371	373	375	378	380	383	385	386	387	389	389	390	390	0.6%
Large Pickup	392	395	397	400	403	406	408	410	412	415	416	417	417	418	0.6%
Small Van	442	445	446	449	452	455	458	460	463	465	466	467	468	469	0.5%
Large Van	660	664	667	670	675	679	684	688	691	695	697	698	700	701	N/A
Small Utility	360	362	364	366	369	372	375	377	379	381	381	382	383	384	N/A
Large Utility	420	423	426	429	432	436	438	440	442	445	446	447	448	449	0.7%
Compressed Natural Gas															
Mini-compact Cars	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	N/A
Compact Cars	305	306	306	307	308	310	311	311	312	313	313	313	314	314	0.5%
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	314	315	316	317	319	321	323	324	324	325	326	327	327	328	0.4%
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	323	325	327	329	331	333	335	337	339	341	342	342	343	343	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	542	545	548	551	554	558	562	565	568	571	573	574	575	576	0.5%
Small Utility	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	N/A

Table 59. New Light-Duty Vehicle Range
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Compressed Natural Gas Bi-Fuel															
Mini-compact Cars	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	N/A
Compact Cars	255	255	255	256	257	258	259	260	260	261	261	261	261	261	0.5%
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	262	263	263	264	266	267	269	270	270	271	272	273	273	273	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	269	271	272	274	276	278	279	281	282	284	285	285	286	286	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	452	455	457	459	462	465	468	471	473	476	477	478	479	480	0.5%
Small Utility	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	N/A
Liquefied Petroleum Gas															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	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	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	457	460	463	466	469	472	475	477	480	483	484	485	486	486	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	768	773	777	780	785	791	796	801	805	809	812	813	815	816	0.5%
Small Utility	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	N/A
Liquefied Petroleum Gas Bi-Fuel															
Mini-compact Cars	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	N/A
Compact Cars	407	408	409	409	411	413	414	415	416	417	418	418	418	418	N/A
Midsized Cars	418	419	420	421	423	425	427	428	429	430	430	431	431	431	N/A
Large Cars	419	420	421	423	425	428	430	432	433	434	435	436	436	437	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	430	433	435	438	442	444	447	449	452	454	456	457	457	458	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	723	727	731	734	739	744	750	754	757	761	764	765	767	768	0.5%
Small Utility	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	N/A
Electric															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	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	N/A
Two Seater Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Small Pickup	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	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Diesel-Electric Hybrid															
Mini-compact Cars	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	N/A
Compact Cars	662	663	664	665	668	671	673	675	677	678	679	679	679	680	N/A
Midsized Cars	679	680	682	684	687	691	693	695	697	699	700	700	701	701	N/A
Large Cars	681	683	685	687	691	695	699	701	703	705	707	709	709	710	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	787	792	795	799	805	811	816	820	824	828	831	832	833	835	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	652	657	663	668	672	675	678	679	681	682	683	N/A
Large Utility	748	753	758	763	770	776	780	784	788	792	795	797	798	800	N/A
Gasoline-Electric Hybrid															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	575	577	579	581	585	588	591	594	596	597	598	599	600	601	N/A
Compact Cars	636	637	638	640	642	645	647	649	651	652	653	653	653	654	0.5%
Midsized Cars	653	654	656	658	661	664	666	669	670	672	673	673	674	674	N/A
Large Cars	655	657	659	661	664	668	672	674	676	678	680	682	682	682	N/A
Two Seater Cars	556	558	559	561	565	567	570	572	575	576	577	578	578	579	0.5%
Small Pickup	0	0	0	642	647	651	655	659	661	663	665	667	668	668	N/A
Large Pickup	672	676	680	685	690	695	698	702	706	710	712	713	714	715	N/A
Small Van	757	761	764	768	774	779	785	788	792	796	799	800	801	803	N/A
Large Van	1130	1136	1142	1147	1155	1163	1171	1178	1183	1189	1194	1196	1198	1200	N/A
Small Utility	616	619	623	627	632	637	643	646	649	652	653	655	656	657	N/A
Large Utility	719	724	729	734	740	746	750	754	758	761	764	766	768	769	N/A
Fuel Cell Methanol															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	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	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	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	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Fuel Cell Hydrogen															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	460	462	463	465	468	470	473	475	477	478	479	479	480	481	N/A
Compact Cars	0	510	511	512	514	516	518	519	520	522	522	522	523	523	N/A
Midsized Cars	522	523	525	526	529	531	533	535	536	537	538	539	539	539	N/A
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	N/A
Large Utility	0	0	0	0	0	0	0	0	606	609	611	613	614	615	N/A

Table 59. New Light-Duty Vehicle Range
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Fuel Cell Gasoline															
Mini-compact Cars	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	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	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	N/A
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range
(miles)

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.