

Table 50. Light-Duty Vehicle Miles Traveled by Technology Type  
(billion miles, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Conventional Vehicles 1/</b>													
Gasoline ICE Vehicles	2541.2	2530.1	2516.5	2513.7	2525.9	2549.1	2577.5	2610.3	2644.6	2679.7	2718.1	2756.4	2794.9
TDI Diesel ICE	43.3	44.4	45.7	46.9	48.4	50.3	52.4	54.7	57.4	60.2	63.1	66.3	69.7
<b>Alternative-Fuel Vehicles</b>													
<b>Alcohol Fuel Technology</b>													
Methanol-Flex Fuel ICE	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	46.6	53.4	58.9	69.1	81.0	95.2	112.3	130.2	148.2	166.2	184.5	202.3	219.8
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
<b>Natural Gas Technology</b>													
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Compressed Natural Gas Bi-fuel	4.3	5.0	5.4	5.8	6.1	6.4	6.8	7.2	7.6	8.0	8.4	8.8	9.1
Liquefied Petroleum Gases ICE	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
Liquefied Petroleum Gases Bi-fuel	13.3	16.0	17.5	18.8	20.0	21.3	22.6	24.0	25.5	26.9	28.3	29.6	30.8
<b>Electric Technology</b>													
Electric Vehicle	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
Plug-in Gasoline 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
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
Electric-Gasoline Hybrid	2.2	4.8	7.6	10.5	15.3	20.3	25.9	31.9	38.3	45.0	52.0	59.8	68.0
<b>Fuel Cell Technology</b>													
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
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
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	0.1
<b>VMT Equation Components</b>													
Total VMT (billion miles)	2651.8	2654.5	2652.6	2665.7	2697.8	2743.6	2798.5	2859.5	2922.9	2987.6	3056.1	3125.1	3194.3
VMT/Driving Population (thousand miles)	13.3	13.2	13.0	13.0	13.0	13.1	13.2	13.4	13.6	13.7	13.9	14.1	14.3
Driving Population (million)	229.2	231.8	234.5	237.1	239.6	242.0	244.2	246.4	248.6	250.6	252.6	254.7	256.7
<b>Price Effects</b>													
Motor Gasoline Price (1987 \$/million Btu)	10.21	12.11	13.73	13.61	12.80	12.13	11.62	11.18	10.95	10.75	10.44	10.43	10.46
Fleet Miles per Gallon	19.39	19.39	19.44	19.52	19.64	19.77	19.92	20.09	20.27	20.44	20.60	20.76	20.91
Real Cost of Driving per Mile (1987 cents)	8.993	10.669	12.069	11.910	11.132	10.484	9.969	9.509	9.228	8.988	8.660	8.580	8.546
Point Price Elasticity	-0.031	-0.037	-0.042	-0.042	-0.039	-0.037	-0.035	-0.033	-0.031	-0.030	-0.029	-0.028	-0.027
<b>Income Effects</b>													
Disposable Income (billion 1987 dollars)	8010.8	8105.0	8279.1	8574.7	8919.9	9248.4	9568.0	9860.7	10145.6	10426.7	10740.4	11076.6	11422.5
Point Income Elasticity	292.549	295.446	302.014	311.262	319.939	326.181	330.835	333.680	335.871	337.713	340.069	342.979	346.025
<b>Demographic Driving Population Effect</b>													
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
Point Demographic Elasticity	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774

Table 50. 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	2005-2030
<b>Conventional Vehicles 1/</b>															
Gasoline ICE Vehicles	2833.8	2872.7	2909.5	2948.6	2988.2	3026.4	3067.3	3107.6	3147.3	3190.6	3233.5	3275.3	3318.2	3359.1	1.1%
TDI Diesel ICE	73.4	77.5	82.1	87.2	92.8	99.0	105.9	113.4	121.5	129.9	138.9	148.4	158.4	169.2	5.5%
<b>Alternative-Fuel Vehicles</b>															
<b>Alcohol Fuel Technology</b>															
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	-9.4%
Ethanol-Flex Fuel ICE	236.8	253.4	269.2	284.9	300.1	314.4	328.7	342.2	355.0	367.9	380.0	391.4	402.4	412.6	8.5%
Ethanol ICE	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	8.5%
<b>Natural Gas Technology</b>															
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	4.3%
Compressed Natural Gas Bi-fuel	9.4	9.7	10.1	10.4	10.7	11.0	11.2	11.5	11.8	12.1	12.4	12.6	12.9	13.2	3.9%
Liquefied Petroleum Gases ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	6.5%
Liquefied Petroleum Gases Bi-fuel	31.9	33.1	34.1	35.2	36.3	37.3	38.3	39.3	40.3	41.3	42.2	43.2	44.1	45.0	4.2%
<b>Electric Technology</b>															
Electric Vehicle	1.2	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	3.9%
Plug-in Gasoline 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	N/A
Electric-Diesel Hybrid	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2	N/A
Electric-Gasoline Hybrid	76.6	85.6	95.0	104.8	115.0	125.6	136.4	147.6	159.2	171.0	183.3	195.9	209.0	222.5	16.6%
<b>Fuel Cell Technology</b>															
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	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.1	1.2	43.7%
<b>VMT Equation Components</b>															
Total VMT (billion miles)	3264.2	3334.4	3402.7	3473.9	3546.2	3617.1	3691.4	3765.4	3839.1	3916.9	3994.7	4071.4	4149.8	4226.5	1.9%
VMT/Driving Population (thousand miles)	14.5	14.7	14.9	15.1	15.3	15.5	15.6	15.8	16.0	16.2	16.4	16.5	16.7	16.9	1.0%
Driving Population (million)	258.9	261.1	263.2	265.4	267.6	269.8	272.1	274.3	276.7	279.0	281.4	283.8	286.2	288.6	0.9%
<b>Price Effects</b>															
Motor Gasoline Price (1987 \$/million Btu)	10.54	10.60	10.82	10.79	10.87	11.07	10.98	11.10	11.24	11.13	11.22	11.37	11.37	11.53	-0.2%
Fleet Miles per Gallon	21.05	21.19	21.33	21.45	21.58	21.71	21.82	21.93	22.04	22.15	22.25	22.36	22.46	22.56	0.6%
Real Cost of Driving per Mile (1987 cents)	8.552	8.544	8.669	8.597	8.609	8.713	8.598	8.646	8.715	8.584	8.616	8.691	8.651	8.728	-0.8%
Point Price Elasticity	-0.027	-0.027	-0.027	-0.026	-0.026	-0.026	-0.025	-0.025	-0.025	-0.024	-0.024	-0.024	-0.024	-0.024	-1.8%
<b>Income Effects</b>															
Disposable Income (billion 1987 dollars)	11785.5	12173.8	12569.6	13000.0	13431.5	13853.4	14284.8	14719.8	15172.2	15640.2	16109.0	16585.5	17067.1	17535.0	3.1%
Point Income Elasticity	349.378	353.288	357.453	362.107	366.509	370.609	374.454	378.275	382.418	386.379	390.217	394.186	397.966	401.461	1.2%
<b>Demographic Driving Population Effect</b>															
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	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	0.774	N/A

Table 50. 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: 2004 and 2005 values derived using: Federal Highway Administration, Highway Statistics 2002 (Washington, DC, November 2003); Oak Ridge National Laboratory, Transportation Energy Data Book: 25 and Annual (Oak Ridge, TN, 2006); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); and Energy Information Administration (EIA), AEO2007 National Energy Modeling System run aeo2007.d112106a. Projections: EIA, AEO2007 National Energy Modeling System run aeo2007.d112106a.