

Table 36. Transportation Sector Energy Use by Fuel Type Within a Mode (trillion Btu)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Light-Duty Vehicle													
Motor Gasoline	15966.23	16134.44	16246.66	16176.08	16172.91	16204.86	16225.82	16336.46	16439.09	16478.04	16394.23	16349.91	16250.01
Ethanol	1.06	1.31	1.74	3.62	2.31	2.72	3.65	4.20	4.39	45.24	178.41	277.62	389.29
Compressed Natural Gas	6.88	9.87	10.62	11.20	11.49	11.86	12.11	12.21	12.24	12.20	12.04	11.85	11.69
Liquefied Petroleum Gases	5.15	7.26	6.88	8.79	4.63	2.94	2.60	2.26	1.98	1.78	1.59	1.43	1.32
Electricity	0.70	0.68	0.64	0.61	0.58	0.55	0.52	0.49	0.46	0.44	0.41	0.38	0.37
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.02	0.03	0.05	0.10	0.14	0.18	0.28	0.39	0.49
Distillate Fuel Oil (diesel)	246.77	253.63	256.72	265.92	278.34	293.58	313.77	337.36	362.67	389.75	418.55	451.37	488.52
Total	16226.80	16407.19	16523.26	16466.22	16470.27	16516.54	16558.53	16693.09	16820.98	16927.62	17005.51	17092.95	17141.69
Commercial Light Trucks Gasoline 1/													
	610.08	617.92	619.93	606.07	606.75	615.86	625.14	631.15	632.68	633.53	635.09	637.53	636.81
Freight Trucks 2/													
Motor Gasoline	237.14	230.35	231.21	223.41	216.67	217.20	216.22	214.04	211.67	210.82	211.12	211.92	212.03
Distillate Fuel Oil (diesel)	4489.60	4640.85	4711.80	4703.32	4770.19	4929.51	5079.74	5175.53	5231.97	5276.14	5332.48	5388.71	5423.29
Compressed Natural Gas	8.24	10.78	13.21	15.87	19.76	23.90	28.64	33.35	37.59	41.25	44.72	47.95	50.66
Liquefied Petroleum Gases	9.70	10.26	10.86	11.36	12.03	12.75	13.20	13.30	13.24	13.11	12.98	12.82	12.58
Total	4744.68	4892.24	4967.07	4953.96	5018.63	5183.36	5337.80	5436.21	5494.47	5541.32	5601.31	5661.40	5698.56
Freight Rail 3/													
Distillate Fuel Oil (diesel)	545.03	567.82	573.15	570.41	570.29	581.23	600.76	608.29	611.62	615.96	620.72	631.25	636.07
Total	545.03	567.82	573.15	570.41	570.29	581.23	600.76	608.29	611.62	615.96	620.72	631.25	636.07
Domestic Shipping													
Distillate Fuel Oil (diesel)	219.47	223.52	223.57	221.37	224.22	229.95	233.65	236.50	238.12	239.33	241.98	244.75	245.89
Residual Oil	91.17	91.79	97.37	95.03	94.86	95.86	95.94	97.12	97.78	98.29	99.37	100.51	100.98
Total	310.64	315.31	320.94	316.40	319.08	325.80	329.60	333.62	335.90	337.62	341.36	345.26	346.88
International Shipping													
Distillate Fuel Oil (diesel)	49.82	50.91	51.18	51.19	51.20	51.23	51.26	51.34	51.40	51.46	51.53	51.60	51.67
Residual Oil	717.07	724.46	772.30	761.34	750.57	739.96	729.33	730.37	731.28	732.23	733.22	734.22	735.18
Total	766.89	775.37	823.49	812.53	801.78	791.20	780.60	781.71	782.68	783.69	784.75	785.82	786.84
Air Transportation													
Jet Fuel	2688.08	2614.02	2628.34	2683.31	2761.44	2870.22	2987.75	3087.25	3138.42	3198.13	3261.06	3326.35	3388.52
Aviation Gasoline	35.15	33.00	32.00	29.00	32.75	32.62	32.51	32.42	32.35	32.29	32.24	32.20	32.16
Total	2723.23	2647.02	2660.34	2712.31	2794.18	2902.83	3020.26	3119.67	3170.77	3230.42	3293.30	3358.55	3420.68
Miscellaneous Transportation													
Military Use													
Jet Fuel	531.48	543.69	561.68	585.65	582.44	572.79	564.68	559.50	557.84	558.70	560.92	563.67	566.59
Residual Fuel Oil	19.76	15.74	17.31	17.77	17.40	16.84	16.34	16.19	16.14	16.17	16.23	16.31	16.39
Distillate Fuel Oil	128.32	128.74	133.55	139.09	138.18	135.75	133.69	132.46	132.06	132.25	132.77	133.41	134.09
Total	679.56	688.17	712.55	742.52	738.03	725.39	714.71	708.15	706.03	707.12	709.92	713.39	717.07

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bus Transportation													
Transit Bus (motor gasoline)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.21
Transit Bus (diesel)	90.03	91.45	90.89	90.85	91.07	91.54	92.21	92.75	93.07	93.27	93.46	93.69	93.91
Intercity Bus (diesel)	46.88	47.62	47.33	47.31	47.43	47.67	48.02	48.31	48.48	48.58	48.69	48.81	48.93
School Bus (motor gasoline)	10.98	11.11	11.26	11.21	11.19	11.20	11.24	11.31	11.35	11.38	11.41	11.44	11.47
School Bus (diesel)	111.42	113.18	112.49	112.44	112.70	113.29	114.12	114.79	115.19	115.43	115.67	115.96	116.22
Total	259.50	263.55	262.18	262.01	262.59	263.90	265.79	267.37	268.29	268.86	269.43	270.11	270.73
Rail Transportation													
Intercity Rail (electricity)	1.37	1.45	1.52	1.60	1.59	1.54	1.49	1.45	1.41	1.38	1.35	1.32	1.30
Intercity Rail (diesel)	12.02	13.03	13.68	14.37	14.24	13.79	13.38	12.99	12.64	12.40	12.10	11.79	11.63
Transit Rail (electricity)	14.68	14.91	15.17	15.37	15.75	16.06	16.37	16.67	16.94	17.18	17.45	17.70	17.95
Commuter Rail (electricity)	4.63	4.68	4.77	4.83	4.98	5.15	5.29	5.42	5.54	5.64	5.76	5.87	5.97
Commuter Rail (diesel)	9.26	9.49	9.66	9.65	10.26	10.67	11.01	11.39	11.73	12.00	12.34	12.66	12.91
Total	41.96	43.56	44.81	45.82	46.81	47.21	47.55	47.92	48.25	48.61	48.99	49.35	49.75
Recreation Boats													
Gasoline	197.38	200.98	205.74	204.19	203.27	202.85	202.66	203.85	205.24	206.72	208.24	210.14	211.77
Distillate Fuel Oil (diesel)	41.39	41.76	42.98	43.48	45.06	46.53	47.96	49.38	50.64	51.84	53.15	54.45	55.64
Lubricants	151.00	147.00	140.00	139.00	140.61	141.72	141.81	142.17	142.71	143.18	143.60	143.92	144.13
Pipeline Fuel Natural Gas	601.74	592.06	631.81	617.05	634.35	640.14	643.58	650.59	647.84	650.65	656.75	661.64	661.59
Total Miscellaneous	1972.51	1977.08	2040.06	2054.06	2070.73	2067.75	2064.07	2069.43	2069.01	2076.98	2090.08	2103.00	2110.68
Total Consumption	27899.85	28199.96	28528.24	28491.96	28651.71	28984.57	29316.75	29673.16	29918.12	30147.14	30372.11	30615.75	30778.21

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	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2006-2030
Light-Duty Vehicle														
Motor Gasoline	16139.73	15827.25	15488.16	15171.63	14707.44	14723.22	14721.14	14746.20	14774.31	14756.67	14779.00	14841.96	14845.51	-0.3%
Ethanol	478.54	742.26	971.55	1245.16	1642.66	1574.55	1521.61	1416.71	1370.87	1383.78	1365.13	1317.89	1343.05	33.5%
Compressed Natural Gas	11.52	11.36	11.19	11.03	10.94	10.90	10.88	10.91	10.94	10.98	11.03	11.08	11.13	0.5%
Liquefied Petroleum Gases	1.21	1.14	1.09	1.00	0.93	0.87	0.81	0.76	0.71	0.68	0.64	0.61	0.59	-9.9%
Electricity	0.35	0.33	0.31	0.29	0.26	0.65	0.58	0.55	0.50	0.45	0.41	0.38	0.35	-2.7%
Liquid Hydrogen	0.72	0.93	1.14	1.37	1.59	1.81	2.06	2.30	2.55	2.80	3.04	3.29	3.53	44.8%
Distillate Fuel Oil (diesel)	530.07	578.10	630.16	681.79	737.37	798.85	863.52	929.62	999.46	1072.79	1150.40	1232.06	1315.64	7.1%
Total	17162.14	17161.37	17103.59	17112.26	17101.19	17110.83	17120.60	17107.04	17159.33	17228.14	17309.65	17407.27	17519.79	0.3%
Commercial Light Trucks Gasoline 1/														
	635.49	633.99	631.20	630.25	628.24	627.94	627.77	627.22	629.34	631.86	634.52	638.18	643.25	0.2%
Freight Trucks 2/														
Motor Gasoline	212.95	214.49	216.07	217.89	219.08	220.69	222.15	223.28	225.24	227.31	229.29	231.38	233.75	0.1%
Distillate Fuel Oil (diesel)	5466.87	5512.09	5564.06	5617.06	5666.43	5720.00	5774.00	5830.65	5889.88	5951.23	6008.68	6063.46	6126.05	1.2%
Compressed Natural Gas	53.18	55.50	57.77	59.95	61.95	63.79	65.41	66.89	68.22	69.43	70.44	71.20	71.93	8.2%
Liquefied Petroleum Gases	12.37	12.26	12.24	12.30	12.40	12.52	12.61	12.71	12.82	12.94	13.05	13.08	13.14	1.0%
Total	5745.37	5794.34	5850.15	5907.21	5959.87	6017.00	6074.17	6133.52	6196.16	6260.92	6321.45	6379.12	6444.86	1.2%
Freight Rail 3/														
Distillate Fuel Oil (diesel)	641.35	647.08	652.89	660.38	666.09	673.52	680.52	686.54	692.71	698.90	705.90	710.83	717.57	1.0%
Total	641.35	647.08	652.89	660.38	666.09	673.52	680.52	686.54	692.71	698.90	705.90	710.83	717.57	1.0%
Domestic Shipping														
Distillate Fuel Oil (diesel)	246.62	247.22	249.04	250.62	251.52	251.47	251.99	252.14	253.15	253.96	253.64	253.25	253.55	0.5%
Residual Oil	101.29	101.53	102.29	102.94	103.31	103.30	103.51	103.58	104.00	104.34	104.21	104.05	104.18	0.5%
Total	347.91	348.75	351.33	353.55	354.84	354.77	355.50	355.72	357.15	358.30	357.84	357.31	357.73	0.5%
International Shipping														
Distillate Fuel Oil (diesel)	51.73	51.80	51.87	51.93	52.00	52.07	52.14	52.21	52.28	52.35	52.42	52.49	52.56	0.1%
Residual Oil	736.16	737.12	738.08	739.06	740.04	741.03	742.03	743.05	744.07	745.10	746.14	747.18	748.23	0.1%
Total	787.89	788.92	789.95	790.99	792.04	793.10	794.17	795.25	796.34	797.44	798.56	799.67	800.79	0.1%
Air Transportation														
Jet Fuel	3451.65	3514.31	3576.97	3639.82	3702.64	3763.88	3824.50	3885.01	3944.62	4004.56	4064.87	4124.54	4184.33	2.0%
Aviation Gasoline	32.14	32.11	32.09	32.08	32.06	32.05	32.04	32.04	32.03	32.02	32.02	32.02	32.01	-0.1%
Total	3483.79	3546.42	3609.07	3671.90	3734.70	3795.93	3856.54	3917.04	3976.65	4036.58	4096.89	4156.55	4216.34	2.0%
Miscellaneous Transportation														
Military Use														
Jet Fuel	569.61	572.62	575.63	578.60	581.56	584.51	587.41	590.30	593.16	595.97	598.76	601.51	604.23	0.4%
Residual Fuel Oil	16.48	16.56	16.65	16.74	16.82	16.90	16.99	17.07	17.15	17.23	17.31	17.39	17.47	0.4%
Distillate Fuel Oil	134.80	135.50	136.20	136.89	137.58	138.26	138.94	139.61	140.27	140.92	141.57	142.21	142.83	0.4%
Total	720.88	724.68	728.48	732.23	735.96	739.68	743.34	746.97	750.58	754.13	757.64	761.11	764.53	0.4%

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	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2006-2030
Bus Transportation														
Transit Bus (motor gasoline)	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.4%
Transit Bus (diesel)	94.11	94.26	94.43	94.76	95.13	95.55	96.01	96.47	96.97	97.52	98.09	98.63	99.21	0.3%
Intercity Bus (diesel)	49.04	49.12	49.21	49.39	49.59	49.81	50.05	50.30	50.56	50.85	51.15	51.44	51.75	0.3%
School Bus (motor gasoline)	11.49	11.53	11.56	11.61	11.65	11.71	11.76	11.78	11.85	11.91	11.98	12.05	12.12	0.4%
School Bus (diesel)	116.47	116.66	116.87	117.28	117.74	118.26	118.82	119.39	120.02	120.69	121.39	122.07	122.78	0.3%
Total	271.32	271.78	272.28	273.25	274.32	275.54	276.86	278.15	279.61	281.18	282.83	284.42	286.07	0.3%
Rail Transportation														
Intercity Rail (electricity)	1.29	1.29	1.30	1.29	1.29	1.28	1.27	1.27	1.26	1.26	1.25	1.25	1.25	-0.6%
Intercity Rail (diesel)	11.55	11.59	11.67	11.58	11.53	11.47	11.40	11.34	11.29	11.24	11.21	11.20	11.17	-0.6%
Transit Rail (electricity)	18.19	18.42	18.65	18.89	19.12	19.35	19.59	19.82	20.07	20.31	20.55	20.79	21.04	1.4%
Commuter Rail (electricity)	6.07	6.15	6.24	6.34	6.43	6.52	6.61	6.70	6.79	6.88	6.97	7.06	7.15	1.8%
Commuter Rail (diesel)	13.14	13.33	13.53	13.81	14.03	14.26	14.51	14.75	14.99	15.23	15.46	15.70	15.94	2.2%
Total	50.23	50.78	51.39	51.91	52.38	52.89	53.38	53.88	54.39	54.91	55.45	56.00	56.55	1.1%
Recreation Boats														
Gasoline	213.42	215.29	216.67	218.40	219.68	221.21	222.54	223.33	224.83	226.30	227.72	229.14	230.48	0.6%
Distillate Fuel Oil (diesel)	56.82	57.93	59.07	60.31	61.48	62.67	63.86	65.03	66.24	67.46	68.70	69.93	71.16	2.2%
Lubricants	144.36	144.62	144.92	145.27	145.64	146.05	146.47	146.95	147.41	147.87	148.32	148.75	149.20	0.1%
Pipeline Fuel Natural Gas	660.73	658.64	690.07	722.86	724.34	722.36	722.42	720.50	722.14	721.91	722.70	719.31	718.48	0.8%
Total Miscellaneous	2117.75	2123.72	2162.87	2204.23	2213.81	2220.40	2228.85	2234.80	2245.20	2253.77	2263.36	2268.65	2276.47	0.6%
Total Consumption	30921.69	31044.59	31151.04	31330.77	31450.79	31593.49	31738.13	31857.14	32052.89	32265.92	32488.18	32717.59	32976.82	0.7%

Table 36. 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.

-- = Not applicable.

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

Sources: 2005 and 2006 compressed natural gas volumes: Energy Information Administration (EIA), AEO2008 National Energy Modeling System run aeo2008.d030208f. Other 2005 and 2006 values derived using: EIA, Annual Energy Review, 2006, DOE/EIA-0384(2006) (Washington, DC, June 2007); EIA, Fuel Oil and Kerosene Sales 2004, DOE/EIA-0535(2004) (Washington, DC, November 2005); EIA, State Energy Data Report 2004, DOE/EIA-0214(2004) (Washington, DC, June 2007); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 26 and Annual (Oak Ridge, TN, 2007); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2008 National Energy Modeling System run aeo2008.d030208f. Projections: EIA, AEO2008 National Energy Modeling System run aeo2008.d030208f.