

M I C H I G A N Table CT7. Transportation sector energy consumption estimates, selected years, 1960-2022, Michigan

Year	Coal Thousand short tons	Natural gas ^a Billion cubic feet	Petroleum								Electricity ^f Million kilowatthours	End use ^{g,h}	Electrical system energy losses ⁱ	Total ^{g,h}
			Aviation gasoline	Distillate fuel oil ^b	HGL ^c	Jet fuel ^d	Lubricants	Motor gasoline ^e	Residual fuel oil	Total				
			Thousand barrels											
1960	223	3	1,312	2,475	21	3,369	1,277	62,307	728	71,489	9	--	--	--
1965	50	5	2,619	3,348	34	4,377	1,126	74,814	779	87,097	0	--	--	--
1970	21	10	718	6,353	62	7,365	1,324	93,269	427	109,518	0	--	--	--
1975	2	10	347	8,949	95	5,700	1,321	105,412	423	122,248	0	--	--	--
1980	0	12	488	9,741	128	6,646	1,477	95,235	232	113,946	0	--	--	--
1985	0	11	201	12,328	291	6,570	1,344	91,556	99	112,389	0	--	--	--
1990	0	18	215	13,207	283	10,057	1,513	98,167	92	123,533	0	--	--	--
1995	0	25	231	18,125	241	8,818	1,443	109,159	94	138,111	4	--	--	--
2000	0	27	205	21,915	266	7,214	1,542	116,941	48	148,131	4	--	--	--
2005	0	28	84	23,256	509	3,431	1,300	117,139	197	145,916	5	--	--	--
2006	0	26	67	23,767	231	4,124	1,267	115,637	232	145,325	4	--	--	--
2007	0	26	76	23,422	278	5,270	1,308	113,760	288	144,401	5	--	--	--
2008	0	24	74	20,749	289	4,641	1,215	109,444	218	136,629	5	--	--	--
2009	0	24	62	20,008	227	4,270	1,092	108,134	134	133,927	5	--	--	--
2010	0	25	118	21,161	42	8,583	680	107,099	246	137,928	5	--	--	--
2011	0	24	111	21,252	42	8,797	650	104,587	328	135,766	5	--	--	--
2012	0	21	102	20,997	34	8,656	597	103,658	225	134,269	7	--	--	--
2013	0	19	92	23,149	48	8,751	656	107,612	240	140,548	6	--	--	--
2014	0	21	66	23,746	51	8,760	665	104,960	181	138,428	4	--	--	--
2015	0	20	74	24,111	73	9,796	738	107,851	160	142,804	4	--	--	--
2016	0	16	74	24,061	89	10,013	R 705	109,880	458	R 145,279	4	--	--	--
2017	0	19	75	22,179	180	10,289	R 624	108,630	677	R 142,653	6	--	--	--
2018	0	22	84	25,764	134	10,049	626	108,808	781	146,246	7	--	--	--
2019	0	29	88	24,246	143	10,017	R 584	107,253	888	R 143,219	6	--	--	--
2020	0	23	76	22,089	113	5,405	R 497	91,171	625	R 119,977	4	--	--	--
2021	0	26	89	R 21,944	132	6,833	R 525	100,040	806	R 130,750	3	--	--	--
2022	0	29	92	22,394	122	7,710	552	98,212	826	130,305	4	--	--	--

Trillion Btu

1960	5.5	2.7	6.6	14.4	0.1	18.2	7.7	327.3	4.6	378.9	(s)	387.2	0.1	387.3
1965	1.2	4.6	13.2	19.5	0.1	24.0	6.8	393.0	4.9	461.5	0.0	467.4	0.0	467.4
1970	0.5	10.5	3.6	37.0	0.2	41.0	8.0	489.9	2.7	582.5	0.0	593.5	0.0	593.5
1975	(s)	10.5	1.7	52.1	0.4	31.6	8.0	553.7	2.7	650.3	0.0	660.8	0.0	660.8
1980	0.0	12.6	2.5	56.7	0.5	37.1	9.0	500.3	1.5	607.5	0.0	620.1	0.0	620.1
1985	0.0	10.8	1.0	71.8	1.1	36.7	8.2	480.9	0.6	600.4	0.0	614.7	0.0	614.7
1990	0.0	18.7	1.1	76.9	1.1	56.6	9.2	515.7	0.6	661.1	0.0	683.9	0.0	683.9
1995	0.0	25.9	1.2	105.5	0.9	50.0	8.8	568.1	0.6	735.0	(s)	760.9	(s)	761.0
2000	0.0	27.5	1.0	127.5	1.0	40.9	9.3	608.2	0.3	788.3	(s)	815.9	(s)	815.9
2005	0.0	28.3	0.4	135.3	2.0	19.5	7.7	608.2	1.2	774.4	(s)	803.0	(s)	803.0
2006	0.0	26.1	0.3	137.9	0.9	23.4	7.9	599.6	1.5	771.3	(s)	798.2	(s)	798.2
2007	0.0	26.6	0.4	135.5	1.1	29.9	7.9	585.0	1.8	761.5	(s)	789.2	(s)	789.3
2008	0.0	24.2	0.4	119.9	1.1	26.3	7.4	558.8	1.4	715.3	(s)	740.5	(s)	740.5
2009	0.0	24.2	0.3	115.6	0.9	24.2	6.6	550.4	0.8	698.9	(s)	723.1	(s)	723.1
2010	0.0	25.6	0.6	122.2	0.2	48.7	4.1	542.7	1.5	720.0	(s)	745.6	(s)	745.6
2011	0.0	24.2	0.6	122.6	0.2	49.9	3.9	529.5	2.1	708.7	(s)	733.0	(s)	733.0
2012	0.0	21.2	0.5	121.1	0.1	49.1	3.6	524.7	1.4	700.6	(s)	721.8	(s)	721.8
2013	0.0	19.5	0.5	133.4	0.2	49.6	4.0	544.5	1.5	733.7	(s)	753.2	(s)	753.2
2014	0.0	21.4	0.3	136.8	0.2	49.7	4.0	531.0	1.1	723.2	(s)	744.6	(s)	744.6
2015	0.0	20.5	0.4	138.9	0.3	55.5	4.5	545.4	1.0	746.0	(s)	766.5	(s)	766.5
2016	0.0	17.0	0.4	138.5	0.3	56.8	4.3	555.4	2.9	758.6	(s)	775.6	(s)	775.6
2017	0.0	20.1	0.4	127.7	0.7	58.3	3.8	548.9	4.3	744.0	(s)	764.2	(s)	764.2
2018	0.0	22.6	0.4	148.4	0.5	57.0	3.8	549.9	4.9	764.9	(s)	787.5	(s)	787.6
2019	0.0	R 30.3	0.4	139.6	0.5	56.8	3.5	541.8	5.6	748.4	(s)	778.7	(s)	778.8
2020	0.0	R 24.8	0.4	127.1	0.4	30.6	3.0	460.6	3.9	R 626.2	(s)	R 651.0	(s)	R 651.0
2021	0.0	R 27.5	0.5	R 126.5	0.5	38.7	R 3.2	505.2	5.1	R 681.7	(s)	R 709.2	(s)	R 709.2
2022	0.0	30.4	0.5	129.1	0.5	43.7	3.3	495.9	5.2	680.3	(s)	710.7	(s)	710.8

^a Transportation use of natural gas to operate pipelines and, since 1990, also includes vehicle fuel.

^b Beginning in 2009, includes biodiesel blended into distillate fuel oil. Beginning in 2011, includes renewable diesel blended into distillate fuel oil.

^c Hydrocarbon gas liquids, assumed to be propane only.

^d Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Industrial sector, Other petroleum." There is a discontinuity in this time series between 2009 and 2010 because of data source and methodology changes, see technical notes.

^e Beginning in 1993, includes fuel ethanol blended into motor gasoline.

^f Electricity sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers. Sales to public railroads and railway systems only. Excludes electric vehicles.

^g There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of fuel ethanol beginning in 1981.

^h For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline column.

ⁱ Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.

-- = Not applicable.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.

Data Source: U.S. Energy Information Administration, State Energy Data System. See Technical Notes. <http://www.eia.gov/state/seds/>