

Motorcycles registered in the United States, 2002–2023

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Overview

The following tables summarize the U.S. motorcycle population between 2002 (the earliest available year of data) and 2023, based on Institute analyses of data provided by IHS Markit, an S&P 500 company (formerly R.L. Polk and Company).

Registration counts as of January 1 of each year were provided by year, state, and Vehicle Identification Number (VIN) pattern (first 10 digits). Software developed and maintained by the Highway Loss Data Institute (HLDI) was used to decode VIN patterns to determine make, series, and model year, and to append information maintained by HLDI on motorcycle type and antilock braking system (ABS) availability. Only on-road classes of motorcycles were included.

Since the VIN information is constantly improving, counts in this paper may differ slightly from the previous versions.

Selected observations

- The number of on-road motorcycles registered in the U.S. has been generally increasing throughout these years, approximately doubling from 4.3 million in 2002 to 8.8 million in 2023 (Tables 1a–1c).
- California and Florida have the largest number of registered motorcycles by large margins.
- Cruisers and touring bikes are the largest classes of registered motorcycles (Table 2).
- Choppers are a relatively new class designation from manufacturers. This class probably is undercounted, as similar motorcycles are custom builds and not identifiable from VINs.
- Scooter registrations have been increasing, but also may be undercounted as many have engines smaller than 50 cc and state laws (including registration requirements) vary widely for vehicles with such small engines.
- Antilock braking system (ABS) availability has increased greatly among the on-road motorcycle fleet, from standard on 0.2% of registered motorcycles in 2002 to 19.9% in 2023 (Table 3). Similarly, registered motorcycles for which ABS was an optional feature increased from 1.3% in 2002 to 17.3% in 2023.
- The average age of registered motorcycles has increased from 9.0 years in 2002 to 14.3 years in 2023 (Table 4b). Half of motorcycles registered in 2023 were at least 14 years old.

Table 1a. On-road motorcycles registered in the United States by state, 2002–2010

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Alabama	59,290	67,810	78,157	89,666	102,939	115,290	127,023	139,838	144,816
Alaska	13,046	14,287	15,656	16,928	18,266	19,789	21,274	22,681	23,663
Arizona	75,800	83,229	92,253	102,376	116,240	131,604	143,629	154,880	158,381
Arkansas	32,142	37,280	42,757	48,652	56,601	63,924	71,565	80,589	82,735
California	409,751	453,215	503,075	558,067	617,635	674,260	722,641	776,100	783,852
Colorado	104,260	114,492	123,032	131,660	140,516	150,024	160,856	171,201	172,943
Connecticut	56,522	62,234	68,056	72,982	77,820	83,210	87,897	91,772	92,256
Delaware	12,723	13,997	15,446	17,129	19,075	20,983	22,086	23,510	24,002
District of Columbia	2,425	2,652	2,717	2,624	2,733	3,025	3,338	3,537	3,745
Florida	239,917	272,426	312,877	360,718	418,137	474,494	512,500	552,161	550,839
Georgia	98,493	112,473	126,976	142,687	158,306	175,287	190,126	206,959	208,690
Hawaii	17,172	18,456	19,804	20,947	22,775	24,157	25,228	26,572	26,672
Idaho	28,764	31,191	34,065	37,270	41,500	46,668	52,003	58,033	58,353
Illinois	206,493	222,914	240,883	256,272	265,129	286,417	312,302	333,075	336,337
Indiana	119,065	130,929	141,744	152,320	161,974	170,682	180,206	194,410	199,372
Iowa	74,581	80,080	87,412	95,222	103,212	111,722	120,612	130,910	136,646
Kansas	47,561	51,871	56,953	62,563	68,743	75,845	82,909	91,684	95,898
Kentucky	52,241	61,715	71,326	80,911	90,550	99,203	108,137	115,610	118,509
Louisiana	50,204	56,966	63,440	69,246	74,966	83,453	89,588	96,679	98,732
Maine	22,228	27,055	30,754	35,334	39,474	42,658	40,878	50,519	53,021
Maryland	65,144	73,830	82,436	92,292	102,160	112,096	120,436	126,199	127,994
Massachusetts	94,084	105,653	115,875	122,745	127,320	132,051	135,798	139,530	139,894
Michigan	174,536	188,757	203,084	216,423	228,991	240,820	253,499	265,262	263,300
Minnesota	123,623	136,491	149,113	161,674	172,942	184,433	196,623	210,750	214,399
Mississippi	25,340	29,205	33,476	37,892	42,597	48,085	52,375	57,705	58,316
Missouri	67,772	76,083	85,016	94,990	105,932	117,524	127,705	138,660	142,398
Montana	19,278	21,475	25,145	28,695	22,404	24,502	26,691	30,577	33,040
Nebraska	23,420	26,309	29,757	33,453	37,140	41,222	45,245	49,928	52,633
Nevada	34,149	37,994	42,017	47,708	54,092	59,975	64,858	68,020	67,657
New Hampshire	45,639	41,763	41,512	53,625	67,450	71,713	74,186	76,528	76,027
New Jersey	106,254	117,456	128,760	138,184	148,618	154,177	163,068	166,964	165,480
New Mexico	32,934	36,287	40,259	44,023	48,616	54,090	59,822	66,293	68,363
New York	245,670	260,901	260,130	277,364	294,453	294,391	312,301	331,570	339,951
North Carolina	122,811	138,792	150,888	167,358	185,118	202,939	219,194	235,280	233,908
North Dakota	13,561	15,030	16,695	18,688	20,886	23,313	25,922	28,876	30,220
Ohio	223,987	243,540	262,707	281,715	301,867	321,789	344,078	367,175	369,502
Oklahoma	51,721	58,637	65,428	72,160	79,788	90,902	101,105	111,541	114,980
Oregon	63,925	68,731	74,173	78,581	84,462	92,136	100,712	111,665	116,259
Pennsylvania	213,509	234,970	254,614	280,477	308,343	336,041	355,475	382,162	396,576
Rhode Island	17,345	19,298	21,230	23,265	25,086	26,773	28,101	29,240	29,389
South Carolina	62,012	69,125	74,072	80,818	88,692	98,296	107,702	116,474	114,312
South Dakota	22,522	24,912	27,421	29,943	32,712	35,528	38,252	41,186	42,537
Tennessee	76,307	85,356	95,564	108,784	124,476	140,461	156,605	171,545	172,257
Texas	213,404	241,930	274,061	306,868	347,584	388,839	428,321	479,281	483,646
Utah	36,440	40,066	44,764	49,685	55,434	63,211	72,822	85,761	90,750
Vermont	14,739	16,465	18,000	19,384	21,014	22,984	24,804	26,636	27,004
Virginia	94,462	106,749	119,140	134,287	149,633	164,977	178,395	191,056	195,275
Washington	118,624	128,430	140,416	155,881	173,489	193,190	210,921	230,094	234,731
West Virginia	25,933	29,650	33,112	37,130	41,566	46,260	51,098	55,731	56,909
Wisconsin	173,636	184,019	201,907	213,036	232,332	246,596	266,809	283,209	295,199
Wyoming	13,812	15,519	17,310	19,013	20,810	23,105	25,693	27,996	28,462
Total	4,339,271	4,788,695	5,255,465	5,779,715	6,342,598	6,905,114	7,443,414	8,023,614	8,150,830

Table 1b. On-road motorcycles registered in the United States by state, 2011–2020

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Alabama	149,066	153,268	157,392	161,045	164,337	167,508	171,702	174,054	174,306	171,719
Alaska	24,027	24,528	25,215	25,690	25,861	25,974	26,242	25,303	24,365	23,940
Arizona	161,146	166,837	174,408	184,265	191,437	200,669	207,615	206,331	213,187	216,925
Arkansas	82,198	81,104	78,888	78,222	76,872	75,280	74,343	72,696	71,821	70,656
California	784,402	799,557	823,309	862,857	896,786	934,182	959,555	955,184	958,184	958,426
Colorado	171,897	170,241	171,356	178,938	182,285	186,583	187,876	189,010	189,607	202,642
Connecticut	91,572	89,321	92,770	92,133	92,184	92,186	94,115	92,710	91,366	89,870
Delaware	24,577	25,852	26,383	26,692	26,914	27,119	27,101	26,688	26,641	26,659
District of Columbia	4,009	4,290	4,461	5,019	5,155	5,226	5,185	5,333	5,297	5,260
Florida	540,033	546,197	544,116	561,756	579,088	596,575	603,293	599,269	602,710	621,780
Georgia	210,095	209,605	206,989	205,688	208,138	210,965	209,908	214,378	214,886	218,647
Hawaii	26,755	26,758	24,040	29,285	31,360	28,476	32,660	55,940	59,836	36,029
Idaho	56,688	58,962	57,906	60,759	62,687	64,127	64,707	65,111	66,923	68,136
Illinois	337,142	326,243	320,214	322,228	320,393	318,949	297,868	302,074	299,908	304,302
Indiana	199,584	202,645	203,613	206,999	210,582	230,055	235,090	233,099	229,680	230,983
Iowa	140,666	144,533	147,680	152,126	156,386	159,837	162,946	163,687	165,065	168,906
Kansas	98,822	100,998	101,875	103,224	104,118	104,327	104,534	103,980	103,395	102,396
Kentucky	117,980	118,323	117,267	117,805	119,612	119,323	118,185	117,255	115,911	118,730
Louisiana	97,935	91,869	89,880	92,695	92,517	92,445	90,313	87,565	84,968	82,293
Maine	49,135	52,902	56,810	55,095	57,962	58,064	57,507	56,569	60,208	61,496
Maryland	126,758	124,517	121,598	122,889	123,712	121,329	118,942	115,104	113,248	111,665
Massachusetts	138,547	142,097	141,434	142,165	143,519	145,717	146,943	146,583	145,612	144,713
Michigan	259,529	254,596	250,416	249,474	247,186	247,662	250,685	249,878	248,198	245,211
Minnesota	214,671	211,363	210,223	214,323	219,045	219,896	215,022	185,399	210,051	208,662
Mississippi	57,943	55,044	51,849	53,105	53,017	51,805	50,607	50,470	50,323	50,495
Missouri	143,207	141,368	136,564	138,274	139,246	139,350	139,969	137,248	136,006	131,860
Montana	34,492	35,750	39,131	47,078	50,906	54,359	57,637	59,893	62,778	65,564
Nebraska	53,963	53,275	52,719	54,346	54,832	54,189	55,110	53,932	54,049	57,422
Nevada	66,411	65,546	65,774	69,024	71,633	73,797	74,560	75,749	77,713	82,185
New Hampshire	74,830	74,356	74,709	75,448	76,770	78,595	80,321	81,625	82,739	83,368
New Jersey	159,848	163,349	159,114	158,894	158,890	160,984	161,825	161,456	161,376	162,285
New Mexico	69,580	66,921	66,501	67,174	67,642	66,905	61,907	63,472	63,776	64,628
New York	344,314	338,951	354,953	360,493	361,983	365,742	370,884	370,585	369,858	369,354
North Carolina	224,409	224,131	216,438	216,845	215,158	241,240	255,144	239,015	237,454	243,807
North Dakota	30,647	32,742	28,236	34,573	36,764	37,893	37,828	37,705	37,498	37,134
Ohio	368,684	366,099	370,806	375,925	383,630	387,028	392,162	390,672	393,138	393,297
Oklahoma	116,683	117,092	117,771	120,638	123,150	123,941	122,721	120,653	118,115	118,580
Oregon	116,062	116,314	113,298	119,721	122,312	124,994	127,801	129,291	131,107	131,621
Pennsylvania	407,843	409,968	409,242	412,692	367,869	381,859	392,007	394,876	398,715	400,873
Rhode Island	29,328	28,807	28,733	28,832	28,983	28,682	28,991	29,007	28,254	27,572
South Carolina	108,503	112,827	103,431	115,591	128,890	135,413	137,796	134,971	140,867	146,436
South Dakota	43,268	44,739	45,675	47,627	48,869	49,940	49,655	50,636	51,181	51,284
Tennessee	171,146	167,348	165,229	158,686	148,915	91,902	39,212	28,770	81,182	164,539
Texas	473,945	452,553	435,567	446,355	452,767	402,724	386,926	378,456	377,373	394,139
Utah	95,410	100,308	99,543	98,866	92,277	87,891	87,683	87,510	89,736	93,280
Vermont	26,886	25,603	24,992	25,004	24,887	25,008	24,768	24,288	24,131	24,078
Virginia	193,722	189,710	191,696	191,202	201,393	206,164	206,092	202,230	197,407	196,725
Washington	233,511	238,426	235,451	235,261	239,122	245,012	246,933	231,331	246,728	242,246
West Virginia	56,489	57,357	54,614	54,112	53,529	53,596	53,267	52,845	52,237	52,956
Wisconsin	306,270	299,606	314,047	308,661	320,414	312,193	324,454	312,155	325,300	312,873
Wyoming	28,181	26,548	25,954	26,416	26,516	26,847	25,911	25,322	25,620	24,978
Total	8,142,809	8,131,344	8,130,280	8,292,215	8,388,500	8,440,527	8,454,508	8,367,363	8,490,034	8,613,625

Table 1c. On-road motorcycles registered in the United States by state, 2021–2023

	2021	2022	2023
Alabama	167,663	171,830	173,795
Alaska	23,095	22,048	22,394
Arizona	222,728	226,581	228,749
Arkansas	72,545	75,583	75,902
California	953,652	941,548	936,809
Colorado	201,536	201,921	203,396
Connecticut	88,132	88,084	86,787
Delaware	26,791	26,934	27,118
District of Columbia	5,025	4,873	4,610
Florida	646,062	657,042	668,046
Georgia	227,728	231,600	236,276
Hawaii	34,807	34,754	34,805
Idaho	69,130	73,904	75,017
Illinois	285,175	287,170	280,058
Indiana	234,703	238,313	238,729
Iowa	168,834	170,264	171,380
Kansas	100,872	101,014	101,530
Kentucky	121,807	123,532	124,923
Louisiana	80,534	79,690	80,208
Maine	60,082	60,476	63,835
Maryland	113,826	119,334	119,139
Massachusetts	147,988	155,802	155,408
Michigan	234,981	245,187	249,872
Minnesota	203,830	212,677	208,616
Mississippi	51,526	52,496	53,311
Missouri	126,908	126,161	126,441
Montana	68,572	72,738	77,212
Nebraska	57,441	58,582	58,922
Nevada	83,121	84,002	86,060
New Hampshire	84,560	87,928	90,235
New Jersey	154,441	157,675	161,348
New Mexico	64,653	65,674	66,525
New York	364,106	365,769	370,101
North Carolina	250,453	252,175	253,643
North Dakota	35,427	35,796	35,589
Ohio	390,096	405,827	407,952
Oklahoma	119,572	120,152	120,364
Oregon	129,477	134,137	136,648
Pennsylvania	385,552	404,904	403,039
Rhode Island	27,472	28,183	28,376
South Carolina	149,110	152,469	153,359
South Dakota	51,079	53,119	54,596
Tennessee	173,921	179,376	184,982
Texas	381,161	392,069	394,351
Utah	96,773	101,112	105,029
Vermont	22,870	23,751	23,775
Virginia	188,283	192,498	194,400
Washington	243,146	244,107	236,862
West Virginia	49,599	51,753	54,165
Wisconsin	320,980	307,381	320,021
Wyoming	25,195	25,366	25,772
Total	8,587,020	8,725,361	8,790,480

Table 2. On-road motorcycles registered in the United States by type of motorcycle, 2002–2023

	Chopper		Standard		Cruiser		Touring		Sport touring		Unclad sport		Sport		Supersport		Dual purpose		Scooter		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2002	914	0.0	472,934	10.9	2,060,158	47.5	626,302	14.4	36,113	0.8	33,010	0.8	308,170	7.1	376,307	8.7	207,778	4.8	217,585	5.0	4,339,271	100.0
2003	1,709	0.0	461,304	9.6	2,323,679	48.5	701,567	14.7	43,242	0.9	48,559	1.0	325,860	6.8	426,083	8.9	222,354	4.6	234,338	4.9	4,788,695	100.0
2004	4,931	0.1	444,254	8.5	2,594,271	49.4	780,756	14.9	52,755	1.0	65,798	1.3	339,464	6.5	479,291	9.1	236,722	4.5	257,223	4.9	5,255,465	100.0
2005	10,824	0.2	433,437	7.5	2,882,869	49.9	868,197	15.0	62,181	1.1	85,845	1.5	354,076	6.1	543,426	9.4	254,294	4.4	284,566	4.9	5,779,715	100.0
2006	17,581	0.3	420,525	6.6	3,167,944	49.9	966,226	15.2	71,369	1.1	106,132	1.7	372,698	5.9	615,877	9.7	276,918	4.4	327,328	5.2	6,342,598	100.0
2007	22,888	0.3	401,274	5.8	3,431,192	49.7	1,075,683	15.6	80,514	1.2	124,237	1.8	396,213	5.7	689,725	10.0	304,720	4.4	378,668	5.5	6,905,114	100.0
2008	26,268	0.4	388,934	5.2	3,669,536	49.3	1,177,924	15.8	90,559	1.2	142,437	1.9	416,662	5.6	759,297	10.2	334,882	4.5	436,915	5.9	7,443,414	100.0
2009	27,923	0.3	377,733	4.7	3,880,290	48.4	1,265,171	15.8	104,473	1.3	163,481	2.0	437,724	5.5	807,326	10.1	372,406	4.6	587,087	7.3	8,023,614	100.0
2010	31,224	0.4	356,771	4.4	3,910,391	48.0	1,327,893	16.3	113,153	1.4	173,372	2.1	435,819	5.3	798,585	9.8	384,688	4.7	618,934	7.6	8,150,830	100.0
2011	32,966	0.4	335,243	4.1	3,877,183	47.6	1,377,289	16.9	121,784	1.5	176,984	2.2	425,828	5.2	775,228	9.5	389,049	4.8	631,255	7.8	8,142,809	100.0
2012	33,972	0.4	315,679	3.9	3,814,556	46.9	1,430,785	17.6	131,048	1.6	181,085	2.2	420,622	5.2	743,697	9.1	398,738	4.9	661,162	8.1	8,131,344	100.0
2013	34,289	0.4	301,422	3.7	3,754,301	46.2	1,487,578	18.3	139,855	1.7	182,839	2.2	417,838	5.1	712,549	8.8	412,520	5.1	687,089	8.5	8,130,280	100.0
2014	34,791	0.4	298,565	3.6	3,759,387	45.3	1,580,893	19.1	151,159	1.8	189,333	2.3	423,102	5.1	701,964	8.5	441,698	5.3	711,323	8.6	8,292,215	100.0
2015	34,987	0.4	292,729	3.5	3,728,190	44.4	1,659,827	19.8	162,363	1.9	203,415	2.4	423,789	5.1	687,977	8.2	464,375	5.5	730,848	8.7	8,388,500	100.0
2016	34,826	0.4	293,305	3.5	3,660,648	43.4	1,720,675	20.4	170,565	2.0	217,508	2.6	425,933	5.0	674,473	8.0	487,455	5.8	755,139	8.9	8,440,527	100.0
2017	34,735	0.4	296,842	3.5	3,602,170	42.6	1,772,122	21.0	176,049	2.1	232,587	2.8	425,283	5.0	652,510	7.7	509,620	6.0	752,590	8.9	8,454,508	100.0
2018	34,348	0.4	300,416	3.6	3,507,465	41.9	1,808,768	21.6	178,483	2.1	243,556	2.9	410,273	4.9	603,909	7.2	527,275	6.3	752,870	9.0	8,367,363	100.0
2019	34,306	0.4	322,231	3.8	3,499,019	41.2	1,882,678	22.2	182,374	2.1	259,781	3.1	413,588	4.9	585,172	6.9	560,372	6.6	750,513	8.8	8,490,034	100.0
2020	34,568	0.4	343,496	4.0	3,493,251	40.6	1,961,739	22.8	187,247	2.2	279,387	3.2	423,529	4.9	569,120	6.6	594,202	6.9	727,086	8.4	8,613,625	100.0
2021	33,473	0.4	362,820	4.2	3,418,334	39.8	1,982,335	23.1	189,482	2.2	294,200	3.4	427,101	5.0	540,434	6.3	627,547	7.3	711,294	8.3	8,587,020	100.0
2022	33,471	0.4	387,129	4.4	3,413,178	39.1	2,039,541	23.4	193,878	2.2	316,956	3.6	437,272	5.0	521,303	6.0	680,065	7.8	702,568	8.1	8,725,361	100.0
2023	32,873	0.4	419,531	4.8	3,357,213	38.2	2,067,821	23.5	195,287	2.2	337,063	3.8	445,233	5.1	504,689	5.7	735,149	8.4	695,621	7.9	8,790,480	100.0

Table 3. On-road motorcycles registered in the United States by availability of antilock braking systems (ABS), 2002–2023

	Standard		Optional		Not available		Total*	
	N	%	N	%	N	%	N	%
2002	7,718	0.2	58,260	1.3	3,670,657	84.6	4,339,271	100.0
2003	10,768	0.2	89,437	1.9	4,093,995	85.5	4,788,695	100.0
2004	14,362	0.3	124,062	2.4	4,539,457	86.4	5,255,465	100.0
2005	17,583	0.3	155,788	2.7	5,047,406	87.3	5,779,715	100.0
2006	21,394	0.3	187,003	2.9	5,596,310	88.2	6,342,598	100.0
2007	27,381	0.4	217,217	3.1	6,146,496	89.0	6,905,114	100.0
2008	33,820	0.5	279,350	3.8	6,640,094	89.2	7,443,414	100.0
2009	44,795	0.6	408,858	5.1	7,103,544	88.5	8,023,614	100.0
2010	56,592	0.7	507,420	6.2	7,148,690	87.7	8,150,830	100.0
2011	79,847	1.0	586,470	7.2	7,068,464	86.8	8,142,809	100.0
2012	126,825	1.6	675,902	8.3	6,943,360	85.4	8,131,344	100.0
2013	184,679	2.3	783,654	9.6	6,786,868	83.5	8,130,280	100.0
2014	265,298	3.2	918,195	11.1	6,738,113	81.3	8,292,215	100.0
2015	413,407	4.9	999,077	11.9	6,624,879	79.0	8,388,500	100.0
2016	572,070	6.8	1,062,839	12.6	6,468,957	76.6	8,440,527	100.0
2017	730,065	8.6	1,119,870	13.2	6,294,811	74.5	8,454,508	100.0
2018	875,537	10.5	1,176,793	14.1	6,038,094	72.2	8,367,363	100.0
2019	1,021,729	12.0	1,270,287	15.0	5,933,367	69.9	8,490,034	100.0
2020	1,189,197	13.8	1,365,746	15.9	5,812,737	67.5	8,613,625	100.0
2021	1,346,559	15.7	1,408,819	16.4	5,594,969	65.2	8,587,020	100.0
2022	1,559,767	17.9	1,473,385	16.9	5,461,961	62.6	8,725,361	100.0
2023	1,750,205	19.9	1,518,007	17.3	5,300,602	60.3	8,790,480	100.0

* Total includes motorcycles with unknown ABS availability.

Table 4a. On-road motorcycles registered in the United States by vehicle age, 2002–2023

	< 1 year		1–3 years		4–6 years		7–9 years		10+ years		Total*	
	N	%	N	%	N	%	N	%	N	%	N	%
2002	101,849	2.3	1,210,311	27.9	714,458	16.5	520,098	12.0	1,768,489	40.8	4,339,271	100.0
2003	105,207	2.2	1,418,114	29.6	823,651	17.2	576,525	12.0	1,842,075	38.5	4,788,695	100.0
2004	64,959	1.2	1,648,075	31.4	992,680	18.9	620,363	11.8	1,907,514	36.3	5,255,465	100.0
2005	109,983	1.9	1,750,126	30.3	1,216,930	21.1	678,725	11.7	2,003,141	34.7	5,779,715	100.0
2006	109,937	1.7	1,887,829	29.8	1,433,004	22.6	781,411	12.3	2,110,800	33.3	6,342,598	100.0
2007	101,534	1.5	1,959,168	28.4	1,697,984	24.6	938,083	13.6	2,190,092	31.7	6,905,114	100.0
2008	72,535	1.0	2,147,369	28.8	1,748,934	23.5	1,141,761	15.3	2,315,711	31.1	7,443,414	100.0
2009	78,114	1.0	2,209,300	27.5	1,881,404	23.4	1,340,845	16.7	2,498,058	31.1	8,023,614	100.0
2010	33,196	0.4	1,849,471	22.7	1,980,444	24.3	1,578,964	19.4	2,694,338	33.1	8,150,830	100.0
2011	32,197	0.4	1,357,100	16.7	2,192,561	26.9	1,609,896	19.8	2,938,032	36.1	8,142,809	100.0
2012	52,896	0.7	1,018,808	12.5	2,125,350	26.1	1,694,239	20.8	3,228,184	39.7	8,131,344	100.0
2013	35,833	0.4	829,808	10.2	1,900,674	23.4	1,744,678	21.5	3,608,267	44.4	8,130,280	100.0
2014	46,970	0.6	977,655	11.8	1,369,822	16.5	1,970,409	23.8	3,922,271	47.3	8,292,215	100.0
2015	37,440	0.4	1,098,578	13.1	1,012,197	12.1	1,926,344	23.0	4,309,933	51.4	8,388,500	100.0
2016	31,350	0.4	1,119,194	13.3	848,102	10.0	1,716,769	20.3	4,722,105	55.9	8,440,527	100.0
2017	30,860	0.4	1,092,067	12.9	992,889	11.7	1,219,614	14.4	5,116,283	60.5	8,454,508	100.0
2018	27,282	0.3	1,031,259	12.3	1,110,242	13.3	898,706	10.7	5,248,538	62.7	8,367,363	100.0
2019	28,173	0.3	971,335	11.4	1,131,220	13.3	768,262	9.0	5,474,047	64.5	8,490,034	100.0
2020	27,871	0.3	942,146	10.9	1,121,467	13.0	908,938	10.6	5,453,349	63.3	8,613,625	100.0
2021	18,997	0.2	935,567	10.9	1,057,144	12.3	1,012,808	11.8	5,367,498	62.5	8,587,020	100.0
2022	44,370	0.5	969,539	11.1	992,098	11.4	1,038,055	11.9	5,444,445	62.4	8,725,361	100.0
2023	25,602	0.3	1,047,304	11.9	933,730	10.6	1,017,647	11.6	5,485,413	62.4	8,790,480	100.0

* Total includes motorcycles with unknown model year.

Table 4b. Average and median age (years) of on-road motorcycles registered in the United States, 2002–2023

	Average	Median
2002	9.0	7
2003	8.8	7
2004	8.7	6
2005	8.6	6
2006	8.5	6
2007	8.4	6
2008	8.5	6
2009	8.5	6
2010	9.0	7
2011	9.5	7
2012	9.9	8
2013	10.4	9
2014	10.8	9
2015	11.1	10
2016	11.5	10
2017	11.9	11
2018	12.3	12
2019	12.8	12
2020	13.2	13
2021	13.6	13
2022	14.0	14
2023	14.3	14

HLDI motorcycle classification

Chopper



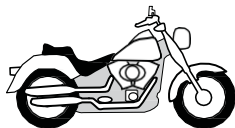
Chopper-style motorcycles are closely related to cruisers. They have a longer wheelbase that results from an extended front fork configuration. The lengthened wheelbase reduces maneuverability. Choppers generally are highly customized and, as a result, more costly. As the term “chopper” implies, the motorcycle is derived by chopping off or removing parts from a typical cruiser with the intent of reducing weight or bulk for the sake of speed. Its reduced maneuverability is exaggerated further by a wide rear tire that assists in acceleration.

Standard



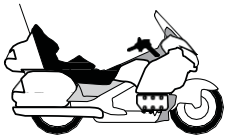
Standard motorcycle designs are basic, with many remaining in production for 10 years or more without redesign. However, in recent model years, standard motorcycles have begun utilizing technological advances in chassis and engine design, such as antilock braking systems and fuel-injected engines. Riding position typically is upright and similar to that of a cruiser, but with foot pegs placed farther rearward. The riding position, coupled with better ground clearance than a cruiser, gives standard motorcycles better handling characteristics. Engine displacements are smaller than those for cruisers.

Cruiser



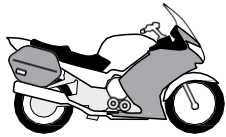
Cruiser motorcycles mimic the style of earlier American motorcycles from the 1930s to the early 1960s, such as those made by Harley-Davidson and Indian. Although cruisers have benefited from advances in technology and metallurgy, the basic design is still very similar to early motorcycles. The riding position places the feet forward of the seat and the hands near shoulder height, and the upper body is erect or leaning back slightly. This position allows long-distance comfort and compromises some degree of control. Cruisers have limited cornering ability because of a low-slung design. Cruiser engines produce more torque and less peak horsepower compared with motorcycles from the sport classes. Cruisers are among the heaviest of motorcycles and can be used with a sidecar.

Touring



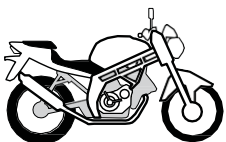
Touring motorcycles are equipped with high-displacement/high-torque engines for carrying a passenger and luggage. The Honda Goldwing, which is one of the best-selling motorcycles in this class, has an 1,833-cc engine. Touring motorcycles are among the longest and heaviest motorcycles, and they can weigh in excess of 800 pounds. Touring motorcycles offer wind protection for the rider, high-capacity fuel tanks, the ability to carry luggage, and an upright riding position that is comfortable for long distances. Although any motorcycle can be equipped and used for touring, touring motorcycles are designed for this purpose. They incorporate technological advances such as antilock brakes and airbags and are more likely to include features such as reverse gear, cruise control, heated hand grips, driver-to-passenger communication systems, navigation, and audio systems.

Sport touring



Sport-touring motorcycles are similar in design to sport motorcycles but have some features typically found on touring motorcycles. Sport-touring motorcycles typically are derived from sport class frames and share components such as engines and drive trains. Sport tourers normally are equipped with touring features such as saddlebags, high windshields, larger fairings, heated grips, and larger seats—features not found on other sport-class motorcycles. Among the other sport-class motorcycles, sport tourers tend to have the largest engines, and riding positions that are more upright. More than any other sport-class motorcycle, sport tourers can accommodate passengers due to larger engines, upright riding positions, and larger seats.

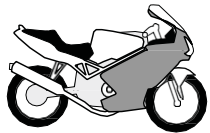
Unclad sport



Unclad sport motorcycles occupy a relatively new market niche; however, they are retro in styling. Sometimes referred to as “naked” or “hooligan” motorcycles, unclad sport motorcycles are derivatives of sport/supersport motorcycles. They do not have full body panels or fairing coverings typically found on sport/supersport motorcycles. Compared with sport and supersport motorcycles, unclad sport motorcycles generally have lower horsepower. The riding position places the feet under the seat and the hands below shoulder height. The rider’s knees are bent and the upper body has a slight forward lean, giving unclad sport motorcycles a riding position that is more comfortable than the sport class. The reduced

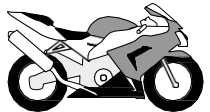
horsepower and riding position make them more user friendly and suitable for everyday riding. Some motorcycles in this class serve as beginner motorcycles, whereas others are as powerful and agile as some sport and supersport motorcycles and are targeted at premium customers (e.g., Ducati and Aprilia).

Sport



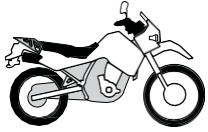
Sport motorcycles are light and powerful. Their power-to-weight ratios are second only to the supersport class. They benefit from advances in design and technology intended for racing; however, they are not considered racing-specification machines. The riding position places the feet under the seat and the hands below shoulder height. The rider's knees are bent, and the upper body has a forward lean. This riding position improves control when cornering and accelerating. All sport motorcycles have extensive body paneling and fairing covers to provide wind protection and assist in aerodynamics. Sport motorcycles can be equipped with side bags or a rear trunk to provide limited touring ability, but they do not have the features and amenities typically found in the touring or sport-touring classes. Sport motorcycles have a wide range of engine displacements. The riding position and lower power-to-weight ratios make sport class motorcycles more suitable for everyday street use than supersport motorcycles. Sport motorcycles are capable of high speeds, but they do not offer the acceleration, stability, and handling of racing-specification machines.

Supersport



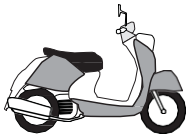
Supersport motorcycles are consumer versions of the motorcycles used by factory racing teams and use racing specifications as benchmarks in design. Their range of engine displacements is limited to meet racing requirements of the class. The power-to-weight ratios of supersport motorcycles are higher than any other mass-produced motor vehicle. As racing specification machines, measures are taken to reduce weight and increase power, thus making these motorcycles quick in acceleration, nimble in handling, and capable of high speeds. The riding position is suitable for racing, and places the feet under the seat and the hands below shoulder height. The rider's knees are bent and the upper body has a forward lean. There also is less space between the seat and feet than for sport motorcycles to provide better rider/racer control. Supersport motorcycles have extensive body paneling and fairing coverings, but generally only offer good wind protection when the rider is in a crouched riding position.

Dual purpose



Dual-purpose motorcycles have similarities with off-road motorcycles. However, they are equipped with road-ready features such as turn signals, brake lights, and horns. They also use four-stroke engines for compliance with emissions requirements. They generally have larger displacement engines than off-road motorcycles, along with a more comfortable riding position.

Scooter



Scooters are characterized by small wheels, automatic transmissions, small engines, and a step-through configuration that allows riders to place both feet on a running board with knees together. However, larger scooters with engine displacements greater than 250 cc are becoming more popular. The BMW C650GT and the Suzuki Burgman are examples of the increasing displacements of highway-capable scooters.