

Motorcycles registered in the United States, 2002-17

August 2017

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The following tables summarize the U.S. motorcycle population between 2002 and 2017, based on analyses by the Insurance Institute for Highway Safety (IIHS) of data provided by IHS Markit. Registration counts as of January 1 of each year were provided by year, state, and vehicle identification number (VIN) pattern (first 10 digits). The Highway Loss Data Institute (HLDI) decoded VIN patterns to determine make, series, and model year, and information maintained by HLDI on motorcycle type and antilock braking system (ABS) availability were appended to each record by make/series/model year. Only onroad classes of motorcycles were included.

Selected observations

- The number of on-road motorcycles registered in the U.S. has been steadily increasing throughout these years, doubling from 4.2 million in 2002 to 8.4 million in 2017 (Table 1).
- 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 VIN numbers.
- Scooter registrations have been increasing, but they also may be undercounted as many have engines smaller than 50 cubic centimeters (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 motorcycle fleet, from standard on 0.2 percent of registered motorcycles in 2002 to 8.9 percent in 2017 (Table 3).
 Similarly, registered motorcycles for which ABS was an optional feature increased from 1.4 percent in 2002 to 13.3 percent in 2017.
- The average age of registered motorcycles has increased from 8.8 years in 2002 to 11.8 years in 2017 (Table 4b). Half of motorcycles registered in 2017 were at least 11 years old.

Table 1. On-road motorcycles registered in the United States by state, 2002-17

Ia	bie 1. On-		•													<u></u>
-	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Alabama	56,978	65,438	75,778	87,252	100,477	112,823	124,543	137,342	142,300	146,548	150,718	154,809	158,100	161,640	164,931	169,288
Alaska	12,491	13,741	15,132	16,436	17,819	19,378	20,895	22,350	23,350	23,746	24,248	24,929	25,398	25,620	25,754	26,033
Arizona	73,980	81,557	90,714	100,945	114,892	130,388	142,438	153,735	157,273	160,077	165,727	173,059	182,562	189,714	199,021	205,986
Arkansas	31,239	36,457	41,980	47,900	55,875	63,241	70,932	79,968	82,170	81,679	80,618	78,442	77,748	76,463	74,958	74,091
California	400,060	444,595	495,430	551,425	611,877	669,213	717,940	771,645	779,844	780,712	795,843	818,970	857,773	891,706	929,559	955,293
Colorado	100,880	111,298	120,034	128,849	137,906	147,583	158,575	169,042	170,990	170,138	168,559	169,727	177,204	180,734	185,364	186,884
Connecticut	54,571	60,372	66,301	71,352	76,297	81,785	86,540	90,438	91,038	90,476	88,319	91,752	91,112	91,249	91,349	93,434
Delaware	12,417	13,698	15,179	16,874	18,831	20,755	21,866	23,269	23,743	24,248	25,401	25,861	26,048	26,270	26,521	26,520
District of Columbia	2,360	2,587	2,661	2,585	2,700	2,997	3,315	3,512	3,722	3,984	4,256	4,414	4,956	5,109	5,193	5,158
Florida	232,640	265,686	306,454	354,482	411,833	468,077	506,007	545,454	544,664	534,287	539,070	535,720	553,105	571,725	590,379	595,946
Georgia	96,058	110,158	124,855	140,667	156,404	173,493	188,431	205,294	207,208	208,666	208,241	205,638	204,307	206,939	209,977	209,335
Hawaii	16,912	18,226	19,606	20,770	22,618	24,019	25,108	26,467	26,578	26,674	26,687	23,973	29,188	31,283	28,434	32,599
Idaho	27,250	29,668	32,581	35,818	40,120	45,333	50,720	56,766	57,175	55,634	57,872	56,915	59,742	61,772	63,259	63,922
Illinois	198,538	215,419	233,786	249,720	259,487	280,934	306,830	327,912	331,751	332,941	322,448	316,617	318,733	317,331	316,412	295,866
Indiana	115,503	127,526	138,462	149,245	159,104	168,113	177,859	192,087	197,217	197,609	200,674	201,684	205,116	208,968	227,901	232,915
lowa	70,474	76,070	83,535	91,497	99,628	108,269	117,276	127,672	133,563	137,711	141,618	144,803	149,213	153,695	157,331	160,323
Kansas	45,084	49,504	54,687	60,421	66,685	73,859	80,984	89,807	94,144	97,141	99,391	100,357	101,686	102,809	103,188	103,544
Kentucky	50,881	60,413	70,051	79,665	89,336	98,011	107,017	114,561	117,552	117,148	117,507	116,456	116,888	118,775	118,587	117,595
Louisiana	49,003	55,873	62,455	68,422	74,251	82,810	88,993	96,137	98,224	97,482	91,417	89,426	92,173	92,038	92,114	90,148
Maine	21,389	26,161	29,849	34,427	38,558	41,795	40,148	49,640	52,170	48,489	52,205	56,046	54,349	57,281	57,496	57,028
Maryland	63,502	72,299	81,008	90,992	100,976	110,995	119,399	125,153	126,975	125,829	123,646	120,441	121,318	122,135	120,328	118,174
Massachusetts	90,988	102,749	113,141	120,256	125,103	130,077	134,018	137,952	138,522	137,359	140,919	140,382	141,106	142,593	144,982	146,349
Michigan	169,526	183,979	198,601	212,189	225,021	237,097	250,002	261,972	260,379	256,952	252,321	248,331	247,433	245,487	246,269	249,539
Minnesota	118,762	131,815	144,634	157,347	168,759	180,389	192,721	206,892	210,749	211,304	208,257	207,330	211,386	216,294	217,497	213,111
Mississippi	24,718	28,634	32,942	37,400	42,120	47,634	51,945	57,286	57,934	57,583	54,727	51,554	52,773	52,707	51,570	50,450
Missouri	65,454	73,861	82,917	93,003	104,052	115,750	126,057	137,092	140,983	141,986	140,253	135,561	137,217	138,355	138,640	139,463
Montana	18,334	20,504	24,086	27,631	21,838	23,993	26,199	30,049	32,475	33,885	35,107	38,451	46,245	50,068	53,540	56,822
Nebraska	22,349	25,309	28,796	32,523	36,264	40,392	44,461	49,151	51,917	53,308	52,699	52,180	53,815	54,390	53,830	54,827
Nevada	33,147	37,066	41,183	46,943	53,383	59,332	64,254	67,486	67,183	65,976	65,152	65,390	68,585	71,254	73,483	74,357
New Hampshire	43,678	40,054	39,859	51,983	65,814	70,178	72,737	75,210	74,855	73,786	73,316	73,698	74,426	75,835	77,757	79,599
New Jersey	103,559	114,806	126,302	135,891	146,476	152,262	161,308	165,381	164,126	158,661	162,109	157,889	157,614	157,723	160,016	161,057
New Mexico	31,775	35,191	39,222	43,097	47,785	53,323	59,094	65,594	67,710	68,951	66,355	65,971	66,631	67,128	66,519	61,689
New York	231,962	247,946	250,092	267,793	285,358	288,087	306,408	325,943	334,755	339,528	334,650	350,580	356,016	357,980	362,227	367,865
North Carolina	120,363	136,295	148,626	165,215	183,087	201,026	217,449	233,602	232,458	223,280	223,002	215,394	215,744	214,241	239,474	252,794
North Dakota	12,915	14,410	16,089	18,102	20,331	22,775	25,411	28,392	29,768	30,257	32,341	27,926	34,199	36,425	37,579	37,572
Ohio	215,448	235,391	254,970	274,383	294,927	315,234	337,898	361,376	364,278	363,988	361,595	366,524	371,503	379,609	383,550	389,195
Oklahoma	49,603	56,669	63,640	70,458	78,197	89,407	99,735	110,326	113,892	115,654	116,145	116,847	119,691	122,326	123,336	122,297
Oregon	61,127	66,076	71,651	76,265	82,399	90,228	98,901	109,730	114,276	114,188	114,494	111,584	117,915	120,694	123,580	126,579
Pennsylvania	205,904	227,713	247,986	274,152	302,353	330,432	350,377	377,227	391,796	403,158	405,553	405,079	408,248	365,931	380,113	390,493
Rhode Island	16,477	18,462	20,458	22,524	24,404	26,128	27,505	28,691	28,879	28,867	28,382	28,318	28,388	28,597	28,332	28,690
South Carolina	60,652	67,861	72,969	79,774	87,681	97,308	106,755	115,559	113,461	107,723	111,947	102,463	114,651	128,077	134,741	137,313
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South Dakota	21,675	24,083	26,639	29,192	31,986	34,834	37,575	40,536	41,942	42,739	44,170	45,109	47,089	48,381	49,534	49,298	
Tennessee	74,024	83,209	93,567	106,909	122,664	138,736	154,939	169,978	170,884	169,924	166,210	164,100	157,595	148,330	91,532	39,149	
Texas	208,291	237,293	269,740	302,869	343,856	385,444	425,224	476,379	481,105	471,669	450,288	433,153	444,142	450,845	401,731	386,938	
Utah	34,852	38,526	43,266	48,236	54,064	61,891	71,548	84,475	89,443	94,075	98,894	98,180	97,463	91,172	87,022	86,870	
Vermont	14,114	15,849	17,388	18,802	20,447	22,454	24,292	26,143	26,581	26,514	25,281	24,691	24,707	24,629	24,815	24,585	
Virginia	92,317	104,723	117,252	132,495	147,895	163,360	176,864	189,602	193,951	192,531	188,595	190,595	189,951	199,809	204,675	204,487	
Washington	112,210	122,189	134,432	150,186	168,072	188,080	206,103	225,262	230,204	229,471	234,270	231,616	231,508	235,792	241,930	244,146	
West Virginia	25,089	28,857	32,369	36,439	40,907	45,629	50,497	55,168	56,423	56,082	56,961	54,293	53,777	53,232	53,348	53,052	
Wisconsin	164,321	175,273	193,156	205,022	224,241	238,960	259,067	275,709	287,633	298,608	292,686	306,674	301,632	313,496	306,268	318,266	
Wyoming	13,244	14,987	16,808	18,543	20,375	22,685	25,282	27,620	28,119	27,879	26,291	25,711	26,160	26,302	26,668	25,748	
U.S. Total	4,189,088	4,646,526	5,123,319	5,655,366	6,225,533	6,796,996	7,340,442	7,924,034	8,058,332	8,057,105	8,047,435	8,045,613	8,204,329	8,310,958	8,372,614	8,392,682	

 Table 2. On-road motorcycles registered in the United States by type of motorcycle, 2002-17

	Chop	oer	Standard Cruiser Touring Sport touring		ing	Unclad sport Sport			Supersport		Dual purpose		Scooter		Total	Total						
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
2002	0	0.0	433,513	10.3	2,024,081	48.3	620,971	14.8	36,109	0.9	33,007	0.8	296,886	7.1	362,444	8.7	183,453	4.4	198,624	4.7	4,189,088	100.0
2003	744	<0.1	424,158	9.1	2,289,388	49.3	696,337	15.0	43,236	0.9	48,554	1.0	315,384	6.8	413,341	8.9	199,000	4.3	216,384	4.7	4,646,526	100.0
2004	3,826	0.1	409,972	8.0	2,561,950	50.0	775,607	15.1	52,747	1.0	65,792	1.3	329,918	6.4	467,958	9.1	214,911	4.2	240,638	4.7	5,123,319	100.0
2005	9,530	0.2	401,229	7.1	2,852,170	50.4	863,164	15.3	62,176	1.1	85,843	1.5	345,234	6.1	533,137	9.4	233,700	4.1	269,183	4.8	5,655,366	100.0
2006	16,167	0.3	390,433	6.3	3,138,921	50.4	961,344	15.4	71,366	1.1	106,131	1.7	364,620	5.9	606,564	9.7	257,839	4.1	312,148	5.0	6,225,533	100.0
2007	21,412	0.3	374,051	5.5	3,404,317	50.1	1,070,984	15.8	80,506	1.2	124,232	1.8	389,047	5.7	681,721	10.0	287,036	4.2	363,690	5.4	6,796,996	100.0
2008	24,752	0.3	363,527	5.0	3,644,347	49.6	1,173,380	16.0	90,555	1.2	142,430	1.9	410,070	5.6	752,101	10.2	317,835	4.3	421,445	5.7	7,340,442	100.0
2009	26,394	0.3	353,996	4.5	3,856,926	48.7	1,260,787	15.9	104,465	1.3	163,476	2.1	431,705	5.4	800,850	10.1	355,900	4.5	569,535	7.2	7,924,034	100.0
2010	29,686	0.4	334,836	4.2	3,889,121	48.3	1,323,801	16.4	113,150	1.4	173,371	2.2	430,445	5.3	792,944	9.8	369,300	4.6	601,678	7.5	8,058,332	100.0
2011	31,416	0.4	315,259	3.9	3,857,982	47.9	1,373,460	17.0	121,783	1.5	176,885	2.2	421,005	5.2	770,353	9.6	374,729	4.7	614,233	7.6	8,057,105	100.0
2012	32,490	0.4	297,093	3.7	3,797,207	47.2	1,427,220	17.7	131,048	1.6	180,830	2.2	416,272	5.2	739,381	9.2	385,140	4.8	640,754	8.0	8,047,435	100.0
2013	32,885	0.4	283,700	3.5	3,738,391	46.5	1,484,273	18.4	139,855	1.7	182,441	2.3	413,848	5.1	708,659	8.8	399,795	5.0	661,766	8.2	8,045,613	100.0
2014	33,445	0.4	281,666	3.4	3,739,441	45.6	1,577,743	19.2	150,944	1.8	188,731	2.3	419,364	5.1	698,461	8.5	429,244	5.2	685,290	8.4	8,204,329	100.0
2015	33,630	0.4	276,423	3.3	3,715,037	44.7	1,656,985	19.9	162,216	2.0	202,488	2.4	420,652	5.1	684,847	8.2	452,311	5.4	706,369	8.5	8,310,958	100.0
2016	33,555	0.4	277,233	3.3	3,649,044	43.6	1,717,876	20.5	177,680	2.1	215,073	2.6	424,514	5.1	671,555	8.0	475,695	5.7	730,389	8.7	8,372,614	100.0
2017	33,519	0.4	281,311	3.4	3,592,275	42.8	1,769,520	21.1	190,113	2.3	229,132	2.7	425,322	5.1	649,858	7.7	498,228	5.9	723,404	8.6	8,392,682	100.0

Table 3. On-road motorcycles registered in the United States by availability of antilock braking systems, 2002-17

	Standard		Optional		Not availabl	e	Total		
	N	%	N	%	N	%	N	%	
2002	7,717	0.2	58,254	1.4	4,123,117	98.4	4,189,088	100.0	
2003	10,768	0.2	89,425	1.9	4,546,333	97.8	4,646,526	100.0	
2004	14,360	0.3	124,051	2.4	4,984,908	97.3	5,123,319	100.0	
2005	17,581	0.3	155,777	2.8	5,482,008	96.9	5,655,366	100.0	
2006	21,393	0.3	186,994	3.0	6,017,146	96.7	6,225,533	100.0	
2007	27,375	0.4	217,168	3.2	6,552,453	96.4	6,796,996	100.0	
2008	33,817	0.5	279,294	3.8	7,027,331	95.7	7,340,442	100.0	
2009	44,778	0.6	408,786	5.2	7,470,470	94.3	7,924,034	100.0	
2010	56,577	0.7	507,394	6.3	7,494,361	93.0	8,058,332	100.0	
2011	79,836	1.0	586,453	7.3	7,390,816	91.7	8,057,105	100.0	
2012	126,825	1.6	675,895	8.4	7,244,715	90.0	8,047,435	100.0	
2013	184,596	2.3	783,648	9.7	7,077,369	88.0	8,045,613	100.0	
2014	264,813	3.2	918,192	11.2	7,021,324	85.6	8,204,329	100.0	
2015	412,718	5.0	999,069	12.0	6,899,171	83.0	8,310,958	100.0	
2016	578,307	6.9	1,062,710	12.7	6,731,597	80.4	8,372,614	100.0	
2017	742,974	8.9	1,119,720	13.3	6,529,988	77.8	8,392,682	100.0	

 Table 4a. On-road motorcycles registered in the United States by vehicle age, 2002-17

	<1 year		1-3 years		4-6 years		7-9 years		10+ years		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
2002	101,723	2.4	1,204,757	28.8	709,510	16.9	519,062	12.4	1,654,036	39.5	4,189,088	100.0
2003	105,036	2.3	1,413,888	30.4	819,895	17.6	571,766	12.3	1,735,941	37.4	4,646,526	100.0
2004	64,643	1.3	1,645,493	32.1	987,976	19.3	616,377	12.0	1,808,830	35.3	5,123,319	100.0
2005	109,640	1.9	1,749,544	30.9	1,211,462	21.4	674,382	11.9	1,910,338	33.8	5,655,366	100.0
2006	109,699	1.8	1,886,230	30.3	1,429,319	23.0	778,120	12.5	2,022,165	32.5	6,225,533	100.0
2007	101,068	1.5	1,956,850	28.8	1,695,724	24.9	933,859	13.7	2,109,495	31.0	6,796,996	100.0
2008	71,741	1.0	2,143,883	29.2	1,748,151	23.8	1,137,027	15.5	2,239,640	30.5	7,340,442	100.0
2009	77,845	1.0	2,202,992	27.8	1,879,147	23.7	1,337,666	16.9	2,426,384	30.6	7,924,034	100.0
2010	33,084	0.4	1,842,156	22.9	1,977,801	24.5	1,577,105	19.6	2,628,186	32.6	8,058,332	100.0
2011	32,152	0.4	1,350,153	16.8	2,188,794	27.2	1,609,205	20.0	2,876,801	35.7	8,057,105	100.0
2012	52,762	0.7	1,012,100	12.6	2,117,251	26.3	1,692,515	21.0	3,172,807	39.4	8,047,435	100.0
2013	35,825	0.4	818,139	10.2	1,891,738	23.5	1,742,831	21.7	3,557,080	44.2	8,045,613	100.0
2014	41,638	0.5	965,060	11.8	1,361,706	16.6	1,967,694	24.0	3,868,231	47.1	8,204,329	100.0
2015	37,082	0.4	1,091,263	13.1	1,003,291	12.1	1,919,594	23.1	4,259,728	51.3	8,310,958	100.0
2016	32,446	0.4	1,118,854	13.4	837,168	10.0	1,709,328	20.4	4,674,818	55.8	8,372,614	100.0
2017	30,799	0.4	1,096,297	13.1	981,365	11.7	1,212,771	14.5	5,071,450	60.4	8,392,682	100.0

Table 4b. Average and median age (years) of on-road motorcycles registered in the United States, 2002-17

	average	median
2002	8.8	7
2003	8.6	6
2004	8.5	6
2005	8.4	6
2006	8.3	6
2007	8.2	6
2008	8.3	6
2009	8.4	6
2010	8.8	7
2011	9.3	7
2012	9.8	8
2013	10.3	8
2014	10.7	9
2015	11.1	10
2016	11.4	10
2017	11.8	11

HLDI motorcycle classifications

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 and generally do not utilize technological advances in chassis and engine design. Many standard motorcycles are generic enough to remain in production for 10 years or more without redesign. 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 turning 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 the best-selling motorcycle in this class, has an 1,800cc engine. Touring motorcycles are among the longest and heaviest motorcycles. Honda Goldwings can weigh in excess of 900 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 such features 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 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 are similar to 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 250cc are becoming more popular. The BMW C650GT and the Suzuki Burgman are examples of the increasing displacements of highway-capable scooters.