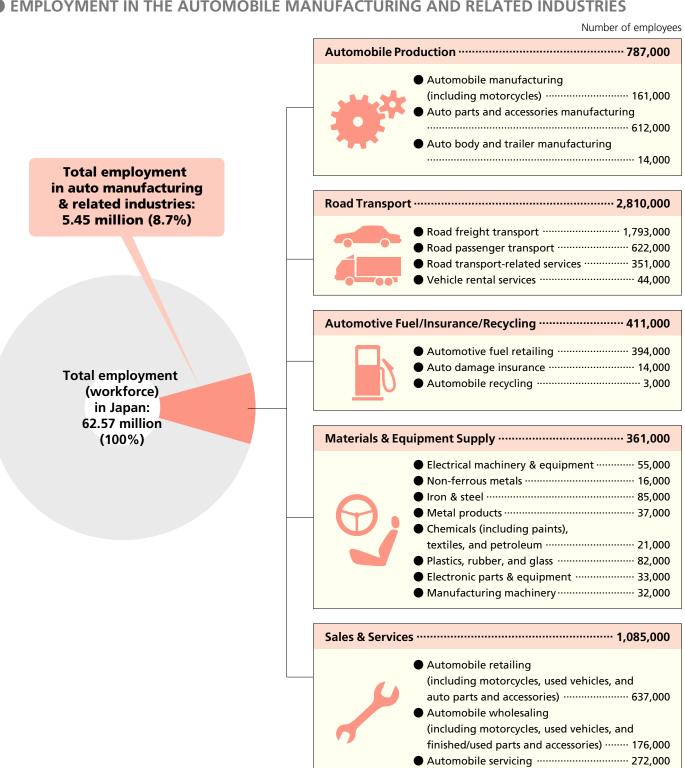


Japan Automobile Manufacturers Association, Inc.

## A Vast Range of Related Industries

Automobiles are the focus of an extremely wide range of industrial and related activity, from materials supply and vehicle production to sales, servicing, freight shipping and other auto-centered operations. Auto-related employment in Japan at present totals 5.45 million people.

#### EMPLOYMENT IN THE AUTOMOBILE MANUFACTURING AND RELATED INDUSTRIES



Note: Figures are rounded off to the nearest thousand.

# **Automobile Manufacturing Is an Integrated Industry**

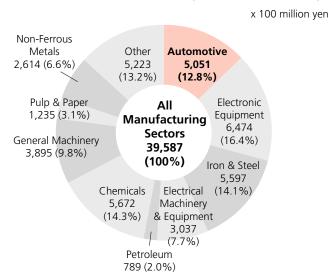
An automobile typically is composed of 20,000 to 30,000 parts, all of which even the largest manufacturers cannot produce themselves. Automakers therefore either outsource production or purchase finished products (such as tires, batteries, air conditioners and audio systems), including products manufactured abroad. The volume of imported components increases yearly. Automobile manufacturing is thus an integrated industry because it relies on many supporting industries to produce the great diversity of materials and components it uses. Trends in the automobile industry, which makes huge investments in equipment and research-and-development activities, are considered a barometer of the economy.

#### PRINCIPAL MATERIALS AND COMPONENTS USED IN AUTOMOBILE MANUFACTURING

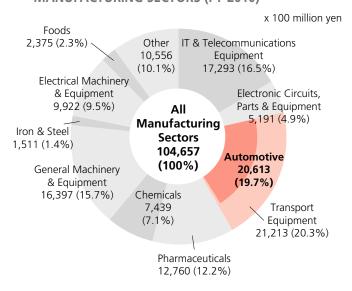
Cast iron	Engine parts, e.g. cylinder blocks
Common steel	Chassis, frames, wheel parts
Special steel	Gears, axle shafts, crankshafts, fuel injection equipment
Copper	Electricals, radiators, cables
Lead, tin, zinc	Engine metals, solder, body varnish, batteries
Aluminum	Engine parts (e.g. pistons, cylinder heads), wheels, chassis
Noble metals	Emissions after-treatment parts
Other non-ferrous metals	Magnets, plating
Synthetic resin	Steering wheels, bumpers, radiator grilles, body components
Glass	Window glass, mirrors, headlamps
Rubber	Tires, sealing parts, vibration control parts
Ceramics	Plugs, electronic parts, sensors, emissions after-treatment parts
Textiles	Seats, linings, seatbelts
Leather	Seats, packing
Paper	Filters
Wood	Load-carrying platforms, interior equipment
Paints	Ornamental and rustproof paints
Chemicals	Antifreeze, engine oil, transmission oil, brake oil
Animal and vegetable oils	For casting
Fats and oils	For lubrication, heat treatment, etc.

Springs, dampers						
Turbochargers						
Bearings						
Machined parts, e.g. pumps						
Tires and tubes						
Batteries						
Window glass						
Onboard tools, e.g. jacks	;					
Supplies, e.g. extinguish	ers, tire chains					
Electronic parts	Sensors, ECUs, actuators					
Lights, cables, optical fib	ers					
Air conditioners, air clea	ners					
Starters, alternators, ger	nerators, inverters, meters					
Audio systems, phones,	navigation systems					
Safety equipment, e.g. a traction control	nti-lock brakes, airbags,					
Coke	For casting					
Petroleum, electricity, natural gas  Fuel, heat treatment, paint drying, power generation						

#### INVESTMENTS IN EQUIPMENT OF MAJOR MANUFACTURING SECTORS (PROJECTED, FY 2011)



#### INVESTMENTS IN R&D OF MAJOR MANUFACTURING SECTORS (FY 2010)

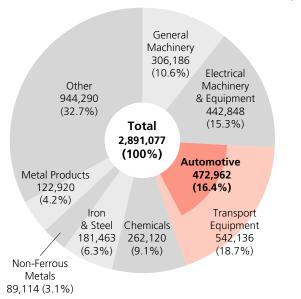


# **Automobile Manufacturing Is a Core Industry**

The automotive industry is one of the Japanese economy's core industrial sectors. In 2010 automotive shipments accounted for 16.4% of the total value of Japan's manufacturing shipments, and 36.6% of the value of the machinery industries' combined shipments. Automotive shipments (both domestic and export shipments, including motorcycles, auto parts, etc.) in value terms totalled 47.3 trillion yen in 2010, up 16.8% from the previous year.

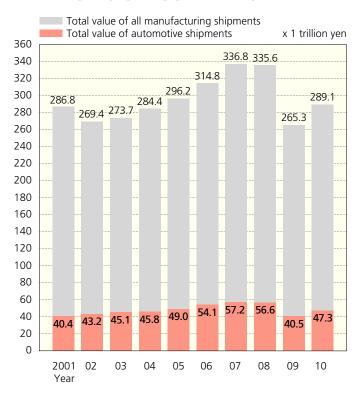
#### SHIPMENTS OF MAJOR MANUFACTURING SECTORS IN VALUE TERMS (2010)

x 100 million yen



#### Breakdown of automotive shipments:

#### COMPARISON OF VALUE OF AUTOMOTIVE SHIPMENTS TO TOTAL VALUE OF ALL MANUFACTURING SHIPMENTS



#### SHIPMENTS OF MAJOR MANUFACTURING SECTORS IN VALUE TERMS

x 100 million yen

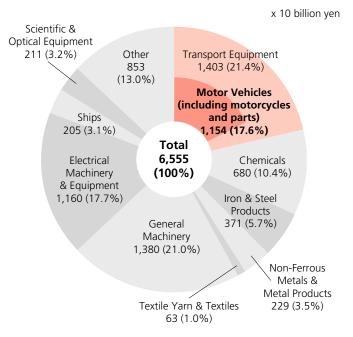
						Ma	chinery Ind	ustries				Automotive	Shipments
Year	Chemicals	Iron & Steel	Non-Ferrous Metals	Metal Products	General Machinery	Electrical Machinery	Transport Equipment		Subtotal	Other	Total	As % of Value of Machinery	As % of Total Value of
						& Equipment		Automotive				Shipments	Manufacturing Shipments
1970	55,402	65,648	30,547	37,277	68,028	73,305	72,758	54,673	223,008	287,383	690,348	24.5	7.9
1975	104,381	113,063	39,087	65,731	106,112	108,213	147,935	105,241	379,551	589,807	1,274,329	27.7	8.3
1980	179,787	178,956	81,186	106,465	175,998	222,346	249,536	212,346	682,457	952,724	2,146,998	31.1	9.9
1985	205,524	177,543	63,836	130,944	241,904	408,422	361,793	276,927	1,055,932	1,063,240	2,653,206	26.2	10.4
1990	235,030	182,687	78,217	185,736	332,249	545,286	468,582	423,106	1,397,439	1,205,939	3,233,726	30.3	13.1
1995	233,625	140,727	64,964	176,465	298,844	548,309	442,145	395,613	1,330,364	1,155,277	3,060,356	29.7	12.9
2000	237,994	119,630	62,189	155,868	304,132	595,817	444,474	400,429	1,385,612	1,115,720	3,035,824	28.9	13.2
2001	232,284	112,018	58,492	145,450	282,965	524,657	451,522	404,215	1,299,143	1,060,156	2,867,544	31.1	14.1
2002	227,483	109,627	56,685	137,365	254,773	460,411	479,974	431,630	1,230,660	967,300	2,693,618	35.1	16.0
2003	233,271	119,030	56,321	132,430	260,683	480,137	498,869	450,500	1,275,564	956,603	2,737,344	35.3	16.5
2004	241,493	141,413	61,931	134,543	290,742	498,469	506,995	458,122	1,335,931	968,597	2,844,183	34.3	16.1
2005	250,271	168,964	67,116	140,159	312,108	495,083	539,999	489,548	1,385,037	988,717	2,962,417	35.3	16.5
2006	261,995	184,727	90,162	144,510	333,313	511,634	598,356	541,091	1,484,034	1,023,649	3,148,346	36.5	17.2
2007	282,939	211,917	107,705	151,889	362,734	553,265	639,100	571,848	1,597,840	1,058,017	3,367,566	35.8	17.0
2008	281,299	243,322	104,805	151,492	402,477	518,797	637,666	566,053	1,558,940	1,015,930	3,355,788	36.3	16.9
2009	242,757	159,884	69,400	124,267	289,320	400,593	471,866	404,915	1,161,779	894,503	2,652,590	34.9	15.3
2010	262,120	181,463	89,114	122,920	306,186	442,848	542,136	472,962	1,291,170	944,290	2,891,077	36.6	16.4

Notes: 1. Shipments from all manufacturing operations with four or more employees are included in this data. 2. Compilation of data on production in value terms was discontinued in 1996 and replaced by data on shipments in value terms. 3. Figures in value terms include domestic consumption tax revenue from shipments. 4. "Electrical Machinery & Equipment" includes IT-related electronic parts and equipment as of 2002.

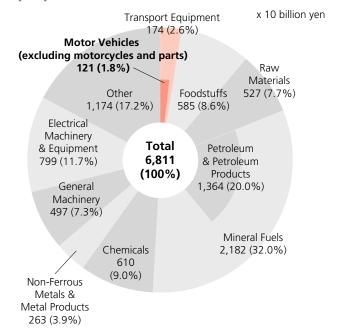
## **Motor Vehicle Exports Show a Decrease**

Japan's gross exports in 2011 decreased by 2.7% from the previous year, while gross imports rose by 12.1%. In value terms, automotive exports dropped 8.4% from 2010 to 11.5 trillion yen, with motorcycle exports rising but motor vehicle and parts exports falling. On the other hand, automotive imports increased, by 11.4% year-on-year to 1.2 trillion yen, with motor vehicle imports showing growth but auto parts imports showing a slight decline.

#### EXPORTS BY PRINCIPAL COMMODITY (FOB) IN 2011



#### IMPORTS BY PRINCIPAL COMMODITY (CIF) IN 2011



#### AUTOMOTIVE EXPORTS IN VALUE TERMS (FOB)

x 100 million yen

	Motor \	/ehicles				Export	s Total
Year		Chg. (%)	Passenger Cars, Trucks, Buses	Auto Parts	Motorcycles & Motorcycle Parts		Chg. (%)
2002	115,675	118.3	87,746	21,172	6,757	521,090	106.4
2003	118,363	102.3	88,950	22,998	6,415	545,484	104.7
2004	124,773	105.4	92,142	25,617	7,014	611,700	112.1
2005	135,132	108.3	99,288	28,006	7,839	656,565	107.3
2006	161,795	119.7	122,995	30,227	8,573	752,462	114.6
2007	185,267	114.5	143,170	33,555	8,543	839,314	111.5
2008	175,126	94.5	137,361	30,655	7,110	810,181	96.5
2009	93,679	53.5	66,933	23,089	3,657	541,706	66.9
2010	125,956	134.5	91,741	30,833	3,382	673,996	124.4
2011	115,417	91.6	82,042	29,972	3,403	655,465	97.3

Note: "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

#### AUTOMOTIVE IMPORTS IN VALUE TERMS (CIF)

x 100 million yen

	Motor Ve	ehicles			Import	s Total
Year		Chg. (%)	Passenger Cars, Trucks, Buses	Auto Parts		Chg. (%)
2002	11,234	108.1	8,038	3,196	422,275	99.6
2003	11,799	105.0	8,279	3,520	443,620	105.1
2004	12,842	108.8	9,055	3,787	492,166	110.9
2005	13,353	104.0	9,149	4,204	569,494	115.7
2006	14,412	107.9	9,163	5,249	673,443	118.3
2007	15,586	108.1	9,294	6,291	731,359	108.6
2008	14,160	90.9	7,499	6,662	789,548	108.0
2009	8,245	58.2	4,549	3,696	514,994	65.2
2010	10,836	131.4	5,957	4,879	607,650	118.0
2011	12,069	111.4	7,352	4,717	681,112	112.1

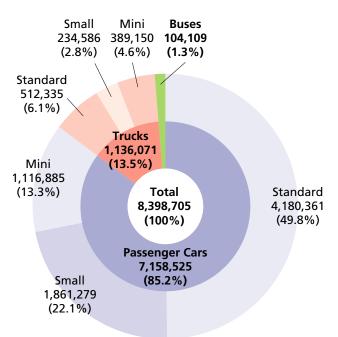
Notes: 1. Motor vehicles include passenger cars, trucks, buses, and chassis. 2. "FOB" = free on board; "CIF" = cost, insurance, and freight. 3. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

## **Motor Vehicle Production Declines for First Time in 2 Years**

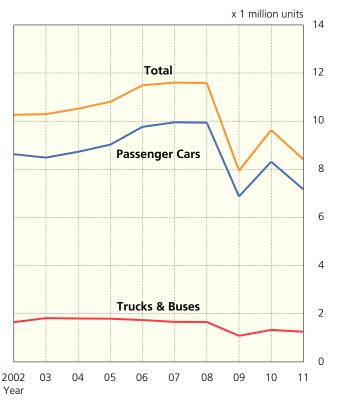
In 2011 motor vehicle production in Japan decreased for the first time in two years, totalling 8.40 million units, down 12.8% from the previous year. Passenger car production fell 13.9% to a total of 7.16 million units. Within that category, standard car production dropped 13.7% to 4.18 million units, small car production slipped 13.8% to 1.86 million units, and minicar production dipped 14.4% to 1.12 million units. Truck and bus production also showed a decline from 2011, shrinking 6.0% to 1.14 million units and 4.8% to 104,000 units, respectively.

#### MOTOR VEHICLE PRODUCTION BY TYPE **IN 2011** In vehicle units





#### TRENDS IN MOTOR VEHICLE PRODUCTION

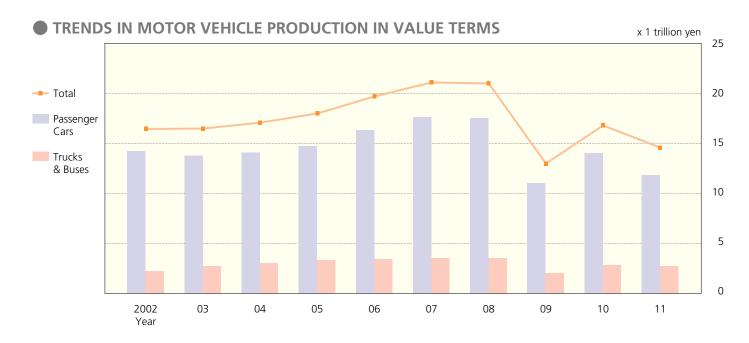


#### MOTOR VEHICLE PRODUCTION

		Pa	assenger Cai	rs						Trucks
Year	Standard	Small	Mini	Total			Standard			Small
i cai	Staridard	Siliali	IVIIII	Total	Chg. (%)	Gasoline	Diesel	Subtotal	Gasoline	Diesel
1970	51,619	2,377,639	749,450	3,178,708	121.7	52,047	206,053	258,100	1,156,729	97,132
1975	209,032	4,198,550	160,272	4,567,854	116.2	84,304	203,866	288,170	1,441,759	168,716
1980	403,338	6,438,847	195,923	7,038,108	114.0	457,208	427,990	885,198	1,663,834	449,477
1985	494,792	6,991,432	160,592	7,646,816	108.1	842,792	435,420	1,278,212	1,218,423	659,470
1990	1,750,783	7,361,224	835,965	9,947,972	109.9	635,255	614,270	1,249,525	517,972	744,971
1995	2,553,703	4,140,629	916,201	7,610,533	97.5	232,514	591,626	824,140	304,495	604,826
2000	3,376,447	3,699,893	1,283,094	8,359,434	103.2	153,280	495,900	649,180	204,253	279,029
2002	3,671,023	3,637,501	1,309,830	8,618,354	106.2	157,225	522,739	679,964	198,002	182,301
2003	3,753,446	3,434,662	1,290,220	8,478,328	98.4	157,420	615,307	772,727	250,019	199,443
2004	4,044,563	3,309,147	1,366,675	8,720,385	102.9	127,529	642,424	769,953	261,902	184,634
2005	4,191,360	3,416,622	1,408,753	9,016,735	103.4	106,530	617,133	723,663	233,694	203,069
2006	4,915,428	3,302,265	1,537,210	9,754,903	108.2	96,083	603,327	699,410	213,687	205,717
2007	5,864,354	2,638,842	1,441,441	9,944,637	101.9	125,262	593,639	718,901	177,425	188,107
2008	5,786,333	2,714,413	1,427,397	9,928,143	99.8	121,443	613,480	734,923	163,237	166,521
2009	3,459,589	2,145,279	1,257,293	6,862,161	69.1	83,442	288,244	371,686	127,004	88,135
2010	4,846,411	2,159,119	1,304,832	8,310,362	121.1	75,016	445,656	520,672	133,043	105,733
2011	4,180,361	1,861,279	1,116,885	7,158,525	86.1	58,951	453,384	512,335	135,335	99,251

Notes: 1. Passenger cars are classified under Japan's Road Vehicles Act in three categories, based primarily on engine capacity: "standard" (over 2,000cc), "small" (661cc-2,000cc), and been treated as components since 1988. 3. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

5



#### MOTOR VEHICLE PRODUCTION IN VALUE TERMS

#### x 1 million yen

V		Passeng	er Cars				Trucks				Buses		Grand
Year	Standard	Small	Mini	Total	Standard	Small	Mini	Tractors	Total	Large	Small	Total	Total
1985	895,041	7,049,323	85,925	8,030,289	1,793,000	1,519,934	679,498	46,745	4,039,177	103,053	101,007	204,060	12,273,526
1990	3,717,356	8,676,715	572,188	12,966,259	1,953,924	1,180,028	591,144	64,913	3,790,009	134,015	66,988	201,003	16,957,271
1995	5,147,637	4,869,427	790,303	10,807,367	1,619,428	849,511	510,579	124,764	3,104,282	107,647	89,441	197,088	14,108,737
2000	6,640,075	4,298,370	1,237,605	12,176,050	1,111,558	543,408	357,765	45,453	2,058,184	80,897	109,007	189,904	14,424,138
2002	8,573,769	4,468,191	1,166,197	14,208,157	1,209,751	441,509	324,822	36,334	2,012,416	97,050	131,813	228,863	16,449,436
2003	8,454,215	4,243,705	1,054,329	13,752,249	1,539,221	540,480	338,236	67,945	2,485,882	116,560	130,268	246,828	16,484,959
2004	8,836,999	4,067,398	1,146,115	14,050,512	1,805,315	561,422	333,606	89,959	2,790,302	105,985	129,577	235,562	17,076,376
2005	9,352,545	4,178,641	1,169,871	14,701,057	1,916,692	588,224	357,615	104,567	2,967,098	127,605	163,069	290,674	17,958,829
2006	10,891,826	4,088,449	1,333,394	16,313,669	2,029,030	574,272	352,050	122,267	3,077,619	131,726	203,231	334,957	19,726,245
2007	13,122,924	3,167,910	1,309,576	17,600,410	2,146,513	512,887	319,400	120,346	3,099,146	129,209	264,477	393,686	21,093,242
2008	13,006,119	3,207,109	1,293,624	17,506,852	2,110,682	463,435	312,374	136,277	3,022,768	136,115	313,594	449,709	20,979,329
2009	7,261,654	2,548,371	1,155,681	10,965,706	1,127,974	312,497	281,888	34,778	1,757,137	109,723	166,115	275,838	12,998,681
2010	10,239,303	2,609,861	1,207,423	14,056,587	1,684,489	358,081	323,800	75,944	2,442,314	118,300	211,359	329,659	16,828,560
2011	8,451,638	2,343,337	1,045,460	11,840,435	1,710,831	351,255	285,454	89,976	2,437,516	97,157	199,301	296,458	14,574,409

Source: Ministry of Economy, Trade and Industry

#### In vehicle units

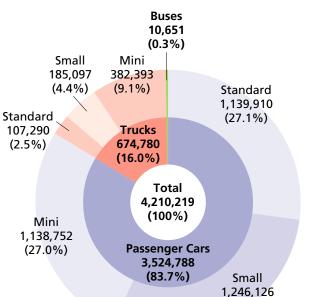
					Bus	ses				
	Mini	Total		Large	Small	Total		Total	Chg. (%)	Year
Subtotal	IVIIII	Total	Chg. (%)	(≥30 passengers)	(≤29 passengers)	Total	Chg. (%)		Cilg. (78)	i Cai
1,253,861	551,922	2,063,883	102.1	15,265	31,301	46,566	111.3	5,289,157	113.1	1970
1,610,475	438,987	2,337,632	90.8	13,624	22,481	36,105	78.8	6,941,591	105.9	1975
2,113,311	914,679	3,913,188	115.2	16,470	75,118	91,588	146.4	11,042,884	114.6	1980
1,877,893	1,388,583	4,544,688	105.2	15,547	64,044	79,591	110.2	12,271,095	107.0	1985
1,262,943	986,171	3,498,639	89.0	15,787	24,398	40,185	95.5	13,486,796	103.5	1990
909,321	804,276	2,537,737	93.9	12,814	34,452	47,266	96.2	10,195,536	96.6	1995
483,282	594,356	1,726,818	98.8	8,035	46,509	54,544	112.7	10,140,796	102.5	2000
380,303	512,373	1,572,640	98.2	11,141	55,180	66,321	114.2	10,257,315	104.9	2002
449,462	524,427	1,746,616	111.1	11,406	49,668	61,074	92.1	10,286,018	100.3	2003
446,536	514,202	1,730,691	99.1	12,286	48,156	60,442	99.0	10,511,518	102.2	2004
436,763	546,185	1,706,611	98.6	11,763	64,550	76,313	126.3	10,799,659	102.7	2005
419,404	521,879	1,640,693	96.1	11,063	77,574	88,637	116.1	11,484,233	106.3	2006
365,532	453,587	1,538,020	93.7	11,516	102,154	113,670	128.2	11,596,327	101.0	2007
329,758	443,718	1,508,399	98.1	11,660	127,442	139,102	122.4	11,575,644	99.8	2008
215,139	398,276	985,101	65.3	8,783	78,012	86,795	62.4	7,934,057	68.5	2009
238,776	449,776	1,209,224	122.8	10,274	99,060	109,334	126.0	9,628,920	121.4	2010
234,586	389,150	1,136,071	94.0	9,427	94,682	104,109	95.2	8,398,705	87.2	2011

<sup>&</sup>quot;mini" (660cc and under); see page 66 for details. 2. KD sets have been excluded since 1979; they represent less than 60% of the cost of compositional components per vehicle and have Source: Japan Automobile Manufacturers Association

### **Motor Vehicle Sales Decline from Previous Year**

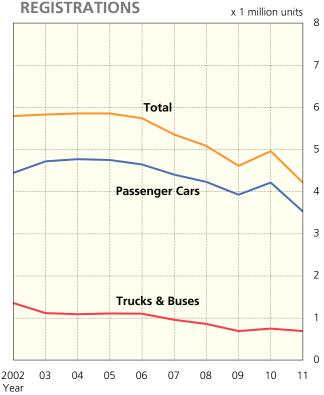
Passenger car and commercial vehicle demand in Japan in 2011 totalled 4.21 million units, a decrease of 15.1% from the previous year. Total passenger car sales dropped 16.3% to 3.53 million units, with the standard car segment shrinking 19.7% to 1.14 million units, small cars declining 17.3% to 1.25 million units, and minicars falling 11.4% to 1.14 million units. Sales of trucks and buses decreased 7.7% and 16.6% from 2010, to 675,000 and 11,000 units respectively.





(29.6%)

# TRENDS IN NEW MOTOR VEHICLE



#### NEW MOTOR VEHICLE REGISTRATIONS

		Pa	assenger Ca	rs				Trucks		
Year	Standard	Small	Mini	Subtotal	Chg. (%)	Standard	Small	Mini	Subtotal	Chg. (%)
1970	9,068	1,652,899	717,170	2,379,137	116.8	168,086	986,673	538,743	1,693,502	95.6
1975	49,125	2,531,396	157,120	2,737,641	119.7	121,118	999,155	431,181	1,551,454	100.7
1980	71,931	2,608,215	174,030	2,854,176	94.0	154,472	1,144,167	839,308	2,137,947	102.2
1985	73,539	2,869,527	161,017	3,104,083	100.3	118,009	945,484	1,367,685	2,431,178	104.7
1990	467,490	3,839,221	795,948	5,102,659	115.9	193,775	1,449,678	1,006,456	2,649,909	93.7
1995	889,260	2,654,291	900,355	4,443,906	105.6	177,264	1,411,296	815,265	2,403,825	104.6
2000	770,220	2,208,387	1,281,265	4,259,872	102.5	84,626	1,015,313	586,660	1,686,599	99.6
2002	674,094	2,460,103	1,307,157	4,441,354	103.5	76,035	739,502	518,843	1,334,380	83.4
2003	1,229,907	2,194,194	1,291,819	4,715,920	_	208,752	373,259	509,044	1,091,055	_
2004	1,358,281	2,037,767	1,372,083	4,768,131	101.1	186,588	361,449	519,067	1,067,104	97.8
2005	1,271,349	2,089,992	1,387,068	4,748,409	99.6	197,548	351,708	536,648	1,085,904	101.8
2006	1,225,867	1,908,267	1,507,598	4,641,732	97.8	209,283	354,870	516,021	1,080,174	99.5
2007	1,299,168	1,654,025	1,447,106	4,400,299	94.8	171,998	293,021	472,713	937,732	86.8
2008	1,250,987	1,549,677	1,426,979	4,227,643	96.1	146,690	249,655	442,914	839,259	89.5
2009	1,160,175	1,480,137	1,283,429	3,923,741	92.8	87,692	180,509	404,742	672,943	80.2
2010	1,419,909	1,507,693	1,284,665	4,212,267	107.4	101,697	187,642	441,755	731,094	108.6
2011	1,139,910	1,246,126	1,138,752	3,524,788	83.7	107,290	185,097	382,393	674,780	92.3

Notes: 1. Chassis-based through 2002, data compilation became vehicle registration number-based as of 2003. 2. Truck figures include special-purpose vehicles (except large ones). 3. Data includes

#### ● NEW MINI-VEHICLE SALES BY TYPE

In vehicle units

Year	Passenger Cars	Commercial Vehicles	Commercial Vehicles	Commercial Vehicles	Total		
rear	(Minicars)	("Bonnet" minivans)	(Cab-over-engine minivans)	(Mini-trucks)	Total	Chg. (%)	
2002	1,307,296	101,789	163,412	258,203	1,830,700	98.8	
2003	1,291,889	89,532	172,644	250,690	1,804,755	98.6	
2004	1,372,083	77,297	183,995	257,775	1,891,150	104.8	
2005	1,387,068	77,547	197,141	261,960	1,923,716	101.7	
2006	1,507,598	68,714	204,838	242,469	2,023,619	105.2	
2007	1,447,106	57,509	196,040	219,164	1,919,819	94.9	
2008	1,426,979	51,622	185,806	205,486	1,869,893	97.4	
2009	1,283,429	42,932	167,358	194,452	1,688,171	90.3	
2010	1,284,665	41,630	180,505	219,620	1,726,420	102.3	
2011	1,138,752	33,023	168,705	180,665	1,521,145	88.1	

Notes: 1. Figures here through 2003 include other types of mini-vehicles not counted in the data in the bottom chart. 2. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

Source: Japan Mini Vehicles Association

#### **● RECREATIONAL VEHICLE (RV) SALES**

In vehicle units

Year	Station Wagons	Vans	Off-Road	Minivans	Total	
			4WD Vehicles			Chg. (%)
2002	850,219	10,187	198,291	1,123,797	2,182,494	103.8
2003	771,384	6,927	183,435	1,201,270	2,163,016	99.1
2004	669,501	7,347	170,447	1,230,788	2,078,083	96.1
2005	612,667	9,363	179,776	1,169,006	1,970,812	94.8
2006	509,936	9,406	211,135	1,126,216	1,856,693	94.2
2007	460,950	8,752	226,159	980,181	1,676,042	90.3
2008	454,164	9,396	213,209	938,694	1,615,463	96.4
2009	339,827	7,433	157,284	890,265	1,394,809	86.3
2010	365,565	8,762	195,783	946,473	1,516,583	108.7
2011	378,041	8,482	170,304	748,133	1,304,960	86.0

Note: "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

Source: Japan Automobile Dealers Association

In vehicle units

	Bus	ses								
Large	Small	Subtotal	Chg. (%)	Total	Chg. (%)	Total Vehicle Registrations	Chg. (%)	Total Mini- Vehicles	Chg. (%)	Year
10,256	17,572	27,828	104.2	4,100,467	106.9	2,844,554	104.9	1,255,913	111.7	1970
8,818	11,018	19,836	87.4	4,308,931	111.9	3,720,630	118.8	588,301	82.1	1975
9,414	13,973	23,387	97.5	5,015,510	97.3	4,002,172	93.1	1,013,338	118.3	1980
8,798	12,775	21,573	106.4	5,556,834	102.2	4,028,132	101.3	1,528,702	104.8	1985
9,162	15,763	24,925	105.9	7,777,493	107.2	5,975,089	107.4	1,802,404	106.3	1990
6,475	10,828	17,303	97.0	6,865,034	105.2	5,149,414	104.8	1,715,620	106.2	1995
4,333	12,238	16,571	114.5	5,963,042	101.7	4,095,117	102.7	1,867,925	99.7	2000
4,729	11,630	16,359	102.7	5,792,093	98.1	3,966,093	97.7	1,826,000	98.8	2002
5,862	15,341	21,203	_	5,828,178	100.6	4,027,315	101.5	1,800,863	98.6	2003
5,098	13,049	18,147	85.6	5,853,382	100.4	3,962,232	98.4	1,891,150	105.0	2004
5,856	11,898	17,754	97.8	5,852,067	100.0	3,928,351	99.1	1,923,716	101.7	2005
6,064	11,536	17,600	99.1	5,739,506	98.1	3,715,887	94.6	2,023,619	105.2	2006
5,153	10,464	15,617	88.7	5,353,648	93.3	3,433,829	92.4	1,919,819	94.9	2007
5,357	9,976	15,333	98.2	5,082,235	94.9	3,212,342	93.5	1,869,893	97.4	2008
4,234	8,338	12,572	82.0	4,609,256	90.7	2,921,085	90.9	1,688,171	90.3	2009
4,777	7,998	12,775	101.6	4,956,136	107.5	3,229,716	110.6	1,726,420	102.3	2010
3,136	7,515	10,651	83.4	4,210,219	84.9	2,689,074	83.3	1,521,145	88.1	2011

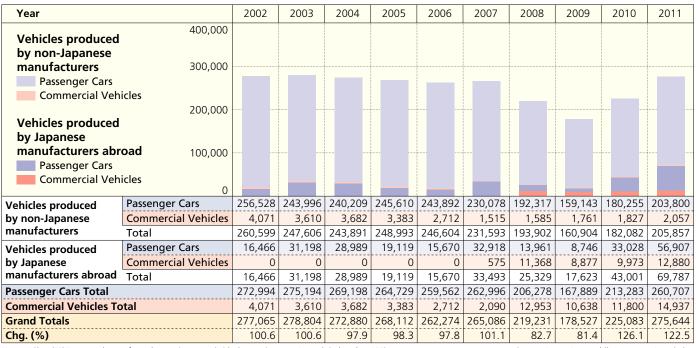
imported cars. 4. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

# **Sales of Imported Vehicles Rise for Second Consecutive Year**

Imported vehicle sales in Japan in 2011 totalled 276,000 units, up 22.5% from the previous year. Passenger car sales increased 22.2% to 261,000 units, and commercial vehicles (trucks and buses) surged 26.6% to 15,000 units. Sales of used imported vehicles increased 0.3% to 484,000 units, with passenger cars rising 0.3% to 462,000 units, and trucks growing 7.4% to 14,000 units.

#### TRENDS IN IMPORTED MOTOR VEHICLE SALES

In vehicle units



Note: "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

Source: Japan Automobile Importers Association

#### IMPORTED MOTOR VEHICLES (ON CUSTOMS CLEARANCE BASIS)

In vehicle units

	Passenger		Commercial		Total Motor		
Year	Cars	Chg. (%)	Vehicles	Other	Vehicles	Chg. (%)	Motorcycles
1980	46,285	71.4	547	1,085	47,917	72.2	17,015
1985	52,225	118.3	380	546	53,151	118.4	7,087
1990	251,169	128.6	911	761	252,841	128.6	28,696
1995	401,836	136.0	2,469	390	404,695	130.3	43,936
2000	283,582	109.2	1,470	376	285,428	109.3	74,906
2002	288,657	100.5	1,288	569	290,514	100.3	629,193
2003	281,526	97.5	1,405	733	283,664	97.6	562,415
2004	286,798	101.9	1,715	748	289,261	102.0	485,572
2005	282,654	98.6	1,420	660	284,734	98.4	444,635
2006	278,726	98.6	1,615	654	280,995	98.7	458,966
2007	291,387	104.5	1,662	708	293,757	104.5	458,722
2008	228,255	78.3	14,288	796	243,339	82.8	413,817
2009	145,687	63.8	9,088	593	155,368	63.8	367,727
2010	230,791	158.4	11,922	780	243,493	156.7	353,260
2011	273,798	118.6	14,185	816	288,799	118.6	386,949

Notes: 1. "Other" denotes special-purpose vehicles and engine-mounted chassis. 2. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100) Source: Trade Statistics of Japan, Ministry of Finance

#### USED IMPORTED VEHICLE SALES

In vehicle units

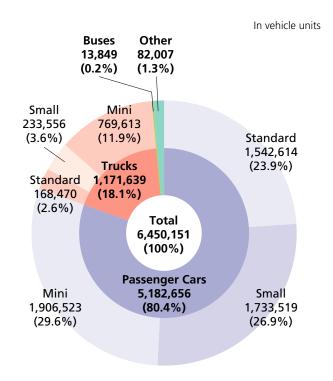
	_				1				
Year	Passenger Cars	Chg. (%)	Trucks	Chg. (%)	Special-Purpose Vehicles	Chg. (%)	Other	Total	Chg. (%)
2002	537,750	102.3	5,169	110.4	42,669	90.2	315	585,903	101.4
2003	555,895	103.4	6,148	118.9	38,025	89.1	308	600,376	102.5
2004	576,809	103.8	7,961	129.5	31,856	83.8	281	616,907	102.8
2005	588,397	102.0	9,468	118.9	27,269	85.6	228	625,362	101.4
2006	586,398	99.7	11,121	117.5	22,640	83.0	303	620,462	99.2
2007	543,211	92.6	12,518	112.6	17,574	77.6	204	573,507	92.4
2008	504,710	92.9	12,441	99.4	13,292	75.6	355	530,798	92.6
2009	470,986	93.3	12,547	100.9	10,083	75.9	165	493,781	93.0
2010	461,050	97.9	13,381	106.6	7,878	78.1	182	482,491	97.7
2011	462,435	100.3	14,370	107.4	6,756	85.8	164	483,725	100.3

1. Passenger cars are classified under Japan's Road Vehicles Act in three categories, based primarily on engine capacity: "standard" (over 2,000cc), "small" (661cc-2,000cc), and "mini" (660cc and under); see page 66 for details. 2. "Other" includes buses, large special-purpose vehicles and small-sized three-wheeled trucks. 3. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100). Source: Japan Automobile Importers Association

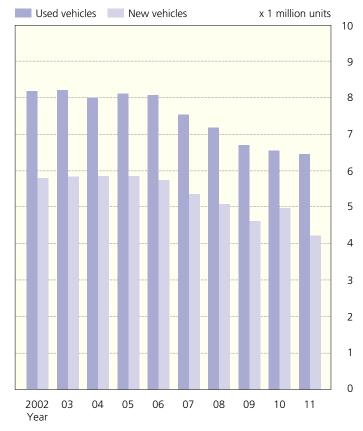
# **Used Vehicle Sales Decline for Sixth Straight Year**

In 2011 sales of used motor vehicles decreased 1.4% from the previous year to total 6.45 million units, with used passenger car sales declining 1.9% to 5.18 million units. In this category, standard passenger cars dropped 3.1% to 1.54 million units and small cars fell 4.6% to 1.73 million units, but minicars increased 1.8% to 1.91 million units. While used truck sales grew 1.4% from 2010 to 1.17 million units, used bus sales dipped 2.2% to 14,000 units.

#### USED VEHICLE SALES BY TYPE IN 2011



#### TRENDS IN NEW AND USED MOTOR **VEHICLE SALES**



#### USED MOTOR VEHICLE SALES

In vehicle units

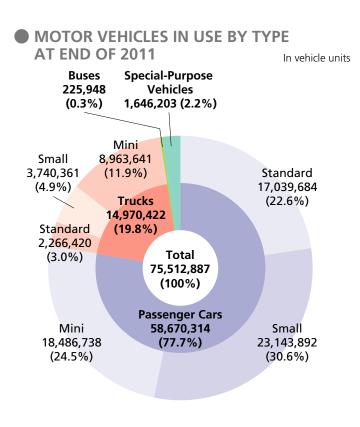
		Pass	enger Caı	's				Trucks			Bus	es	Oth	er		
Year	Standard	Small	Mini	Subtotal	Chg. (%)	Standard	Small	Mini	Subtotal	Chg. (%)		Chg. (%)		Chg. (%)	Total	Chg. (%)
1985	160,150	3,295,092	356,726	3,811,968	100.9	139,459	589,321	1,125,545	1,854,325	108.3	11,655	103.1	44,620	116.7	5,722,568	103.3
1990	304,193	3,945,086	304,782	4,554,061	106.2	185,851	555,634	1,746,495	2,487,980	102.1	13,377	98.3	54,118	107.3	7,109,536	104.7
1995	994,311	3,845,076	727,259	5,566,646	106.6	221,523	521,244	1,538,718	2,281,485	102.2	13,327	105.4	84,409	119.1	7,945,867	105.4
2000	1,742,786	3,050,087	1,448,546	6,241,419	104.8	201,714	412,511	1,169,626	1,783,851	99.1	15,173	102.7	173,475	105.2	8,213,918	103.5
2002	1,861,694	2,744,604	1,714,827	6,321,125	100.4	206,088	374,111	1,089,079	1,669,278	97.5	17,064	103.6	159,825	93.9	8,167,292	99.7
2003	1,910,017	2,640,456	1,809,840	6,360,313	100.6	220,470	379,461	1,062,660	1,662,591	99.6	17,392	101.9	154,971	97.0	8,195,267	100.3
2004	1,984,562	2,524,764	1,777,866	6,287,192	98.9	225,715	363,523	972,000	1,561,238	93.9	17,240	99.1	136,242	87.9	8,001,912	97.6
2005	2,002,563	2,460,410	1,890,154	6,353,127	101.0	240,060	368,778	980,714	1,589,552	101.8	18,871	109.5	144,910	106.4	8,106,460	101.3
2006	1,959,739	2,304,226	2,033,569	6,297,534	99.1	244,770	365,180	1,003,607	1,613,557	101.5	20,643	109.4	135,130	93.3	8,066,864	99.5
2007	1,810,596	2,105,122	2,022,866	5,938,584	94.3	220,989	302,043	935,745	1,458,777	90.4	16,418	79.5	116,317	86.1	7,530,096	93.3
2008	1,728,090	1,944,766	1,995,333	5,668,189	95.4	225,848	278,673	884,836	1,389,357	95.2	16,193	98.6	104,516	89.9	7,178,255	95.3
2009	1,619,370	1,855,071	1,864,874	5,339,315	94.2	194,180	266,395	787,957	1,248,532	89.9	15,293	94.4	95,452	91.3	6,698,592	93.3
2010	1,592,110	1,816,696	1,873,466	5,282,272	98.9	177,327	245,642	732,854	1,155,823	92.6	14,163	92.6	87,238	91.4	6,539,496	97.6
2011	1,542,614	1,733,519	1,906,523	5,182,656	98.1	168,470	233,556	769,613	1,171,639	101.4	13,849	97.8	82,007	94.0	6,450,151	98.6

1. Passenger cars are classified under Japan's Road Vehicles Act in three categories, based primarily on engine capacity: "standard" (over 2,000cc), "small" (661cc-2,000cc), and "mini" (660cc and under); see page 66 for details. 2. Includes imported vehicles. 3. "Other" refers to emergency vehicles, special vehicles equipped with beds, refrigerated trucks, tank trucks, tractors, bulldozers, steamrollers, snowplows, snowmobiles, etc., that are assigned special registration numbers. 4. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

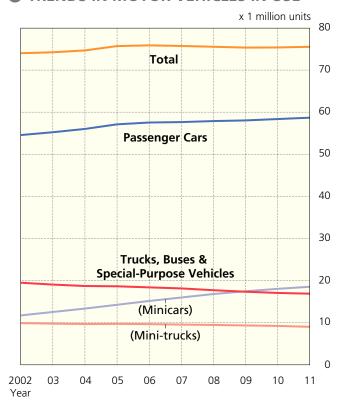
Sources: Japan Automobile Dealers Association; Japan Mini Vehicles Association

# Slight Increase in Number of Motor Vehicles in Use

At the end of December 2011, motor vehicles in use in Japan (excluding motorcycles) totalled 75.5 million units, a 0.2% increase over the previous year. Passenger cars in use increased 0.6% to 58.7 million units, with standard and minicars growing 0.9% and 2.8% to 17.0 million and 18.5 million units respectively, but small cars dropping 1.4% to 23.1 million units. Meanwhile, trucks in use slipped 2.1% from 2010 to 15.0 million units and buses in use decreased 0.6% to 226,000 units. At the end of March 2011, the average service life of motor vehicles in Japan was 12.43 years for passenger cars, 13.04 years for trucks, and 17.37 years for buses.



#### TRENDS IN MOTOR VEHICLES IN USE



#### MOTOR VEHICLES IN USE (at end of every calendar year)

		P	assenger Ca	rs				Trucks		
Year	Standard	Small	Mini	Subtotal	Chg. (%)	Standard	Small	Mini	Subtotal	Chg. (%)
1970	77,374	6,457,181	2,244,417	8,778,972	126.6	798,256	4,478,486	3,005,017	8,281,759	107.1
1975	207,511	14,417,680	2,611,130	17,236,321	108.7	1,158,465	6,100,206	2,785,182	10,043,853	98.9
1980	472,314	21,011,096	2,176,110	23,659,520	104.4	1,494,464	7,155,221	4,527,794	13,177,479	104.8
1985	711,914	25,116,179	2,016,487	27,844,580	102.6	1,668,852	6,679,665	8,791,289	17,139,806	105.5
1990	1,784,594	30,554,652	2,584,926	34,924,172	107.1	2,176,488	6,609,536	12,535,415	21,321,439	101.1
1995	7,874,189	31,030,462	5,775,386	44,680,037	104.7	2,574,433	6,213,405	11,642,311	20,430,149	98.9
2000	13,942,626	28,593,491	9,901,258	52,437,375	102.5	2,596,421	5,474,660	10,154,427	18,225,508	97.8
2002	15,375,465	27,493,644	11,670,730	54,539,839	101.9	2,531,293	5,111,024	9,838,107	17,480,424	97.8
2003	15,836,593	26,885,069	12,490,928	55,212,590	101.2	2,476,588	4,870,933	9,732,853	17,080,374	97.7
2004	16,295,520	26,401,167	13,297,363	55,994,050	101.4	2,464,873	4,694,922	9,621,053	16,780,848	98.2
2005	16,634,529	26,254,546	14,201,714	57,090,789	102.0	2,474,378	4,594,363	9,665,130	16,733,871	99.7
2006	16,714,523	25,698,303	15,108,217	57,521,043	100.8	2,465,823	4,431,103	9,602,484	16,499,410	98.6
2007	16,771,502	24,921,226	15,931,025	57,623,753	100.2	2,455,268	4,323,579	9,495,420	16,274,267	98.6
2008	16,748,373	24,356,113	16,760,486	57,864,972	100.4	2,386,255	4,102,553	9,407,694	15,896,502	97.7
2009	16,688,645	23,919,019	17,412,189	58,019,853	100.3	2,319,612	3,952,534	9,288,679	15,560,825	97.9
2010	16,890,402	23,470,003	17,986,982	58,347,387	100.6	2,281,711	3,825,632	9,177,282	15,284,625	98.2
2011	17,039,684	23,143,892	18,486,738	58,670,314	100.6	2,266,420	3,740,361	8,963,641	14,970,422	97.9

Notes: 1. "Special-purpose vehicles" refers to emergency vehicles, special vehicles equipped with beds, refrigerated trucks, tank trucks, tractors, bulldozers, steamrollers, snowplows, 100). 3. "Three-wheeled vehicles" includes three-wheeled passenger cars, trucks, and special-purpose vehicles.

#### PRIVATE PASSENGER CARS IN USE PER 100 HOUSEHOLDS BY PREFECTURE (at March 31, 2011)

In vehicle units 1. Fukui 2. Toyam 3. Gunm 4. Yamag 174.8 171.5 Toyama Gunma Yamagata 166.7 165.3 5. Gifu 164.7 6. Tochigi 7. Iwate\* 8. Fukushi 9. Ibaraki 163.5 163.2 Fukushima\* 161.9 160 9 157.9 10. Nagano 11. Niigata 153.9 12. Yamanashi 13. Ishikawa 14. Miyagi\* 153.3 149 5 148.8 Saga 148.4 16. Mie 146.3 17. Shizuoka 18. Shiga 143.9 142.4 19. Tottori 141.9 20. Shimane 21. Okayama 22. Akita 137.8 137.1 136.6 23. Tokushima 24. Aichi 25. Kagawa 26. Kumamoto 133.6 132.8 132.4 128.5 27. Oita 126.5 28. Okinawa 29. Miyazaki 30. Yamaguchi 124.3 123.9 121.1 . Aomori 120.3 32. Wakayama 118.6 33. Nara 34. Kagoshima 112.2 111.5 35. Ehime 110.0 36. Hiroshima 37. Fukuoka 109.3 108.3 38. Kochi 106.3 39. 40. Nagasaki 105.7 Saitama Chiba 102.5 41 1014 42. Hokkaido 100.3 43. Hyogo 93.4 44. Kyoto 86.0 75.4 45. Kanagawa 46. Osaka 67.7 47. Tokyo 48.4

\*Figures for Iwate, Fukushima and Miyagi are estimates because households in 22 municipalities there affected by the March 11, 2011 earthquake and tsunami are not included in the count Source: Automobile Inspection & Registration Information Association

50

108.1

100

150

National Average

0

#### PASSENGER CARS IN USE BY YEAR OF **FIRST REGISTRATION**

At March 31, 2011

Year of First Registration	Vehicles in Use	% of Total Vehicles in Use
April 2010-March 2011	2,652,963	6.61
April 2009-March 2010	2,860,058	7.13
April 2008-March 2009	2,438,217	6.08
April 2007-March 2008	2,786,771	6.94
April 2006-March 2007	2,829,498	7.05
April 2005-March 2006	3,018,947	7.52
April 2004-March 2005	3,014,396	7.51
April 2003-March 2004	2,858,398	7.12
April 2002-March 2003	2,867,090	7.14
April 2001-March 2002	2,525,750	6.29
April 2000-March 2001	2,443,551	6.09
April 1999-March 2000	1,990,954	4.96
April 1998-March 1999	1,808,985	4.51
April 1997-March 1998	1,468,422	3.66
-March 1997	4,571,132	11.39
Total Vehicles in Use	40,135,132	100.00

#### AVERAGE AGE BY TYPE

In years

Year	Passenger Cars	Trucks	Buses
2002	6.23	7.77	8.97
2003	6.39	8.10	9.24
2004	6.58	8.17	9.33
2005	6.77	8.36	9.53
2006	6.90	8.50	9.61
2007	7.09	8.68	9.80
2008	7.23	8.98	10.02
2009	7.48	9.16	10.26
2010	7.56	9.62	10.50
2011	7.74	10.04	10.78

#### AVERAGE SERVICE LIFE BY TYPE

In years

Year	Passenger Cars	Trucks	Buses
2002	10.55	10.92	13.98
2003	10.77	11.23	14.41
2004	10.97	11.84	14.48
2005	10.93	11.72	15.34
2006	11.10	11.47	15.02
2007	11.66	11.92	14.83
2008	11.67	11.72	15.62
2009	11.68	13.50	15.00
2010	12.70	12.72	16.59
2011	12.43	13.04	17.37

Notes: 1. "Average age" means the average number of years elapsed since first registration. 2. "Average service life" means average vehicle lifespan. The method of calculating average service life changed in 2001 for passenger cars and trucks and in 2002 for buses. 3. "Average age" and "average service life" figures are as at the end of every fiscal year. 4. The above three tables exclude mini-vehicles.

Source: Automobile Inspection & Registration Information Association

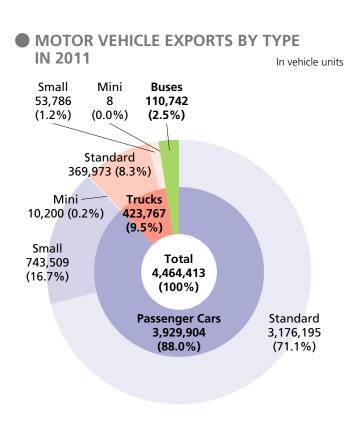
In vehicle units

	Buse	<b>2</b> S		Special-Purp	ose Vehicles			<b>-</b> 11	Three-	
Large	Small	Subtotal	Chg. (%)		Chg. (%)	Total	Chg. (%)	Trailers	Wheeled Vehicles	Year
104,895	83,085	187,980	110.5	333,132	110.5	17,581,843	116.2	23,079	243,934	1970
102,186	124,098	226,284	101.7	584,100	101.7	28,090,558	104.9	39,808	47,998	1975
106,633	123,387	230,020	100.4	789,155	100.4	37,856,174	104.5	56,804	17,724	1980
108,967	122,261	231,228	100.5	941,647	100.5	46,157,261	103.7	65,485	6,123	1985
114,819	130,849	245,668	101.6	1,206,390	101.6	57,697,669	104.7	87,359	4,056	1990
114,478	128,617	243,095	99.1	1,500,219	99.1	66,853,500	102.8	120,171	3,621	1995
110,046	125,437	235,483	99.9	1,750,733	99.9	72,649,099	101.3	133,676	3,827	2000
110,058	123,347	233,405	99.4	1,735,682	99.4	73,989,350	100.8	136,172	3,603	2002
109,909	121,909	231,818	99.3	1,689,629	99.3	74,214,411	100.3	137,510	3,478	2003
109,703	121,231	230,934	99.6	1,649,686	99.6	74,655,518	100.6	142,032	3,471	2004
109,917	121,816	231,733	100.3	1,630,062	98.8	75,686,455	101.4	147,626	3,280	2005
109,763	121,918	231,681	100.0	1,606,934	98.6	75,859,068	100.2	151,441	3,238	2006
109,621	121,307	230,928	99.7	1,585,873	98.7	75,714,821	99.8	154,798	3,201	2007
109,808	120,873	230,681	99.9	1,536,160	96.9	75,528,315	99.8	157,951	3,119	2008
108,760	119,637	228,397	99.0	1,515,411	98.6	75,324,486	99.7	152,381	3,127	2009
108,136	119,135	227,271	99.5	1,502,593	99.2	75,361,876	100.0	152,834	3,120	2010
107,435	118,513	225,948	99.4	1,646,203	109.6	75,512,887	100.2	154,100	3,089	2011

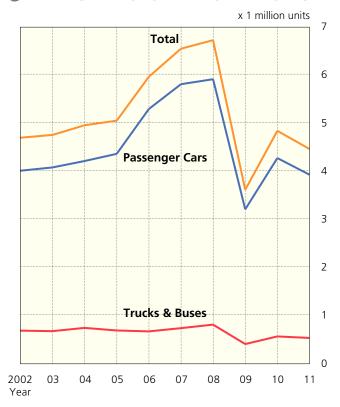
200

# **Motor Vehicle Exports Show First Decrease in 2 Years**

Exports of motor vehicles in 2011 decreased 7.8% from the previous year to 4.46 million units. Passenger car exports dropped 8.1% to 3.93 million units, truck exports fell 5.9% to 424,000 units, and bus exports shrank 4.4% to 111,000 units. Although the value of automobile exports therefore decreased 0.5% from the previous year to US\$ 101.9 billion, the value of auto parts exports rose 4.8% to US\$ 40.2 billion, bringing the total value of auomotive exports to US\$ 142.1 billion, up 0.9% from 2010.



#### TRENDS IN MOTOR VEHICLE EXPORTS

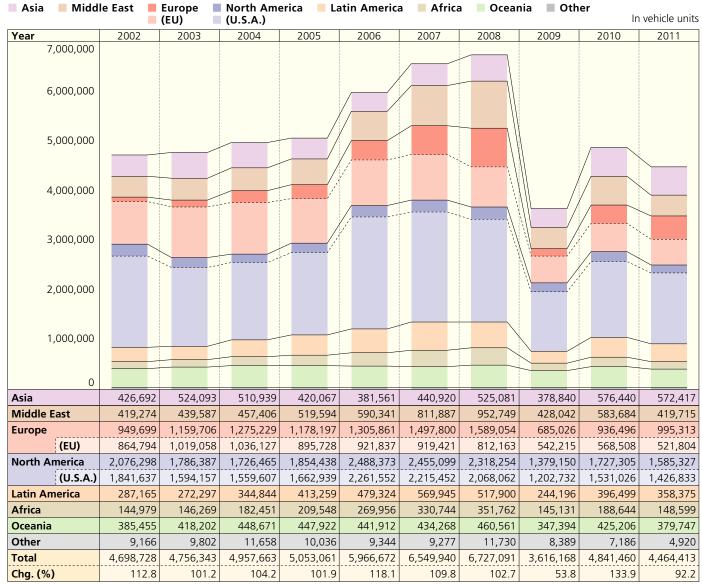


#### MOTOR VEHICLE EXPORTS

		F	Passenger Cars					Trucks
Year	Standard	Small	Mini	Subtotal	Chg. (%)	Standard	Small	Mini
1970	715	,450	10,136	725,586	129.5	65,170	272,549	13,892
1975	1,821	,835	5,451	1,827,286	105.8	168,370	643,232	22,071
1980	345,413	3,580,623	21,124	3,947,160	127.2	332,257	1,548,251	73,177
1985	493,047	3,932,414	1,301	4,426,762	111.2	1,196,973	1,029,757	11,374
1990	1,343,967	3,138,147	16	4,482,130	101.8	944,737	364,376	8
1995	1,156,122	1,732,050	8,044	2,896,216	86.2	612,654	236,929	276
2000	2,333,263	1,462,069	520	3,795,852	101.0	530,823	86,329	718
2002	2,783,405	1,228,525	443	4,012,373	112.4	567,313	70,218	62
2003	2,856,312	1,222,433	1,753	4,080,498	101.7	553,406	76,787	61
2004	2,995,259	1,217,013	1,755	4,214,027	103.3	591,233	96,453	109
2005	3,164,603	1,198,273	292	4,363,168	103.5	521,848	89,946	162
2006	3,845,081	1,449,608	808	5,295,497	121.4	488,632	89,201	141
2007	4,450,934	1,359,414	1,611	5,811,959	109.8	527,010	89,128	312
2008	4,379,569	1,534,975	885	5,915,429	101.8	567,596	90,581	41
2009	2,403,359	804,980	300	3,208,639	54.2	267,060	48,447	0
2010	3,453,951	818,660	2,755	4,275,366	133.2	397,404	52,908	0
2011	3,176,195	743,509	10,200	3,929,904	91.9	369,973	53,786	8

Notes: 1. Passenger cars are classified under Japan's Road Vehicles Act in three categories, based primarily on engine capacity: "standard" (over 2,000cc), "small" (661cc-2,000cc), and "mini" (660cc and manufactured in Japan. 3. KD sets have been excluded since 1979; they represent less than 60% of the cost of compositional components per vehicle and have been treated as components since 1988.

#### MOTOR VEHICLE EXPORT TRENDS (BY REGION OF DESTINATION)



Note: "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

In vehicle units

			Bus	ses				
Subtotal	Chg. (%)	Large	Small	Subtotal	Chg. (%)	Total	Chg. (%)	Year
351,611	120.9	4,520	5,059	9,579	141.6	1,086,776	126.7	1970
833,673	95.3	6,406	10,247	16,653	104.3	2,677,612	102.3	1975
1,953,685	137.2	7,616	58,500	66,116	179.4	5,966,961	130.8	1980
2,238,104	108.0	6,249	59,357	65,606	116.7	6,730,472	110.2	1985
1,309,121	90.6	6,066	33,895	39,961	113.7	5,831,212	99.1	1990
849,859	82.8	8,028	36,706	44,734	60.8	3,790,809	85.0	1995
617,870	100.8	7,131	34,032	41,163	107.3	4,454,885	101.0	2000
637,593	115.3	9,346	39,416	48,762	109.6	4,698,728	112.8	2002
630,254	98.8	8,300	37,291	45,591	93.5	4,756,343	101.2	2003
687,795	109.1	11,692	44,149	55,841	122.5	4,957,663	104.2	2004
611,956	89.0	9,957	67,980	77,937	139.6	5,053,061	101.9	2005
577,974	94.4	11,567	81,634	93,201	119.6	5,966,672	118.1	2006
616,450	106.7	13,887	107,644	121,531	130.4	6,549,940	109.8	2007
658,218	106.8	17,574	135,870	153,444	126.3	6,727,091	102.7	2008
315,507	47.9	11,106	80,916	92,022	60.0	3,616,168	53.8	2009
450,312	142.7	13,969	101,813	115,782	125.8	4,841,460	133.9	2010
423,767	94.1	14,495	96,247	110,742	95.6	4,464,413	92.2	2011

under); see page 66 for details. Vehicle type classification in this table differs somewhat from that used in Ministry of Finance export data. 2. Figures represent ex-factory export shipments of motor vehicles 4. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

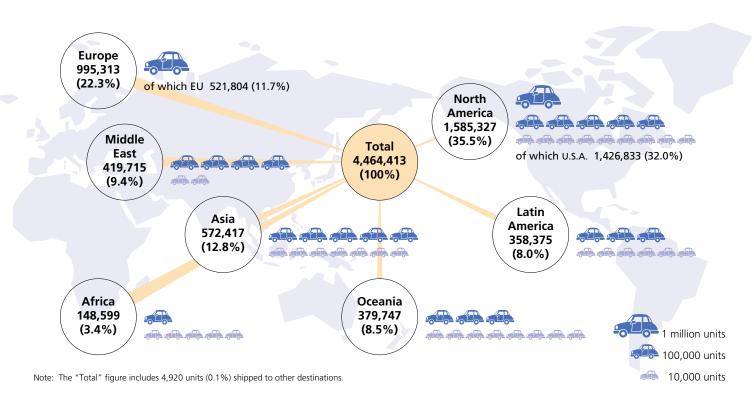
Source: Japan Automobile Manufacturers Association

# A Decline in Motor Vehicle Exports Worldwide, Except to Europe

Compared to the previous year, motor vehicle exports in 2011 increased 6.3% to Europe, but declined 28.1% to the Middle East, 21.2% to Africa, 10.7% to Oceania, 9.6% to Latin America, 8.2% to North America, and 0.7% to Asia.

#### MOTOR VEHICLE EXPORTS BY DESTINATION IN 2011

In vehicle units



#### MOTOR VEHICLE EXPORT TRENDS (BY REGION OF DESTINATION)

In %

Asia		9.1	11.0	10.3	8.3	6.4	6.7	7.8	10.5	11.9	12.8
Middle Ea	ıst	8.9	9.2	9.2	10.3	9.9	12.4	14.2	11.8	12.1	9.4
Europe	(EU)	<b>20.2</b> (17.8)	<b>24.4</b> (20.8)	<b>25.7</b> (20.9)	<b>23.3</b> (17.7)	<b>21.9</b> (15.4)	<b>22.9</b> (14.0)	23.6 (12.1)	19.0 (15.0)	19.3 (11.7)	<b>22.3</b> (11.7)
North America	(U.S.A.)	<b>44.2</b> (39.2)	<b>37.6</b> (33.5)	<b>34.8</b> (31.5)	<b>36.7</b> (32.9)	<b>41.7</b> (37.9)	<b>37.5</b> (33.8)	<b>34.5</b> (30.7)	<b>38.1</b> (33.3)	<b>35.7</b> (31.6)	<b>35.5</b> (32.0)
Latin Ame	erica	6.1	5.7 3.1	7.0	8.2 4.1	8.0 4.5	8.7 5.1	7.7 5.2	6.8 4.0	3.9	8.0 3.4
Oceania Other		8.2 0.2	8.8 0.2	9.1 0.2	8.9 0.2	7.4 0.2	6.6 0.1	6.8 0.2	9.6 0.2	8.8 0.1	8.5 0.1
		2002 Year	03	04	05	06	07	08	09	10	11

#### ■ MOTOR VEHICLE EXPORTS BY DESTINATION IN 2011

In vehicle units

			Passeno	er Cars			Tru	cks			Buses		
Des	stination	Standard	Small	Mini	Subtotal	Standard	Small	Mini	Subtotal	Large	Small	Subtotal	Total
Asia	South Korea	13,734	3,399	0	17,133	16	Jiliali 0	0	16	Large	0	Jubiolai	17,14
Asia	China	207,461	2,873	0	210.334	12,001	0	0	12,001	0	2,553	2,553	224,88
	Taiwan	40,836	3,568	5	44,409	7,326	969	0	8,295	1,645	350	1,995	54,69
	Hong Kong	10,864	5,200	156	16,220	5,031	441	0	5,472	45	450	495	22,18
	Thailand	8,722	1	0	8,723	23,936	72	0	24,008	94	19,018	19,112	51,84
	Singapore	1,976	302	17	2,295	3,327	607	0	3,934	14	635	649	6,87
	Malaysia Philippines	24,869 7,856	14,378 1,945	1 0	39,248	15,432 2,771	1,779 341	0	17,211 3,112	358 117	4,326 6,405	4,684 6,522	61,14 19,43
	Indonesia	23,015	8,138	22	9,801 31,175	38,117	0	1	38,118	888	0,405	888	70,18
	Pakistan	25,013	12,394	0	12,644	3,624	204	0	3,828	462	365	827	17,29
	Other	9,975	4,618	6	14,599	4,541	4,401	7	8,949	551	2,616	3,167	26,71
	Subtotal	349,558	56,816	207	406,581	116,122	8,814	8	124,944	4,174	36,718	40,892	572,41
Middle	Iran	12,487	2,020	0	14,507	10,911	0	0	10,911	0	0	0	25,41
East	Saudi Arabia	42,565	33,122	0	75,687	22,396	2,199	0	24,595	1,147	4,475	5,622	105,90
	Kuwait	20,278	4,662	0	24,940	1,674	553	0	2,227	472	940	1,412	28,57
	Oman	38,232	3,013	0	41,245	17,138	1,154	0	18,292	791	5,534	6,325	65,86
	Israel	24,253	19,126	0	43,379	581	0	0	581	0	0	0	43,96
	United Arab Emirates	49,969	15,262	2	65,233	8,091	7,291	0	15,382	932	4,051	4,983	85,59
	Qatar	11,443	926	0	12,369	1,731	1,031	0	2,762	244	1,656	1,900	17,03
	Other	20,038	16,860	0	36,898	7,172	535	0	7,707	805	1,953	2,758	47,36
F	Subtotal	219,265	94,991	13	314,258	69,694 237	12,763	0	82,457 237	4,391	18,609	23,000	419,71!
Europe	Denmark	15,969 4,273	2,343 2,277	84	18,325 6,634	1,032	0	0	1,032	0	0 0	0	18,562 7,666
	UK	56,367	21,228	87	77,682	638	0	0	638	0	0	0	78,320
	Netherlands	33,262	9,398	36	42,696	322	0	0	322	0	0	0	43,018
	Belgium	12,070	5,875	73	18,018	197	0	0	197	0	0	0	18,21!
	France	49,368	12,020	6,815	68,203	752	0	0	752	0	0	0	68,955
	<b>E</b> Germany	85,851	29,769	647	116,267	692	0	0	692	0	0	0	116,959
	<b>U</b> Spain	28,632	2,116	37	30,785	103	0	0	103	0	0	0	30,888
	Italy	35,896	18,668	41	54,605	2,259	0	0	2,259	0	0	0	56,864
	Finland Poland	8,747 12,613	2,297 991	7 22	11,051 13,626	3,108 81	0	0	3,108 81	0	0 0	0	14,159 13,707
	Austria	15,290	6,571	75	21,936	454	0	0	454		27	27	22,417
	Greece	2,541	1,745	0	4,286	28	0	0	28	0	0	0	4,314
	Other	20,651	2,474	132	23,257	4,503	0	0	4,503	0	0	0	27,760
	Subtotal	381,530	117,772	8,069	507,371	14,406	0	0	14,406	0	27	27	521,804
	Norway	17,291	4,125	1,072	22,488	3,130	0	0	3,130	0	0	0	25,618
	Switzerland	18,877	9,492	117	28,486	1,571	0	0	1,571	0	0	0	30,057
	Russia	317,168	30,708	106	347,982	2,003	1,884	0	3,887	0	820 0	820 0	352,689
	Turkey Ukraine	5,708 23,433	21,038 3,151	2	26,748 26,584	4,273 1,574	2,933	0	7,206 1,574	0	25	25	33,95 <sup>4</sup> 28,183
	Other	2,560	365	1	2,926	82	0	0	82		0	0	3,008
	Subtotal	766,567	186,651	9,367	962,585	27,039	4,817	0	31,856	0	872	872	995,313
North	Canada	140,865	15,835	175	156,875	1,619	0	0	1,619	0	0	0	158,494
America	U.S.A.	1,228,469	177,777	329	1,406,575	15,024	5,234	0	20,258	0	0	0	1,426,833
	Subtotal	1,369,334	193,612	504	1,563,450	16,643	5,234	0	21,877	0	0	0	1,585,327
Latin	Mexico	50,951	11,947	0	62,898	11,098	752	0	11,850	0	2,705	2,705	77,453
America	Puerto Rico	20,136	10,349	0	30,485	0	0	0	0	0	0	0	30,485
	Colombia	10,727	4,304	2	15,033	18,869	177	0	19,046	830	63	893	34,972
	Ecuador	14,955	2,708	0	17,663	3,544	112	0	3,656	730	79	809	22,128
	Peru	6,088	11,160	0	17,248	3,708	1,588	0	5,296	32	3,203	3,235	25,779
	Chile Brazil	33,793 32,600	15,542 970	15 0	49,350 33,570	3,455 0	615	0	4,070	0 0	277	277	53,697 33,570
	Other	30,929	22,179	14	53,122	17,350	3,377	0	20,727	1,857	4,585	6,442	80,29
	Subtotal	200,179	79,159	31	279,369	58,024	6,621	0	64,645	3,449	10,912	14,361	358,375
Africa	Algeria	2,481	3,489	0	5,970	7,196	66	0	7,262	1,243	589	1,832	15,06
	Egypt	1,284	14,550	0	15,834	10,535	12,168	0	22,703	186	2,568	2,754	41,29
	Nigeria	2,412	195	0	2,607	276	302	0	578	509	2,518	3,027	6,212
	Kenya	619	70	0	689	4,753	240	0	4,993	12	335	347	6,029
	South Africa	16,969	10,821	0	27,790	14,145	685	0	14,830	0	10,315	10,315	52,935
	Other	10,742	3,522	0	14,264	7,158	812	0	7,970	464	4,370	4,834	27,068
	Subtotal	34,507	32,647	0	67,154	44,063	14,273	0	58,336	2,414	20,695	23,109	148,599
Oceania	Australia	216,780	85,841	65	302,686	30,245	921	0	31,166	18	4,033	4,051	337,90
	New Zealand Other	15,468 2,595	12,688 1,058	24	28,180 3,653	3,400 3,196	206 137	0	3,606 3,333	0 38	110 2,924	110 2,962	31,896 9,948
	Subtotal	234,843	99,587	89	334,519	36,841	1,264	0	38,105	56	7,067	7,123	379,74
Other	JubiOial	1,942	99,587	0	1,988	1,547	1,264	0	1,547	11	1,374	1,385	4,92
Grand To	itals	3,176,195	743,509		3,929,904	369,973	53,786	8	423,767	14,495	96,247		4,464,41
	nner cars are class					•				The state of the s			

Note: Passenger cars are classified under Japan's Road Vehicles Act in three categories, based primarily on engine capacity: "standard" (over 2,000cc), "small" (661cc-2,000cc), and "mini" (660cc and under); see page 66 for details.

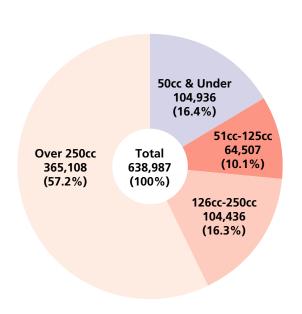
Source: Japan Automobile Manufacturers Association

# **Production of Class 1 Motor-Driven Cycles Up for First Time in 5 Years**

Overall domestic motorcycle production in 2011 decreased 3.8% from the previous year to 639,000 units. While Class 1 motor-driven cycles (50cc and under) grew 19.9% to 105,000 units, the combined total for larger motorcycles (all those over 50cc) shrank 7.4% to 534,000 units, with Class 2 motor-driven cycles (51cc to 125cc), mini-sized motorcycles (126cc to 250cc) and small-sized motorcycles (over 250cc) declining 20.0% to 65,000 units, 4.1% to 104,000 units, and 5.7% to 365,000 units respectively.

#### MOTORCYCLE PRODUCTION BY ENGINE **CAPACITY IN 2011**

In vehicle units





#### MOTORCYCLE PRODUCTION

In vehicle units

			Over	50сс			
Year	Motor-Driven Cycles Class 1 (50cc & Under)	Motor-Driven Cycles Class 2 (51cc-125cc)	Mini-Sized Motorcycles (126cc-250cc)	Small-Sized Motorcycles (Over 250cc)	Subtotal	Total	Chg. (%)
1970	895,599	1,407,205	259,145	385,723	2,052,073	2,947,672	114.4
1975	1,030,822	1,887,701	331,733	552,291	2,771,725	3,802,547	84.3
1980	2,493,910	2,181,206	660,831	1,098,577	3,940,614	6,434,524	143.8
1985	2,014,850	1,373,423	469,728	678,346	2,521,497	4,536,347	112.7
1990	1,343,220	686,734	270,304	506,637	1,463,675	2,806,895	100.4
1995	951,803	1,038,938	217,738	544,760	1,801,436	2,753,239	101.0
2000	636,546	630,221	297,433	851,191	1,778,845	2,415,391	107.3
2002	588,956	543,294	241,356	741,882	1,526,532	2,115,488	90.9
2003	458,072	376,800	235,499	760,534	1,372,833	1,830,905	86.5
2004	331,449	304,622	271,126	832,387	1,408,135	1,739,584	95.0
2005	298,549	260,343	279,274	953,419	1,493,036	1,791,585	103.0
2006	306,246	149,868	276,043	1,039,229	1,465,140	1,771,386	98.9
2007	264,336	178,827	269,689	963,245	1,411,761	1,676,097	94.6
2008	162,928	128,381	192,863	742,667	1,063,911	1,226,839	73.2
2009	108,417	57,424	125,384	353,676	536,484	644,901	52.6
2010	87,513	80,630	108,950	387,082	576,662	664,175	103.0
2011	104,936	64,507	104,436	365,108	534,051	638,987	96.2

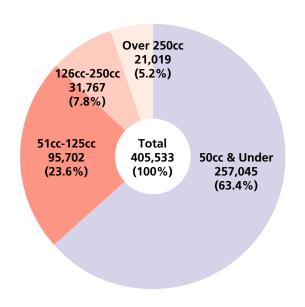
Notes: 1. KD sets have been excluded since 1979; they represent less than 60% of the cost of compositional components per vehicle and have been treated as components since 1988. 2. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

# **Motorcycle Sales Show First Increase in 6 Years**

Domestic motorcycle sales (defined here as ex-factory shipments to domestic dealers, not as new registrations) in 2011 totalled 406,000 units, up 6.7% from the previous year, marking the first increase in six years. In the Class 1 motor-driven cycle category (50cc and under), sales climbed 11.2% to 257,000 units. While sales of mini-sized motorcycles (126cc to 250cc) grew 16.5% to 32,000 units, sales of Class 2 motor-driven cycles (51cc to 125cc) and small-sized motorcycles (over 250cc) dropped 0.7% and 17.1%, to 96,000 and 21,000 units respectively. Overall sales of motorcycles with engine capacity over 50cc thus totalled 148,000 units, a decrease of 0.3% from 2010.

#### MOTORCYCLE SALES BY ENGINE CAPACITY IN 2011

In vehicle units



#### TRENDS IN MOTORCYCLE SALES



#### MOTORCYCLE SALES (SHIPMENTS TO DOMESTIC DEALERS)

In vehicle units

			Over	50cc			
Year	Motor-Driven Cycles Class 1 (50cc & Under)	Motor-Driven Cycles Class 2 (51cc-125cc)	Mini-Sized Motorcycles (126cc-250cc)	Small-Sized Motorcycles (Over 250cc)	Subtotal	Total	Chg. (%)
1980	1,978,426	200,238	88,188	103,184	391,610	2,370,036	122.7
1985	1,646,115	130,574	173,887	145,674	450,135	2,096,250	102.6
1990	1,213,512	169,618	158,882	76,921	405,421	1,618,933	97.6
1995	884,718	138,115	98,833	91,186	328,134	1,212,852	101.6
2000	558,459	102,116	72,886	46,416	221,418	779,877	93.2
2002	535,327	94,468	94,414	46,873	235,755	771,082	102.7
2003	539,610	89,906	87,881	42,724	220,511	760,121	98.6
2004	500,388	62,780	97,135	39,718	199,633	700,021	92.1
2005	470,922	88,747	99,658	47,186	235,591	706,513	100.9
2006	478,196	82,211	91,395	48,564	222,170	700,366	99.1
2007	458,023	100,720	86,081	40,120	226,921	684,944	97.8
2008	295,908	120,990	55,674	49,743	226,407	522,315	76.3
2009	255,561	65,888	37,180	22,148	125,216	380,777	72.9
2010	231,247	96,368	27,275	25,352	148,995	380,242	99.9
2011	257,045	95,702	31,767	21,019	148,488	405,533	106.7

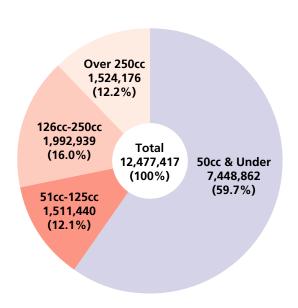
Note: "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

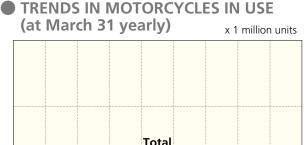
To our readers: Because a significant amount of data on motorcycles in use in 2011 was not yet available at press time, this entire page remains unaltered from last year's edition of this publication.

# **Tenth Straight Year of Rise in Number of Motorcycles Over 50cc in Use**

As of March 31, 2010, the number of motorcycles in use in Japan dipped to 12.48 million, down 1.6% from the previous year. By engine capacity, Class 1 motor-driven cycles, which account for 59.7% of all motorcycles in use, dropped 3.2% to 7.45 million units and mini-sized motorcycles in use slipped 0.2% to 1.99 million units. On the other hand, Class 2 motor-driven cycles and small-sized motorcycles in use rose 2.2% and 1.3%, to 1.51 million and 1.52 million units respectively. Thus, motorcycles over 50cc in use increased 1.0%, to a total of 5.03 million units.

#### MOTORCYCLES IN USE BY ENGINE CAPACITY (at March 31, 2010) In vehicle units







#### MOTORCYCLES IN USE (at March 31 yearly)

In vehicle units

20

16

			Over				
Year	Motor-Driven Cycles Class 1 (50cc & Under)	Motor-Driven Cycles Class 2 (51cc-125cc)	Mini-Sized Motorcycles (126cc-250cc)	Small-Sized Motorcycles (Over 250cc)	Subtotal	Total	Chg. (%)
1970	3,727,426	4,431,745	583,316	109,771	5,124,832	8,852,258	100.5
1975	4,851,140	3,132,818	492,307	276,715	3,901,840	8,752,980	101.9
1980	8,794,335	2,281,006	506,567	383,639	3,171,212	11,965,547	109.8
1985	14,609,399	1,747,957	1,047,426	775,627	3,571,010	18,180,409	104.8
1990	13,539,269	1,517,228	1,669,771	1,045,519	4,232,518	17,771,787	97.6
1995	11,165,390	1,421,031	1,823,446	1,177,229	4,421,706	15,587,096	98.0
2000	9,643,487	1,337,395	1,704,522	1,288,399	4,330,316	13,973,803	98.0
2001	9,354,554	1,344,330	1,712,597	1,308,417	4,365,344	13,719,898	98.2
2002	9,136,832	1,334,792	1,734,395	1,334,354	4,403,541	13,540,373	98.7
2003	8,915,037	1,329,410	1,772,545	1,352,199	4,454,154	13,369,191	98.7
2004	8,739,686	1,341,088	1,810,594	1,370,331	4,522,013	13,261,699	99.2
2005	8,566,613	1,353,732	1,857,439	1,397,392	4,608,563	13,175,176	99.3
2006	8,345,225	1,378,714	1,908,402	1,428,149	4,715,265	13,060,490	99.1
2007	8,134,692	1,397,085	1,950,512	1,452,893	4,800,490	12,935,182	99.0
2008	7,902,051	1,429,738	1,976,829	1,478,724	4,885,291	12,787,342	98.9
2009	7,694,009	1,479,588	1,996,311	1,505,304	4,981,203	12,675,212	99.1
2010	7,448,862	1,511,440	1,992,939	1,524,176	5,028,555	12,477,417	98.4

Notes: 1. Motor-driven cycle data is as at April 1, and since 2006 motorcycles with engine capacity of 125cc and under whose owners fail to pay the mandatory motorcycle ownership tax are not included in this data. 2. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

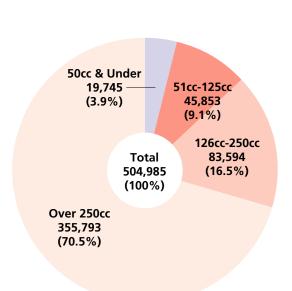
Sources: Ministry of Land, Infrastructure, Transport and Tourism; since 2006 (only for the 125cc-and-under categories), Ministry of Internal Affairs and Communications

# **Motorcycle Exports Rise for First Time in 5 Years**

Motorcycle exports in 2011 increased 2.3% over the previous year to 505,000 units. By engine capacity, exports of Class 1 motor-driven cycles surged 71.4% to 20,000 units, whereas exports of Class 2 motor-driven cycles dropped 6.4% to 46,000 units. Exports in the mini-sized motorcycle category declined 2.2% to 84,000 units, but those in the small-sized motorcycle category grew 2.4% to 356,000 units. In 2011 the total value of motorcycle and motorcycle components exports increased 6.4% to US\$ 4.7 billion, with the value of motorcycle exports rising 4.2% to US\$ 3.2 billion and the value of components exports climbing 11.5% to US\$ 1.5 billion.

# ■ MOTORCYCLE EXPORTS BY ENGINE CAPACITY IN 2011

In vehicle units



#### TRENDS IN MOTORCYCLE EXPORTS



#### MOTORCYCLE EXPORTS

In vehicle units

			Over				
Year	Motor-Driven Cycles Class 1 (50cc & Under)	Motor-Driven Cycles Class 2 (51cc-125cc)	Mini-Sized Motorcycles (126cc-250cc)	Small-Sized Motorcycles (Over 250cc)	Subtotal	Total	Chg. (%)
1970	326,815	914,325	187,185	309,277	1,410,787	1,737,602	133.8
1975	288,843	1,546,170	328,313	527,344	2,401,827	2,690,670	83.0
1980	501,027	1,907,481	548,306	972,226	3,428,013	3,929,040	144.0
1985	369,167	1,350,412	296,865	525,038	2,172,315	2,541,482	119.7
1990	147,301	507,840	117,222	411,381	1,036,443	1,183,744	107.3
1995	61,627	691,433	129,961	442,689	1,264,083	1,325,710	94.2
2000	82,038	549,040	204,591	805,508	1,559,139	1,641,177	116.1
2002	74,811	462,137	149,900	731,834	1,343,871	1,418,682	89.9
2003	114,315	312,768	144,873	708,999	1,166,640	1,280,955	90.3
2004	84,832	265,245	173,037	804,030	1,242,312	1,327,144	103.6
2005	57,860	197,378	177,824	899,161	1,274,363	1,332,223	100.4
2006	57,558	124,335	183,980	968,153	1,276,468	1,334,026	100.1
2007	34,192	134,570	177,673	886,361	1,198,604	1,232,796	92.4
2008	36,234	95,114	149,530	721,309	965,953	1,002,187	81.3
2009	14,493	44,708	101,298	383,380	529,386	543,879	54.3
2010	11,522	48,976	85,506	347,460	481,942	493,464	90.7
2011	19,745	45,853	83,594	355,793	485,240	504,985	102.3

Notes: 1. Figures represent ex-factory export shipments of motorcycles manufactured in Japan. 2. Class 2 motor-driven cycles include three-wheeled motor-driven cycles. 3. KD sets have been excluded since 1979; they represent less than 60% of the cost of compositional components per vehicle and have been treated as components since 1988. 4. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

Source: Japan Automobile Manufacturers Association

Asia

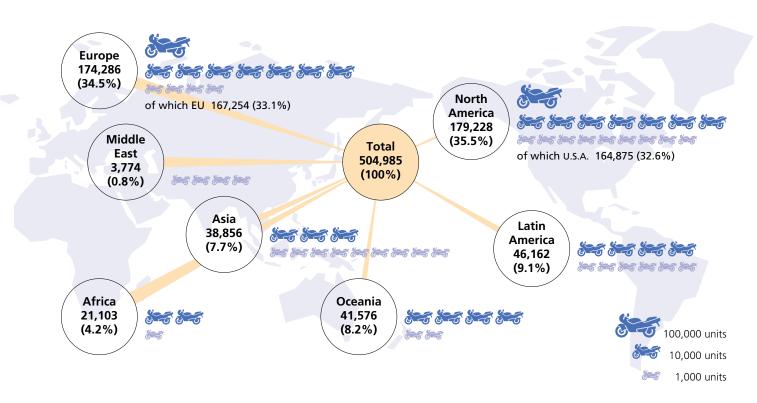
**America** 

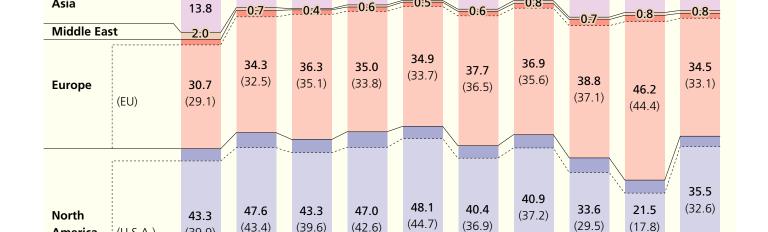
# A Rise in Motorcycle Exports to North America and Latin America

Whereas motorcycle exports in 2011 increased 68.7% to North America and 18.8% to Latin America over the previous year, they declined 23.6% to Europe, 17.8% to Africa, 16.7% to Oceania, 4.7% to Asia, and 2.9% to the Middle East.

#### MOTORCYCLE EXPORTS BY DESTINATION IN 2011

In vehicle units





6.2

4.9

7.4

07

80

09

5.0 0.8

9.6

8.3

10

MOTORCYCLE EXPORT TRENDS (BY REGION OF DESTINATION)

7.0

(39.9)

2002

Year

03

04

(U.S.A.)

7.2

									7.9	
							6.2	4.6		9.1
Latin America			6.5	10	27	5.0	6.3	4.5	5.2	4.2
Africa	4.3	4.1		4.0	2.0	3.1	3.4	5	40.4	7.2
Oceania	_2.3_	2.5	2.4		Z.J	5.8	6.7	8.2	10.1	8.2
Oceania	3.6	3.8	3.9	4.6	5.0	5.5				

06

05

11

In %

7.7

#### **● MOTORCYCLE EXPORTS BY DESTINATION IN 2011**

In vehicle units

		Matau Duiman		Over	50cc		
Des	tination	Motor-Driven Cycles Class 1 (50cc & Under)	Motor-Driven Cycles Class 2 (51cc-125cc)	Mini-Sized Motorcycles (126cc-250cc)	Small-Sized Motorcycles (Over 250cc)	Subtotal	Total
Asia	South Korea Taiwan Hong Kong Singapore Malaysia Philippines Other	0 656 62 0 0 0 45	7 1,000 6 31 8 0 160	9 0 92 59 217 25,200 276	605 576 2,060 1,805 5,015 59 908	621 1,576 2,158 1,895 5,240 25,259 1,344	621 2,232 2,220 1,895 5,240 25,259 1,389
	Subtotal	763	1,212	25,853	11,028	38,093	38,856
Middle East	Saudi Arabia Israel United Arab Emirates Other	0 0 32 1	25 10 374 18	486 13 399 46	413 654 525 778	924 677 1,298 842	924 677 1,330 843
Europe	Subtotal  Sweden Denmark UK Netherlands Belgium France Germany E Portugal U Spain Italy Finland Poland Hungary Greece Slovenia Czech Republic Other	33 20 0 83 0 0 1,388 368 0 135 210 141 14 6 0 6 3 17	427 20 94 404 610 65 4,164 354 0 502 225 160 10 8 6 8	944  443 72 827 2,053 20 1,150 1,665 25 466 1,274 129 76 104 7 4 0 92	2,370 475 282 9,303 33,024 812 32,839 24,183 736 15,021 30,452 398 746 248 526 245 255 271	3,741 938 448 10,534 35,687 897 38,153 26,202 761 15,989 31,951 687 832 360 539 257 255 373	3,774  958 448 10,617 35,687 897 39,541 26,570 761 16,124 32,161 828 846 366 539 263 258 390
	Subtotal Norway Switzerland Turkey Russia Other	2,391 108 46 0 78 3	6,640 57 38 0 93 3	8,407 118 85 6 34 11	149,816 296 3,174 477 2,032 373	164,863 471 3,297 483 2,159 387	167,254 579 3,343 483 2,237 390
North America	Subtotal Canada U.S.A.	2,626 921 9,182	6,831 2,028 12,259	8,661 2,314 23,878	156,168 9,090 119,556	171,660 13,432 155,693	174,286 14,353 164,875
	Subtotal  Mexico	10,103	14,287	26,192 455	128,646 1,225	169,125 1,752	179,228 1,854
Latin America	Guatemala Nicaragua Panama Colombia Venezuela Peru Chile Brazil Argentina Other	0 0 1 12 0 3 6 158 0 25	72 11 131 2 42 0 166 193 0 322 424	752 960 128 1,378 0 522 593 702 557 1,430	1,225 43 6 506 2,354 2,232 71 861 26,470 2,784 463	1,752 806 1,097 636 3,774 2,232 759 1,647 27,172 3,663 2,317	1,654 806 1,097 637 3,786 2,232 762 1,653 27,330 3,663 2,342
Africa	Guinea Ghana Togo Niger Rwanda Dem Rep Congo Ethiopia Kenya Uganda Tanzania Namibia South Africa Other	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	486 493 190 550 608 2,023 0 930 1,391 123 530 2,448 2,502	120 84 726 70 8 46 869 1,263 51 180 0 1,120 915	0 52 0 0 0 2 0 0 0 0 0 2,796 434	606 629 916 620 616 2,071 869 2,193 1,442 303 530 6,364 3,851	606 629 916 620 616 2,071 869 2,193 1,442 303 530 6,453 3,855
Oceania	Australia New Zealand Other	93 5,572 245 3	12,274 8,014 1,395 50	5,452 7,531 1,402 82	3,284 16,250 946 86	21,010 31,795 3,743 218	21,103 37,367 3,988 221
Grand Tot	Subtotal	5,820 19,745	9,459 45,853	9,015 83,594	17,282 355,793	35,756 485,240	41,576 504,985

Source: Japan Automobile Manufacturers Association

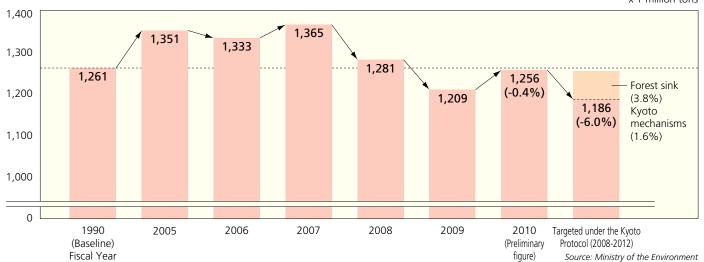
# Climate Change and CO<sub>2</sub> Emissions Reduction: The Response of the Transport Sector

Under the Kyoto Protocol, adopted in 1997 by most industrialized countries to reduce CO2 and other greenhouse gas emissions and enforced in February 2005, Japan pledged to reduce its average GHG emissions volume in the first commitment period (2008-2012) to 6% below the 1990 level. In April 2005, the Japanese government formulated a target achievement plan (revised in March 2008) and then promoted diverse CO2 reduction measures in all major sectors including the industrial, consumer, and transport sectors. In line with the national initiative, the automobile industry has been making vigorous efforts with respect to increasing vehicle fuel efficiency, developing and promoting alternative-energy and next-generation vehicles, raising public awareness of eco-friendly driving practices, and supporting the government's efforts to improve traffic flow. After peaking in 2001, CO2 emissions in Japan's transport sector have been on a steady decline, owing largely to increased fuel efficiency in passenger cars and greater efficiency in goods distribution.

#### JAPAN'S GHG EMISSION VOLUMES: ACTUAL & TARGETED under the Kyoto Protocol

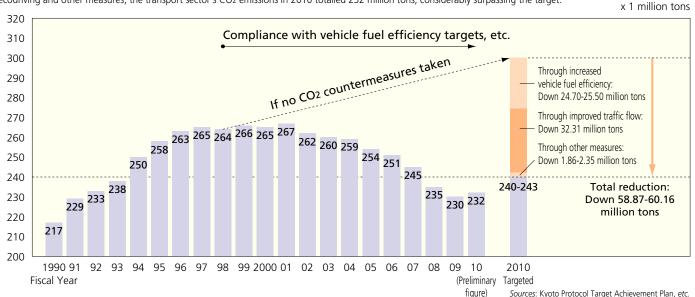
Japan's GHG emissions in 1990 totalled 1,261 million tons (in equivalent tons of CO2). In order for Japan to meet its target under the Kyoto Protocol, it was determined that its average GHG emissions volume would have to be reduced to 1,186 million tons by the end of the first commitment period in 2012. Total GHG emissions in 2010 rose 3.9% from 2009 as a result of an increase in CO2 emissions from all sectors, and particularly the industrial sector, with the recovery of activity following the economic recession triggered by the global financial crisis in 2008. In addition, electric power demand increased owing to the relatively high number of days on which exceptionally hot or cold temperatures were recorded. GHG emissions in 2010 totalled 1,256 million tons, 0.4% below the 1990 level or 5.6% higher than the target volume. In order to achieve the "6% below 1990" target, therefore, further reduction efforts are urgently required.

x 1 million tons



#### ACTUAL & TARGETED CO2 EMISSION VOLUMES IN JAPAN'S TRANSPORT SECTOR

Of Japan's total CO2 emissions, the transportation sector accounts for roughly 20%, of which 90% are auto-emitted—making CO2 reduction in road transport a priority concern. With steadily declining CO2 emissions since 2001, the transport sector's original target of an annual total of 250 million tons of CO2 emissions by 2010 was revised in 2008, to a more challenging 240-243 million tons. In fact, by means of increased vehicle fuel efficiency, road congestion mitigation, the wider practice of ecodriving and other measures, the transport sector's CO2 emissions in 2010 totalled 232 million tons, considerably surpassing the target.



# CO<sub>2</sub> Emissions Reduction: Improving Vehicle Fuel Efficiency

In 1998 Japan's Energy Conservation Law recommended vehicle fuel efficiency targets for fiscal year 2010, applying "top runner" criteria whereby the leading fuel efficiency performance to date (1998) for a given vehicle weight category was established as the target value. Auto manufacturers worked hard to comply, and in 2010 the average fuel efficiency of domestic new gasoline-powered passenger cars reached 18.7 km/liter, largely surpassing the 2010 target of 14.4 km/liter. In 2006 fuel efficiency targets were established for heavy-duty vehicles, i.e. trucks and buses weighing more than 3.5 tons, for enforcement in 2015; in 2007 new and stricter fuel efficiency targets, also for 2015, were introduced for passenger cars and trucks/small buses weighing 3.5 tons or less; and in 2012 still stricter fuel efficiency targets were established for passenger cars for enforcement in 2020. Japan's automakers will therefore continue to advance fuel efficiency technologies in order to meet these new targets as soon as possible.

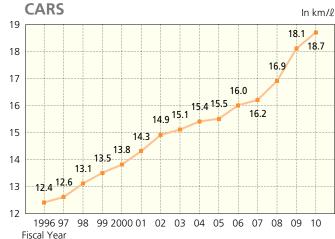
#### TRENDS IN DOMESTIC NEW VEHICLE COMPLIANCE WITH 2010 FUEL



Note: Above figures indicate the rate of compliance with the 2010 fuel efficiency standards among all domestically-manufactured vehicles with GVW≤2.5t.

Source: Japan Automobile Manufacturers Association

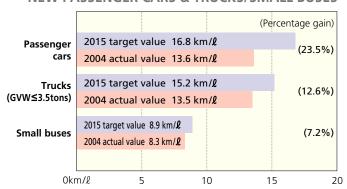
#### AVERAGE FUEL EFFICIENCY OF DOMESTIC NEW GASOLINE-POWERED PASSENGER



Note: Figures are for domestic-brand new passenger cars only.

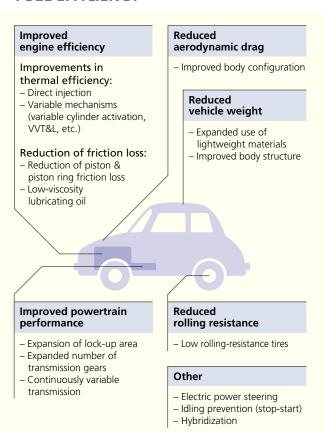
Source: Japan Automobile Manufacturers Association

#### 2015 AVERAGE FUEL EFFICIENCY TARGETS FOR NEW PASSENGER CARS & TRUCKS/SMALL BUSES

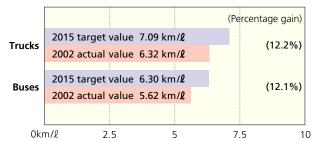


Note: Fuel efficiency here is JC08 test cycle-measured (see page 67), and targets were established assuming the same respective shipment volume ratios by vehicle weight category for 2015 as those recorded in 2004. Sources: Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism

#### VEHICLE TECHNOLOGIES FOR INCREASED FUEL EFFICIENCY



#### 2015 AVERAGE FUEL EFFICIENCY TARGETS FOR NEW HEAVY-DUTY VEHICLES (GVW>3.5t)



Note: Fuel efficiency here is JE05 test cycle-measured (see page 67), and targets were established assuming the same respective shipment volume ratios by vehicle weight category for 2015 as those recorded in 2002.

Sources: Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism

## In-Use Status of Alternative-Energy/Next-Generation and Fuel-Efficient Vehicles

Hybrid and electric vehicles and other vehicles that run on alternative fuels are gaining increasing attention because of their significantly reduced CO<sub>2</sub> and other emissions. In 2010 nearly 1.5 million of such vehicles (mostly hybrids) were in circulation in Japan and that number is expected to grow. The more widespread use of next-generation vehicles will largely depend on the automakers' resolution of a number of technological issues (for fuel cell and hydrogen vehicles, for example) and on the expansion of the fuel/energy supply infrastructure. Meanwhile, the use of more fuel-efficient and low-emission conventional vehicles continues to be actively promoted. Indeed, in 2010 shipments of domestic alternative-energy/next-generation and fuel-efficient/low-emission vehicles registered a combined total of 3.57 million units.

#### DOMESTIC SHIPMENTS OF ALTERNATIVE-ENERGY/NEXT-GENERATION & FUEL-EFFICIENT/LOW-EMISSION VEHICLES (Fiscal 2010)

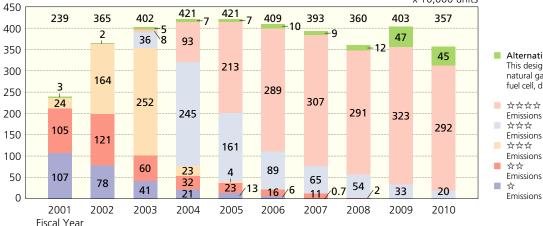
In vehicle units

		Passeng	jer Cars	Trucks				
		Standard and small-sized vehicles	Mini- vehicles	Standard and small-sized vehicles	Mini- vehicles	Buses	Total	Chg. (%)
Fuel cell vehicles		1	0	0	0	0	1	_
Electric vehicles		4,816	2,687	0	0	0	7,503	439.8
Hybrid vehicles		444,535	0	1,217	5	97	445,854	95.5
Natural gas vehicles		0	0	559	431	10	1,000	83.5
Methanol vehicles		0	0	0	0	0	0	_
Subtotal		449,352	2,687	1,776	436	107	454,358	96.8
Vehicles certified as fuel-efficient and	☆☆☆☆ (1)	1,829,926	983,898	68,722	40,469	0	2,923,015	90.6
low-emission vehicles (see Note1)	☆☆☆ (2)	58,110	68,567	8,974	60,676	0	196,327	59.2
Subtotal		1,888,036	1,052,465	77,696	101,145	0	3,119,342	87.7
Diesel-alternative LPG vehicles		0	0	399	0	6	405	90.0
Hydrogen vehicles		0	0	0	0	0	0	_
Total		2,337,388	1,055,152	79,871	101,581	113	3,574,105	88.7

(1) ☆☆☆☆ = Emissions down by 75% from 2005 emission standards. (2) ☆☆☆ = Emissions down by 50% from 2005 emission standards 1. Vehicles that meet or surpass 2010 fuel efficiency standards (as per Japan's Energy Conservation Law) and are compliant with low-emission environmental performance certification criteria (see starred ratings above). 2. "Chg. (%)" means change from the previous year (with the previous year's result indexed at 100).

Source: Japan Automobile Manufacturers Association

#### TRENDS IN ALTERNATIVE-ENERGY/NEXT-GENERATION & FUEL-EFFICIENT/LOW-EMISSION VEHICLE SHIPMENTS (DOMESTIC) x 10,000 units



Alternative-Energy/Next-Generation Vehicles This designation includes hybrid, electric, natural gas, methanol (virtually no longer in use), fuel cell, diesel-alternative LPG and hydrogen vehicles.

Emissions down by 75% from 2005 standards

Emissions down by 50% from 2005 standards Emissions down by 75% from 2000 standards

Emissions down by 50% from 2000 standards

Emissions down by 25% from 2000 standards

#### TRENDS IN ALTERNATIVE-ENERGY/NEXT-GENERATION VEHICLE USE IN JAPAN In vehicle units

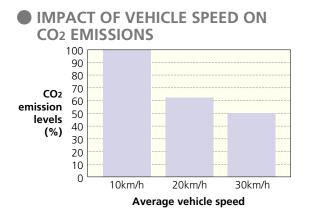
Fiscal Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Electric vehicles	4,700	5,591	7,677	8,468	9,928	9,421	9,358	8,850	8,473	16,882
of which motorcycles	3,990	2,895	4,658	5,357	6,999	6,848	6,911	6,250	4,652	5,777
Hybrid vehicles	74,563	91,210	132,516	196,770	256,644	343,626	429,274	536,473	983,831	1,418,400
Natural gas vehicles	12,012	16,561	20,638	24,263	27,605	31,462	34,203	37,117	38,861	40,429
Methanol vehicles	135	114	58	33	26	20	20	17	13	12
of which motorcycles*	_	_	_	_	_	_	_	_	3	2
Diesel-alternative LPG vehicles	14,962	17,054	19,483	20,670	21,868	23,007	22,917	22,608	21,812	20,764
Total	106,372	130,530	180,372	250,204	316,071	407,536	495,772	605,065	1,052,990	1,496,487
excluding motorcycles	102,382	127,635	175,714	244,847	309,072	400,688	488,861	598,815	1,048,335	1,490,708

<sup>\*</sup>Figures prior to 2009 are not available

Sources: Next Generation Vehicle Promotion Center; Japan Gas Association; Automobile Inspection & Registration Information Association

# CO<sub>2</sub> Emissions Reduction: Improving Traffic Flow

Improved road traffic flow enables increased vehicle speed and increased fuel efficiency, which in turn contributes to CO<sub>2</sub> reduction. Improving traffic flow by upgrading road networks and overall infrastructure is therefore urgently required. JAMA advocates such upgrades, including measures to mitigate congestion at intersections, as well as the early completion of the Tokyo metropolitan area's three major ring roads and the greater use of expressways. To help ensure steady progress in this regard, the government and other relevant public-sector players must jointly establish a data compilation/analysis and response formulation/implementation scheme to evaluate the impact of traffic flow-related measures on CO<sub>2</sub> reduction and to follow up accordingly. JAMA in fact conducted a quantitative assessment of the impact on CO<sub>2</sub> reduction of the operation of the Oji section (opened for service in December 2002) of the Tokyo Metropolitan Expressway's inner ring road. This study determined that operation of the new section enabled increased average vehicle speed on that ring road and on surrounding local roads, resulting in an estimated reduction in CO<sub>2</sub> emissions of 20,000 to 30,000 tons annually.



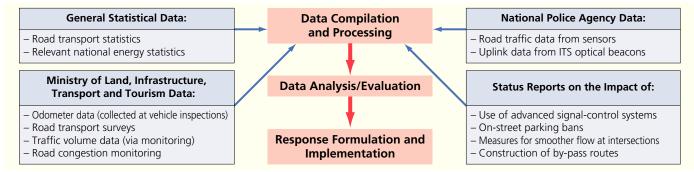
#### IMPACT OF THE OJI SECTION'S OPERATION ON CO2 REDUCTION

		Before Operation	After Operation	Increase/ Decrease
Average vehicle speed	Tokyo Metropolitan Expressway	56.0	56.2	0.2
in km/h	Local roads	22.5	22.8	0.3
CO2 emissions volume	Tokyo Metropolitan Expressway	173	178	5
x 10,000 tons/year	Local roads	356	349	-7
	Total	529	527	-2

Note: Vehicle speed and CO2 emissions were calculated on the basis of three established models, including that of the Japan Automobile Research Institute. The estimated annual CO2 reduction volume varies between 20,000 and 30,000 tons depending on the model used.

Source: Japan Automobile Manufacturers Association

#### PROPOSED DATA INPUT/ANALYSIS & RESPONSE FORMULATION SCHEME FOR IMPROVED TRAFFIC FLOW



Source: Japan Automobile Manufacturers Association

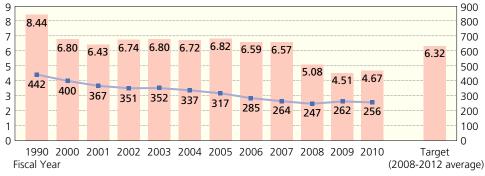
## **CO2 Reductions at Production Plants**

Source: Japan Automobile Research Institute

Japan's automobile manufacturers have implemented multiple measures to reduce energy consumption and otherwise cut CO<sub>2</sub> emissions at their production facilities. Since 2008, they have worked with Japan's auto-body manufacturers towards a combined reduction target for 2008-2012. Originally set at 6.59 million tons of CO<sub>2</sub> annually, this shared target was revised in 2009 to a stricter 6.32 million tons, down 25% from the 1990 level. As a result of the manufacturers' concerted efforts, plant-generated CO<sub>2</sub> emissions totalled 4.67 million tons in 2010.

#### ■ REDUCTIONS IN PRODUCTION PLANT-GENERATED CO₂ EMISSIONS





CO2 emissions/ production value (x 1,000 tons CO2 per 1 trillion yen)

Source: Japan Automobile Manufacturers Association

# Promoting Vehicles with Greater Fuel Efficiency and Lower Emissions

Vehicles with greater fuel efficiency help counter global warming through their reduced emission of CO<sub>2</sub>, while vehicles with reduced tailpipe emissions help improve air quality. For gasoline, diesel, and LPG vehicles, the Japanese government has established environmental performance certification criteria keyed to Japan's latest fuel efficiency and emission standards. Trucks and buses that comply with NO<sub>x</sub> (nitrogen oxides) and PM (particulate matter) emissions requirements are also certified, separately. To boost widespread public awareness of vehicles with advanced fuel efficiency and/or low emissions, such vehicles are identified with appropriately coded stickers.

# CERTIFICATION FOR VEHICLES WITH ADVANCED FUEL EFFICIENCY

# For Gasoline and Diesel Vehicles Including Trucks and Buses with GVW≤2.5t

Rating/Pe	Rating/Performance Level						
Compliant +20% compared to standards	Performing 20% better or more compared to 2015 fuel efficiency standards	原理27年度 競費基準+20%達成車					
Compliant +10% compared to standards	Performing 10% better or more compared to 2015 fuel efficiency standards	应数基本代 <mark>10%</mark> 适应率					
Compliant with standards	Compliant with 2015 fuel efficiency standards	<sup>──提</sup> 27年度					

Note: Fuel efficiency is JC08 test cycle-measured.

#### For Trucks and Buses with GVW>2.5t

Rating/Pe	Vehicle Sticker	
Compliant +10% compared to standards	Performing 10% better or more compared to 2015 fuel efficiency standards	是是基本 <mark>代0%</mark> 建成事
Compliant +5% compared to standards	Performing 5% better or more compared to 2015 fuel efficiency standards	滋費基準( <mark>-5%達</mark> 成車
Compliant with standards	Compliant with 2015 fuel efficiency standards	然費基準達成車

Note: Fuel efficiency is JC08 or JE05 test cycle-measured.

# For Gasoline and LPG Vehicles Including Trucks and Buses with GVW≤2.5t

Rating/Pe	Vehicle Sticker	
Compliant +50% compared to standards	Performing 50% better or more compared to 2010 fuel efficiency standards	學歷22年度 然費基準 <b>计50%達成</b> 車
Compliant +38% compared to standards	Performing 38% better or more compared to 2010 fuel efficiency standards	型型 + 138% 建 应 車
Compliant +25% compared to standards	Performing 25% better or more compared to 2010 fuel efficiency standards	平成22年度 悉費基準+25%並过至

Note: Fuel efficiency is 10 • 15 - mode test cycle-measured.

#### CERTIFICATION FOR VEHICLES WITH LOW EMISSIONS

Rating/Pe	erformance Level	Vehicle Sticker
***	Emissions down by 75% from 2005 standards	佐排出ガス車 1777年
***	Emissions down by 50% from 2005 standards	★★★ 低排出ガス車
*	Emissions down by 10% from 2009 standards	低部出力ス車 型品2 1年間出力以降 1 の人間は 位立の光人に数であ

#### CERTIFICATION FOR TRUCKS AND BUSES WITH LOW NOx & PM EMISSIONS

Rating/Performance Level	Vehicle Sticker
Compliant with 2009 emission standards	適合車
Compliant with 2005 emission standards	適合車
Compliant with other certification criteria (see above)	道合車 an sign

# Vehicle Exhaust Emissions: New Regulations Enforced in 2009

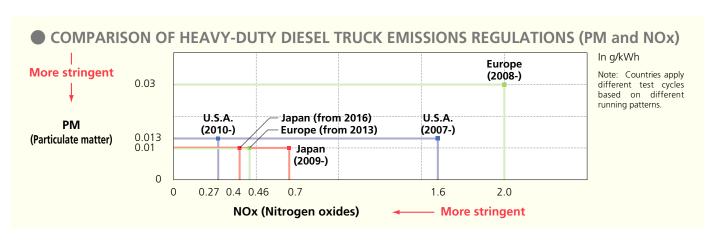
Japan's vehicle exhaust emissions regulations have always been among the strictest in the world, and its automakers have worked very hard to develop the advanced technologies required to comply with them. As a result, NOx and other atmospheric pollutant levels have been on a steady decline even in large urban areas. Based on the Ministry of the Environment-affiliated Central Environment Council's policy recommendations for future reductions in motor vehicle exhaust emissions (released in April 2005), comprehensive new regulations were implemented by the Japanese government in 2009, of which the regulations for trucks and buses were, at the time of their enforcement, the most stringent in the world. Starting in 2016, the NOx regulation for heavy-duty diesel vehicles will be even stricter.

#### COMPARISON OF HEAVY-DUTY DIESEL TRUCK EMISSIONS REGULATIONS

All regulatory values below apply to the heaviest truck categories. In g/kWh

		NOx Nitrogen oxides	<b>HC</b> Hydrocarbons	NMHC Non-methane hydrocarbons	<b>CO</b> Carbon monoxide	<b>PM</b> Particulate matter
Japan (GVW=Over 3.5	<b>5 tons)</b> (1)			'	'	
Long-term regulation	ons (1997, 1998, 1999)	4.50	2.90	_	7.40	0.25
New short-term reg	New short-term regulations (2003, 2004)		0.87	_	2.22	0.18
New long-term regu	ulations (2005) (2)	2.0	_	0.17	2.22	0.02
Post-new long-term	Post-new long-term regulations (2009, 2010)		_	0.17	2.22	0.01
Future regulations (	2016, 2017, 2018)	0.4	_	0.17	2.22	0.01
U.S.A. (GVW=Over 3.8	35 tons)					
1998 standard		5.36	1.74	_	20.78	0.13
2004 standard		Automobile manufact 1) NOx + NMHC 3.22	urers must comply with	20.78	0.13	
		2) NOx + NMHC 3.35	with mandatory NMH	C value of 0.67		
<b>2007 standard</b> (3)		0.27 (1.6)	_	0.188	20.78	0.01
2010 standard		0.27	_	0.188	20.78	0.01
Europe (GVW=Over 3	.5 tons)					
EURO II (1995)		7.0	1.1	_	4.0	0.15
EURO II (2000) (4)	Transient mode	5.0	_	0.78	5.45	0.16
	Steady state mode	(5.0)	(0.66)	_	(2.1)	(0.10
EURO IV (2005)	Transient mode	3.5	_	0.55	4.0	0.03
	Steady state mode	(3.5)	(0.46)	_	(1.5)	(0.02
EURO V (2008)	Transient mode	2.0	_	0.55	4.0	0.03
	Steady state mode	(2.0)	(0.46)	_	(1.5)	(0.02
EURO VI (2013)	Transient mode	0.46	0.16	_	4.0	0.01
	Steady state mode	(0.4)	(0.13)	_	(1.5)	(0.01
<b>EEV</b> (5)	Transient mode	2.0	_	0.40	3.0	0.02
	Steady state mode	(2.0)	(0.25)	_	(1.5)	(0.02)

(1) GVW (gross vehicle weight) (Japan) = Vehicle weight + Maximum load + Maximum occupants x 55 kg. Weight per occupant and other details slightly differ from those of U.S. and European regulations. (2) Japan's 1997-2004 regulations applied to the over 2.5t GVW vehicle category; regulations as of 2005 apply to the over 3.5t GVW vehicle category. (3) The U.S.'s 2007 standard permits an NOx compliance level of around 1.6g until 2010 depending on engine family type. (4) EURO III (Europe): All vehicle categories were regulated in the steady state (ESC) mode only, except DPF- and NOx reduction catalyst-equipped vehicles, which were regulated in both the steady state (ESC) and transient (ETC) modes. Beginning with EURO IV, all vehicle categories, whether DPF- and NOx reduction catalyst-equipped or not, are regulated in both modes. (5) EEV (Europe): Enhanced Environmentally Friendly Vehicles. EEV regulations constitute a special category and are applied by EU member countries only in specific instances when urban air quality is particularly poor (for example, when temporary restrictions on vehicle circulation in cities are enforced). Emission values indicated are provisional.



#### MOTOR VEHICLE EMISSIONS REGULATIONS IN JAPAN

			P	revious/C	urrent Regulatio	ns		New Reg	gulations				
	Trucks Mini and buses		Test Year Emission Regulatory value (Average)		Test cycle	Year enforced	Emission	Regulatory value (Average)					
Gasoline	Passen	ner cars	10•15M	2005	СО	1.15	JC08	2009	СО	1.15			
and LPG	doscin	ger cars	+ 11M		NMHC	0.05	(g/km) (1)		NMHC	0.05			
	ehicles		(g/km) (1)		NOx	0.05			NOx	0.05			
Temeles							JC08 (g/km)	2009	PM (2)	0.005			
	Trucks	Mini	10•15M	2007	CO	4.02	JC08	2009	СО	4.02			
	and		+ 11M		NMHC	0.05	(g/km) (1)		NMHC	0.05			
	buses		(g/km) (1)		NOx	0.05			NOx	0.05			
							JC08 (g/km)	2009	PM (2)	0.005			
		Light-duty	10•15M	2005	CO	1.15	JC08	2009	CO	1.15			
		(GVW≤1.7t)	+ 11M (g/km) (1)		NMHC	0.05	(g/km) (1)		NMHC	0.05			
					NOx	0.05			NOx	0.05			
							JC08 (g/km)	2009	PM (2)	0.005			
	Medium-duty		10•15M	2005	CO	2.55	JC08	2009	СО	2.55			
		(1.7t <gvw≤3.5t) +="" td="" ′<=""><td>+ 11M</td><td></td><td>NMHC</td><td>0.05</td><td>(g/km) (1)</td><td></td><td>NMHC</td><td>0.05</td></gvw≤3.5t)>	+ 11M		NMHC	0.05	(g/km) (1)		NMHC	0.05			
			(g/km) (1)		NOx	0.07			NOx	0.07			
							JC08 (g/km)	2009	PM (2)	0.007			
		Heavy-duty	JE05	2005	СО	16.0	JE05	2009	CO	16.0			
		(GVW>3.5t)	(g/kWh)		NMHC	0.23	(g/kWh)		NMHC	0.23			
					NOx	0.7			NOx	0.7			
									PM (2)	0.01			
Diesel	Passen	ger cars (3)	10•15M	2005	CO	0.63	JC08	2009	CO	0.63			
Vehicles			+ 11M		NMHC	0.024	(g/km)		NMHC	0.024			
			(g/km)		NOx Small-sized	0.14			NOx	0.08			
					IVIId-SIZed	0.15							
					PM Small-sized Mid-sized	0.013 0.014			PM	0.005			
	Trucks	Light-duty	10•15M	2005	CO		JC08	2009	СО	0.63			
	and	(GVW≤1.7t)	+ 11M		NMHC		(g/km)		NMHC	0.024			
		• '	5		ouses	(g/km)		NOx	0.14			NOx	0.08
	buses					PM	0.013			PM	0.005		
		-		10•15M	2005	CO	0.63	JC08	2009	СО	0.63		
				+ 11M		NMHC	0.024	(g/km) (4)	NMHC	0.024			
			(g/km)		NOx	0.25			NOx	0.15			
					PM	0.015			PM	0.007			
		Heavy-duty	JE05	2005	CO	2.22	JE05	2009	СО	2.22			
		(GVW>3.5t)	(g/kWh)		NMHC	0.17	(g/kWh)	(4)	NMHC	0.17			
					NOx	2.0			NOx (5)	0.7			
					PM	0.027			PM	0.01			
Motor-		driven cycles	Motorcycle	2006	CO	2.0							
cycles	Class 1		test cycle		HC	0.5							
			(g/km)	222	NOx	0.15							
		driven cycles		2007	CO	2.0							
		Class 2			HC	0.5							
	Class 2				NOx	0.15							
				2006	CO	2.0							
	Mini-siz			2006	CO	2.0							
				2006	HC	0.3							
	Mini-siz motorc	ycles			HC NOx	0.3 0.15							
	Mini-siz	ycles ized		2006	HC	0.3							

<sup>(1)</sup> All vehicles weighing 3.5t or less are regulated as follows: Beginning in 2008, on the basis of (values measured in cold-start state in JC08 test cycle) x 0.25 + (values measured in 10·15-mode test cycle) x 0.75; and beginning in 2011, on the basis of (values measured in cold-start state in JC08 test cycle) x 0.25 + (values measured in warm-start state in JC08 test cycle) x 0.75. (2) PM values apply only to direct-injection, lean-burn vehicles equipped with absorption-type NOx reduction catalysts. (3) Small-sized diesel passenger cars have an equivalent inertia weight (ElW) of 1.25t (GVW of 1.265t) or less, and mid-sized diesel passenger cars have an ElW over 1.25t. (4) Enforced since 2010 for medium-duty diesel vehicles weighing 2.5t or less and heavy-duty diesel vehicles weighing 12t or less. (5) Future regulations will mandate a stricter NOx value of 0.4g/kWh; enforcement: 2016 for GVW>7.5t; 2017 for tractor-trailer cabs; and 2018 for 3.5t<GVW<7.5t.

Note: CO: carbon monoxide; NMHC: non-methane hydrocarbons; HC: hydrocarbons; NOx: nitrogen oxides; PM: particulate matter.

# **Improving Air Quality**

Japan's central government as well as local governments in the greater Tokyo area have implemented measures to address air-quality problems caused by motor vehicles. In accordance with national legislation aimed at curbing nitrogen oxide (NOx) and particulate matter (PM) emissions in major metropolitan areas, the issuance of inspection-compliance certification is prohibited for vehicles that fail to meet the legal standards at inspection time. Moreover, the Tokyo metropolitan and surrounding prefectural governments have introduced additional regulations for diesel vehicles for the specific purpose of reducing PM emissions. Enforcement of these regulations means that restrictions are imposed on diesel vehicle circulation in the areas concerned.

#### PROVISIONS OF THE NATIONAL MOTOR VEHICLE NOX & PM EMISSIONS ACT/ DIESEL-VEHICLE PM EMISSION REGULATIONS FOR THE GREATER TOKYO AREA

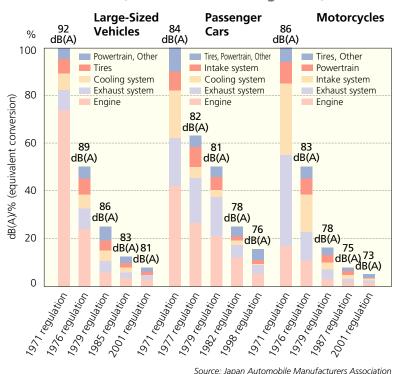
	Provisions of the National Motor Vehicle NOx & PM Emissions Act (Major Metropolitan Areas)	Provisions of PM Emission Regulations for Diesel Vehicles (Greater Tokyo Area Only)
Areas Regulated	Tokyo, Osaka, and Aichi, Chiba, Hyogo, Kanagawa, Mie, and Saitama prefectures (designated areas)	Tokyo (except for islands) and Chiba, Kanagawa, an Saitama prefectures (all areas)
Vehicle Types Regulated	Diesel, gasoline, and LPG trucks and buses Diesel passenger cars	Diesel trucks and buses  Note: Not applicable to diesel passenger vehicles with up to 10-passeng occupancy
Substances Regulated	NOx and PM	PM only
Regulatory Values in Force	Trucks and Buses GVW = Gross vehicle weight GVW=1.7 tons & under:  NOx Same as 1988 regulatory values for new gasoline vehicles PM Half the 2002 regulatory values for new diesel vehicles GVW=Over 1.7 tons to 2.5 tons:  NOx Same as 1994 regulatory values for new gasoline vehicles PM Half the 2002 regulatory values for new diesel vehicles GVW=Over 2.5 tons to 3.5 tons:  NOx Same as 1995 regulatory values for new diesel vehicles PM Half the 2003 regulatory values for new diesel vehicles GVW=Over 3.5 tons:  NOx Same as 1998-1999 regulatory values for new diesel vehicles PM Same as 1998-1999 regulatory values for new diesel vehicles PASSENGER CARS  NOX Same as 1978 regulatory values for new diesel vehicles PM Half the 2002 regulatory values for new diesel vehicles	In Chiba and Kanagawa, same as 1997, 1998, an 1999 regulatory values for new diesel vehicles  In Tokyo and Saitama, same as 2002, 2003, and 200 regulatory values for new trucks and buses
Specific Provisions	New Vehicles In regulated areas, new vehicles not meeting the standards cannot be registered.  Vehicles in Use Regulated vehicles whose principal places of use (as declared in their inspection certificates) fall in regulated areas and that do not meet the standards will not be granted inspection certification after grace periods have expired.  Note: Vehicles whose principal places of use (as declared in their inspection certificates) do not fall in regulated areas can travel through regulated areas even if they do not meet the standards.	New Vehicles No restriction.  Vehicles in Use Vehicles not meeting the standards will be prohibite from travelling through regulated areas after grac periods have expired. Vehicles equipped with loc government-specified PM reduction systems at deemed to be in compliance with the standards.  Note: Applicable to diesel trucks and buses registered anywhere in Japan at travelling through regulated areas.
Grace Periods	From first registration:  Small trucks 8 years etc.  Diesel passenger cars 9 years etc.  Standard trucks 9 years etc.  Minibuses 10 years etc.  Large buses 12 years etc.	Seven years from first registration, regardless of vehic type (truck or bus)  Note: Except in Chiba Prefecture, where vehicles neither registered in n travelling through areas designated under the national Motor Vehicle Nr and PM Emissions Act will be exempted for a period of 12 years, provid vehicle owners apply for such an exemption.

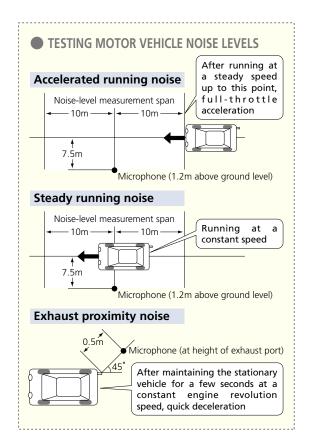


## **Reducing Automobile-Emitted Noise**

Automobiles generate various kinds of noise, including the noise emitted by the engine, intake system, powertrain, and cooling and exhaust systems. Tires also generate tire/road noise. Automotive noise in Japan is regulated by standards—on accelerated running noise, steady running noise, and stationary exhaust proximity noise—which have become progressively more stringent, requiring automakers to develop the technologies necessary for compliance. Tampered muffler systems are another source of noise. To address that issue, strengthened regulations in effect from April 2010 mandate a) that mufflers be tamper-resistant so as to prevent the alteration of their noise-suppression mechanism, and b) that replacement mufflers meet Japan's accelerated running noise standard, as well as its stationary exhaust proximity noise standard, through type approval compliance and be ID-marked accordingly. For further progress in automotive noise reduction, Japan's Central Environment Council is working on regulatory reform, including changes in noise testing methodology and the implementation of tire noise regulations, in line with the results of studies conducted by the UNECE's World Forum for Harmonization of Vehicle Regulations (WP.29).

#### THE PROGRESS IN MOTOR VEHICLE NOISE **REDUCTION** (accelerated running noise)





#### OVERVIEW OF JAPAN'S MOTOR VEHICLE NOISE REGULATIONS (for accelerated running noise)

					F	Regulation	l	
	Vehicle Ty	pe		1971	1976-1977	1979	1982-1987	1998-2001
Large-Sized	Vehicles with GVW>3.5 tons	4WD vehicles, etc. Trucks						82
Vehicles	and maximum engine			92	89	86	83	81
	output>150 kW		Buses					81
Medium-Sized	Vehicles with GVW>3.5 tons	4WD	vehicles, etc.					81
Vehicles	and maximum engine		Trucks	89	87	86	83	80
	output≤150 kW		Buses					80
Small-Sized	Vehicles with GVW≤3.5 tons	Other than	GVW>1.7 tons					76
Vehicles		mini-vehicles	GVW≤1.7 tons	O.F.	83	0.1	78	76
		Mini-vehicles "Bonnet" type		85	0.5	81	/8	76
			Cab-over-engine type					76
Passenger Cars	Vehicles exclusively for the transport of passengers, with	Over 6 occup	ants	84	82	81	78	76
	up to 10-passenger occupancy	6 occupants o	or fewer	04				76
Motorcycles	Small-sized motorcycles (over 2	·		86	83	78	75	73
	and mini-sized motorcycles (126			84	0.5	70		73
Motor-Driven	Class 1 motor-driven cycles (50	cc & under)	Class 2	82	79	75	72	71
Cycles	and Class 2 motor-driven cycles	(51cc-125cc)	Class 1	80	/9	/5	12	71

Notes: 1. In pre-1987 regulations, "150 kW" reads "200 horsepower." 2. "4WD vehicles, etc." includes 4WDs, tractors, and cranes

Source: Ministry of the Environment

# **Vehicle Recycling and Waste Reduction**

Under Japan's End-of-Life Vehicle (ELV) Recycling Law which entered into force in January 2005, automobile manufacturers and importers are responsible for recovery, recycling and appropriate disposal with respect to fluorocarbons, airbags, and automobile shredder residue (ASR). Compliance with the law was anticipated to enable ASR to be recycled at a rate of 70% by 2015, resulting in an automobile recycling rate, by vehicle weight, of 95% (as compared with the 80% rate prevailing prior to the introduction of the law); those rates were in fact surpassed in 2008. Japan's vehicle recycling infrastructure as mandated by its ELV Recycling Law is the first in the world to administer the entire process of auto recycling—from ELV recovery to final disposal—on the basis of electronic "manifests" (or compliance checklists). JAMA itself played a central role in the development and implementation of this advanced vehicle recycling system. It also provided financial support for related software development and continues to help finance system maintenance and upgrades. In line with national efforts to "reduce, reuse, recycle," Japan's automakers are also striving to design vehicles using lightweight materials that are easy to dismantle and recycle, and to reduce and recycle waste generated in the manufacturing process. In 2010 the volume of auto plant-generated waste destined for landfill disposal totalled 1,100 tons, a 99.7% decrease from the 1990 level, very largely surpassing the 2015 target of 10,000 tons.

#### INDUSTRY MEASURES IN LINE WITH NATIONAL LEGISLATION

		ective Utilization v (the "3-R" Law)		End-of-Life Vehicle Recycling Law
	Product Design	Waste Management		ELV Recycling
"Reduce" initiatives	For designated products: - Weight reduction/ Downsizing - Longer product life - Reduced use of hazardous substances	For designated areas of activity:  - Reduction/recycling of designated waste products generated in vehicle manufacturing operations: 1) Scrap metals 2) Casting sand residue	g and Use	
"Reuse" initiatives	For designated products:  - Use of recyclable materials		Distribution, Servicing	- Recovery and recycling of: 1) Fluorocarbons 2) Airbags 3) ASR  Note: Motorcycles are not covered by the ELV Recycling Law.
"Recycle" initiatives	- Ease of dismantling  - Ease of sorting  - Non-hazardous recycling  - Materials identification	- Total waste volume*:  1990 (baseline): 352,000 tons  2010: 1,100 tons (a 99.7% reduction from 1990)  JAMA target: 10,000 tons by FY 2015  *For landfill disposal, including scrap metals, casting sand residue, and other waste	Dist	the ELV Recycling LaW.

#### **ELV RECOVERY IN NUMBERS**

In vehicle units

Fiscal	Year	2010	2011
No. of ELVs	recovered	3,648,428	2,963,642
Appropriate disposal of 3 designated items	Fluorocarbons	3,000,962	2,374,587
	Airbags (1)	1,905,049	1,645,528
	ASR (2)	3,743,461	2,870,155

<sup>(1)</sup> Through recovery/appropriate disposal of inflators or through onboard deactivation. (2) Covers all categories of processors, whether for direct disposal or for transfer to other markets.

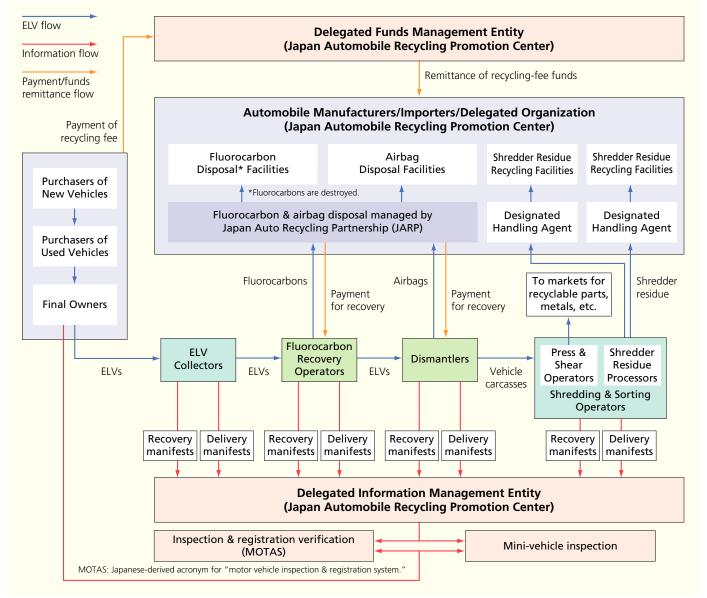
Source: Japan Automobile Recycling Promotion Center

#### RECYCLING RATES: TARGETED & ACHIEVED

Three Designated Items	Target	Achieved
Fluorocarbons	Destruction	2,375 million vehicle units (2011)
Airbags	85%	93.0-100% (2010)
ASR	2005: 30% 2010: 50% 2015: 70%	79.9-87.0% (2010)

Sources: Government-affiliated entities

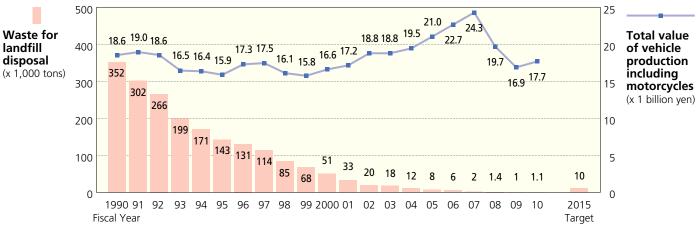
#### ■ THE ELV RECYCLING FLOW (as per the provisions of the End-of-Life Vehicle Recycling Law)



Note: The Japan Automobile Recycling Promotion Center assumes the same responsibilities as automobile manufacturers and importers when an ELV has no manufacturer representation under the provisions of this law. It also assumes transport-to-mainland costs for ELVs turned in on Japan's smallest islands. In addition, this organization provides financial assistance in the disposal of illegally abandoned vehicles.

#### REDUCTIONS IN PRODUCTION PLANT-GENERATED WASTE

As a result of the efforts made by Japan's automobile manufacturers, the total volume of auto plant-generated waste destined for landfill has decreased dramatically. Having shrunk in 2005 to 8,000 tons, down more than 97% from the 1990 baseline level and for the first time surpassing the 2015 target of 10,000 tons, plant-generated waste totalled 1,100 tons in 2010, a 99.7% decrease from the 1990 level.



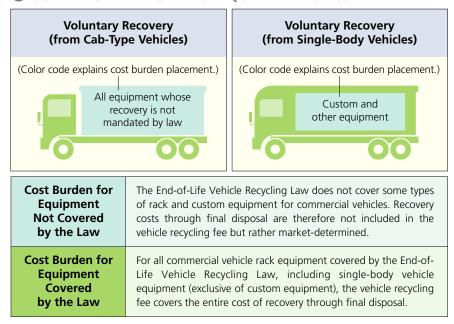
Source: Japan Automobile Manufacturers Association



# **Voluntary Initiatives to Recycle Commercial Vehicle Rack Equipment and Motorcycles**

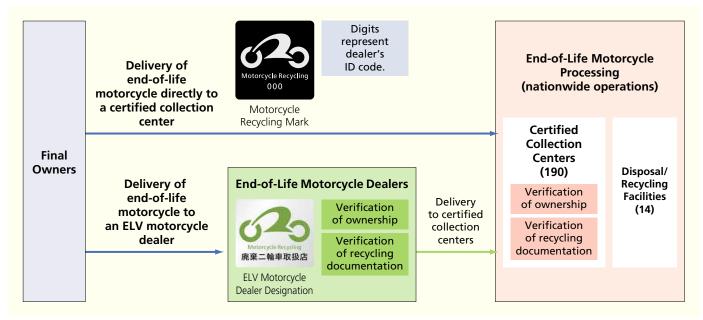
Japan's End-of-Life Vehicle Recycling Law does not cover some types of commercial vehicle rack and custom equipment, nor does it cover motorcycles. In response, JAMA, in cooperation with the Japan Auto-Body Industries Association, promotes the development and use of rack equipment that is easy to dismantle and contains minimal amounts of hazardous substances. JAMA has also introduced a recycling-and-disposal system for such equipment, and by the end of 2011 a total of 163 operators across Japan were participating in the system voluntarily. Since October 2004, JAMA's four motorcycle-manufacturing members, along with 12 motorcycle importers, have been voluntarily operating a recycling system under which motorcycle dealers nationwide sell only vehicles that feature an official motorcycle recycling mark, enabling, without any additional charge to their final owners, their recovery and processing through the proper disposal channels at the end of their service life. In October 2011, the motorcycle recycling fee was eliminated for vehicles sold prior to the introduction of the motorcycle recycling system seven years earlier. Municipally-owned motorcycles require a pre-approval by the Japan Automobile Recycling Promotion Center prior to their appropriate disposal.

#### COMMERCIAL VEHICLE RACK EQUIPMENT NOT COVERED BY THE END-OF-LIFE VEHICLE RECYCLING LAW



	Vehicles Not Covered by the End-of-Life Vehicle Recycling Law								
Van-type CVs such as:	Freezer trucks/vans, refrigerator trucks/vans, dry vans, etc.								
Tank-type CVs such as:	Tank trucks, cement mixers, waterspraying trucks, water-supply trucks, sewage removal trucks, etc.								
Hauling CVs such as:	Specialized hauling trucks, vehicle carriers, container trucks, lift-equipped vehicles, etc.								
Special- purpose CVs such as:	Special all-terrain vehicles, fire trucks, wreckers, pump trucks, ladder-equipped vehicles, etc.								

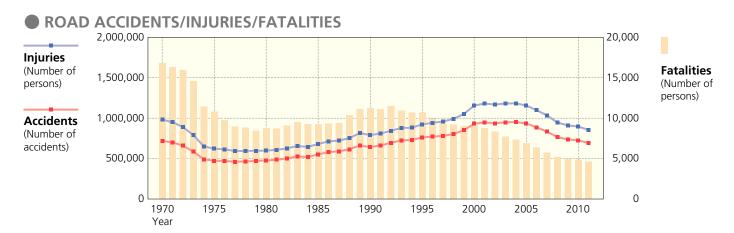
#### THE MOTORCYCLE RECYCLING FLOW



Note: The cost of ELV motorcycle delivery from ELV dealers to certified collection centers is financed by the motorcycle manufacturers on the basis of the consumer's recycling fee paid at time of motorcycle purchase. Source: Japan Automobile Recycling Promotion Center

# **Road Accidents and Resulting Fatalities and Injuries Continue to Decline**

In 2011 road fatalities (defined as occurring within 24 hours after the accident) in Japan fell 72.5% compared to their peak of 16,765 in 1970, to a total of 4,611. Road accidents and road injuries also declined, for the seventh consecutive year, to 691,936 and 854,493 respectively. Increased seatbelt use is one of the major factors behind the downward trend in road fatalities. The June 2008 revision to the Road Traffic Act requires all automobile passengers, including rear-seat occupants, to use seatbelts. Although the rate of use of rear seatbelts in 2011 stood at 33.2% on regular roads and at 63.5% on expressways, those rates remain low compared to the rate of use of front seatbelts, which approaches 100%. Further measures are needed to encourage rear-seat occupants to buckle up.



#### ROAD ACCIDENTS/INJURIES/FATALITIES (exact figures)

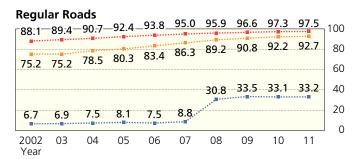
Year	1970	1975	1980	1985	1990	1995	2000	2005	2007	2008	2009	2010	2011
Accidents	718,080	472,938	476,677	552,788	643,097	761,789	931,934	933,828	832,454	766,147	737,474	725,773	691,936
Injuries (Number of persons)	981,096	622,467	598,719	681,346	790,295	922,677	1,155,697	1,156,633	1,034,445	945,504	911,108	896,208	854,493
Fatalities (Number of persons)	16,765	10,792	8,760	9,261	11,227	10,679	9,066	6,871	5,744	5,155	4,914	4,863	4,611

In %

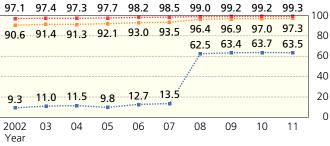
Source: National Police Agency

#### SEATBELT USE RATES BY SEAT POSITION

Driver's seat Front passenger's seat Rear seat

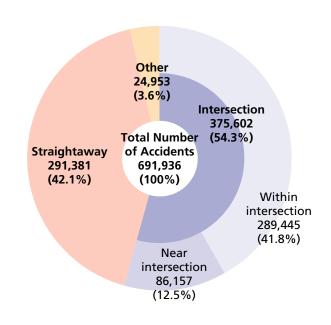


#### **Expressways**



Notes: 1. The survey on seatbelt use is conducted annually in October. 2. 2011 survey samples totalled roughly 415,000 on regular roads and 87,000 on expressways Sources: National Police Agency; Japan Automobile Federation

#### ROAD ACCIDENTS IN 2011 BY ROAD **CONFIGURATION** Number of accidents



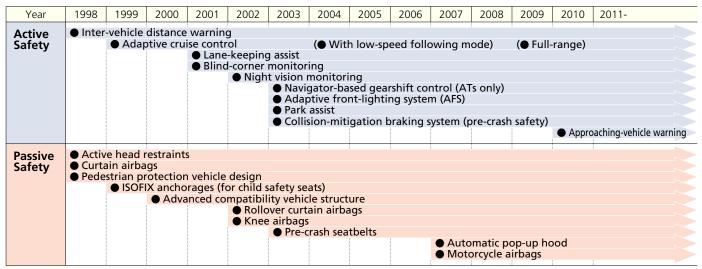
Notes: 1. "Straightaway" includes some curves and tunnels. 2. "Other" includes railroad crossings.

Source: National Police Agency

# **Equipping More Vehicles with Advanced Safety Features**

Road accidents, injuries and fatalities in Japan continued to decline in 2011 (see page 38). Nevertheless, road accidents still claim thousands of lives every year in Japan and in 2011, they injured 854,493 people. Further efforts are therefore required to make the nation's roads safer for all their users. Road safety involves three factors—vehicles, road users, and road infrastructure—and greater road safety requires that progress be made in all three areas. The automotive industry continuously strives for greater *active* safety by enhancing and expanding the installation rates of onboard vehicle safety equipment to help prevent accident occurrence. At the same time, it seeks to increase *passive* safety through enhanced structural safety and vehicle features designed to mitigate injury when accidents do occur.

## VEHICLE SAFETY FEATURES & YEAR OF INTRODUCTION



Source: Japan Automobile Manufacturers Association

# SAFETY FEATURE ONBOARD INSTALLATION STATUS (for passenger cars produced in 2010 for home market)

ctive afety	Safety Feature  Anti-lock braking system (ABS) Brake assist Unfastened seatbelt warning (driver's seat)	In no. of n (see Not 191 170	e 1)	In % (see Note 2)	In vehicle units	In %
	Brake assist Unfastened seatbelt warning (driver's seat)		(4.67)			(see Note 2)
	Unfastened seatbelt warning (driver's seat)	170	(167)	98.5	3,851,786	95.1
afety		170	(158)	87.6	3,716,284	91.8
		191	(191)	98.5	4,049,410	99.9
	Unfastened seatbelt warning (front passenger's seat)	64	(64)	33.0	1,420,625	35.1
	Power-window jamming prevention (with auto-up function)	183	(180)	94.3	4,000,257	98.8
	Power-window jamming prevention (without auto-up function)	7	(3)	5.2	39,592	1.
	High-intensity discharge headlamps	150	(58)	77.3	1,764,517	43.
	Adaptive front-lighting system (AFS)	44	(18)	22.7	223,932	5.
	Back-up monitoring (rear obstacle detection)	109	(21)	56.2	521,283	12.
	Vehicle perimeter monitoring	37	(6)	19.1	122,156	3.
	Vehicle perimeter obstacle warning	33	(4)	17.0	186,141	4.
	Blind-corner monitoring	18	(2)	9.3	81,424	2.
	Night vision monitoring	4	(0)	2.1	1,279	0.
	Night vision "pedestrian ahead" warning	4	(0)	2.1	1,279	0.
	Curve detection	24	(1)	12.4	174,736	4.
	Tire pressure monitoring	7	(5)	3.6	83,881	2
	Driver inattention warning	26	(1)	13.4	185,593	4
	Inter-vehicle distance warning	43	(1)	22.2	41,727	1.
	Lane deviation warning	21	(0)	10.8	23,882	Ö
	Rear collision warning-equipped headrest control	8	(0)	4.1	3,599	Ő
	Collision-mitigation braking system (pre-crash safety)	47	(2)	24.2	47,882	1.
	Adaptive cruise control	45	(2)	23.2	38,843	1
	Adaptive cruise control with low-speed following mode	6	(0)	3.1	12,877	Ö
	Full-range adaptive cruise control	9	(0)	4.6	17,665	0
	Lane-keeping assist	17	(0)	8.8	10,040	0
	Back-up monitoring (parking assistance)	18	(0)	9.3	39,164	1
	Navigator-based gearshift control	29	(8)	14.9	79,037	2
	Pre-crash seatbelts	39	(5)	20.1	28.623	0
	Electronic stability control	117	(55)	60.3	1,010,588	25
	Traction control with ABS	112	(54)	57.7	985,581	24
	Navigator-based stop sign alert with brake assist	112	(6)	5.7	119,844	3
	Rearward-approaching-vehicle warning	3	(1)	1.5	1,377	0
	Emergency braking warning	18	(18)	9.3	472,447	11
	Approaching-vehicle warning	6	(4)	8.0	2,893	0
	Side airbags	130	(52)	67.0	1.086.455	26
assive	Curtain airbags	130	(49)	67.5	988,676	24.
afety	Active head restraints	117	(112)	60.3	2,502,817	61
a.c.y	ISOFIX anchorages (for child safety seats)	144	(112)	74.2		80
		81	(71)	74.2 50.9	3,255,095	
	Three-point seatbelt for rear center seat*  Total	81	194	50.9	1,091,546 <b>4,049,89</b>	36.

Notes: 1. "In no. of models" indicates the number of models in which the safety feature is installed as standard or optional equipment. Figures in parentheses indicate the number of models in which the safety feature is standard equipment. 2. "In %" means as a percentage of the total number of models/units produced. 3. Passenger cars here include minicars.

\*In 2010 a total of 159 passenger car models (2,970,375 vehicle units) featured a rear center seat. Minicars do not feature a rear center seat. Source: Japan Automobile Manufacturers Association

# **JAMA Initiatives in Promoting Greater Road Safety**

In April 2004, JAMA pledged its support of the Japanese government's goal to reduce road fatalities by 50% over a period of ten years. JAMA's own initiatives towards that goal are outlined below.

## JAMA'S ROAD SAFETY INITIATIVES IN EIGHT PRIORITY AREAS

Priority Area	Road Users: Public Awareness Campaigns	Vehicles: Safety Measures	Road Infrastructure: Proposals to Government
① Accidents involving pedestrians or cyclists	Continued implementation of road safety public awareness campaigns, based on the results of accident causation studies.	More widespread application of AFS (1), ABS (2), BA (3), and stability control.	For infrastructural improvements, based on the results of accident causation studies.
② Special measures for the elderly	Development of road safety educational programs specifically for the elderly.	Development of technologies specifically geared to aging-related physical changes.	For more widespread roadway/sidewalk demarcation and greater barrier-free mobility.
③ Greater use of seatbelts	Public awareness campaigns to promote the use of seatbelts.		
Delays in driver recognition and incorrect vehicle control	<ul> <li>Campaigns aimed at preventing faulty driver recognition and incorrect vehicle control.</li> </ul>	Research into the mechanisms of accident causation and human-machine interface conditions using data recorders, etc.	
⑤ Accidents occurring at twilight/night	Campaigns to promote the early lighting of automobile headlamps.	More widespread application of AFS.	• For improved nighttime road illumination.
Accidents occurring at intersections	Public awareness campaigns to encourage drivers to exercise greater caution at intersections, where the majority of fatal road accidents occur.	More widespread application of ABS, BA, and stability control.     Improvement of side-impact protection performance.	For road infrastructure regulations for effective utilization of ITS technologies.
⑦ Collisions with stationary objects		Improvement of side-impact and vehicle occupant protection performance and of side and curtain airbags.	For expanded provision of underground power lines and impact-absorbing road installations.
® Compatibility		R&D on crash-compatible vehicle bodies and compatibility evaluation methods to improve vehicle performance.	

<sup>(1)</sup> Adaptive front-lighting systems. (2) Anti-lock braking systems. (3) Brake-assist systems.

# **Automobiles and Society**

# **Road Safety 4 National Initiatives**

# Japan's 9th Basic Plan for Road Safety

Japan's road safety measures are promoted in line with the nation's consecutive "basic plans" for road safety, the first of which was implemented in 1970. Under the slogan "Towards a 'Zero Road Accidents' Society," the ninth road safety plan (2011-2015) aims to create a highly road safety-conscious society that places maximum priority on human life and, in particular, the safety of those of its members who are most vulnerable to road accidents—namely, pedestrians, senior citizens, and persons who are disabled. The plan emphasizes the need to pursue aggressive measures targeting further reductions in the occurrence of road accidents and fatalities.

## JAPAN'S ROAD SAFETY TARGETS

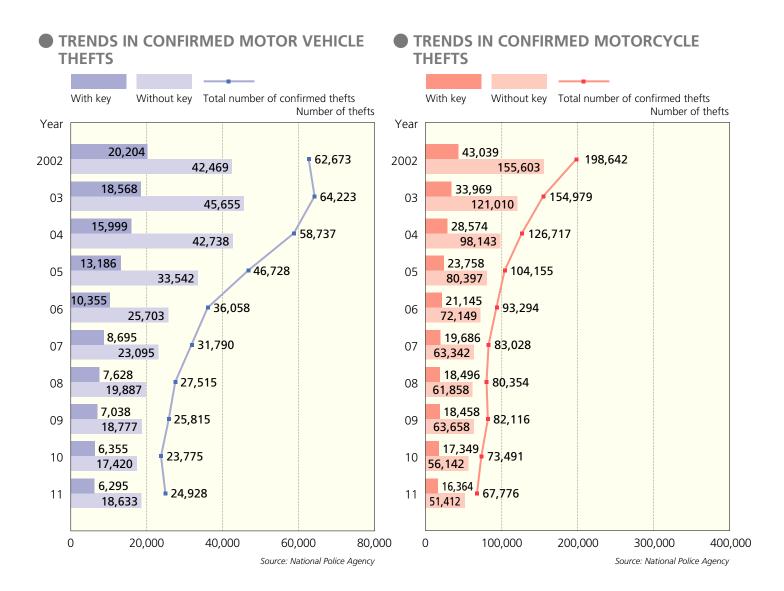
- To reduce the annual number of road fatalities (occurring within 24 hours post-accident) to below 3,000\* by 2015, and thus to make Japan's roads the safest in the world.
- \*Or about 3,500 when fatalities occurring within 30 days post-accident are included (based on the actual ratio in 2010)
- To reduce the total annual number of road fatalities (occurring within 24 hours post-accident) and injuries to below 700,000 by 2015.

## EIGHT MAJOR AREAS OF ROAD SAFETY PROMOTIONAL ACTIVITY

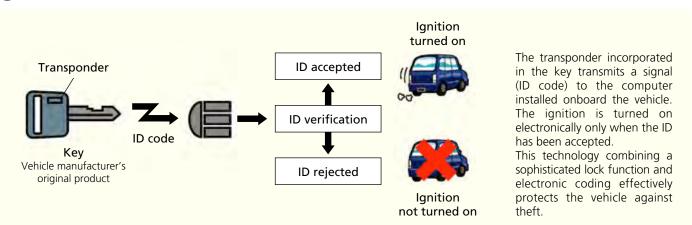
Road Infrastructure Improvements - Sidewalk construction/upgrades, especially in school zones - More pedestrian routes suitable for the elderly and disabled - Increased use of ITS	Road Safety Public Awareness Campaigns - Promotion of safe cycling - Promotion of road safety education for the elderly - Promotion of seatbelt use by all vehicle occupants - Promotion of road safety activities in local communities with the participation of residents
Promotion of Safe Driving - Implementation of special driver-education programs for the elderly - Vehicle fleet operation-related road accident analysis	Enhancement of Vehicle Safety - Expanded development and onboard application of Advanced Safety Vehicle technologies - Implementation of improvements to the national vehicle recall system - Promotion of regular vehicle checks and maintenance
Enforcement of Road Traffic Laws - Strict enforcement of traffic regulations - Stronger crackdowns on "hot-rodding" motorcyclists	Reinforcement of Emergency Rescue Operations Infrastructure - Improved training and deployment of emergency rescue personnel - Upgrading of emergency dispatch support systems - Promotion of doctor-staffed helicopters
Provision of Fair Compensation for Road Accident Victims - Enhanced support for the provision of fair "damages" compensation	Promotion of Road Safety Research and Analysis - Promotion of further safe-driving research - Promotion of comprehensive analysis of road accident causation

# **Efforts to Prevent Theft**

After peaking at 64,223 in 2003, the annual number of automobile thefts in Japan fell for seven consecutive years, dropping to 23,775 in 2010, but then rose slightly, to 24,928, in 2011. This overall downward trend is largely attributable to the widespread use of immobilizers (portable electronic lock systems). Meanwhile, although 67,776 motorcycle thefts were reported in 2011, that figure nevertheless represents a continuing steady decline in such thefts since 2000. To enhance motor vehicles' "theft-resistance," the automobile industry has introduced and promotes the use of electronic devices such as smart keys equipped with immobilizers.



## A SAMPLE IMMOBILIZER DEVICE AND HOW IT WORKS



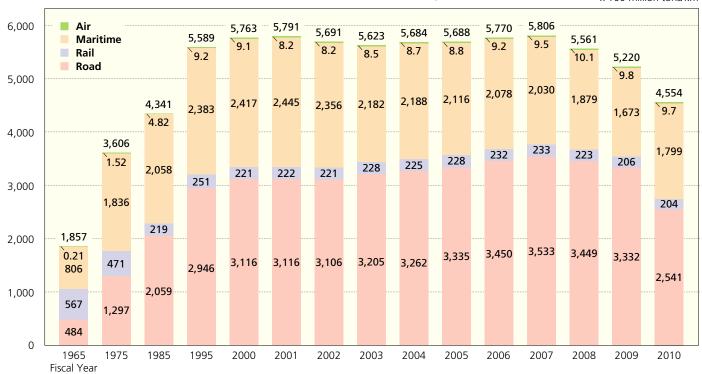
Note: The above diagram illustrates the operation of a vehicle manufacturer's original product. Other types of immobilizers are available in the aftersales market

# **Motor Vehicles are Vital to Goods Distribution**

Accounting for 56% of Japan's total freight transport, road transportation plays an essential role in goods distribution. With ever-expanding goods distribution, the role of motor vehicles in freight transport will become even more significant in the years ahead.



x 100 million tons/km



Notes: 1. As of 1987, "Road" includes transport by mini-vehicles. 2. Survey and calculation methods for "Road" data changed in 2010. 3. "Road" figures for fiscal 2010 (ending March 31, 2011) do not include data from the Tohoku region and Hokkaido as a consequence of the March 11, 2011 earthquake. Sources: Ministry of Land, Infrastructure, Transport and Tourism, etc.

# **Automobiles and Society**

# **Automobile Customs Tariffs**

# **Automobile Customs Tariffs**

After repeated reductions in tariff rates, import tariffs in Japan on finished motor vehicles and major auto components were completely abolished in 1978. Meanwhile, some countries still impose high tariffs on imported vehicles. The United States imposes a 25% tariff on imported trucks, and EU import tariffs range from 10% (on finished passenger cars) to 22% (on larger-sized trucks). China's auto tariffs remain high despite having been progressively lowered after the country's accession to the World Trade Organization.

#### AUTOMOBILE CUSTOMS TARIFFS, JAPAN/U.S.A./EU/CHINA

As of February 2012

	Japan	U.S.A.	EU	China
Passenger Cars	None	2.5%	10%	25%
Trucks	None	25% Cab chassis, 5t or greater in GVW4%	Gasoline trucks, over 2800cc Diesel trucks, over 2500cc	Trucks, under 5t in GVW
Buses	None	Vehicles for the transport of 10 or more persons, incl. the driver 2%	Vehicles for the transport of 10 or more persons, incl. the driver Gasoline buses, over 2800cc Diesel buses, over 2500cc	25%
Components, etc.	Major components: None	Bodies, parts and accessories ···· 2.5%	Bodies, parts and accessories 3-4.5%	Major components ······ 3-10%

Sources: Customs tariff schedules of countries/region concerned

# **Evolution of Intelligent Transport Systems (ITS) in Japan**

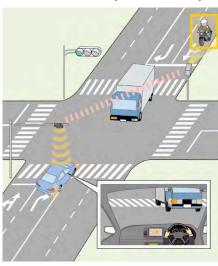
Intelligent Transport Systems aim to radically improve transport safety, efficiency and comfort through the use of information and communication technologies integrating road users, road infrastructure, and vehicles. In 1996 the Japanese government formulated its Comprehensive Concept for the Promotion of ITS, on the basis of which it has promoted, as a national project, ITS development in a number of areas. Advanced navigation systems are already widely in use, as are ETC (electronic toll collection) and smart highway toll stations using ETC exclusively. With the development and introduction of advanced safety vehicles (ASVs), road-to-vehicle safe-driving support systems, including an ITS "spot service" system for use mainly on expressways, were tested in 2008 and entered into full-scale operation in 2010. The government's New Strategy in Information and Communications Technology of 2010 calls for the introduction of safe-driving support systems and the halving of road congestion by 2020 (compared to 2010) on major national highways.

## INTRODUCTION OF ROAD-TO-VEHICLE SAFE-DRIVING SUPPORT SYSTEMS

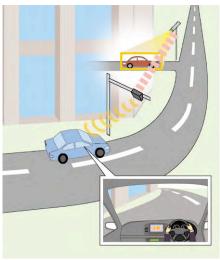
Incorporating ITS technologies, road-to-vehicle systems providing safe-driving support and cruise assistance are now in operation in Japan. In 2010 an ITS "spot service" system was launched mainly on expressways and a "DSSS" (for "Driving Safety Support System") system on national highways. Meanwhile, the use of electronic toll collection (ETC) on highways has increased to nearly 90% per 10 million vehicles.

## "DSSS" SYSTEM FEATURES (EXAMPLES)

1. Oncoming traffic warning (here, on right turn)



2. Entering traffic ahead warning



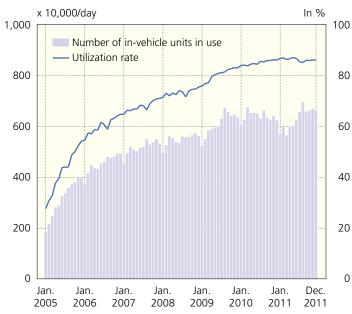
Source: Universal Traffic Management Society of Japan

## "SPOT SERVICE" SYSTEM FEATURES (EXAMPLES)



Sources: Ministry of Land, Infrastructure, Transport and Tourism, etc.

## ETC UTILIZATION STATUS



Notes: 1. Data was not collected from roads that were made toll-free on a trial basis from July 2010 through June 2011. 2. No data was collected from the entire Tohoku region in and after June 2011, when all toll roads there were made toll-free.

Source: Ministry of Land, Infrastructure, Transport and Tourism

## **EXPANDING AVAILABILTY OF ASV TECHNOLOGIES IN THE MARKET**

In the area of safe-driving assistance using ITS technologies, a wide range of vehicle safety features, including adaptive front-lighting systems, lane-keeping assist systems, full-range adaptive cruise control systems and collision-mitigation braking systems, have been developed based on the results of research conducted on the Advanced Safety Vehicle (ASV) concept. Most of these advanced technologies have already been introduced to the market (see page 39 for details on the status of their onboard installation).

# ■ THE ADVANCED SAFETY VEHICLE (ASV) PROJECT, PHASES 1-5: Summary of Contents and Scheduling

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
	(Five-Year Plan)	(Five-Year Plan)	(Five-Year Plan)	(Five-Year Plan)	(Five-Year Plan)
Implementation	FY 1991	FY 1996	FY 2001	FY 2006	FY 2011
Period	through FY 1995	through FY 2000	through FY 2005	through FY 2010	through FY 2015
Objectives	Technological verification	R&D for market introduction	Preparation for widespread use Development of new technologies	Promotion of widespread use Practical application of some "DSSS" systems (see page 44)	Breakthroughs in active safety technologies     Preparation for implementation of telecommunications-based systems to help prevent accidents involving pedestrians

Source: Ministry of Land, Infrastructure, Transport and Tourism

## PRINCIPAL ASV SAFETY TECHNOLOGIES DEVELOPED

- 1 Collision-Mitigation Braking System
- 2 Curve Detection System
- 3 Full-Range Adaptive Cruise Control
- 4 Lane Deviation Warning System
- 5 Lane-Keeping Assist System
- 6 Vehicle Perimeter Obstacle Warning
- 7 Adaptive Front-Lighting System
- 8 Rear Collision Warning-Equipped
  Headrest Control
- 9 Pre-Crash Seatbelts

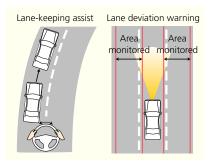
- 10 Driver Inattention Warning System
- 11 Electronic Stability Control System
- 12 Rear/Side Obstacle Detection
- 13 Emergency Braking Warning
- 14 Night Vision "Pedestrian Ahead" Warning

Source: Ministry of Land, Infrastructure, Transport and Tourism

## PRACTICAL APPLICATION OF ASV TECHNOLOGIES

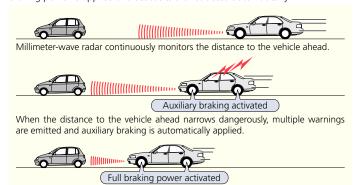
## 1. Lane-Keeping Assist

Sensors (cameras) positioned on the vehicle monitor the road ahead and, through auxiliary control of the steering wheel, help keep the vehicle centered in the lane whenever the vehicle deviates from its course because of, for example, a crosswind or road surface unevenness.



### 3. Collision-Mitigation Braking System (pre-crash safety)

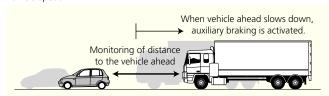
Based on the distance from and speed relative to the vehicle ahead obtained principally by means of radar technology, the system's electronic control unit calculates the risk of collision. In the event of such a risk, multiple warnings are emitted and auxiliary braking is applied. When a collision is imminent, full braking power is applied and seatbelts are retracted automatically.



When a collision is imminent, full braking power is automatically applied and seatbelts are rapidly retracted.

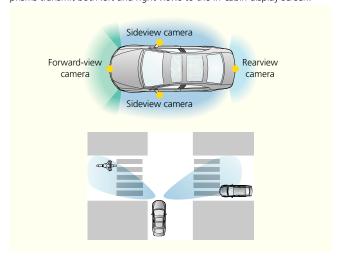
#### 2. Full-Range Adaptive Cruise Control

Information from front sensors helps a vehicle keep a safe distance from the vehicle ahead through brake or speed control according to a preset vehicle speed.



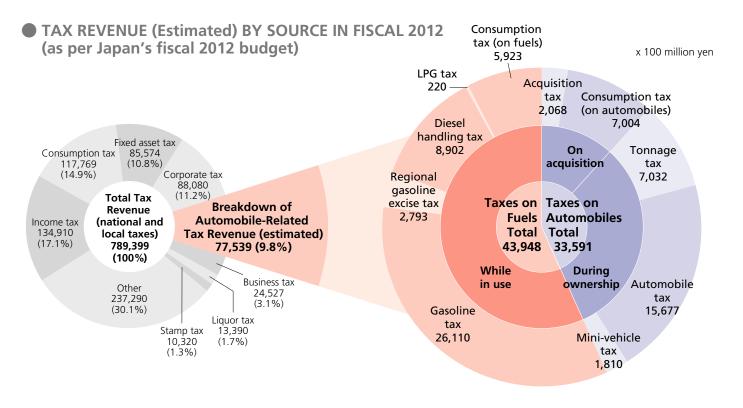
### 4. Vehicle Perimeter Monitoring & Blind-Corner Monitoring

In blind-corner monitoring (bottom image), front cameras with built-in prisms transmit both left and right views to the in-cabin display screen.



# **Eight Trillion Yen in Annual Automobile-Related Tax Revenue**

Since the initial earmarking of funds for road construction and road maintenance programs in line with Japan's first five-year road improvement plan in 1954, there has been a steady increase both in the number of automobile-related taxes assessed on users and in their respective rates. Currently, the automobile tax structure consists of nine different taxes, creating a very heavy tax burden for Japanese motor vehicle owners. Under the government's budget for fiscal 2012, the total value of tax revenue from these automobile-related taxes was estimated at 7.8 trillion yen, or 9.8% of Japan's projected total tax revenue of 79 trillion yen in fiscal 2012.



Notes: 1. Automobile-related consumption tax revenue is not included in the "Consumption tax" segment in the chart on the left, but is included in the breakdown of automobile-related tax revenue appearing in the chart on the right. 2. Automobile-related consumption tax revenue values have been calculated by JAMA. 3. The consumption tax is a national sales tax, of which 1% of the revenue is redistributed to local government coffers.

Sources: Ministry of Internal Affairs and Communications

## AUTOMOBILE-RELATED TAXES IN JAPAN (as of May 1, 2012)

Tax Category	On Acquisition	on	During Ownership
rax category	Acquisition Tax	Consumption Tax	Tonnage Tax
How Assessed	Assessed on the acquisition of an automobile, whether new or used, based on the purchase price	Assessed on the purchase price of the automobile	Assessed according to vehicle weight at each vehicle inspection
National/Local Tax	Prefectural tax	National and local tax	National tax
Tax Rate/ Amount	(Private use) - 5% of purchase price (3% for commercial and mini-vehicles) - Exempted for vehicles purchased for 500,000 yen or less  Note: Acquisition tax reductions/exemptions are in effect from April 1, 2012 through March 31, 2015 for eco-friendly vehicles (see pages 48-50).	5% (of which 1% is a local tax)	1) Vehicles complying with 2015 fuel efficiency standards: Original rates apply (¥2,500/0.5t per year for private passenger cars) 2) Vehicles on the road 18 years or longer since first registration: Previous rates apply (¥6,300/0.5t per year for private passenger cars) 3) Vehicles on the road 13 years or longer since first registration: Temporary rates apply (¥5,000/0.5t per year for private passenger cars) 4) Other vehicles for private use: Passenger cars: ¥4,100/0.5t per year Trucks (GVW>2.5t): ¥4,100/t per year - Trucks (GVW≤2.5t): ¥3,300/t per year Buses: ¥4,100/t per year - Mini-vehicles: ¥3,300 per year Motorcycles (251cc and over): ¥1,900 per year Motorcycles (126 to 250cc): ¥4,900 upon registration  Note: Additionally, tonnage tax reductions/exemptions are in effect from May 1, 2012 through April 30, 2015 for eco-friendly vehicles (see pages 48-50).

## ■ JAPAN'S ESTIMATED AUTOMOBILE-RELATED TAX REVENUE IN FISCAL 2012

			Tax Revenue (x 100 million yen)	Original Tax Rate	Current Tax Rate	Comparison with Original Tax Rate (multiplier value)
Taxes on Automobiles	On acquisition	Acquisition tax	2,068	3%	5% (Excluding commercial/mini-vehicles)	1.7
	-	Consumption tax (on automobiles)	7,004	5%	_	_
	Ownership  Automobile tax		7,032	¥2,500/0.5t per year (Registered vehicles for private use)	¥4,100/0.5t per year (Registered vehicles for private use)	1.6
			15,677	Based on engine capacity	No change	_
		Mini-vehicle tax	1,810	¥7,200/year (Passenger cars for private use)	No change	_
		Total	33,591			
Taxes on	While	Gasoline tax	26,110	¥24.3/ℓ	¥48.6/l	2.0
Fuels	in use	Regional gasoline excise tax	2,793	¥4.4/ℓ	¥5.2/ℓ	1.2
		Diesel handling tax	8,902	¥15.0/ℓ	¥32.1/ℓ	2.1
		LPG tax	220	¥17.5/kg	No change	I
		Consumption tax (on fuels)	5,923	5%	_	
		Total	43,948			
Grand Total			77.539			

Notes: 1. Consumption tax revenue values have been calculated by JAMA. 2. Tax rates indicated effective as of May 1, 2012. 3. A new carbon tax, to be incorporated separately into the petroleum and coal tax and with rates calculated on the basis of CO<sub>2</sub> emissions per ton, comes into effect in October 2012.

# ■ TAX RATES IN EFFECT (Examples), 1954-2012, TO SUPPORT ROAD NETWORK IMPROVEMENTS

Year	Five-Year Plan	Year	Acquisition Tax	Tonnage Tax Yen/0.5t per year	Gasoline Tax Yen/ℓ	Regional Gasoline Excise Tax Yen/ $\ell$	Diesel Handling Tax Yen/ $\ell$	LPG Tax Yen/kg
1954-′57		'54 '55 '56 '57			13.0 11.0 ↓ 14.8	2.0 ↓ 3.5	6.0 8.0	
'58-'60	Second	<b>′</b> 59			<b>↓</b> 19.2		<b>↓</b> 10.4	
′61-′63	Third	<b>′</b> 61	Commercial and mini-	In the case of a passenger car for	↓ 22.1	4.0	↓ 12.5	
′64-′66	Fourth	'64 '66	vehicles excluded	private use	24.3	4.4	15.0	5
′67-′69	Fifth	'67 '68	3%					10
′70-′72	Sixth	′70 ′71	<u> </u>	2,500	$\downarrow$	<b>1</b>		17.5
′73-′77	Seventh	′74 ′76	5%	5,000 6,300	29.2 36.5	5.3 6.6	↓ 19.5	
′78-′82	Eighth	′79			45.6	8.2	24.3	
′83-′87	Ninth							
′88-′92	Tenth				<b>†</b>	<b>†</b>	<b>+</b>	
′93-′97	Eleventh	′93			48.6	5,2	32.1	
′98-′02	Twelfth	′98						
2003-′07	As per the national priority infrastructure development plan							
′08-	As per the national medium-term road infrastructure plan			, 6,300				
′10-′11	_		•	5,000	<b>↓</b>	•	<b>↓</b>	<b>+</b>
′12-	_		5%	4,100 (2,500*)	48.6	5.2	32.1	17.5
Comparison with original tax rate (multiplier value)		1.67	1.64	2.00	1.18	2.14	1.00	

Original tax rate \*The original tonnage tax rate (¥2,500/0.5t per year) is applied to vehicles compliant with 2015 fuel efficiency standards.

Notes: 1. Tax rates indicated effective as of May 1, 2012. 2. A new carbon tax, to be incorporated separately into the petroleum and coal tax and with rates calculated on the basis of CO2 emissions per ton, comes into effect in October 2012.

Source: Japan Automobile Manufacturers Association

	While in Use					
Automobile Tax	Mini-Vehicle Tax	Gasoline Tax			LPG Tax	Consumption Tax
Fixed amount assessed on the	Fixed amount assessed on the	Assessed on gas	soline	Assessed on light oil	Assessed on LPG	Assessed on
owner each year as of April 1	owner each year as of April 1	Included in the	fuel price			the purchase price of fuels
Prefectural tax	Municipal tax	National tax		Prefectural tax	National tax	National and local tax
Passenger cars (for private use) - Up to 1,000cc 29,500 yen/year - 1,001 to 1,500cc 34,500 yen/year - 2,501 to 2,000cc 45,000 yen/year - 2,501 to 3,000cc 51,000 yen/year - 3,001 to 3,500cc 58,000 yen/year - 3,501 to 4,000cc 66,500 yen/year - 4,001 to 4,500cc - 4,501 to 6,000cc - 0ver 6,000cc 111,000 yen/year	1) Mini-vehicles (for private use) - Passenger cars 7,200 yen/year - Trucks 4,000 yen/year 2) Motorcycles - Up to 50cc 1,000 yen/year - 51 to 90cc 1,200 yen/year - 91 to 125cc 1,600 yen/year - 126 to 250cc 2,400 yen/year - 251cc and over 4,000 yen/year	48.6 yen/ℓ	5.2 yen/ℓ	32.1 yen/l (light oil)	17.5 yen/kg (LPG)	5% of the purchase price of fuels (of which 1% is a local tax)  For light oil, imposed on the light oil price excluding the diesel handling tax

Source: Japan Automobile Manufacturers Association

# **Tax Incentives to Promote the Wider Use of Eco-Friendly Vehicles**

To help expedite the shift to low-carbon road transport in the interest of curbing global warming, the Japanese government has, since April 2009, applied both new and extended auto-related tax incentives to promote the wider use of eco-friendly (i.e., fuel-efficient and low-emission) vehicles. For the purchase of new vehicles that comply with Japan's 2015 fuel efficiency standards, reductions/exemptions are applicable to the acquisition tax and tonnage tax since April 1 and May 1, 2012, respectively.

# **INCENTIVES & ELIGIBILITY REQUIREMENTS FOR NEW VEHICLES**

## ACQUISITION AND TONNAGE TAX REDUCTIONS/EXEMPTIONS

Period in effect: April 1, 2012 through March 31, 2015 for the acquisition tax; May 1, 2012 through April 30, 2015 for the tonnage tax.

	Vehicle Type		Redu	Reductions/Exemptions		
	Requirements	Certification Sticker(s)	Acquisition Tax (4)	Tonnage Tax		
	Passenger Cars and Small Trucks a	and Buses (GVW≤2	.5t)			
	icles (including fuel cell vehicles), rid Vehicles, Clean Diesel Vehicles (1), Natural Gas Vehicles (2)		Exempt	Exempt at time of 1st vehicle inspect 50% reduction at 2nd inspection		
Gasoline Vehicles	Compliant +20% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (3)	またでは またまながかはま	Exempt	Exempt at time of 1st vehicle inspect 50% reduction at 2nd inspection		
(including hybrid vehicles)	Compliant +10% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (3)	anus officiales	75% reduction	75% reduction		
	Compliant with 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (3)	您員基準達成車 明清出力又車 2000年	50% reduction	50% reduction		
	Mid-Sized Trucks and Buses (	(2.5t <gvw≤3.5t)< td=""><td></td><td></td></gvw≤3.5t)<>				
	icles (including fuel cell vehicles), rid Vehicles, Natural Gas Vehicles (2)		Exempt	Exempt at time of 1st vehicle inspection 50% reduction at 2nd inspection		
Diesel Vehicles (including	Compliant +10% compared to 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	有指数 <b>(10%) 注</b>	Exempt	Exempt at time of 1st vehicle inspec 50% reduction at 2nd inspection		
hybrid vehicles)	Compliant +5% compared to 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	では、100mm で	75% reduction	75% reduction		
	Compliant +10% compared to 2015 fuel efficiency standards, and compliant with 2009 emission standards	atha ologona	75% reduction	75% reduction		
	Compliant with 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	然 育 展 体 達 战 单	50% reduction	50% reduction		
	Compliant +5% compared to 2015 fuel efficiency standards, and compliant with 2009 emission standards	MRH & COLUMN	50% reduction	50% reduction		
Gasoline Vehicles	Compliant +10% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards	SRESCHOOLES (明用出力ス度	Exempt	Exempt at time of 1st vehicle inspec 50% reduction at 2nd inspection		
(including hybrid vehicles)	Compliant +5% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards	MARIA (SOLIE)	75% reduction	75% reduction		
	Compliant +10% compared to 2015 fuel efficiency standards, with emissions down by 50% from 2005 standards	antes doubles (Mill 2020)	75% reduction	75% reduction		
	Compliant with 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards	您責易华達成事! (明治出方之車	50% reduction	50% reduction		

	Vehicle Type		Redu	uctions/Exemptions						
	Requirements	Certification Sticker(s)	Acquisition Tax (4)	Tonnage Tax						
	Heavy-Duty Trucks and Buses (GVW>3.5t)									
	icles (including fuel cell vehicles), rid Vehicles, Natural Gas Vehicles (2)		Exempt	Exempt at time of 1st vehicle inspection 50% reduction at 2nd inspection						
Diesel Vehicles (including	Compliant +10% compared to 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	新月基本(1000年) 医排出对及证	Exempt	Exempt at time of 1st vehicle inspection 50% reduction at 2nd inspection						
hybrid vehicles)	Compliant +5% compared to 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	型資品等(NATES) 医排光方尺車 (Extraction)	75% reduction	75% reduction						
	Compliant +10% compared to 2015 fuel efficiency standards, and compliant with 2009 emission standards	MRHS COM ES	75% reduction	75% reduction						
	Compliant with 2015 fuel efficiency standards, with NOx and PM emissions down by 10% from 2009 standards	您有易年達成事 您有易年達成事 <del>能能認及意</del>	50% reduction	50% reduction						
	Compliant +5% compared to 2015 fuel efficiency standards, and compliant with 2009 emission standards	<b>恢复基件</b>	50% reduction	50% reduction						

<sup>(1)</sup> Passenger cars complying with 2009 emission standards. (2) With NOx emissions down by 10% from 2009 emission standards. (3) Fuel consumption and exhaust emission requirements are JC08 test cycle-based. The "Compliant +20% compared to 2015 fuel efficiency standards," "Compliant +10% compared to 2015 fuel efficiency standards," and "Compliant with 2015 fuel efficiency standards" requirements are equivalent to "Compliant +50% compared to 2010 fuel efficiency standards," "Compliant +38% compared to 2010 fuel efficiency standards," and "Compliant +25% compared to 2010 fuel efficiency standards," espectively, when measured in the 10-15-mode test cycle, on which basis the 2010 fuel efficiency standards were established. (4) Acquisition tax reductions/exemptions are applied once, at the time of new vehicle purchase during the period in which these reductions/exemptions are in effect.

# ACQUISITION AND TONNAGE TAXES ON NEW VEHICLES: EXAMPLES OF AMOUNTS ASSESSED, BY VEHICLE TYPE

In yen

		Pa	ssenger Ca	ars	N	lini-Vehicle	es	Heav	y-Duty Vel	hicles
	Tax Status	Exempt	With 75% reduction	With 50% reduction	Exempt	With 75% reduction	With 50% reduction	Exempt	With 75% reduction	With 50% reduction
Acquisition Tax	As of April 1, 2012	0	20,200	40,500	0	6,700	13,500	0	90,000	180,000
	Without reductions/ exemptions	81,000	81,000	81,000	27,000	27,000	27,000	360,000	360,000	360,000
Tonnage Tax	As of May 1, 2012	0	5,600	11,200	0	1,800	3,700	0	9,300	18,700
	Without reductions/ exemptions	22,500	22,500	22,500	7,500	7,500	7,500	37,500	37,500	37,500
Total Reduction (acquisition tax + tonnage tax)		103,500	77,700	51,800	34,500	26,000	17,300	397,500	298,200	198,800

Assumptions: For passenger cars: purchase price = ¥1.8 million, GVW<1.5t; For mini-vehicles: purchase price = ¥1 million; For heavy-duty vehicles: purchase price = ¥8 million, GVW=15t. Notes: 1. New tax assessment values above have been calculated on the basis of tax rates to be applied from April 1 and May 1, 2012. 2. Reductions are applied on the basis of compliance with stipulated requirements, and reduction amounts vary according to vehicle purchase price and weight.

# ACQUISITION AND TONNAGE TAX REDUCTIONS/EXEMPTIONS FOR HEAVY-DUTY VEHICLES EQUIPPED WITH ADVANCED SAFETY FEATURES AND PUBLIC-USE ASSISTED-MOBILITY VEHICLES

Period in effect: April 1, 2012 through March 31, 2015 for the acquisition tax; May 1, 2012 through April 30, 2015 for the tonnage tax.

	Vohicle Type	Reductions/Exemptions				
	Vehicle Type	Acquisition Tax	Tonnage Tax			
Trucks (GVW>8t) and Tr equipped with a collision-	•	¥3.5 million deduction from purchase price (1), (2)	50% reduction (1), (3)			
Assisted-Mobility Vehicles	Low-floor ("non-step") buses (for use in public transport)	¥10 million deduction from purchase price (2)	Exempt (3)			
	Buses equipped with an electric lift (for use in public transport)	For large buses (occupancy≥30 persons),     ¥6.5 million deduction from purchase price (2)     For small buses (occupancy<30 persons),     ¥2 million deduction from purchase price (2)	Exempt (3)			
	Universal design-based taxis (for use in public transport)	¥1.0 million deduction from purchase price (2)	Exempt (3)			

<sup>(1)</sup> For large trucks (GVW>22t) and some tractors (GVW>13t), period in effect: April 1, 2012 through October 31, 2014. (2) Deductions are applied once, at the time of first registration. (3) Reductions/exemptions are applied once, at the time of first mandatory vehicle inspection.

Notes: 1. Acquisition tax is assessed on the amount remaining after deduction. 2. The above tonnage tax reduction/exemptions do not apply to vehicles targeted by this scheme that are

# ■ FISCAL 2012-2013 AUTOMOBILE TAX REDUCTIONS FOR PASSENGER CARS AND SMALL TRUCKS AND BUSES (GVW≤2.5t) \*

Requirements (1)	Certification Stickers	Reduction
Compliant +10% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (2)	SRESTING SRESTING SRESTING	50% reduction approximately (3)
Compliant with 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (2)	型育品等建设年 经排出方式申	25% reduction approximately (3)

<sup>\*</sup>Also applies to trucks and buses (2.5t<GVW>3.5t, gasoline vehicles only) certified as fuel-efficient and low-emission vehicles.

(1) Applies additionally to electric (including fuel cell) vehicles, plug-in hybrid vehicles and natural gas vehicles (with NOx emissions down by 10% from 2009 standards). (2) Fuel consumption and exhaust emission requirements are JC08 test cycle-based, with "Compliant +10% compared to 2015 fuel efficiency standards" and "Compliant with 2015 fuel efficiency standards" being equivalent to "Compliant +38% compared to 2010 fuel efficiency standards" and "Compliant +25% compared to 2010 fuel efficiency standards," respectively, when measured in the 10+15-mode test cycle, on which basis the 2010 fuel efficiency standards were established. (3) For eligible vehicles newly registered in 2012 and 2013 the automobile tax reduction is applied in the year subsequent to the year of projects along.

2013, the automobile tax reduction is applied in the year subsequent to the year of registration.

Note: This scheme also mandates a yearly 10% surcharge on the automobile tax for diesel vehicles on the road 11 years or longer, and for gasoline and LPG-powered vehicles on the road 13 years or longer, since first registration.

# **INCENTIVES & ELIGIBILITY REQUIREMENTS FOR USED VEHICLES**

## ■ FISCAL 2012-2013 ACQUISITION INCENTIVES FOR PASSENGER CARS AND SMALL TRUCKS AND BUSES (GVW≤2.5t) \*

Requirements (1)	Certification Stickers	Incentive
Compliant +20% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (2)	本本本	¥450,000 deduction from purchase price
Compliant +10% compared to 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (2)	新来 ま 本	¥300,000 deduction from purchase price
Compliant with 2015 fuel efficiency standards, with emissions down by 75% from 2005 standards (2)	無有風味達成事 (気)ルビガス車	¥150,000 deduction from purchase price

<sup>\*</sup>Also applies to trucks and buses (gasoline vehicles only) and heavy-duty trucks and buses (hybrid vehicles only) certified as fuel-efficient and low-emission vehicles.

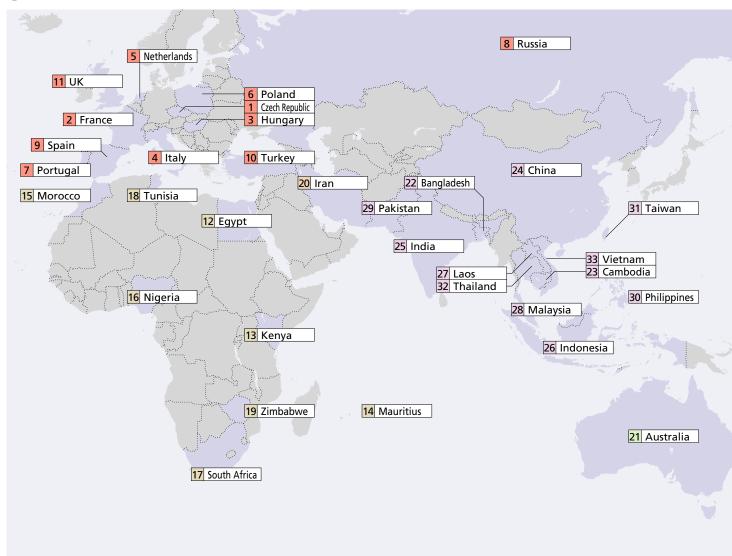
(1) Applies additionally to electric (including fuel cell) vehicles, plug-in hybrid vehicles, natural gas vehicles (with NOx emissions down by 10% from 2009 standards) and clean diesel passenger cars (compliant with 2009 emission standards). (2) Fuel consumption and exhaust emission requirements are JC08 test cycle-based, with "Compliant +20% compared to 2015 fuel efficiency standards," "Compliant +10% compared to 2015 fuel efficiency standards," and "Compliant with 2015 fuel efficiency standards" being equivalent to "Compliant +50% compared to 2010 fuel efficiency standards," and "Compliant +25% compared to 2010 fuel efficiency standards," and "Compliant +25% compared to 2010 fuel efficiency standards," Note: Acquisition tax is assessed on the amount remaining after deduction.

Notes: 1. Acquisition tax is assessed on the amount remaining after deduction. 2. The above tonnage tax reduction/exemptions do not apply to vehicles targeted by this scheme that are eligible for the tonnage tax reductions/exemptions prescribed for eco-friendly vehicles (see page 48), to which the latter measures only are applied. Regarding the acquisition tax, owners of vehicles covered under this scheme can opt either for the deductions indicated here or for the acquisition tax reductions/exemptions prescribed for eco-friendly vehicles (see page 48).

# **Global Manufacturing Operations Expand Their Range**

Japanese automobile manufacturers have continued to develop local production operations, whether as wholly-owned subsidiaries or as joint ventures, in the United States, Europe, Southeast Asia, China and, recently, Russia and other countries with emerging markets. These operations contribute to the strengthening of local economies

## **■** GEOGRAPHICAL DISTRIBUTION OF JAPANESE AUTOMAKERS' OVERSEAS PRODUCTION BASES



## JAPANESE AUTOMAKERS' OVERSEAS PRODUCTION BASES: Number of Plants by Country &

Country/ Territory Country N (see ma	Motor Vehicles (incl. parts)	Motor- cycles (incl. parts)	Motor Vehicles & Motorcycles (incl. parts)	Parts Only	
Europe					
Czech Republic	1	1		-	<u>-</u>
France	2	1	1	-	<u> </u>
Hungary	3	1	-	-	-
Italy	4	<u> </u>	1	-	1
Netherlands	5	1	-	-	-
Poland	6	-	-	-	3
Portugal	7	2	-	-	-
Russia	8	5	-	-	-
Spain	9	1	2	-	-
Turkey	4		-		
UK	3	-	-	1	
Europe Total		19	4	-	5

	ntry No. ee map)	Motor Vehicles (incl. parts)	Motor- cycles (incl. parts)	Motor Vehicles & Motorcycles (incl. parts)	Parts Only
Africa					
Egypt	12	3		-	-
Kenya	13	3	-	-	-
Mauritius	14	1	-	-	-
Morocco	15	1	-	-	-
Nigeria	16	-	2	-	-
South Africa	17	6	-	-	-
Tunisia	18	1	-	-	-
Zimbabwe	19	1	-	-	-
Africa Total		16	2	-	-
Middle East					
Iran	20	1	-	-	1
Middle East Total		1	-	-	-
Oceania					
Australia	21	1	-	-	1
Oceania Total		1	-	-	1

through employment creation, local parts purchasing and, in many cases, export revenue for the host countries. Locally-produced automobile parts such as engines and transmissions, as well as finished vehicles of some models, are exported to Japan and other destinations.



# **Items Produced**

			Motor- cycles (incl. parts)	Motor Vehicles & Motorcycles (incl. parts)	Parts Only
Asia					
Bangladesh	22	3	-	-	-
Cambodia	23	-	1	-	-
China	24	25	9	-	16
India	25	8	3	-	2
Indonesia	26	9	4	1	9
Laos	27		1		
Malaysia	28	8	3		3
Pakistan	29	6	1	1	-
Philippines	30	10	4		4
Taiwan	31	8	2		
Thailand	32	13	4	-	9
Vietnam	33	7	2	1	1
Asia Total		97	34	3	44

Country/ Territory	Country No. (see map)	Motor Vehicles (incl. parts)	Motor- cycles (incl. parts)	Motor Vehicles & Motorcycles (incl. parts)	Parts Only
<b>North Ame</b>	rica				
Canada	34	4	-	-	1
U.S.A.	35	15	1	-	12
North Ame	rica Total	19	1	-	13
<b>Latin Amer</b>	ica				
Argentina	36	1	1	1	-
Brazil	37	4	4	-	1
Colombia	38	2	2	-	-
Ecuador	39	2	-	-	-
Mexico	40	5	1	1	-
Peru	41	-	1	-	-
Venezuela	42	2	1	-	-
Latin Amer	ica Total	16	10	2	1
<b>World Tota</b>	l .	169	51	5	64

Source: Japan Automobile Manufacturers Association

# **Overseas Production Benefits Local Economies**

The global operations of Japanese automobile manufacturers continue to grow, focusing increasingly on on-site manufacturing to meet local needs. Whether as independent operations, joint ventures or technical tie-ups, local manufacturing activities are conducted in numerous countries around the world (see pages 54-55). Overseas production brings significant benefits to local economies and host countries, including employment, industrial development, and technology transfer.

#### OVERSEAS PRODUCTION BY JAPANESE AUTOMOBILE MANUFACTURERS

In vehicle units

									in venicle units	
Year	Asia	Middle East	Europe	EU	North America	U.S.A.	Latin America	Africa	Oceania	Total
1985	208,589	_	44,658	43,175	296,569	296,569	90,252	99,500	151,574	891,142
1986	282,912	_	75,163	73,903	426,087	425,644	87,115	119,000	133,109	1,123,386
1987	355,758	_	102,943	100,794	608,446	592,761	104,925	134,000	127,003	1,433,075
1988	456,489	_	132,129	130,326	723,396	672,766	125,531	145,000	152,334	1,734,879
1989	597,402	_	205,005	203,215	1,040,868	932,242	144,811	184,500	166,541	2,339,127
1990	952,390	<del>-</del>	226,613	223,164	1,570,114	1,298,878	160,654	186,000	169,169	3,264,940
1991	1,035,715	_	285,994	282,278	1,684,964	1,378,907	169,001	172,000	134,051	3,481,725
1992	1,120,430	_	358,601	351,296	1,853,097	1,547,361	195,161	167,500	109,276	3,804,065
1993	1,315,346	_	496,574	472,744	2,030,478	1,691,239	211,802	179,000	106,754	4,339,954
1994	1,553,585	_	502,332	477,728	2,346,619	1,982,209	197,325	168,000	128,213	4,896,074
1995	1,882,850	<del></del>	641,573	575,852	2,595,436	2,215,657	110,660	226,000	102,961	5,559,480
1996	1,950,621	_	738,378	650,990	2,641,451	2,275,525	140,031	195,674	118,097	5,784,252
1997	2,003,286	_	814,689	714,699	2,664,588	2,290,685	190,596	182,218	136,107	5,991,484
1998	1,215,202	5,688	920,985	814,847	2,674,299	2,270,516	260,131	144,181	150,685	5,371,171
1999	1,547,671	3,493	929,303	835,582	2,797,175	2,311,163	246,710	130,216	125,575	5,780,143
2000	1,673,740	4,258	953,170	837,679	2,991,924	2,480,691	387,732	146,435	130,933	6,288,192
2001	1,872,521	5,660	1,032,004	939,034	3,061,612	2,451,496	407,887	162,825	137,084	6,679,593
2002	2,380,621	6,000	1,153,059	1,015,748	3,375,453	2,720,449	445,862	155,973	135,498	7,652,466
2003	3,007,348	5,820	1,338,476	1,245,469	3,487,012	2,821,723	457,467	162,969	148,471	8,607,563
2004	3,638,978	10,800	1,454,903	1,296,516	3,840,744	3,143,603	534,863	191,537	125,726	9,797,551
2005	3,964,209	10,500	1,545,355	1,369,556	4,080,713	3,383,277	645,074	225,725	134,581	10,606,157
2006	4,129,856	11,400	1,702,836	1,509,402	4,001,639	3,281,073	745,827	259,050	121,635	10,972,243
2007	4,523,751	3,342	1,976,407	1,789,875	4,049,068	3,324,326	895,099	252,332	159,710	11,859,709
2008	4,877,074	0	1,876,109	1,693,151	3,576,246	2,893,466	920,738	257,646	143,741	11,651,554
2009	5,145,418	0	1,228,294	1,136,145	2,687,527	2,108,161	790,794	168,651	96,836	10,117,520
2010	7,127,042	0	1,356,126	1,250,226	3,390,095	2,653,231	982,342	206,476	119,473	13,181,554
2011	7,545,889	0	1,410,628	1,302,277	3,068,978	2,422,151	1,029,511	233,709	93,675	13,382,390
2008 2009 2010	4,877,074 5,145,418 7,127,042 7,545,889	0	1,876,109 1,228,294 1,356,126 1,410,628	1,693,151 1,136,145 1,250,226 1,302,277	3,576,246 2,687,527 3,390,095 3,068,978	2,893,466 2,108,161 2,653,231 2,422,151	920,738 790,794 982,342 1,029,511	257,646 168,651 206,476 233,709	143,741 96,836 119,473 93,675	11,651, <sup>1</sup> 10,117, <sup>1</sup> 13,181, <sup>1</sup> 13,382,

Notes: 1. Data in principle is for Japanese-brand vehicles only. 2. Until 1997, data was based on statistics supplied by the national automobile trade associations of respective countries.

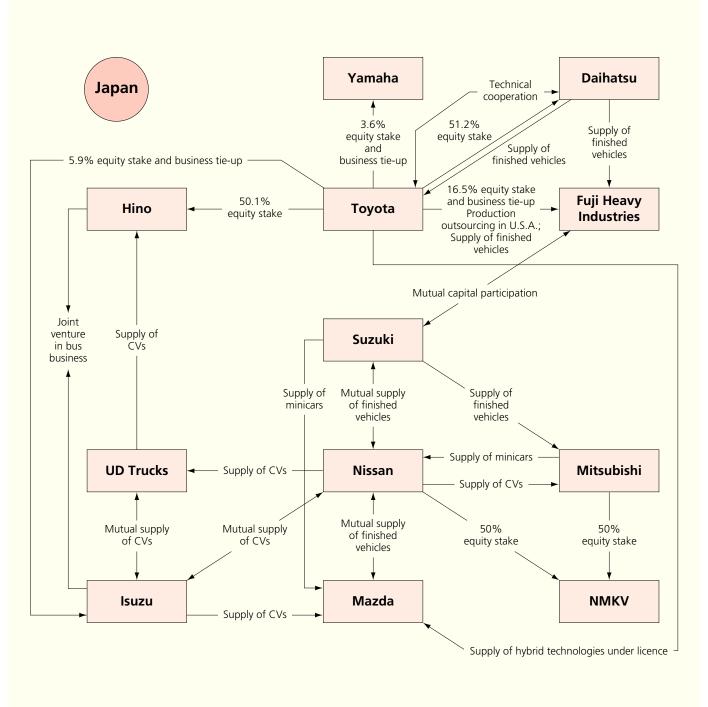
3. Mexico is included in Latin America and Turkey in Europe. 4. Data excludes vehicles produced with technical assistance only provided by Japanese automakers. 5. The figures reflect the use of a new method, adopted as of January 2007, for computing overseas unit production.

Source: Japan Automobile Manufacturers Association

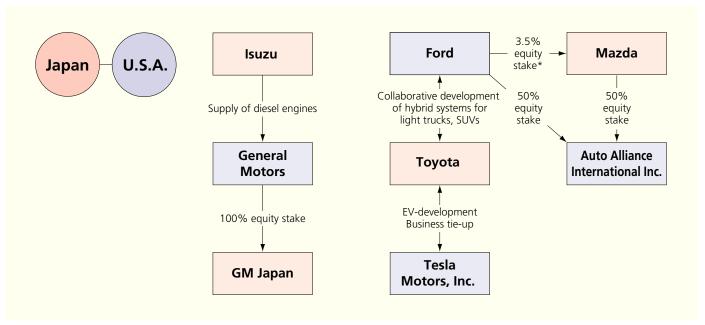
# Japanese Automakers Forge Extensive International Alliances

With economic globalization, Japanese automobile manufacturers have rapidly adapted to the needs of individual markets, not only by shifting production to those markets but also by forging extensive alliances with overseas manufacturers. Various forms of partnership currently exist between Japanese, U.S. and European automakers—including capital and technical tie-ups, joint R&D and production operations, and cooperative sales ties—and such arrangements are expanding yearly. With the rapid spread of motorization in China and Southeast Asia, Japanese automakers are actively building relationships with local manufacturers there on the basis of capital tie-ups and the supply of production as well as environment- and safety-related technologies.

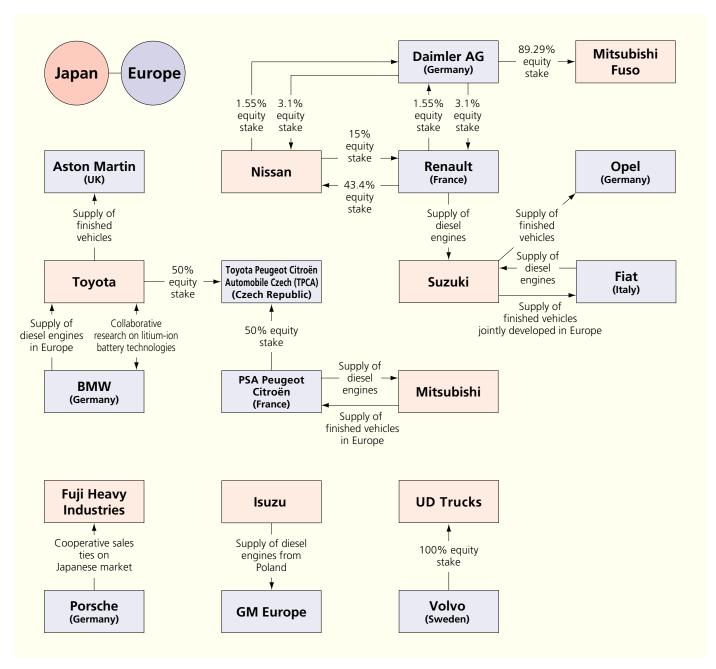
At March 31, 2012

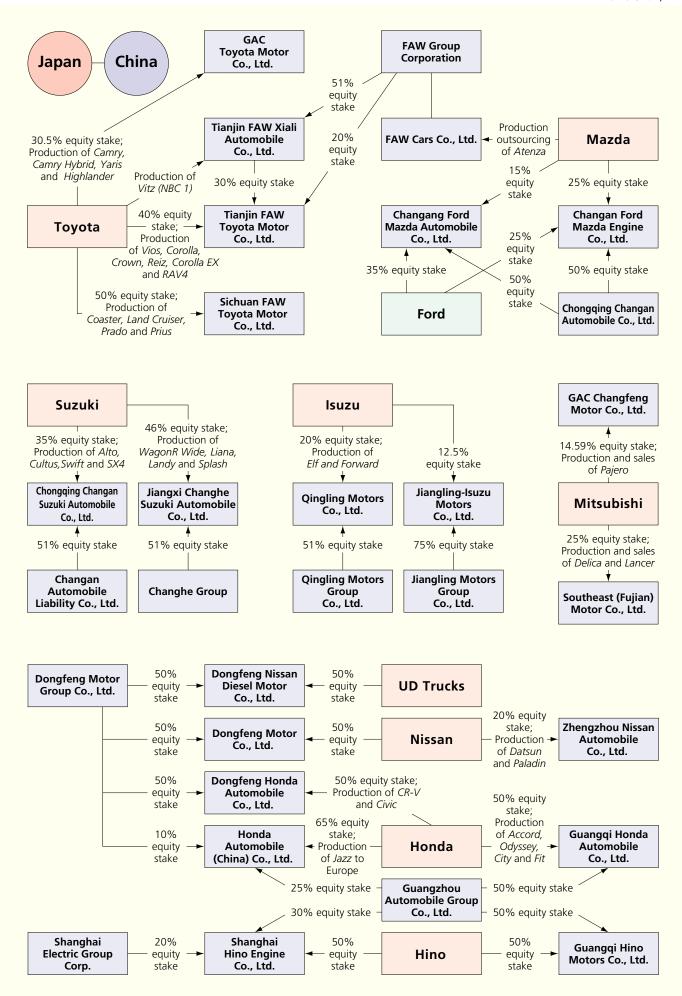


Note: In principle, the tie-ups shown above cover only technical cooperation related to motor vehicle production and exclude sales tie-ups



\*At February 29, 2012



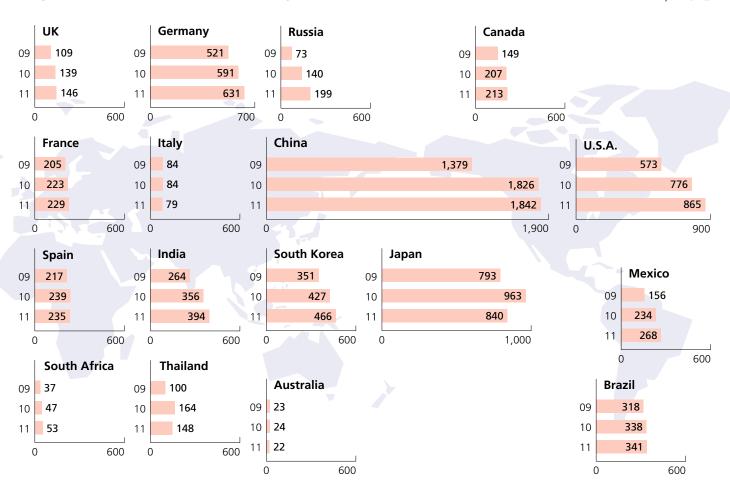


# **Motor Vehicle Production Increases Worldwide Except in Asia-Oceania**

In 2011 worldwide motor vehicle production (excluding motorcycles) increased 3.2% from the previous year to a total of 80.09 million units. By region, production increased in North America (up 9.7% to 10.79 million units), Latin America (up 7.2% to 7.01 million units), Europe (up 6.6% to 21.13 million units), and Africa (up 5.9% to 542,000 units), but decreased in Asia-Oceania (down 0.7% to 40.63 million units).

# MOTOR VEHICLE PRODUCTION EXCLUDING MOTORCYCLES (MAJOR PRODUCING COUNTRIES)

x 10.000 units



## GLOBAL MOTORCYCLE PRODUCTION (BY COUNTRY/TERRITORY)

In vehicle units

Country/	2008				2009			2010	
Territory	Mopeds	Motorcycles	Total	Mopeds	Motorcycles	Total	Mopeds	Motorcycles	Total
Austria	_	79,176	79,176	_	51,366	51,366	_	39,909	39,909
Czech Republic	190	1,371	1,561	74	675	749	49	733	782
France	_	_	172,526	_	_	109,705	_	_	92,900
Germany	_	105,993	105,993	_	82,438	82,438	_	99,244	99,244
Italy	171,000	470,000	641,000	_	_	477,000	_	_	455,176
Spain	_	_	213,696	_	_	115,602	_	_	123,123
UK	_	_	33,900	_	_	22,658	_	_	23,455
Russia	_	_	28,000	_	_	22,000	_	_	_
Brazil	<del></del>	2,140,907	2,140,907	<del>-</del>	1,539,473	1,539,473		1,830,614	1,830,614
China	_	25,944,749	27,501,989		23,592,594	25,427,676		24,476,418	26,681,807
India	444,860	6,765,484	8,408,335	_	_	10,512,903	_	_	13,376,451
Indonesia	_	4,714,168	6,264,265	_	3,658,414	5,884,021	_	_	7,395,390
Japan	_	1,226,839	1,226,839	_	644,901	644,901	_	664,175	664,175
Malaysia	453,815	82,752	536,567	_	_	436,430	_	_	467,941
Pakistan	_	_	411,715	_	_	736,861	_	_	838,550
Philippines	_	317,127	317,127	_	681,497	681,497	_	813,261	813,261
South Korea	_	_	133,737	_	_	96,583	_	_	_
Taiwan	_	_	1,555,042	_	_	1,016,796	_	_	1,028,517
Thailand	_	_	1,923,651	_	_	1,634,123	_	_	2,024,599

Note: "—" means data is not available.

Sources: Motorcycle manufacturers' associations of individual countries, etc.

# ● GLOBAL MOTOR VEHICLE PRODUCTION (BY COUNTRY/REGION/TERRITORY)

In vehicle units

		2009			2010			2011	
Country/Region/ Territory	Passenger Cars	Trucks & Buses	Total	Passenger Cars	Trucks & Buses	Total	Passenger Cars	Trucks & Buses	Total
Austria	56,620	15,714	72,334	86,183	18,814	104,997	130,343	22,162	152,505
Belgium	524,595	12,759	537,354	528,996	26,306	555,302	562,386	0	562,386
Finland	10,907	64	10,971	6,385	280	6,665	2,540	0	2,540
France	1,819,497	228,196	2,047,693	1,924,171	305,250	2,229,421	1,931,030	363,859	2,294,889
Germany	4,964,523	245,334	5,209,857	5,552,409	353,576	5,905,985	5,871,918	439,400	6,311,318
Italy	661,100	182,139	843,239	573,169	265,017	838,186	485,606	304,742	790,348
Netherlands	50,620	26,131	76,751	48,025	46,107	94,132	40,772	32,379	73,151
Portugal	101,680	24,335	126,015	114,563	44,166	158,729	141,779	50,463	192,242
Spain	1,812,688	357,390	2,170,078	1,913,513	474,387	2,387,900	1,819,453	534,229	2,353,682
Sweden	128,738	27,698	156,436	177,084	40,000	217,084	188,969	0	188,969
UK	999,460	90,679	1,090,139	1,270,444	123,019	1,393,463	1,343,810	120,189	1,463,999
Czech Republic	976,435	6,808	983,243	1,069,518	6,866	1,076,384	1,191,968	7,866	1,199,834
Hungary	212,773	1,770	214,543	208,571	2,890	211,461	200,000	2,800	202,800
Poland	818,800	60,198	878,998	785,000	84,474	869,474	740,000	97,132	837,132
Romania	279,320	17,178	296,498	323,587	27,325	350,912	310,243	24,989	335,232
Slovakia	461,340	0	461,340	561,933	0	561,933	639,763	0	639,763
Slovenia	202,570	10,179	212,749	201,039	10,301	211,340	168,955	5,164	174,119
Double Countings Germany/Belgium	88,873	0	88,873	51,625	0	51,625	61,280	0	61,280
Double Countings Germany/Italy	3,886	0	3,886	4,346	0	4,346	6,570	0	6,570
Double Countings Portugal/Japan	0	5,487	5,487	0	10,047	10,047	0	8,847	8,847
European Union (EU27)	13,988,907 510,931	1,301,085	15,289,992	15,288,619	1,818,731	17,107,350	15,701,685 639,734	1,996,527	17,698,212
Turkey Serbia		358,674 401	869,605	603,394	491,163 649	1,094,557		549,397	1,189,131
Russia	16,337 599,265	125,747	16,738	17,384	194,882	18,033 1,403,244	15,050 1,738,163	740 249,873	15,790 1,988,036
Belarus	0 399,203	11,520	725,012	1,208,362 0	15,249		1,736,163	249,873	22,047
Ukraine	65,646	3,649	11,520 69,295	75,261	7,872	15,249 83,133	97,585	7,069	104,654
Uzbekistan	110,200	7,700	117,900	130,400	26,480	156,880	146,300	33,260	179,560
Double Countings Ukraine/World	44,220	0	44,220	52,330	20,480	52,330	67,050	0 33,200	67,050
CIS	730,891	148,616	879,507	1,361,693	244,483	1,606,176	1,914,998	312,249	2,227,247
Europe	15,247,066	1,808,776	17,055,842	17,271,090	2,555,026	19,826,116	18,271,467	2,858,913	21,130,380
Canada	822,267	668,215	1,490,482	967,077	1,101,112	2,068,189	990,483	1,144,410	2,134,893
U.S.A.	2,195,588	3,535,809	5,731,397	2,731,105	5,031,439	7,762,544	2,966,133	5,687,427	8,653,560
North America	3,017,855	4,204,024	7,221,879	3,698,182	6,132,551	9,830,733	3,956,616	6,831,837	10,788,453
Mexico	942,876	618,176	1,561,052	1,386,148	956,134	2,342,282	1,657,080	1,022,957	2,680,037
Argentina	380,067	132,857	512,924	508,401	208,139	716,540	577,233	251,538	828,771
Brazil	2,575,418	607,505	3,182,923	2,584,690	797,038	3,381,728	2,534,534	871,616	3,406,150
Venezuela	71,907	39,748	111,655	73,757	30,600	104,357	69,115	33,294	102,409
Double Countings Venezuela/World	58,770	16,001	74,771	60,308	16,683	76,991	56,520	18,770	75,290
Other	24,679	22,079	46,758	37,197	31,552	68,749	30,000	35,710	65,710
Latin America	3,936,177	1,404,364	5,340,541	4,529,885	2,006,780	6,536,665	4,811,442	2,196,345	7,007,787
North and Latin America	6,954,032	5,608,388	12,562,420	8,228,067	8,139,331	16,367,398	8,768,058	9,028,182	17,796,240
Australia	188,158	39,125	227,283	205,334	38,673	244,007	189,503	34,690	224,193
China	10,383,831	3,407,163	13,790,994	13,897,083	4,367,678	18,264,761	14,485,326	3,933,550	18,418,876
India	2,175,220	466,330	2,641,550	2,831,542	725,531	3,557,073	3,053,871	882,577	3,936,448
Indonesia	352,172	112,644	464,816	496,524	205,984	702,508	561,863	276,085	837,948
Iran	1,170,503	223,572	1,394,075	1,367,014	232,440	1,599,454	1,413,276	235,229	1,648,505
Japan	6,862,161	1,071,896	7,934,057	8,310,362	1,318,558	9,628,920	7,158,525	1,240,180	8,398,705
Malaysia	447,002	42,267	489,269	522,568	45,147	567,715	496,440	43,610	540,050
Pakistan	92,552	16,881	109,433	130,625	22,345	152,970	139,200	23,860	163,060
Philippines	43,558	6,861	50,419	56,128	9,497	65,625	43,280	8,450	51,730
South Korea	3,158,417	354,509	3,512,926	3,866,206	405,535	4,271,741	4,221,617	435,477	4,657,094
Taiwan	183,986	42,370	226,356	251,490	51,966	303,456	288,523	54,773	343,296
Thailand Viotnam	313,442	685,936	999,378	554,387	1,090,126	1,644,513	549,770	928,690	1,478,460
Vietnam  Double Countings China World	32,085	884	32,969	34,334	1,952	36,286	43,780	2,200	45,980
Double Countings China/World  Asia-Oceania	113,370	6,470,438	113,370	114,774	8,515,432	114,774 40,924,255	119,670	8,099,371	119,670 40,624,675
	25,289,717	32,090	31,760,155	32,408,823			32,525,304		
Egypt Morocco	60,249 37,573	9,106	92,339 46,679	76,412 35,546	40,271 6,520	116,683 42,066	53,072 43,240	28,659 6,830	81,731 50,070
South Africa	222,981	150,942	373,923	295,394	176,655	472,066	312,265	220,280	532,545
Double Countings Egypt/World	21,120	12,450	373,923	295,394	12,850	39,640	18,610	9,220	27,830
Double Countings Egypt/World  Double Countings South Africa/World	17,900	48,020	65,920	28,790	56,110	79,800	25,780	69,140	94,920
Africa	281,783	131,668	413,451	356,872	154,486	511,358	364,187	177,409	541,596
Grand Totals	47,772,598	14,019,270	61,791,868	58,264,852	19,364,275	77,629,127	59,929,016	20,163,875	80,092,891
National All Constant Control		·				(			

Note: All figures are estimates.

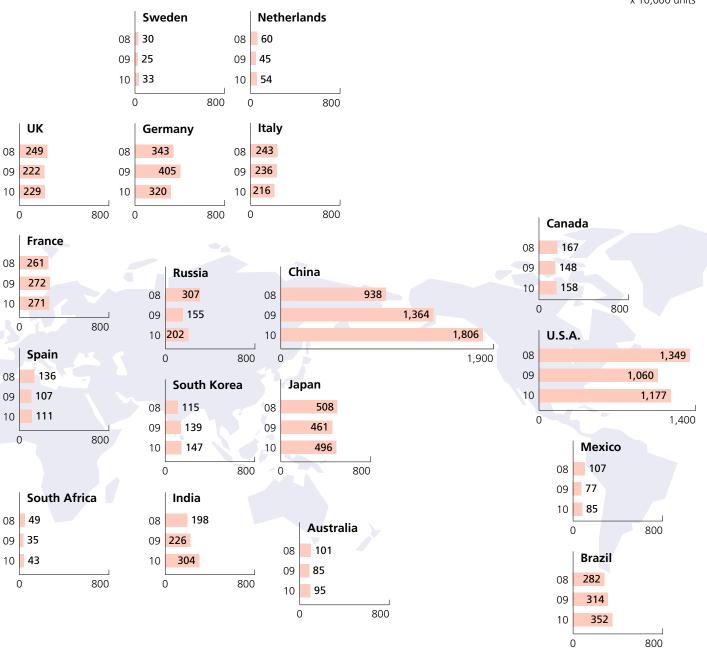
Sources: International Organization of Motor Vehicle Manufacturers (OICA); for Japan, Japan Automobile Manufacturers Association

# Motor Vehicle Sales Surge Worldwide, Notably in the BRICs

In 2010 overall new motor vehicle registrations (excluding motorcycles) increased 14.0% over the previous year to a global total of 74.1 million units. Vehicle sales rose in India (to 3.04 million units, up 34.3%), China (to 18.06 million units, up 32.4%), Russia (to 2.02 million units, up 30.4%), Brazil (to 3.52 million units, up 11.9%), the United States (to 11.77 million units, up 11.0%), Japan (to 4.96 million units, up 7.5%), Canada (to 1.58 million units, up 6.8%), South Korea (to 1.47 million units, up 5.1%), Spain (to 1.11 million units, up 3.7%), and the United Kingdom (to 2.29 million units, up 3.2%). On the other hand, new registrations dropped from the previous year in Germany (to 3.20 million units, down 21.0%), Italy (to 2.16 million units, down 8.3%), and France (to 2.71 million units, down 0.4%).

## NEW REGISTRATIONS OF MOTOR VEHICLES EXCLUDING MOTORCYCLES (SELECTED COUNTRIES)

x 10,000 units



# NEW REGISTRATIONS OF PASSENGER CARS AND COMMERCIAL VEHICLES (BY COUNTRY)

		2008		2009				2010	n vehicle units
Country	Passenger Cars	Commercial Vehicles	Total	Passenger Cars	Commercial Vehicles	Total	Passenger Cars	Commercial Vehicles	Total
Austria	293,697	42,293	335,990	319,403	31,026	350,429	328,563	34,001	362,564
Belgium	535,947	81,276	617,223	476,194	60,587	536,781	547,347	61,177	608,524
Czech Republic	143,661	71,758	215,419	161,659	24,962	186,621	169,236	17,772	187,008
Denmark	150,185	40,959	191,144	112,436	19,316	131,752	153,562	19,675	173,237
Finland	139,647	21,329	160,976	90,574	12,442	103,016	111,956	14,428	126,384
France	2,091,368	523,432	2,614,800	2,302,398	416,183	2,718,581	2,251,669	457,215	2,708,884
Germany	3,090,040	334,999	3,425,039	3,807,175	242,184	4,049,359	2,916,260	282,157	3,198,417
Greece	267,242	25,577	292,819	220,548	17,438	237,986	141,499	12,340	153,839
Hungary	155,403	30,950	186,353	60,189	14,561	74,750	46,069	10,424	56,493
Italy	2,161,682	269,647	2,431,329	2,159,912	197,461	2,357,373	1,961,311	200,956	2,162,267
Netherlands	499,980	104,155	604,135	387,699	64,208	451,907	482,531	59,781	542,312
Poland	319,922	80,610	400,532	320,119	51,716	371,835	333,599	54,260	387,859
Portugal	213,386	61,648	275,034	160,996	42,686	203,682	223,491	49,270	272,761
Romania	270,995	53,085	324,080	130,193	17,769	147,962	106,328	13,089	119,417
Slovakia	70,040	32,338	102,378	74,717	18,044	92,761	64,033	9,800	73,833
Spain	1,161,176	201,410	1,362,586	952,772	121,450	1,074,222	982,015	132,105	1,114,120
Sweden	253,982	47,477	301,459	213,408	34,105	247,513	289,684	44,450	334,134
UK	2,133,874	351,384	2,485,258	1,997,087	225,455	2,222,542	2,032,977	260,599	2,293,576
Russia	2,897,459	177,180	3,074,639	1,465,917	79,780	1,545,697	1,910,573	104,800	2,015,373
Switzerland	288,525	32,801	321,326	266,018	28,681	294,699	294,239	30,540	324,779
Turkey	308,813	218,829	527,642	365,052	199,556	564,608	515,595	281,600	797,195
Canada	872,720	800,802	1,673,522	729,023	753,209	1,482,232	694,349	889,039	1,583,388
U.S.A.	6,813,369	6,679,796	13,493,165	5,400,890	5,200,478	10,601,368	5,635,433	6,136,787	11,772,220
Mexico	580,992	489,768	1,070,760	434,679	338,706	773,385	499,567	347,314	846,881
Brazil	2,193,277	627,073	2,820,350	2,474,764	666,476	3,141,240	2,644,704	870,360	3,515,064
Argentina	452,894	158,876	611,770	373,231	113,911	487,142	524,514	173,785	698,299
Venezuela	_	_	271,622	<u> </u>	_	136,517	_	_	125,202
China	5,692,049	3,688,453	9,380,502	10,331,315	3,313,479	13,644,794	13,757,794	4,304,142	18,061,936
India	1,201,178	778,949	1,980,127	1,425,933	837,747	2,263,680	1,871,041	1,168,479	3,039,520
Japan	4,227,643	854,592	5,082,235	3,923,741	685,515	4,609,256	4,212,267	743,869	4,956,136
South Korea	958,854	195,629	1,154,483	1,174,743	219,257	1,394,000	1,217,764	247,662	1,465,426
Malaysia	497,459	50,656	548,115	486,342	50,563	536,905	543,594	61,562	605,156
Indonesia	429,294	178,507	607,801	361,907	124,181	486,088	541,475	223,235	764,710
Thailand	238,990	375,088	614,078	238,773	310,098	548,871	362,561	437,796	800,357
Australia	791,223	220,941	1,012,164	662,476	186,144	848,620	757,813	191,174	948,987
Egypt	198,800	62,312	261,112	158,926	46,595	205,521	192,848	56,069	248,917
South Africa	295,064	193,947	489,011	224,705	129,056	353,761	279,081	146,656	425,737
Other	1,298,163	478,294	1,776,457	956,507	339,950	1,296,457	1,154,800	426,944	1,581,744
<b>Grand Totals</b>	44,188,993	18,636,820	63,097,435	45,402,421	15,234,975	60,773,913	50,752,142	18,575,312	69,452,656
World Total*		68,120,000			65,021,000			74,102,000	
							into for the discre		

Note: The "—" for some entries for Venezuela means that the relevant data is not available at the end of March 2012, which accounts for the discrepancy, in the "Grand Totals" row, between the three "Total" figures and the figures (for both passenger cars and commercial vehicles) they represent. \*"World Total" figures have been calculated by JAMA and rounded off. Sources: Automobile manufacturers' associations of individual countries; for Japan Automobile Dealers Association; Japan Mini Vehicles Association; Japan Automobile Manufacturers Association

# More than One Billion Motor Vehicles in Use Worldwide

There were 1.017 billion motor vehicles (excluding motorcycles) in use worldwide in 2010, equivalent to 147 motor vehicles per 1,000 inhabitants or one vehicle for every 6.8 persons. Meanwhile, the number of motorcycles owned worldwide in 2010 stood at around 200 million units. Motorcycle density was particularly high in Malaysia, with one motorcycle in use for every three persons; in Vietnam, Thailand, and Indonesia, with one in use for every four persons; and in Italy, with one in use for every six persons. In Japan, one motorcycle was in use for every ten persons.

## MOTOR VEHICLE DENSITY: INTERNATIONAL COMPARISONS (at end of 2010)

In vehicle units x 1 person No. of Motor Vehicles per 1,000 Inhabitants No. of Persons per Motor Vehicle Country **Total Motor Vehicles** (No. of Persons per Passenger Car) Passenger Cars U.S.A. 385 (2.6)1 4 694 Italy 612 (1.6)1.5 Australia (1.8)16 Canada (1.7)1.7 602 Spain (2.1)1.7 France (2.0)1.7 593 Japan (2.2)1.7 Switzerland (1.9)1.7 Austria (1.9)1.7 UK (2.0)18 Belgium (2.0)

> Sources: Ministry of Land, Infrastructure, Transport and Tourism; Ward's, etc.; for population data, OECD, UN

1.8

(1.9)

6.8

(9.8)

# MOTOR VEHICLES IN USE WORLDWIDE (at end of 2010) In vehicle units

(at cha	in venicie units		
Country	Passenger Cars	Commercial Vehicles	Total
Germany	42,301,563	2,959,625	45,261,188
Italy	36,751,311	4,898,566	41,649,877
France	31,300,000	6,444,000	37,744,000
UK	31,258,197	4,220,455	35,478,652
Spain	22,300,000	5,450,000	27,750,000
Netherlands	7,904,583	1,100,730	9,005,313
Belgium	5,242,821	809,137	6,051,958
Austria	4,441,027	406,436	4,847,463
Sweden	4,335,182	540,314	4,875,496
Poland	17,240,000	3,079,000	20,319,000
Switzerland	4,075,825	387,951	4,463,776
Turkey	7,544,871	3,720,880	11,265,751
Russia	34,797,488	6,427,425	41,224,913
U.S.A.	118,946,744	120,865,240	239,811,984
Canada	20,121,339	932,655	21,053,994
Mexico	20,973,153	9,453,773	30,426,926
Argentina	7,604,921	2,511,097	10,116,018
Brazil	25,500,000	6,600,000	32,100,000
Japan	58,347,387	17,014,489	75,361,876
China	34,430,000	43,590,000	78,020,000
South Korea	13,631,754	4,309,602	17,941,356
India	13,300,000	7,480,000	20,780,000
Thailand	4,700,000	6,000,000	10,700,000
Indonesia	10,800,000	8,100,000	18,900,000
Australia	12,269,305	3,083,182	15,352,487
South Africa	5,099,891	2,790,086	7,889,977
Other	112,546,857	35,824,558	148,371,415
<b>Grand Totals</b>	707,764,219	308,999,201	1,016,763,420

Sources: Ministry of Land, Infrastructure, Transport and Tourism; Ward's, etc.

# MOTORCYCLE DENSITY: INTERNATIONAL COMPARISONS (No. of Persons per Motorcycle)

		₩ x 1 person
2010	Malaysia	3 ###
2009	Vietnam	4 <b>††††</b>
2010	Thailand	4 <b>††††</b>
2009	Indonesia	4 <b>††††</b>
2009	Italy	6 <b>†††††</b> †
2009	Spain	9 ##########
2009	Switzerland	9 ##########
2010	Japan	10
2009	Austria	12
2009	Netherlands	14 ††††††††††††††
2010	China	14 † † † † † † † † † † † † † †

Note: Date for Japan as at March 31.

Germany

World

Average

Sources: Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Internal Affairs and Communications; Federation of Asian Motorcycle Industries (FAMI); International Road Federation (IRF); RAI Vereniging, etc.; for population data, OECD, UN

# MOTORCYCLES IN USE WORLDWIDE

In vehicle units

		iii veriicie uriits
	Country/Territory	Total
2009	Italy	9,425,098
2009	Spain	4,958,879
2009	France	3,532,000
2009	UK	1,433,124
2009	Netherlands	1,228,058
2009	Switzerland	806,577
2009	Austria	712,092
2009	Poland	1,808,723
2009	Czech Republic	903,346
2009	Russia	4,710,000
2009	Turkey	2,303,261
2009	U.S.A.	7,929,724
2008	Brazil	13,088,074
2008	Argentina	2,515,681
2010	China	100,004,714
2009	Indonesia	52,433,132
2010	Japan	12,477,417
2010	Thailand	17,229,814
2010	Taiwan	14,844,932
2010	Malaysia	9,443,922
2009	Vietnam	25,414,689
2009	South Korea	1,820,729
2009	Pakistan	5,607,334
2010	Philippines	3,482,149

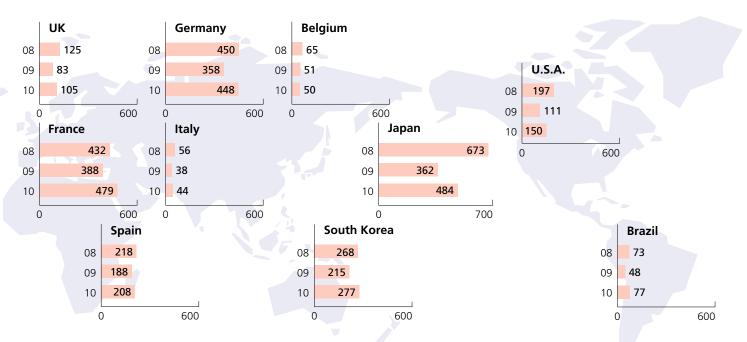
Sources: Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Internal Affairs and Communications; Federation of Asian Motorcycle Industries (FAMI); International Road Federation (IRF); RAI Vereniging, etc.

# A Global Increase in Motor Vehicle Exports

Motor vehicle exports (excluding motorcycles) in 2010 increased over the previous year in Brazil (to 767,000 units, up 61.5%), the United States (to 1.50 million units, up 35.7%), Japan (to 4.84 million units, up 33.9%), South Korea (to 2.77 million units, up 29.0%), the United Kingdom (to 1.05 million units, up 26.3%), Germany (to 4.48 million units, up 25.0%), France (to 4.79 million units, up 23.3%), and Spain (to 2.08 million units, up 10.4%). Motorcycle exports in 2010 also showed a year-on-year increase in India (to 1.54 million units, up 35.0%) and China (to 8.29 million units, up 33.0%), but declined in Taiwan (to 302,000 units, down 9.8%) and Japan (to 493,000 units, down 9.3%).

## MOTOR VEHICLE EXPORTS (MAJOR EXPORTING COUNTRIES)

x 10,000 units



## MOTOR VEHICLE EXPORTS (MAJOR EXPORTING COUNTRIES)

In vehicle units

	2008			2009			2010		
Country	Passenger Cars	Commercial Vehicles	Total	Passenger Cars	Commercial Vehicles	Total	Passenger Cars	Commercial Vehicles	Total
Japan	5,915,429	811,662	6,727,091	3,208,639	407,529	3,616,168	4,275,366	566,094	4,841,460
U.S.A.	1,588,076	378,096	1,966,172	755,093	351,885	1,106,978	1,080,981	420,894	1,501,875
Germany	4,131,660	369,147	4,500,807	3,425,626	158,094	3,583,720	4,238,759	242,147	4,480,906
UK	1,128,586	125,611	1,254,197	762,234	66,454	828,688	961,420	85,547	1,046,967
France	3,736,921	585,270	4,322,191	3,542,282	340,931	3,883,213	4,306,065	480,430	4,786,495
Italy	279,670	281,283	560,953	251,038	131,571	382,609	231,557	208,630	440,187
Belgium	610,784	42,085	652,869	493,280	11,800	505,080	480,684	24,200	504,884
Spain	1,655,154	525,698	2,180,852	1,555,149	328,026	1,883,175	1,658,341	421,441	2,079,782
Brazil	558,207	176,376	734,583	373,747	101,578	475,325	616,125	151,307	767,432
South Korea	2,508,911	175,054	2,683,965	2,007,230	141,632	2,148,862	2,610,949	161,158	2,772,107

Sources: Ward's, etc.; for Japan, Japan Automobile Manufacturers Association

## MOTORCYCLE EXPORTS (MAJOR EXPORTING COUNTRIES/TERRITORY)

In vehicle units

	2008			2009			2010		
Country/Territory	Mopeds	Motorcycles & Scooters	Total	Mopeds	Motorcycles & Scooters	Total	Mopeds	Motorcycles & Scooters	Total
Japan	0	1,002,187	1,002,187	0	543,879	543,879	0	493,464	493,464
Germany	1,619	92,624	94,243	864	75,914	76,778		_	_
Austria	_	76,474	76,474		49,184	49,184	_		_
South Korea	_	_	36,090	_	_	25,434	_	_	_
China	_	9,727,315	9,727,315	_	6,234,302	6,234,302	_	8,291,590	8,291,590
Taiwan	_	461,867	461,867	_	335,330	335,330	_	302,350	302,350
Indonesia	_	_	64,968		_	29,815		_	29,395
India	_	_	1,004,174	_	<u>—</u>	1,140,058	<del></del>		1,539,590

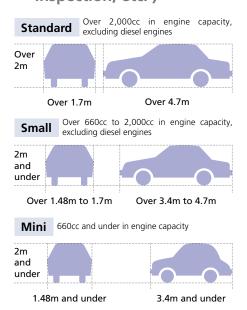
Note: "—" means data is not available at end of March 2012.

Sources: International Motorcycle Manufacturers Association (IMMA); German Motorcycle Industry Association (IVM), etc.; for Japan, Japan Automobile Manufacturers Association

# Classifications According to the Road Vehicles Act and the Road Traffic Act

Japan classifies motor vehicles according to the provisions of two basic laws: the Road Vehicles Act and the Road Traffic Act. Road Vehicles Act classifications are used for registration statistics, vehicle inspection, and related maintenance and repair. Road Traffic Act classifications determine the different categories of driver's licenses. Vehicle registration number/character combinations are determined by vehicle type and usage in accordance with Road Vehicles Act designations, and a "vanity plate" system has been introduced nationwide.

# CLASSIFICATION UNDER THE ROAD VEHICLES ACT (for registration, inspection, etc.)



Note: A vehicle that exceeds any one of the requisites above is classified in the higher category.

## CLASSIFICATION UNDER THE ROAD TRAFFIC ACT (for driver's license issuance)

# Large Motor Vehicles

Gross vehicle weight: ≥11 tons Payload: ≥6.5 tons or Occupancy: ≥30 persons

#### **Ordinary Motor Vehicles**

Gross vehicle weight: <5 tons Payload: <3 tons or Occupancy: <11 persons

#### Middle-Category Motor Vehicles (1)

Gross vehicle weight: 5≤tons<11 Payload: 3≤tons<6.5 or Occupancy: 11≤persons<30

#### Special-Purpose Motor Vehicles

Motor vehicles with caterpillar treads such as bulldozers, steamrollers, graders, snowplows, tractors, etc. are classified into two categories: large and small. Small special-purpose motor vehicles are those of up to 15km per hour in maximum speed, up to 4.7m in length, up to 2m in height (2), and up to 1.7m in width.

(1) As per a revision to the Road Traffic Act, the middle-category motor vehicle classification went into application in June 2007. (2) Projections on small special-purpose vehicles should not exceed 2.8m.

Note: The Road Traffic Act stipulates that the driver of any one-rider, three- or four-wheeled vehicle of up to 50cc in engine capacity, with a legal maximum speed of 50km/h and a maximum load of 30kg, is required to hold an "ordinary motor vehicle" driver's license.

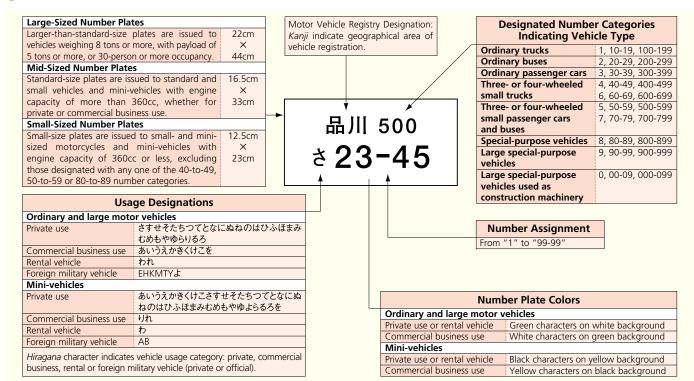
## CLASSIFICATION OF MOTORCYCLES

Road Vehicles Act								
Category	Engine Capacity	Engine Capacity Rated Output		Height	Length			
Small-sized	Over 250cc	Over 1.0kW	Over	Over	Over			
			1.3m	2.0m	2.5m			
Mini-sized	126cc to	Over 1.0kW	1.3m and	2.0m and	2.5m and			
	250cc		under	under	under			
Motor-driven	51cc to	Over 0.6kW	1.3m and	2.0m and	2.5m and			
cycles Class 2	125cc	to 1.0kW	under	under	under			
Motor-driven	50cc and	0.6kW and	1.3m and	2.0m and	2.5m and			
cycles Class 1	under	under	under	under	under			

Road Traffic Act				
Category	Engine			
Category	Capacity			
Large	Over			
	400cc			
Ordinary	51cc to			
	400cc			
Motorized	50cc and			
bicycles	under			

Note: A motorcycle that exceeds any one of the requisites above is classified in the higher category.

#### SIGNIFICANCE OF VEHICLE REGISTRATION DATA & NUMBER PLATE TYPES



# Japan's Test Cycles for Measuring Fuel Consumption and Exhaust Emissions

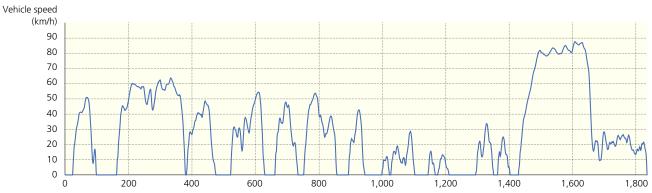
Beginning in April 2011, Japan's JC08 test cycle became the only test cycle applied to measure fuel consumption rates and exhaust emissions in non-heavy-duty vehicles, replacing the 10·15-mode and (less commonly used) 11-mode test cycles. The objective in using the JC08 test cycle is to obtain test results that are as close as possible to actual on-road fuel consumption rates. Certified fuel efficiency values are, therefore, now indicated on the basis of JC08 test cycle results and, for heavy-duty vehicles, on the basis primarily of JE05 test cycle results.

## **● THE JC08 TEST CYCLE**



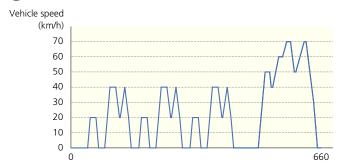
The JC08 cycle reflects typical running patterns in congested city traffic (idling and frequently-alternating acceleration and deceleration) and on expressways, but increases the duration of the test cycle and the variation in running patterns. Measurement is made with both a cold start and a warm start, at a maximum speed of 82km/h.

# ■ THE JE05 TEST CYCLE FOR HEAVY-DUTY VEHICLES (GVW>3.5t)



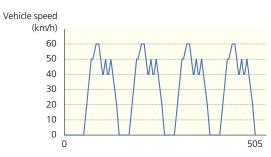
The JEO5 cycle consists of idling and frequently-alternating acceleration and deceleration, reflecting a typical running pattern in today's congested cities, and of an expressway running pattern. Engine revolution and torque modes are predetermined to reach target speed based on test vehicle specifications. Measurement is made on the engine alone, while following the stipulated running pattern.

## ■ THE 10·15-MODE TEST CYCLE



The 10•15-mode cycle consists of a sequence of vehicle operational modes, such as idling, acceleration, steady running and deceleration, which constitutes a typical urban and/or expressway running pattern. Measurement is made with a warm start, at a maximum speed of 70km/h.

## ■ THE 11-MODE TEST CYCLE



The 11-mode cycle consists of four cycles of 11 vehicle operational modes that are typical of a suburban-to-urban running pattern. Measurement is made with a cold start, at a maximum speed of 60km/h.

#### **Company Name / Offices** Plants / Facilities **Major Products** 1-1 Daihatsu-cho, Ikeda, Osaka - Copen, Boon, Coo, Terios Kid, etc. Head (Ikeda) Plant **DAIHATSU** 563-8651 Press Dies, Unit Facilities, etc. Kvoto Plant 1 Kita-hosoike, Shimoueno, - Boon Luminas, etc. Oyamazaki-cho, Otokuni-gun, Daihatsu Motor Co., Ltd. Kvoto 618-0081 Head Office: 1-1 Daihatsu-cho, Ikeda, Osaka 563-8651 Shiga (Ryuo) Plant 2910 Yamanoue, Ryuou-cho, - Move, Tanto, Engines, Transmissions, Light Alloy Castings, etc. Gamou-gun, Shiga 520-2593 Tel: (072) 751-8811 Tokyo Branch Office: 19-15, Shinbashi 6-chome, - Industrial Engines Kagami Plant 2293 kagami, Ryuou-cho, Minato-ku, Tokyo 105-0004 Tel: (03) 6430-8854 Gamou-gun, Shiga 520-2573 http://www.daihatsu.co.jp/ Daihatsu Motor Kyushu Co., Ltd. Oita Nakatsu plant 1 Showashinden, Nakatsu, Oita - Mira eis, Hijet, Bego, Mira, Move Head Office: 1 Showashinden, Nakatsu, Oita 879-0107 879-0107 Conte, Tanto Exe and Mira Cocoa, etc. Tel: (0979) 33-1230 Kurume plant 1 Yoshimoto, Tanushimaru-machi, - Engines (for mini-vehicles) kurume, Fukuoka 839-1206 Gunma Main Plant 1-1 Subaru-cho, Ota-shi, Gunma - Stella and Sambar SUBARU 373-8555 Gunma Yajima 1-1 Shoya-cho, Ota-shi, Gunma - Legacy, Impreza, Forester, Exiga 373-0822 and Subaru BRZ **Plant** Fuji Heavy Industries Ltd. Gunma Ota North 27-1 Kanayama-machi, Ota-shi, - Automobile Undercarriages Head Office: Subaru Bldg. 7-2, Nishi-Shinjuku 1-chome, Plant Gunma 373-0027 Shinjuku-ku, Tokyo 160-8316 Tel: (03) 3347-2111 Gunma Oizumi 1-1-1 Izumi, Oizumi-machi, Oura-gun, Automobile Engines and http://www.fhi.co.jp/ Gunma 370-0531 Plant Gunma Isesaki 100 Suehiro-cho, Isesaki-shi, Gunma - Spare Parts Plant 372-8508 - Industrial-use Vehicles **Eco Technologies** 1-1-11 Yonan, Utsunomiya-shi, Tochigi Plant 320-8564 Hino Plant 1-1 Hinodai 3-chome, Hino, Tokyo - Heavy- and Medium-duty Trucks HINO 191-8660 and Engines Hamura Plant 1-1 Midorigaoka 3-chome, Hamura, - Light-duty Trucks, Tokyo 205-8660 Toyota Commissioned Vehicles, HINO Motors, Ltd. Unit Products for Toyota Head Office: 1-1 Hinodai 3-chome, Hino, Tokyo 191-8660 Tel: (042) 586-5111 Nitta Plant 10-1 Hayakawa, Nitta, Ota, Gunma - Engines, Transmissions, etc. 370-0344 http://www.hino-global.com 10-1 Shinsayama 1-chome, Sayama, - Accord, Inspire, Accord Wagon, Saitama Factory HONDA Legend, Elysion, Odyssey, CR-V, Saitama 350-1382 Step WGN, Stream and Motor Vehicle Engines HONDA MOTOR CO., LTD. 1-1 Hibaridai 2-chome Ogawa-machi, Ogawa plant - Engines Head Office: 1-1 Minami-Aoyama 2-chome, Minato-ku, Hiki-gun, Saitama 355-0318 Tokyo 107-8556 Tel: (03) 3423-1111 Tochigi Factory 19 Matsuyama-cho, Mohka, - Parts for Engines, http://www.honda.co.jp/ Tochigi 321-4346 Parts for Suspensions, Motor Vehicle Differentials and Parts for Light 4WDs, Parts for Drive-lines Hamamatsu 13-1 Aoi-higashi 1-chome, Naka-ku, Outboard Engines, Hamamatsu, Shizuoka 433-8501 Transmissions, etc. Factory 5794-1 Kiga, Hosoe-machi, Hosoe plant Kita-ku, Hamamatsu, Shizuoka 431-1305 1907 Hirata-cho, Suzuka, Mie - Civic Series, Fit, Insight, CR-Z Suzuka Factory 513-8666 and Motor Vehicle Engines Motorcycles (50-1800cc), Kumamoto Factory 1500 Hirakawa, Ozu-machi, Kikuchi-gun, Kumamoto 869-1293 General Purpose Engines, Micro Combined Heat and Power unit, etc. Tochigi Plant 2691 Hakuchu, Ohira-Machi, - Axles for CVs ISUZU Tochigi, Tochigi 329-4424 and Related Parts, and Engines Fujisawa Plant 8 Tsuchidana, Fujisawa, Kanagawa GIGA Series, Buses, FORWARD Series, ELF Series, 252-0881 Isuzu Motors Limited Pickups, Trucks, Engines, etc. Head Office: 26-1 Minami-Oi 6-chome, Shinagawa-ku, Tokyo 140-8722 Tel: (03) 5471-1141 http://www.isuzu.co.jp/

Note: Manufacturers are listed in alphabetical order. Only plants related to motor vehicle production are listed here.

#### **Company Name / Offices** Plants / Facilities **Major Products** Akashi Plant 1-1 Kawasaki-cho, Akashi, Hyogo - Motorcycles (65-1700cc), Kawasa 673-8666 ATVs (All-Terrain Vehicles), Utility Vehicles, Jet Ski® Watercraft and Kawasaki Heavy Industries, Ltd. General-purpose Gasoline Engines Kobe Head Office: Kobe Crystal Tower, 1-3 Higashi Kawasaki-cho 1-chome, Chuo-ku, Kobe, Hyogo 650-8680 Tel: (078) 371-9530 Tokyo Head Office: World Trade Center Bldg., 4-1 Hamamatsu-cho 2-chome, Minato-ku, Tokyo 105-6116 Tel: (03) 3435-2111 http://www.khi.co.jp/ **Head Office Plant** 3-1 Shinchi, Fuchu-cho, Aki-Gun, - Demio, Verisa , Roadster, RX-8, Hiroshima 730-8670 MPV, Premacy, CX-5, CX-7, CX-9, Biante, Bongo, Engines, Transmissions **MAZDA MOTOR CORPORATION** Hofu Plant 888-1 Nishinoura, Hofu, Yamaguchi - Axela, Atenza, Transmissions Head Office: 3-1 Shinchi, Fuchu-cho, Aki-Gun, Hiroshima 747-0835 730-8670 Tel: (082) 282-1111 Miyoshi Office 551-1 Higashi-sakeya-machi, Miyoshi, - Engines Tokyo Head Office: 1-7 Uchisaiwai-cho 1-chome, Hiroshima 728-0023 Chiyoda-ku, Tokyo 100-0011 Tel: (03) 3508-5031 Osaka Branch Office: 1-88-800 Oyodo-naka 1-chome, Kita-ku, Osaka 531-6008 Tel: (06) 6440-5811 http://www.mazda.co.jp/ Nagoya Plant MITSUBISHI MOTORS Okazaki Plant 1 Aza-Nakashinkiri, Hashime-cho, - Colt, Colt Plus, RVR Okazaki, Aichi 444-8501 **Powertrain Plant** MITSUBISHI MOTORS CORPORATION **Kyoto Plant** 1 Tatsumi-cho, Uzumasa, Ukyo-ku, - Engines and Transmissions Head Office: 33-8 Shiba 5-chome, Minato-ku, Tokyo Kyoto 616-8501 108-8410 Tel: (03)3456-1111 Shiga Plant 2-1 Kosuna-cho, Konan, Shiga 520-3212 - Engines 1-1 Kaigan-dori, Mizushima, Kurashiki, - Galant fortis, Outlander, i, Mizushima Plant Okayama 712-8501 http://www.mitsubishi-motors.co.ip/ eK Wagon, Lancer, Paiero Mini, Mini Cab, Town Box, Toppo, http://www.mitsubishi-motors.com/jp/ i-MiEV and MINICAB-MiEV 10 Okura-cho, Nakahara-ku, - Trucks (large, medium, small) and Kawasaki Plant FUSO Kawasaki, Kanagawa 211-8522 Engines for Trucks, Buses and Industrial Vehicles 4001 Sakuradai Nakatsu Aikawa- Transmissions and Gears and Nakatsu Plant Mitsubishi Fuso Truck and Bus Corporation machi, Aiko-gun, Kanagawa 243-0303 Related Parts Head Office: 890-12 Kashimada, Saiwai-ku, Kawasaki, Kanagawa 212-0058 Tel: (044)330-7700 http://www.mitsubishi-fuso.com/ Yokohama Plant 2 Takara-cho, Kanagawa-ku, - Engines and Suspensions JISSAN Yokohama-shi, Kanagawa 220-8623 Oppama Plant 1 Natsushima-cho, Yokosuka-shi, - Cube, Tiida, Tiida Latio, Note, Kanagawa 237-8523 Bluebird Sylpfy, Juke Nissan Motor Co., Ltd. and Nissan LEAF Global Headquarters: 1-1, Takashima 1-chome, Nishi-ku, 2500 Kamigamou, Kaminokawa-machi, Fuga, Skyline, Skyline Crossover, Tochigi Plant Yokohama-shi, Kanagawa 220-8686 Kawachi-gun, Tochigi 329-0692 Fairlady Z, NISSAN GT-R, Infiniti FX, TEL: (045) 523-5523 EX, M, G, and 370Z http://www.nissan.co.jp/ 1-3 Shinhama-cho, Kanda-machi, - Teana, X-TRAIL, Lafesta, Murano, Kyushu Plant http://www.nissan-global.com/JP/ Miyako-gun, Fukuoka 800-0395 Almera, Rogue, and Dualis 386 Shimokawa-aza-Otsurugi, Izumi-Iwaki Plant cho, Iwaki-shi, Fukushima 971-8183 Head (Takatsuka) 300 Takatsuka-cho, Minami-ku, Motorcycle Engines Assembling, **SUZUKI** Hamamatsu, Shizuoka 432-8611 Machining Plant Iwata Plant 2500 Iwai, Iwata, Shizuoka 438-0016 Carry, Every, Jimny, Escudo, etc. Osuka Plant 6333 Nishiobuchi, Kakegawa, - Foundry **Suzuki Motor Corporation** Shizuoka 437-1304

4520 Shirasuka, Kosai, Shizuoka

1-2 Utari, Shiratori-cho, Toyokawa,

1111 Shirai, Makinohara, Shizuoka

431-0451

421-0502

Aichi 442-8575

Note: Manufacturers are listed in alphabetical order. Only plants related to motor vehicle production are listed here

http://www.suzuki.co.jp/

http://www.globalsuzuki.com/

Kosai Plant

Sagara Plant

Tovokawa Plant

Head Office: 300 Takatsuka-cho, Minami-ku, Hamamatsu,

Tokyo Branch Office: 23-2 Daikyo-cho, Shinjuku-ku, Tokyo

Shizuoka 432-8611 Tel: (053) 440-2061

160-0015 Tel: (03) 3356-2501

- Wagon R, MR Wagon, Alto,

Outboard Motors Assembling

Automobile Engines Assembling,

Foundry of Engine Components,

Palette, Solio, etc.

- Swift, SX4, Kizashi,

- Motorcycles,

Machining

#### **Plants / Facilities Company Name / Offices Major Products** Honsha Plant 1 Toyota-cho, Toyota, Aichi 471-8571 - Hybrid System Parts, Forged Parts TOYOTA Motomachi Plant Motomachi, Toyota, Aichi 471-8573 - Crown, MarkX, Estima, LFA Kamigo Plant Taisei-cho, Toyota, Aichi 470-1217 - Engines 1 Sankou, Honda-cho, Toyota, Aichi 473-0938 - Corolla, iQ Takaoka Plant 1 Namiki, Uchikoshi-cho, Miyoshi, TOYOTA MOTOR CORPORATION Miyoshi Plant - Transmission-related Parts, Cold-forged Aichi 470-0213 Head Office: 1 Toyota-cho, Toyota, Aichi 471-8571 and Sintered Parts, Engine-related Parts 1 Umanokashira, Tsutsumi-cho, - Prius, Premio, Allion, Camry, Tel: (0565) 28-2121 Tsutsumi Plant Tokyo Head Office: 4-18 Koraku 1-chome, Bunkyo-ku, Tokyo Toyota, Aichi 473-0932 Scion tC 1 Nishiyama, Myochi-cho, Miyoshi, 112-8701 Tel: (03) 3817-7111 Powertrain-related Suspension Cast Parts, Mvochi Plant Aichi 470-0214 Powertrain-related Suspension Machined Parts Nagoya Office: 7-1 Meieki 4-chome, Nakamura-ku, Nagoya, 1 Shimoyama, Uchikoshi-cho, Miyoshi, Shimoyama Plant Aichi 450-8711 Tel: (052) 552-2111 - Engines, Turbocharges, Aichi 470-0213 Catalytic Converters http://www.toyota.co.jp/ Transmission-related Parts 10-1 Tamatsuura-machi, Hekinan, Aichi 447-0834 Kinu-ura Plant - LS, RAV4, GS, IS, IS F, Land Cruiser, GX, Tahara Plant 3-1 Midorigahama, Tahara, Aichi 441-3401 Vanguard, Wish, 4RUNNER, Engines Teiho Plant 7 Teiho-cho, Toyota, Aichi 471-8574 - Mechanical Equipment, Moldings for Resin and Casting and Forging Hirose Plant 543 Kirigahora, Nishi-hirose-cho, Research and Development and Production of Toyota, Aichi 470-0309 Electronic Control Devices, ICs Toyota Motor Kyushu, Inc. Miyata Plant 1 Kamiaruki, Miyawaka, Fukuoka 823-0015 - Harrier, SAI, IS, ES, RX, HS, CT, Highlander Head Office: 1 Kamiaruki, Miyawaka, Fukuoka 823-0015 Kanda Plant 9-2 Torigoe-cho, Kanda-machi, - Engines and Hybrid System Parts Tel: (0949) 32-5151 Miyako-gun, Fukuoka 800-0304 Kokura Plant 3914-58 Kusami, Kokura-minami-ku, Kita-Kyushu, Fukuoka 145-1 Yufutsu, Tomakomai, Hokkaido Toyota Motor Hokkaido, Inc. - Automobile Parts Including Automatic Plant Head Office: 145-1 Yufutsu, Tomakomai, Hokkaido 059-1393 059-1393 Transmissions, Continuously Variable Tel: (0144) 57-2121 Transmissions, Transfers, Aluminum Wheels Toyota Motor Tohoku, Inc. Electronic Controlled Brakes, Plant 1-1 Matsusakadaira 5-chome Head Office: 1-1 Matsusakadaira 5-chome, Taiwa-cho, Taiwa-cho, Kurokawa-gun, Miyagi Suspensions, Axles, Kurokawa-gun, Miyagi 981-3408 Tel: (022) 345-6711 981-3408 Torque Converters Ageo Plant - Large-, Medium- and Small-sized 1-1 Ageo, Saitama 362-8523 UD TRUCKS Trucks and Engines - Cast Parts Konosu Plant 3121-1 Mida, Konosu, Saitama 365-0062 Hanvu Plant 705-24 Komatsudai 2-chome, Hanvu, - Transmissions **UD Trucks Corporation** Saitama 348-0038 Head Office: 1-1 Ageo, Saitama 362-8523 Tel: (048) 781-2301 http://www.udtrucks.co.jp/ http://www.udtrucks.com/ 2500 Shingai, Iwata, Shizuoka - Assembly of Motorcycles (50-1900cc) Iwata Main Factory 438-8501 **Engines and Snowmobiles** Iwata South 800 Tenryu, Iwata, Shizuoka 438-0075 - Manufacturing of Cast Parts and Factory **Engines** YAMAHA MOTOR CO., Ltd. - Forging and Steel Processing Hamakita Factory 1280 Nakajo, Hamakita-ku, Hamamatsu, Shizuoka 434-8501 Head Office: 2500 Shingai, Iwata, Shizuoka 438-8501 Tel: (0538) 32-1115 Nakaze Factory 4444 Nakaze, Hamakita-ku, - Plastic Forming and Painting Hamamatsu, Shizuoka 434-0012 Tokyo Office: 1-1 Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-0005 Tel: (03) 5220-7200 **Fukuroi Factory** 3080 Yamashina, Fukuroi, Shizuoka - Processing of Engine Parts and Packing http://www.yamaha-motor.co.jp/ 437-0066 of Motorcycle Parts for Export Toyooka Factory 1204 Godaijima, Iwata, Shizuoka - Processing of Major Body Parts 438-0114 Morimachi Factory 1-2 Nakagawa, Morimachi, - Frame Welding Syuchi-gun, Shizuoka 437-0223

# **Special Friend:**

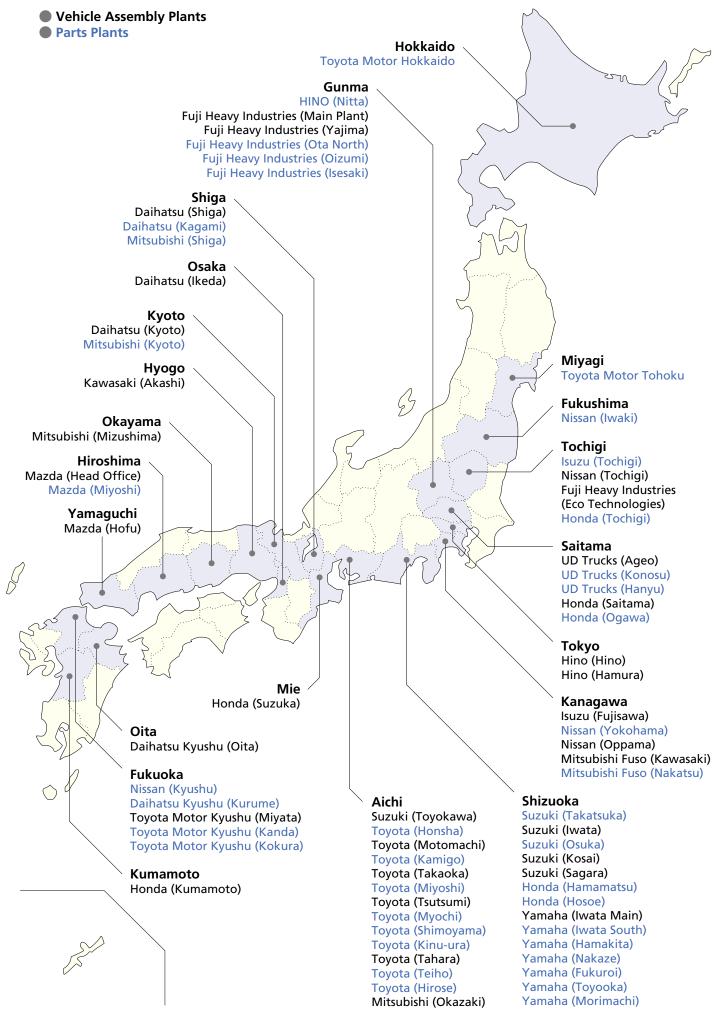


GM Japan

**General Motors Japan LIMITED** 

Head Office: 12-8 Higashi-shinagawa 4-chome, Shinagawa-ku, Tokyo 140-8687 Tel: (03) 6711-5700

http://www.gmjapan.co.jp/



- Japan Auto Parts Industries Association (JAPIA) 16-15, Takanawa 1-chome, Minato-ku, Tokyo 108-0074 (03) 3445-4211
- Japan Auto-Body Industries Association Inc. (JABIA)
  1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 3578-1681
- Japan Automotive Machinery and Tool Manufacturers Association (JAMTA)
   5-8, Shiba-Koen 3-chome, Minato-ku, Tokyo 105-001 (03) 3431-3773
- Society of Automotive Engineers of Japan, Inc. (JSAE) 10-2, Goban-cho, Chiyoda-ku, Tokyo 102-0076 (03) 3262-8211
- Japan Automobile Research Institute (JARI) [Tsukuba] 2530, Karima, Tsukuba, Ibaraki 305-0822 (029) 856-1112
- Japan Automobile Research Institute (JARI) [Tokyo]
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5733-7921
- Automotive Dispute Resolution Center (ADR)
   19-5, Toranomon 1-chome, Minato-ku, Tokyo 105-0001 (0120) 028-222
- Japan Automobile Recycling Promotion Center (JARC)
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5733-8300
- Japan Auto Recycling Partnership (JARP) 1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5405-6150
- Automobile Inspection & Registration Information Association (AIRIA)
   11-6, Iwamoto-cho 3-chome, Chiyoda-ku, Tokyo 101-0032 (03) 5825-3671
- Automobile Business Association of Japan
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 3578-3880
- Japan Automobile Dealers Association (JADA) 1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-8530 (03) 5733-3100
- Japan Mini Vehicles Association
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5472-7861
- Japan Used Car Dealers Association 25-3, Yoyogi 3-chome, Shibuya-ku, Tokyo 151-0053 (03) 5333-5881
- Japan Automobile Importers Association (JAIA)
   1-15, Shiba 3-chome, Minato-ku, Tokyo 105-0014 (03) 5765-6811
- Japan Automobile Federation (JAF)
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 3436-2811
- Japan Auto Appraisal Institute (JAAI)
   34-4, Nishi-Shinbashi 2-chome, Minato-ku, Tokyo 105-0003 (03) 5776-0901
- Automobile Fair Trade Council (AFTC)
   9-3, Hirakawa-cho 1-chome, Chiyoda-ku, Tokyo 102-0093 (03) 3265-7975
- Japan Automobile Service Promotion Association (JASPA)
   10-1, Roppongi 6-chome, Minato-ku, Tokyo 106-6117 (03) 3404-6141
- Japan Automotive Leasing Association (JALA) 23-1, Shiba 2-chome, Minato-ku, Tokyo 105-0014 (03) 5484-7037
- Motorcycle Federation of Japan (MFJ)
   11-6, Tsukiji 3-chome, Chuo-ku, Tokyo 104-0045 (03) 5565-0900
- Motorcycle Safety Association 28-11, Honcho 2-chome, Nakano-ku, Tokyo 164-0012 (03) 3372-5156

- Nippon MotorCycle Association (NMCA)
   7-12, Otsuka 5-chome, Bunkyo-ku, Tokyo 112-0012 (03) 6902-8190
- Japan Automobile Education Foundation (JAEF)
  1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5733-3841
- The General Insurance Association of Japan
   9, Kanda-Awajicho 2-chome, Chiyoda-ku, Tokyo 101-8335 (03) 3255-1844
- Institute for Traffic Accident Research and Data Analysis 6-6, Kojimachi, Chiyoda-ku, Tokyo 102-0083 (03) 3515-2525
- Japan Automobile Transport Technology Association (JATA) 6, Rokuban-cho, Chiyoda-ku, Tokyo 102-0085 (03) 3556-2161
- Japan Automobile Standards Internationalization Center (JASIC)
   6, Rokuban-cho, Chiyoda-ku, Tokyo 102-0085 (03) 5216-7241
- ITS Japan 6-8, Shiba-Koen 2-chome, Minato-ku, Tokyo 105-0011 (03) 5777-1011
- Japan Industrial Vehicles Association (JIVA) 5-26, Moto-Akasaka 1-chome, Minato-ku, Tokyo 107-0051 (03) 3403-5556
- Japan Trucking Association
   6-1, Nishi-Shinjuku 1-chome, Shinjuku-ku, Tokyo 163-1519 (03) 5323-7109
- Nihon Bus Association
   4-1, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-0005 (03) 3216-4011
- All Japan Freight Forwarders Association 2-21, Kanda-Awajicho, Chiyoda-ku, Tokyo 101-0063 (03) 5296-1670
- Japan Federation of Hire-Taxi Associations 8-13, Kudan-Minami 4-chome, Chiyoda-ku, Tokyo 102-0074 (03) 3239-1531
- All Japan Rent-A-Car Association
   1-30, Shiba-Daimon 1-chome, Minato-ku, Tokyo 105-0012 (03) 5472-7328
- Japan Federation of Authorized Driving School Associations 2-1, Yotsuya 3-chome, Shinjuku-ku, Tokyo 160-0004 (03) 3359-8431
- Japan Automobile Tyre Manufacturers Association, Inc. 8-21, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 (03) 3435-9091
- Auto-Parts & Accessories Retail Association (APARA)
   1-7, Shiba 5-chome, Minato-ku, Tokyo 108-0014 (03) 3454-1427
- Japan Traffic Safety Association
   8-13, Kudan-Minami 4-chome, Chiyoda-ku, Tokyo 102-0074 (03) 3264-2641
- The Japan Research Center for Transport Policy 12-6, Kudan-Kita 1-chome, Chiyoda-ku, Tokyo 102-0073 (03) 3263-1945
- Japan Road Association 3-1, Kasumigaseki 3-chome, Chiyoda-ku, Tokyo 100-8955 (03) 3581-2211
- Express Highway Research Foundation of Japan (EHRF) 11-10, Minami-Azabu 2-chome, Minato-ku, Tokyo 106-0047 (03) 6436-2100
- Vehicle Information and Communication System Center
   5-7, Kyobashi 2-chome, Chuo-ku, Tokyo 104-0031 (03) 3562-1720



## THE MOTOR INDUSTRY OF JAPAN 2012 Published May 2012

## Japan Automobile Manufacturers Association, Inc.

Jidosha Kaikan, 1-30 Shiba Daimon 1-chome, Minato-ku, Tokyo 105-0012 Japan For inquiries about this booklet, write or telephone:
Public Relations Office, JAMA Tel: +81 (3) 5405-6119
http://www.jama.or.jp/

