



# Passenger Vehicles

A passenger vehicle is a motor vehicle weighing less than 10,000 pounds; the category includes passenger cars and light trucks (pickup trucks, vans, SUVs, and other light trucks). Passenger vehicles make up over 90 percent of registered vehicles, and account for nearly 90 percent of total vehicle miles traveled (VMT). In 2012 there were an estimated 9,754,000 vehicles involved in police-reported traffic crashes, 96 percent (9,387,000) of which were passenger vehicles. There were 45,586 vehicles involved in fatal crashes, of which 78 percent (35,346) were passenger vehicles. In 2012, there were 21,667 passenger vehicle occupants who lost their lives in traffic crashes, and an estimated 2.09 million were injured.

*Passenger vehicles make up over 90 percent of the fleet of registered vehicles, and account for nearly 90 percent of total VMT.*

## Changes to Registration Data

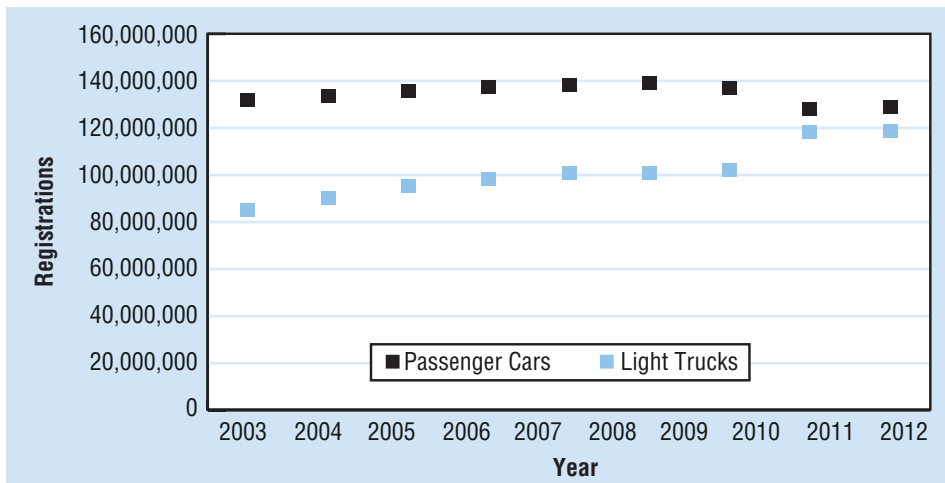
The passenger vehicle (cars and light trucks) registration data contained in this fact sheet was obtained from R.L. Polk's National Vehicle Population Profile (NVPP), which is a compilation of all passenger vehicles that have been registered in compliance with State requirements.

Due to the enhancement in the passenger vehicle registration data for 2011 and 2012, registration counts for these years changed considerably from the counts provided for 2010 and earlier years (Table 1 and Appendix A). Consequently, the 2011 and 2012 data in this fact sheet for vehicle registrations and fatality rates are not strictly comparable with the data for all prior years, which were based on Polk's "Old NVPP." Hence in order to make suitable comparisons over the 10-year period all vehicle registration and fatality rate data are presented across two sets of years, 2011 and 2012; and 2003 through 2010.

Both passenger car and light truck (LTV) registrations remained virtually unchanged from 2011 to 2012 (Figure 1). Among the light-truck categories, compared to 2011, pickup truck registrations decreased by 1 percent and van registrations decreased by 4 percent; however, SUV registrations increased by 2 percent.

Figure 1

### Passenger Vehicle Registrations, 2003–2012



Source: Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011-2012 New NVPP.

*The registration-based fatality rates increased for passenger cars, pickup trucks and vans, but decreased for SUVs from 2011 to 2012.*

## Fatalities and Fatality Rates

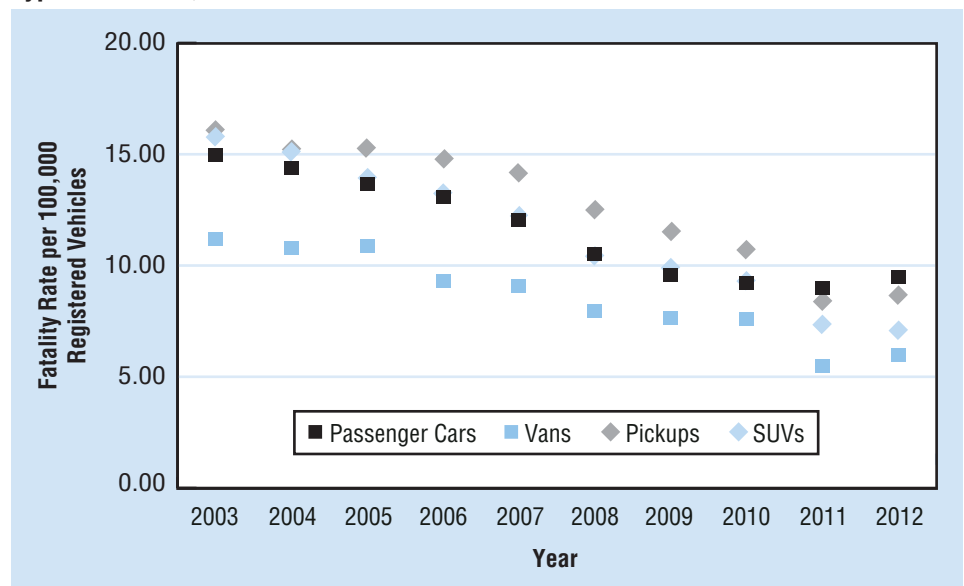
Figure 2 shows that fatality rates per 100,000 registered vehicles have declined since 2003 until 2010 for all passenger vehicle types; this decline has been most pronounced for SUVs. (The data for Figure 2 is presented in Tables 1 and 2.)

Fatality rates per 100,000 registered vehicles from 2011 to 2012 increased for both passenger cars and light trucks (2% and 1% respectively). Among light-truck categories, fatality rates increased for pickup trucks and vans (2% and 7% respectively). However, fatality rates decreased for SUVs by 2 percent.

Among passenger vehicle occupant fatalities, the proportion of light truck occupant fatalities increased to 43 percent in 2012, from 39 percent in 2003, while the proportion of passenger car occupant fatalities declined from 61 percent to 57 percent during the same time span. In 2006, the number of overall light truck occupant fatalities (12,761) experienced a 2-percent decrease, the first decline since 1992. Since this decrease in 2006, light truck occupant fatalities decreased an additional 27 percent until 2011, and increased by 1 percent in 2012.

Figure 2

### Passenger Vehicle Occupant Fatality Rates per 100,000 Registered Vehicles, by Type of Vehicle, 2003–2012



Sources: Fatalities – Fatality Analysis Reporting System (FARS); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011-2012 New NVPP.

Table 1 shows the number of occupant fatalities, registered vehicles, and fatality rates for total passenger vehicles, as well as separately for passenger cars and light trucks from 2003 to 2012. Since 2011, both types of passenger vehicles have seen increases in the registration-based fatality rates. Registrations for both passenger cars and light trucks remained almost the same as in 2011. Registration-based fatality rates declined for SUVs in 2012, but increased for pickup trucks and vans. Vans continue to have the lowest registration-based fatality rate among light trucks.

Overall, both types of passenger vehicles have seen reductions in the registration-based fatality rate from 2003 to 2010. Note also that the number of registered light trucks has increased at a much greater rate than that of passenger cars during this period. In Table 2, light trucks are further separated by type as SUVs, pickup trucks, and vans. Again, each group has consistently seen a reduction in the registration-based fatality rate from 2003 to 2010. Among the three types of light trucks, SUVs saw the steepest increase in the number of registered vehicles. Looking at each type of passenger vehicle, vans have the lowest registration-based fatality rate.

Table 1

**Passenger Vehicle Occupant Fatalities, Registered Vehicles, and Fatality Rates\*, by Vehicle Type, 2003–2012**

Year	Passenger Cars			Light Trucks**			Total Passenger Vehicles		
	Occupant Fatalities	Registered Vehicles	Fatality Rate*	Occupant Fatalities	Registered Vehicles	Fatality Rate*	Occupant Fatalities	Registered Vehicles	Fatality Rate*
2003	19,725	131,665,783	14.98	12,546	85,063,823	14.75	32,271	216,729,606	14.89
2004	19,192	133,414,552	14.39	12,674	89,799,406	14.11	31,866	223,213,958	14.28
2005	18,512	135,324,121	13.68	13,037	94,787,880	13.75	31,549	230,112,001	13.71
2006	17,925	137,031,279	13.08	12,761	98,064,117	13.01	30,686	235,095,396	13.05
2007	16,614	137,929,951	12.05	12,458	100,817,496	12.36	29,072	238,747,447	12.18
2008	14,646	139,028,041	10.53	10,816	100,862,944	10.72	25,462	239,890,985	10.61
2009	13,135	137,203,972	9.57	10,312	102,008,600	10.11	23,447	239,212,572	9.80
2010	12,491	135,310,480	9.23	9,782	102,376,147	9.55	22,273	237,686,627	9.37
2011	12,014	126,974,845	9.46	9,302	118,694,258	7.84	21,316	245,669,103	8.68
2012	12,271	127,091,286	9.66	9,396	118,677,080	7.92	21,667	245,768,366	8.82

Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

\*Fatality Rate Per 100,000 Registered Vehicles; \*\*Includes other/unknown light truck vehicle types

Sources: Fatalities – Fatality Analysis Reporting System (FARS); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011–2012 New NVPP.

Table 2

**Light-Truck Occupant Fatalities, Registered Vehicles, and Fatality Rates\*, by Vehicle Type, 2003–2012**

Year	SUVs			Pickup Trucks			Vans		
	Occupant Fatalities	Registered Vehicles	Fatality Rate*	Occupant Fatalities	Registered Vehicles	Fatality Rate*	Occupant Fatalities	Registered Vehicles	Fatality Rate*
2003	4,483	28,357,698	15.81	5,957	37,116,234	16.05	2,080	18,615,310	11.17
2004	4,760	31,416,857	15.15	5,838	38,362,205	15.22	2,046	18,982,049	10.78
2005	4,831	34,698,739	13.92	6,067	39,699,056	15.28	2,112	19,453,034	10.86
2006	4,928	37,170,302	13.26	5,993	40,478,837	14.81	1,815	19,539,179	9.29
2007	4,834	39,463,148	12.25	5,847	41,121,470	14.22	1,764	19,406,561	9.09
2008	4,214	40,529,579	10.40	5,097	40,782,963	12.50	1,492	18,784,452	7.94
2009	4,104	41,383,289	9.92	4,801	41,676,351	11.52	1,396	18,222,255	7.66
2010	3,942	42,378,757	9.30	4,486	41,596,353	10.78	1,346	17,732,967	7.59
2011	3,884	50,161,564	7.74	4,270	48,912,291	8.73	1,128	19,584,184	5.76
2012	3,875	51,300,136	7.55	4,332	48,465,433	8.94	1,167	18,878,709	6.18

Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

\*Fatality Rate Per 100,000 Registered Vehicles;

Sources: Fatalities – Fatality Analysis Reporting System (FARS); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011–2012 New NVPP.

**Injured and Injury Rates**

The proportion of injured passenger vehicle occupants (Table 3) who were occupants of light trucks increased to 36 percent in 2012, from 34 percent in 2003, while the proportion of injured passenger car occupants declined from 66 percent to 64 percent over these same years.

From 2011 to 2012, occupants injured per 100,000 registered vehicles have increased for both passenger vehicle types (increased for passenger cars from 976 in 2011 to 1,045 in 2012 and for light trucks from 614 in 2011 to 642 in 2012). Among light truck types SUVs had a larger increase in injury rates from 2011 to 2012 (Table 4).

Since 2003, injury rates for occupants injured per 100,000 registered vehicles showed a steady decline for passenger cars until 2009. Injury rates declined for passenger cars from 1,334 in 2003 to 887 in 2009. However, injury rates for passenger cars increased in 2010 to 926. For light trucks, injury rates declined steadily from 1,045 in 2003 to 716 in 2010. Occupant injury rates (Table 4) for all light truck types decreased steadily from 2003 to 2010, except for SUVs, where rates decreased from 2003 to 2009, but increased in 2010. Pickup trucks had the largest decline in injury rates from 2003 to 2010.

Table 3

**Passenger Vehicle Occupants Injured, Registered Vehicles, and Injury Rates\*, by Vehicle Type, 2003–2012**

Year	Passenger Cars			Light Trucks**			Total Passenger Vehicles		
	Occupants Injured	Registered Vehicles	Injury Rate*	Occupants Injured	Registered Vehicles	Injury Rate*	Occupants Injured	Registered Vehicles	Injury Rate*
2003	1,756,000	131,665,783	1,334	889,000	85,063,823	1,045	2,646,000	216,729,606	1,221
2004	1,643,000	133,414,552	1,231	900,000	89,799,406	1,002	2,543,000	223,213,958	1,139
2005	1,573,000	135,324,121	1,163	872,000	94,787,880	920	2,446,000	230,112,001	1,063
2006	1,475,000	137,031,279	1,076	857,000	98,064,117	874	2,331,000	235,095,396	992
2007	1,379,000	137,929,951	1,000	841,000	100,817,496	835	2,221,000	238,747,447	930
2008	1,304,000	139,028,041	938	768,000	100,862,944	762	2,072,000	239,890,985	864
2009	1,216,000	137,203,972	887	759,000	102,008,600	744	1,976,000	239,212,572	826
2010	1,253,000	135,310,480	926	733,000	102,376,147	716	1,986,000	237,686,627	835
2011	1,240,000	126,974,845	976	728,000	118,694,258	614	1,968,000	245,669,103	801
2012	1,328,000	127,091,286	1,045	762,000	118,677,080	642	2,091,000	245,768,366	851

Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

\*Injury Rate Per 100,000 Registered Vehicles; \*\*Includes other/unknown light truck vehicle types

Sources: Injured – General Estimates System (GES); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011-2012 New NVPP.

Table 4

**Light-Truck Occupants Injured, Registered Vehicles, and Injury Rates\*, by Vehicle Type, 2003–2012**

Year	SUVs			Pickup Trucks			Vans		
	Occupants Injured	Registered Vehicles	Injury Rate*	Occupants Injured	Registered Vehicles	Injury Rate*	Occupants Injured	Registered Vehicles	Injury Rate*
2003	338,000	28,357,698	1,190	333,000	37,116,234	898	203,000	18,615,310	1,090
2004	364,000	31,416,857	1,159	309,000	38,362,205	806	211,000	18,982,049	1,110
2005	363,000	34,698,739	1,047	308,000	39,699,056	775	183,000	19,453,034	942
2006	387,000	37,170,302	1,042	276,000	40,478,837	682	179,000	19,539,179	919
2007	380,000	39,463,148	962	271,000	41,121,470	660	175,000	19,406,561	904
2008	361,000	40,529,579	891	250,000	40,782,963	612	145,000	18,784,452	770
2009	341,000	41,383,289	823	238,000	41,676,351	570	139,000	18,222,255	766
2010	360,000	42,378,757	851	218,000	41,596,353	524	135,000	17,732,967	761
2011	353,000	50,161,564	703	237,000	48,912,291	484	138,000	19,584,184	705
2012	386,000	51,300,136	753	241,000	48,465,433	497	135,000	18,878,709	713

Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

\*Injury Rate Per 100,000 Registered Vehicles

Sources: Injured – General Estimates System (GES); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011–2012 New NVPP.

*Seat belt use for occupants of passenger vehicles was 86 percent in 2012, according to NOPUS.*

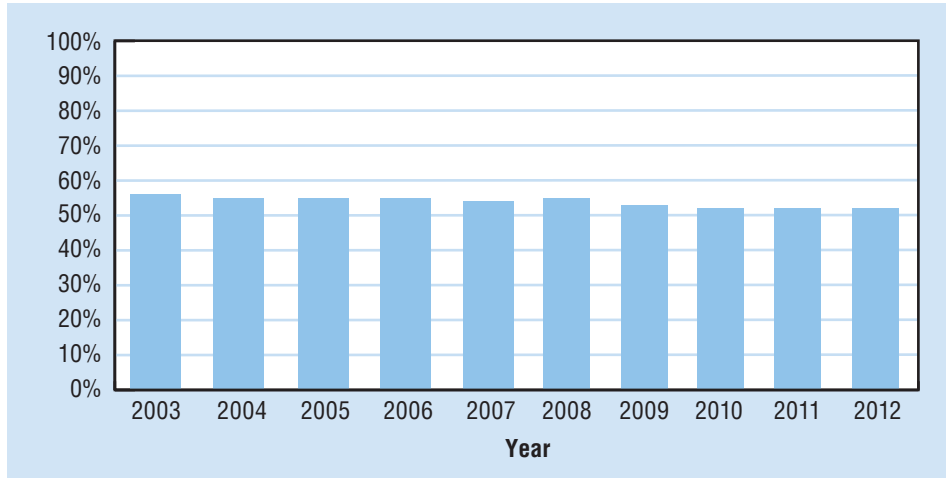
## Restraint Use

According to the National Occupant Protection Use Survey (NOPUS), which provides the only probability-based nationally representative observed data on seat belt use in the United States, seat belt use for passenger vehicles in 2012 was 86 percent; 87 percent for passenger cars, 89 percent for vans and SUVs, and 77 percent for pickup trucks.

In fatal crashes in 2012, there were 21,667 passenger vehicle occupants killed. Rural areas accounted for 61 percent of these occupant fatalities. For these passenger vehicle occupant fatalities occurring in rural areas, 54 percent were unrestrained, compared to 48 percent in urban areas. Nearly two-thirds (65%) of rural pickup truck occupants killed were unrestrained—the highest percentage of any passenger vehicle occupants killed among both rural and urban areas.

Figure 3 shows the gradual decline of the proportion of passenger vehicle occupants killed who were unrestrained, from 56 percent in 2003 to 52 percent in 2012. Passenger car occupant fatalities had the lowest percentage (45%) of unrestrained occupant fatalities in 2012, while pickup truck occupant fatalities, as in previous years, had the highest percent (65%) of unrestrained occupant deaths (Table 5).

Figure 3  
**Percent of Unrestrained Passenger Vehicle Occupant Fatalities, 2003–2012**



Source: Fatality Analysis Reporting System (FARS).

Table 5  
**Percent of Unrestrained\* Passenger Vehicle Occupant Fatalities, by Vehicle Type, 2003–2012**

Year	Passenger Vehicle Type					Total Passenger Vehicles**
	Passenger Cars	Light Trucks			Total**	
		SUVs	Pickups	Vans		
2003	50	65	71	57	67	56
2004	49	62	69	55	64	55
2005	49	63	69	54	64	55
2006	49	63	69	51	64	55
2007	47	62	68	52	63	54
2008	48	62	68	52	63	55
2009	46	60	67	48	62	53
2010	44	59	65	49	61	52
2011	45	58	65	48	60	52
2012	45	59	65	43	60	52

\*Based on known restraint use

\*\*Includes occupants of other/unknown light truck vehicle types.

Source: Fatality Analysis Reporting System (FARS).

In fatal crashes in 2012, 79 percent of passenger vehicle occupants who were totally ejected from vehicles were killed. Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In passenger cars, 18 percent of fatally injured occupants were ejected (totally or partially) from the vehicle, while 34 percent of those killed in light trucks were ejected (Table 6).

*In fatal crashes in 2012, 79 percent of passenger vehicle occupants who were totally ejected were killed.*

Table 6

### Passenger Vehicle Occupants in Fatal Crashes, by Vehicle Type and Ejection Status, 2012

Vehicle Type		Ejection Status						Total	
		Not Ejected		Ejected (Totally or Partially)		Others*/Unknown			
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Cars	Killed	9,938	81.0%	2,253	18.4%	80	0.7%	12,271	100%
	Survived	15,476	96.5%	453	2.8%	112	0.7%	16,041	100%
	Total	25,414	89.8%	2,706	9.6%	192	0.7%	28,312	100%
Light Trucks – All**	Killed	6,140	65.3%	3,191	34.0%	65	0.7%	9,396	100%
	Survived	18,275	94.7%	855	4.4%	172	0.9%	19,302	100%
	Total	24,415	85.1%	4,046	14.1%	237	0.8%	28,698	100%
All Passenger Vehicles	Killed	16,078	74.2%	5,444	25.1%	145	0.7%	21,667	100%
	Survived	33,751	95.5%	1,308	3.7%	284	0.8%	35,343	100%
	Total	49,829	87.4%	6,752	11.8%	429	0.8%	57,010	100%

\*Includes ejected- unknown degree, not applicable, not reported.

\*\*Includes SUVs, vans, pickup trucks, and other/unknown light truck vehicle types.

Source: Fatality Analysis Reporting System (FARS).

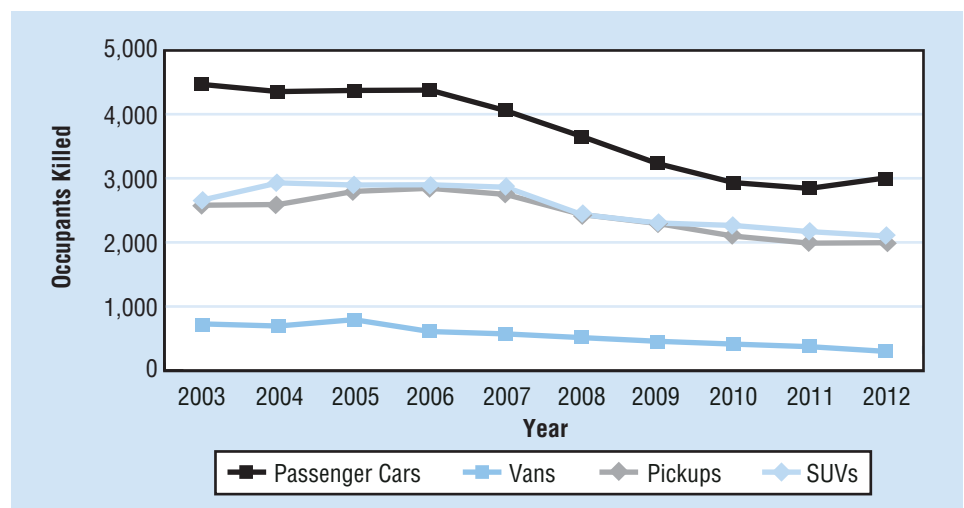
Seat belts are effective in preventing total ejections. Lap/shoulder seat belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. In 2012 alone, seat belts saved an estimated 12,174 lives of passenger vehicle occupants.

## Rollover

The rollover crash is one of the most deadly forms of crashes among passenger vehicles, accounting for more than one-third (35%) of all occupant fatalities in 2012. Among fatally injured passenger vehicle occupants in 2012, the proportion of fatalities in rollover crashes was highest for SUVs (56%), followed by pickup trucks (46%), vans (28%), and passenger cars (25%).

Figure 4

### Passenger Vehicle Occupants Killed in Rollover Crashes, by Vehicle Type, 2003–2012



Source: Fatality Analysis Reporting System (FARS).

In 2012, although occupant fatalities in rollover crashes increased for passenger cars and pickup trucks, overall each passenger vehicle category showed a decreasing trend in the number of occupant fatalities occurring in rollover crashes between 2003 and 2012, as seen in Figure 4. The number of pickup truck occupant fatalities declined by 22 percent over the past decade, while those in SUVs decreased by 19 percent. Fatalities in vans, already the lowest number, declined by 55 percent, and in passenger cars, declined by 33 percent over these years. The data used in Figure 4 are shown in Table 7.

Table 7

### Passenger Vehicle Occupant Fatalities in Rollovers, by Vehicle Type, 2003–2012

Year	Passenger Vehicle Type					Total Passenger Vehicles*
	Passenger Cars	Light Trucks				
		SUVs	Pickups	Vans	Total*	
2003	4,464	2,661	2,580	728	5,978	10,442
2004	4,353	2,929	2,597	695	6,237	10,590
2005	4,371	2,895	2,796	794	6,499	10,870
2006	4,376	2,899	2,844	609	6,366	10,742
2007	4,055	2,861	2,748	572	6,185	10,240
2008	3,653	2,435	2,435	514	5,390	9,043
2009	3,230	2,303	2,295	457	5,061	8,291
2010	2,933	2,264	2,098	413	4,777	7,710
2011	2,849	2,172	1,993	375	4,551	7,400
2012	3,009	2,157	2,004	327	4,491	7,500

\*Includes occupants of other/unknown light truck vehicle types  
Source: Fatality Analysis Reporting System (FARS).

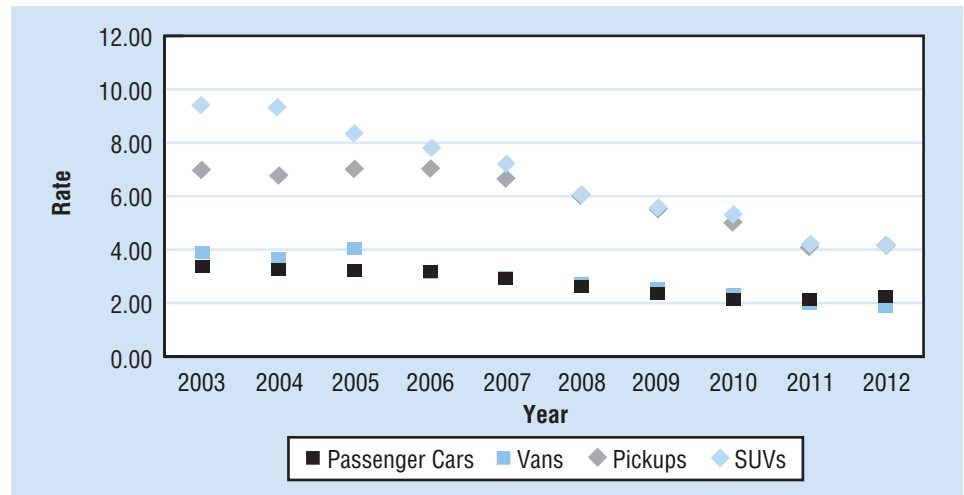
In 2012, among passenger vehicles involved in rural fatal crashes, SUVs experienced the highest rollover percentage (40%) compared to 34 percent for pickup trucks, 22 percent for passenger cars, and 21 percent for vans. The rollover percentages for passenger vehicles in urban areas were much lower: 21 percent for SUVs, 15 percent for pickup trucks, 9 percent for passenger cars, and 8 percent for vans.

From 2011 to 2012, passenger vehicle occupant fatality rates per 100,000 registered vehicles in rollover crashes increased for passenger cars and declined for light trucks. Among light trucks, fatality rates in rollover crashes decreased for SUVs and vans, but increased for pickups.

Passenger vehicle occupant fatality rates per 100,000 registered vehicles in rollover crashes declined for all body types from 2003 to 2010 (Figure 5). The lowest occupant fatality rates in rollover crashes in 2010 were 2.17 for passenger cars, and 2.33 for vans, compared to the highest rates of 5.34 for SUVs and 5.04 for pickups.

*Rollover rates for passenger vehicles involved in fatal crashes were much lower in urban areas than in rural areas.*

Figure 5  
**Passenger Vehicle Occupant Fatality Rates in Rollover Crashes per 100,000 Registered Vehicles, by Vehicle Type, 2003–2012**



Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

Sources: Fatalities – Fatality Analysis Reporting System (FARS); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011-2012 New NVPP.

From 2011 to 2012, the occupant fatality rate in rollover crashes for vans decreased by 9 percent and SUVs by 3 percent. However, the occupant fatality rate in rollover crashes increased for pickup trucks by 1.5 percent and for passenger cars by 6 percent.

Table 8 presents the data displayed in Figure 5, showing the decline in occupant fatality rates in rollover crashes for all passenger vehicle categories from 2003 to 2010. From 2003 to 2010, the occupant fatality rate in rollover crashes for SUVs has decreased by 43 percent, followed by 40 percent for vans, 36 percent for passenger cars and 27 percent for pickup trucks.

Table 8  
**Passenger Vehicle Occupant Fatality Rates\* in Rollovers, by Vehicle Type, 2003–2012**

Year	Passenger Vehicle Type					Total Passenger Vehicles**
	Passenger Cars	SUVs	Pickups	Vans	Total**	
2003	3.39	9.38	6.95	3.91	7.03	4.82
2004	3.26	9.32	6.77	3.66	6.95	4.74
2005	3.23	8.34	7.04	4.08	6.86	4.72
2006	3.19	7.80	7.03	3.12	6.49	4.57
2007	2.94	7.25	6.68	2.95	6.13	4.29
2008	2.63	6.01	5.97	2.74	5.34	3.77
2009	2.35	5.57	5.51	2.51	4.96	3.47
2010	2.17	5.34	5.04	2.33	4.67	3.24
2011	2.24	4.33	4.07	1.91	3.83	3.01
2012	2.37	4.20	4.13	1.73	3.78	3.05

Note: Due to an enhancement in Polk's 2011 and 2012 passenger vehicle registration data processes, results for these years are not strictly comparable to prior years.

\*Fatality Rate Per 100,000 Registered Vehicles; \*\* Includes other/unknown light truck vehicle types.

Sources: Fatalities – Fatality Analysis Reporting System (FARS); Registered Vehicles – R.L. Polk, 2003-2010 Old NVPP and 2011–2012 New NVPP.



## Two-Vehicle Crashes Between Passenger Cars and LTVs

The number of occupants killed in two-vehicle crashes between one passenger car and one LTV (pickup truck, van, or SUV) increased for passenger cars and declined for LTVs from 2011 to 2012 (Table 9). The number of fatally injured occupants in passenger cars increased by 1 percent, and those in light trucks decreased by 8 percent.

Table 9

### Occupants Killed in Two-Vehicle Crashes Involving a Passenger Car and an LTV, 2011 and 2012

	Year		% Change
	2011	2012	
Killed in Passenger Car	2,560	2,592	+1.3%
Killed in LTV	719	660	-8.2%

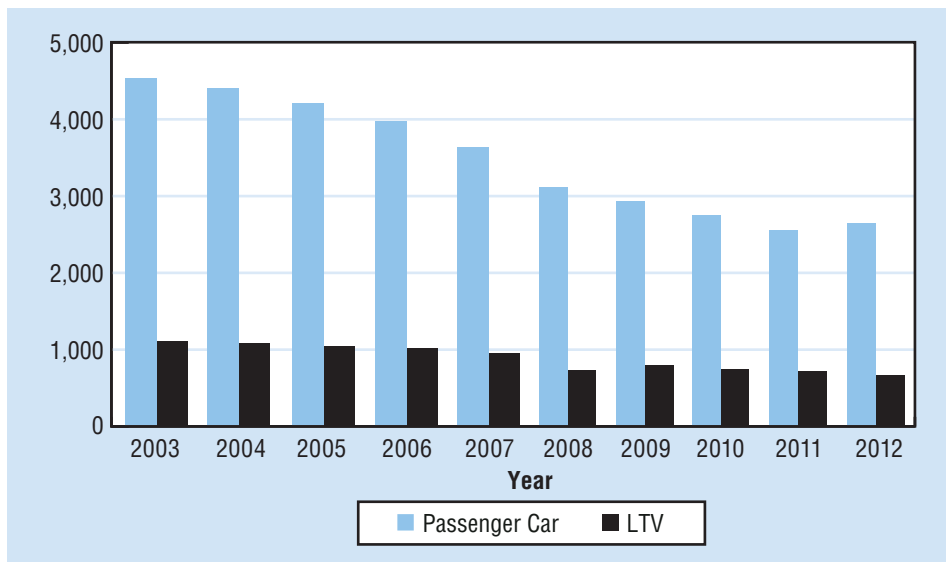
LTV = Pickup Truck, Van, or SUV

Source: Fatality Analysis Reporting System (FARS).

Figure 6 graphically shows the number of occupant fatalities in each vehicle type in two-vehicle crashes involving one car and one LTV, for the years 2003 through 2012. In these crashes there were about four times as many passenger car occupant fatalities as LTV occupant fatalities.

Figure 6

### Occupants Killed in Two-Vehicle Crashes Involving a Passenger Car and an LTV, 2003–2012



Source: Fatality Analysis Reporting System (FARS).

In 2012, in head-on collisions, nearly four times as many passenger car occupants as light-truck occupants were killed (Table 10). The number of occupant fatalities increased for passenger cars and light trucks from 2011 to 2012. In addition, when the front of the passenger car struck the side of the LTV, occupant fatalities declined for both passenger cars and LTVs in the crash. When the front of the LTV struck the side of the passenger car, occupant fatalities increased for passenger cars and decreased for light trucks in the crash. The largest number of occupant fatalities in these crashes was those in passenger cars struck in the side by the front of an LTV. When LTVs were struck in the side by a passenger car, 1.7 times as many LTV occupants were killed as passenger car occupants. When passenger cars were struck in the side by LTVs, 22 times as many passenger car occupants were killed as LTV occupants.

*In head-on collisions between a passenger car and a light truck, nearly four times as many passenger car occupants as light-truck occupants were killed.*

Table 10

**Occupants Killed in Two-Vehicle Crashes Involving a Passenger Car and an LTV, by Collision Type, 2011 and 2012**

	Year		% Change
	2011	2012	
<b>Head-On Collisions</b>			
Killed in Passenger Car	1,005	1,067	+6.2%
Killed in LTV	272	288	+5.9%
<b>Passenger Car Front to LTV Side</b>			
Killed in Passenger Car	104	94	-9.6%
Killed in LTV	171	160	-6.4%
<b>LTV Front to Passenger Car Side</b>			
Killed in Passenger Car	1,121	1,171	+4.5%
Killed in LTV	66	53	-19.7%

LTV = Pickup Truck, Van, or SUV

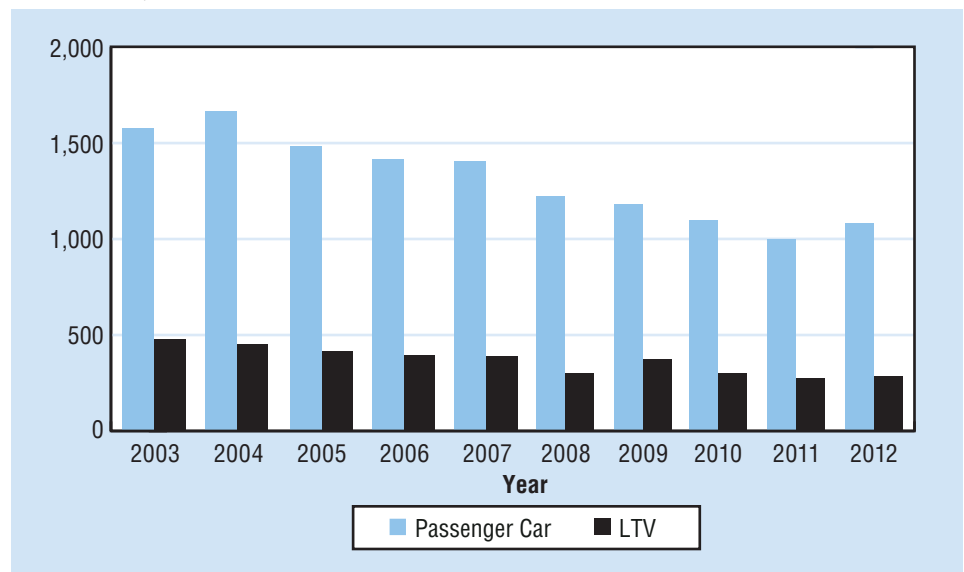
Source: Fatality Analysis Reporting System (FARS).

*When a passenger car and a light truck are involved in a side-impact crash, the vehicle struck in the side is more likely to have an occupant fatality.*

Figures 7, 8, and 9 graphically show each of the above types of crashes from 2003 through 2012. When a passenger car and a light truck hit each other head-on, a fatality in the passenger car is 3.7 times more likely than one in the LTV. Note also that when one vehicle is struck in the side by the front of the other vehicle, the vehicle struck in the side is more likely to have an occupant fatality. This is far more likely when a light truck strikes the side of a passenger car, as shown in Figure 9.

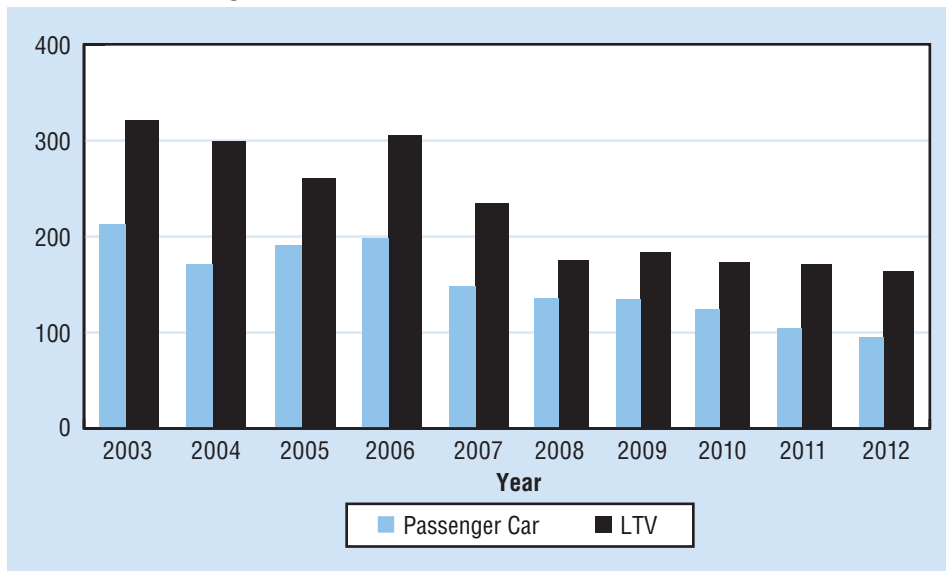
Figure 7

**Occupants Killed in Two-Vehicle Head-On Collisions Involving a Passenger Car And an LTV, 2003–2012**



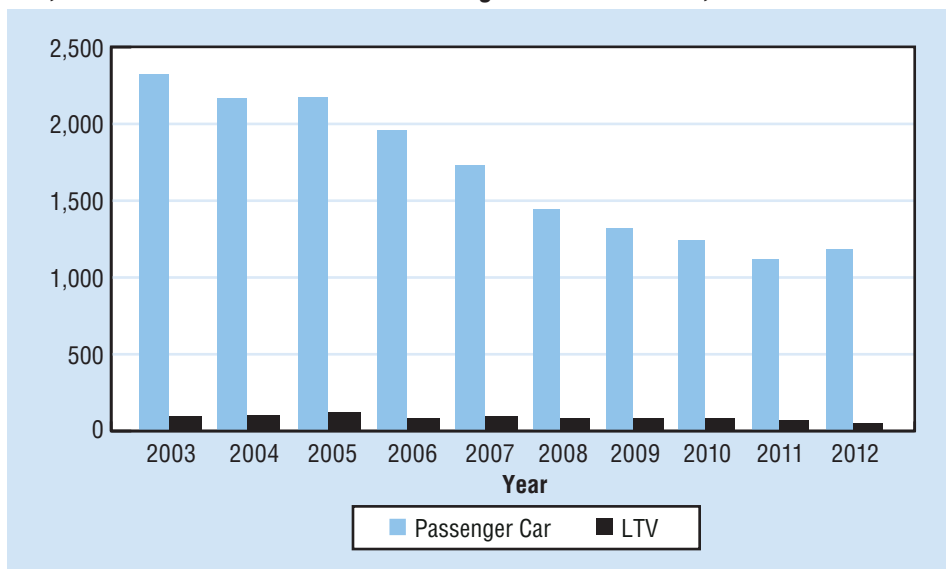
Source: Fatality Analysis Reporting System (FARS).

Figure 8  
**Occupants Killed in Two-Vehicle Crashes Involving a Passenger Car and an LTV, When Passenger Car Front Hit LTV in the Side, 2003–2012**



Source: Fatality Analysis Reporting System (FARS).

Figure 9  
**Occupants Killed in Two-Vehicle Crashes Involving a Passenger Car and an LTV, When the LTV Front Hit the Passenger Car in the Side, 2003–2012**



Source: Fatality Analysis Reporting System (FARS).

## Alcohol

A driver is considered to be alcohol-impaired when the driver's blood alcohol concentration (BAC) is .08 grams per deciliter (g/dL) or higher. From 2003 to 2012, the percent of alcohol-impaired passenger vehicle drivers involved in fatal crashes changed slightly among each of the vehicle types. Pickup truck drivers continue to have the highest percentage of alcohol impairment compared to other passenger vehicle drivers (Table 11). The percentage of alcohol-impaired van drivers involved in fatal crashes is substantially below that of other passenger vehicle drivers.

*Pickup truck drivers have the highest percentage of alcohol impairment compared to drivers of other passenger vehicles.*

Table 11

**Percent of Alcohol-Impaired (BAC = .08+ g/dL) Passenger Vehicle Drivers in Fatal Crashes, by Vehicle Type, 2003–2012**

Year	Passenger Vehicle Type										All Passenger Vehicles*	
	Passenger Cars		Light Trucks									
			SUVs		Pickups		Vans		Total*			
#	%	#	%	#	%	#	%	#	%	#	%	
2003	5,813	22	1,551	21	2,722	25	497	13	4,776	22	10,588	22
2004	5,852	23	1,743	22	2,586	24	466	13	4,808	21	10,660	22
2005	5,898	24	1,695	21	2,706	25	530	14	4,940	22	10,838	23
2006	5,466	23	1,986	24	2,873	27	488	14	5,358	24	10,824	23
2007	5,144	23	1,895	23	2,725	27	457	14	5,083	23	10,227	23
2008	4,679	23	1,651	23	2,316	26	337	12	4,311	23	8,991	23
2009	4,186	23	1,583	23	2,258	27	291	12	4,136	23	8,322	23
2010	4,164	24	1,423	21	2,041	25	286	12	3,752	22	7,916	23
2011	4,103	24	1,410	21	1,877	24	256	12	3,551	21	7,654	22
2012	4,104	23	1,483	21	1,946	25	267	12	3,704	22	7,808	22

\*Includes drivers of other/unknown light truck vehicle types.

Source: Fatality Analysis Reporting System (FARS).

## State Data

Table 12 presents the number of passenger vehicle occupant fatalities in 2012, by vehicle type, for each State, the District of Columbia, and Puerto Rico. Among the passenger vehicle occupants killed in motor vehicle traffic crashes in 2012, 57 percent were occupants of passenger cars and 43 percent were occupants of light trucks.

Table 12

**Passenger Vehicle Occupant Fatalities, by State and Vehicle Type, 2012**

State	Passenger Vehicle Type										All Passenger Vehicle* Fatalities
	Passenger Cars		Light Trucks								
			Pickups		SUVs		Vans		Total*		
#	%	#	%	#	%	#	%	#	%	#	
Alabama	370	57%	140	22%	112	17%	26	4%	278	43%	648
Alaska	23	59%	8	21%	6	15%	2	5%	16	41%	39
Arizona	220	47%	101	21%	126	27%	24	5%	251	53%	471
Arkansas	211	53%	102	26%	75	19%	9	2%	187	47%	398
California	1,008	64%	237	15%	261	17%	70	4%	568	36%	1,576
Colorado	148	52%	58	20%	71	25%	10	3%	139	48%	287
Connecticut	113	74%	14	9%	21	14%	5	3%	40	26%	153
Delaware	43	70%	9	15%	8	13%	1	2%	18	30%	61
Dist of Columbia	1	25%	1	25%	-	-	2	50%	3	75%	4
Florida	757	60%	192	15%	231	18%	74	6%	498	40%	1,255
Georgia	453	55%	178	21%	159	19%	38	5%	376	45%	829
Hawaii	23	42%	16	29%	11	20%	5	9%	32	58%	55
Idaho	57	42%	40	30%	33	24%	5	4%	78	58%	135
Illinois	368	61%	87	14%	102	17%	50	8%	240	39%	608
Indiana	308	60%	83	16%	78	15%	47	9%	208	40%	516
Iowa	131	51%	51	20%	52	20%	22	9%	125	49%	256
Kansas	141	48%	75	25%	60	20%	19	6%	154	52%	295
Kentucky	281	52%	147	27%	79	15%	33	6%	260	48%	541
Louisiana	235	51%	135	29%	78	17%	12	3%	226	49%	461
Maine	82	66%	25	20%	11	9%	6	5%	42	34%	124
Maryland	223	71%	38	12%	46	15%	8	3%	92	29%	315
Massachusetts	145	72%	24	12%	28	14%	4	2%	57	28%	202
Michigan	388	62%	93	15%	94	15%	46	7%	234	38%	622
Minnesota	158	59%	48	18%	35	13%	29	11%	112	41%	270
Mississippi	225	49%	132	29%	87	19%	19	4%	238	51%	463
Missouri	344	57%	134	22%	85	14%	37	6%	256	43%	600
Montana	63	40%	54	34%	35	22%	4	3%	94	60%	157
Nebraska	81	50%	42	26%	24	15%	14	9%	80	50%	161
Nevada	89	61%	18	12%	34	23%	6	4%	58	39%	147
New Hampshire	42	60%	13	19%	14	20%	1	1%	28	40%	70
New Jersey	217	69%	24	8%	58	18%	16	5%	98	31%	315
New Mexico	95	43%	67	31%	45	21%	11	5%	124	57%	219
New York	400	64%	67	11%	106	17%	49	8%	223	36%	623
North Carolina	508	61%	129	16%	147	18%	42	5%	319	39%	827
North Dakota	42	32%	53	40%	24	18%	12	9%	89	68%	131
Ohio	492	62%	130	16%	108	14%	58	7%	298	38%	790
Oklahoma	214	42%	169	33%	95	19%	27	5%	294	58%	508
Oregon	101	51%	46	23%	42	21%	7	4%	97	49%	198
Pennsylvania	575	66%	107	12%	151	17%	43	5%	301	34%	876
Rhode Island	27	55%	8	16%	11	22%	3	6%	22	45%	49
South Carolina	312	55%	111	20%	116	20%	29	5%	256	45%	568
South Dakota	44	45%	22	22%	25	26%	7	7%	54	55%	98
Tennessee	426	56%	188	25%	117	15%	27	4%	334	44%	760
Texas	1,044	47%	603	27%	460	21%	117	5%	1,180	53%	2,224
Utah	82	57%	23	16%	37	26%	3	2%	63	43%	145
Vermont	33	63%	9	17%	8	15%	2	4%	19	37%	52
Virginia	333	61%	98	18%	91	17%	27	5%	216	39%	549
Washington	157	60%	53	20%	41	16%	12	5%	106	40%	263
West Virginia	141	58%	47	19%	41	17%	13	5%	101	42%	242
Wisconsin	261	63%	53	13%	72	17%	30	7%	156	37%	417
Wyoming	36	38%	30	32%	24	26%	4	4%	58	62%	94
<b>National</b>	<b>12,271</b>	<b>57%</b>	<b>4,332</b>	<b>20%</b>	<b>3,875</b>	<b>18%</b>	<b>1,167</b>	<b>5%</b>	<b>9,396</b>	<b>43%</b>	<b>21,667</b>
Puerto Rico	132	80%	5	3%	24	15%	3	2%	32	20%	164

\*Includes occupants of other/unknown light truck vehicle types. Source: Fatality Analysis Reporting System (FARS).

## Appendix A

Polk recently improved the data quality of NVPP, which resulted in a complete rewrite of the data. They (1) enhanced their business rules for vehicles on the road, (2) have more consistent reporting/processing across States, and (3) upgraded their basis for vehicle coding. A comparison between Polk's older and newer version of the National Vehicle Population Profile (NVPP) registration data for 2011 shows that Polk's enhancements have resulted in over a 3-percent increase in passenger vehicle registration counts from what was previously reported. When looking at passenger cars and light trucks separately, the passenger car count decreased by 5.6 percent and the light truck count increased by 14.6 percent between the Old NVPP and New NVPP for 2011 (see passenger car and light truck figures in registered vehicle table below).

This fact sheet uses 2012 data, as well as 2011 data updated from the data presented in the *2011 Passenger Vehicle Traffic Safety Facts*, for passenger car and light truck registrations based on Polk's New NVPP. From 2003 to 2010, passenger vehicle registrations increased 10 percent. LTVs experienced a 20-percent increase in registrations, while passenger cars had an increase of 3 percent (Figure 1 on Page 1). Among the light-truck categories, pickup truck registrations increased 12 percent and van registrations decreased 5 percent; SUV registrations increased by 49 percent.

Registered Vehicles						
Year	All Passenger Vehicles	Passenger Cars	Light Trucks			
			All*	SUVs	Pickups	Vans
2009 (Old NVPP)	239,212,572	137,203,972	102,008,600	41,383,289	41,676,351	18,222,255
2010 (Old NVPP)	237,686,627	135,310,480	102,376,147	42,378,757	41,596,353	17,732,967
2011 (Old NVPP)	238,138,184	134,543,655	103,594,529	43,891,547	41,778,775	17,308,359
2011 (New NVPP)	245,669,103	126,974,845	118,694,258	50,161,564	48,912,291	19,584,184
2012 (New NVPP)	245,768,366	127,091,286	118,677,080	51,300,136	48,465,433	18,878,709

Registered Vehicles – R.L. Polk using NCSA vehicle classification.

\*Includes Other/Unknown Light Truck Registrations.

### For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or via the following e-mail address: [ncsaweb@dot.gov](mailto:ncsaweb@dot.gov). General information on highway traffic safety can be accessed by Internet users at [www.nhtsa.gov/NCSA](http://www.nhtsa.gov/NCSA). To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Motorcycles, Occupant Protection, Older Population, Overview, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, and Young Drivers*. Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. The fact sheets and annual Traffic Safety Facts report can be accessed online at [www-nrd.nhtsa.dot.gov/CATS/index.aspx](http://www-nrd.nhtsa.dot.gov/CATS/index.aspx).



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