# INDIANA TRAFFIC SAFETY FACTS LIGHT TRUCKS, 2010

In 2010 in Indiana, 49 percent (94,304) of all collisions involved a light truck, 33 percent (114,564) of all vehicles involved in collisions were light trucks, and 51 percent (25,795) of all collision-related injuries occurred in collisions involving light trucks (which include vans, sport utility vehicles, and pick-up trucks—see last page for light truck definition). From 2009 to 2010 and on average from 2006 to 2010, the number of collisions involving light trucks, the number of light trucks involved in collisions, and the number of injuries occurring in light truck collisions decreased.

Male drivers were more likely than female drivers to be driving light trucks involved in collisions, and older male drivers, ages 35-74, were most likely to be driving light trucks.

When using the Indiana State Police Automated Reporting Information Exchange System (ARIES) definition of rural, rural areas account for the largest share (60 percent or more historically) of fatal collisions involving light trucks. When using a finer classification scheme that reflects a continuum of population density (urban, suburban, exurban, rural), urban and suburban areas account for the largest share (25 percent or more, historically). Regardless of which definition is used, the risk of fatality for

collisions involving light trucks continues to be four to six times greater in rural areas compared to urban areas. In 2010, rural counties in Indiana also exhibited higher proportions of collisions involving light trucks.

Light truck-involved fatal collision rates were highest on county roads, with nearly seven of every 1,000 light truck collisions resulting in at least one fatality. Additionally, light truck collisions occurring early in the morning (12am-6:59am) were more likely than at other times during the day to result in a serious injury.

After decreasing from 2005 to 2008, the proportion of light truck drivers who were impaired and involved in serious injury collisions increased in 2009 and again in 2010. Younger drivers (ages 21-24) of light trucks involved in collisions had the highest impairment rate (3 percent) among all age groups.

Restraint use rates continue to increase for occupants of light trucks involved in collisions, surpassing 98 percent in 2010. Parallel with these increases, injury rates among light truck occupants decreased from 158 per 1,000 involved in January 2006, to 126 per 1,000 involved in January 2010.

Over 84 percent of drivers of light trucks involved in collisions in 2010 had valid driver's licenses. Approximately one of every seven had a suspended license at the time of collision.

Table 1. Indiana collisions, by light truck involvement and collision severity, 2006-2010

		Co	unt of collisio	ons		% (	Change
Light truck involved?	2006	2007	2008	2009	2010	'09-'10	Average annual '06-'10
Yes	100,345	105,508	103,053	96,105	94,304	-1.9%	-1.4%
Fatal	383	409	320	307	327	6.5%	-3.1%
Non-fatal	19,759	18,897	17,567	16,615	16,402	-1.3%	-4.5%
Property damage	80,203	86,202	85,166	79,183	77,575	-2.0%	-0.7%
No	92,376	99,491	102,399	93,556	98,586	5.4%	1.8%
Fatal	434	395	402	324	374	15.4%	-2.8%
Non-fatal	19,090	18,519	17,791	16,795	17,682	5.3%	-1.8%
Property damage	72,852	80,577	84,206	76,437	80,530	5.4%	2.8%
All	192,721	204,999	205,452	189,661	192,890	1.7%	0.2%
Fatal	817	804	722	631	701	11.1%	-3.3%
Non-fatal	38,849	37,416	35,358	33,410	34,084	2.0%	-3.2%
Property damage	153,055	166,779	169,372	155,620	158,105	1.6%	1.0%
% Involving light trucks	52.1%	51.5%	50.2%	50.7%	48.9%		
Fatal	46.9%	50.9%	44.3%	48.7%	46.6%		
Non-fatal	50.9%	50.5%	49.7%	49.7%	48.1%		
Property damage	52.4%	51.7%	50.3%	50.9%	49.1%		

Source: Indiana State Police







# INDIANA TRAFFIC SAFETY FACTS

## GENERAL TRENDS

Despite an increase in all collisions from 2009 to 2010 and on average from 2006 to 2010, collisions involving light trucks decreased 1.9 percent and 1.4 percent, respectively, during these periods (Table 1). Fatal collisions involving light trucks increased 6.5 percent from 2009 to 2010, less than the 15.4 percent rate of increase in other non-light truck involved fatal collisions.

While the number of passenger cars, large trucks, and motorcycles/ mopeds involved in collisions increased from 2009 to 2010 and on average from 2006 to 2010 (with the exception of large trucks), fewer light trucks were involved in collisions during these periods (Table 2). Light trucks were more likely to be involved in fatal collisions than passenger cars (1.4 times) and other motor vehicles (1.8 times), but less likely than motorcycles/mopeds (0.1 times) and large trucks (0.4 times).

In 2010, over half (52.4 percent) of all individuals involved in collisions were involved in collisions where at least one light truck was involved (Table 3). Fatal and incapacitating injuries in light truck collisions increased 4.8 and 4.6 percent, respectively, from 2009 to 2010, much less than fatal and incapacitating injuries in non-light truck involved collisions (12.9 and 11.5 percent, respectively).

Table 2. Vehicles involved in Indiana collisions, by collision severity and vehicle type, 2006-2010

		Cot	% Change				
Collision severity/vehicle type	2006	2007	2008	2009	2010	'09-'10	Average annual '06-'10
All collisions	335,065	356,529	354,657	329,877	337,258	2.2%	0.3%
Passenger car	186,229	197,106	200,024	187,964	195,795	4.2%	1.4%
Light truck	121,753	127,761	124,122	116,400	114,564	-1.6%	-1.4%
Large truck	14,374	15,033	14,796	11,591	13,320	14.9%	-0.9%
Motorcycle/moped	3,163	3,656	3,915	3,354	3,495	4.2%	3.1%
Other motor vehicle	9,546	12,973	11,800	10,568	10,084	-4.6%	3.0%
Fatal collisions	1,282	1,272	1,147	1,021	1,117	9.4%	-3.0%
Passenger car	553	500	508	417	481	15.3%	-2.6%
Light truck	449	474	354	350	388	10.9%	-2.5%
Large truck	141	149	133	110	116	5.5%	-4.2%
Motorcycle/moped	113	121	128	118	113	-4.2%	0.2%
Other motor vehicle	26	28	24	26	19	-26.9%	-6.3%
Relative risk of involvement in fatal collision							
Light truck v. passenger car	1.2	1.5	1.1	1.4	1.4		
Light truck v. large truck	0.4	0.4	0.3	0.3	0.4		
Light truck v. motorcycle/moped	0.1	0.1	0.1	0.1	0.1		
Light truck v. other motor vehicle	1.4	1.7	1.4	1.2	1.8		

Source: Indiana State Police

Note: Relative risk of fatal collision defined as ratio of % fatal (light truck) to % fatal (other vehicle types).

Table 3. Injuries in Indiana collisions, by light truck involvement and injury severity, 2006-2010

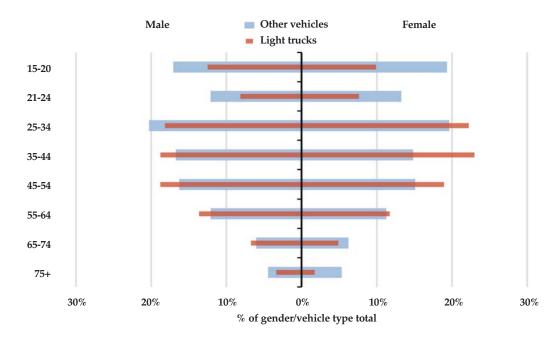
		Cor	% Change				
Collision type/collision severity	2006	2007	2008	2009	2010	'09-'10	Average annual '06-'10
Individuals in all collisions	315,894	330,129	325,775	304,389	311,235	2.2%	-0.3%
Fatal	899	898	815	692	754	9.0%	-3.9%
Incapacitating	3,807	3,661	3,382	3,179	3,443	8.3%	-2.3%
Non-incapacitating	51,389	48,804	45,455	43,410	44,169	1.7%	-3.7%
Other injury	21,816	8,541	5,919	4,153	2,505	-39.7%	-40.3%
Not injured	237,983	268,225	270,204	252,955	260,364	2.9%	2.5%
Individuals in light truck collisions	176,762	182,168	174,806	165,086	162,992	-1.3%	-2.0%
Fatal	426	463	358	335	351	4.8%	-3.9%
Incapacitating	1,851	1,748	1,654	1,488	1,557	4.6%	-4.1%
Non-incapacitating	27,388	25,961	23,470	22,766	22,524	-1.1%	-4.7%
Other injury	12,546	4,986	3,509	2,590	1,363	-47.4%	-40.9%
Not injured	134,551	149,010	145,815	137,907	137,197	-0.5%	0.7%
% In light truck collisions	56.0%	55.2%	53.7%	54.2%	52.4%		
Fatal	47.4%	51.6%	43.9%	48.4%	46.6%		
Incapacitating	48.6%	47.7%	48.9%	46.8%	45.2%		
Non-incapacitating	53.3%	53.2%	51.6%	52.4%	51.0%		
Other injury	57.5%	58.4%	59.3%	62.4%	54.4%		
Not injured	56.5%	55.6%	54.0%	54.5%	52.7%		

Source: Indiana State Police

### DRIVERS Involved

The distribution of drivers involved in collisions varies by gender and vehicle type. A larger share of drivers of light trucks involved in collision were between 25 and 54 years of age, compared to drivers of other vehicle types, and a larger share of female drivers of light trucks were between these ages, compared to male drivers of light trucks. Approximately 56 percent of male drivers of light trucks involved in collisions in 2010 were between 25 and 54 years of age, compared to 64 percent of females, 51 percent of male drivers of other vehicles, and 48 percent of female drivers of other vehicles (Figure 1). Compared to drivers of light trucks, younger age groups (ages 15-24) accounted for a larger share of drivers of other vehicles involved in collisions. In 2010, male drivers of all age groups involved in collisions were more likely to be driving a light truck than female drivers (Figure 2). This relative likelihood of driving a light truck was greatest for the youngest and oldest males: 15 to 20 year old males were nearly twice as likely (32.9 percent versus 18.1 percent) as females in the same age group to be driving a light truck and males 75 years of age and older were nearly three times as likely (36.1 percent versus 13.4 percent) to be driving a light truck as similarly aged females. For females involved in collisions, the likelihood that they were driving a light truck decreased consistently after age 44, while the likelihood remained steady for males, decreasing only after age 74.

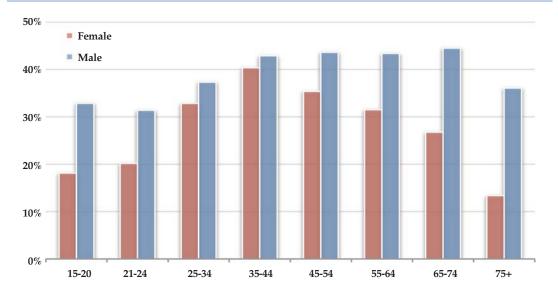
Figure 1. Distribution of drivers involved in Indiana collisions, by gender, age, and vehicle type, 2010



Source: Indiana State Police

Note: Data exclude cases with invalid or unknown gender and age.

Figure 2. Drivers of light trucks in Indiana collisions as a proportion of all drivers, by gender and age cohort, 2010



Source: Indiana State Police

Note: Data exclude cases with invalid or unknown gender and age.

### TIME AND LOCATION

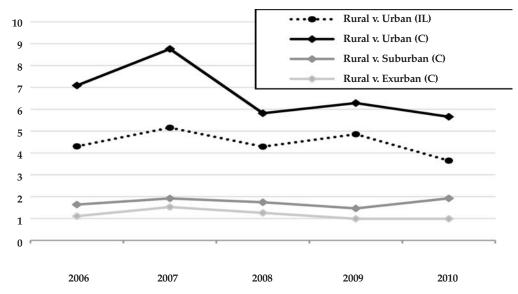
In ARIES, collisions are classified as rural or urban depending on whether or not they occur inside the incorporated limits of a municipality. Using this definition, most fatal collisions (64 to 73 percent) involving light trucks from 2006 to 2010 occurred in rural areas, while non-fatal light truck collisions occurred predominantly in urban areas (Table 4). However, if the state of Indiana is divided more carefully into urban, suburban, exurban, and rural categories (based on US Census definitions of urban places) reflecting a continuum of population density, the majority of fatal collisions involving light trucks—about 60 percent—occurred in urban and suburban locations from 2006 to 2010, with less than 20 percent classified as rural. Despite these proportional shifts, the risk of fatality for collisions involving light trucks continues to be highest in rural areas. Based on the ARIES rural/urban definitions, in 2010, light truck collisions in rural areas were nearly four times as likely to be fatal as those in urban areas (Figure 3). Using the Census-based definitions, light truck collisions in rural areas (i.e., areas more than five miles outside urban areas) were nearly six times more likely to be fatal than those in urban areas, two times as likely as those in suburban areas, and about equally as likely as those in exurban areas.

Table 4. Collisions involving light trucks, by collision severity and location, 2006-2010

Count of collisions								
2006	2007	2008	2009	2010				
383	409	320	307	327				
27.4%	27.9%	31.3%	29.3%	36.1%				
72.6%	72.1%	68.8%	70.7%	63.9%				
19,759	18,897	17,567	16,615	16,402				
59.5%	64.7%	64.0%	65.3%	64.9%				
40.4%	35.2%	36.0%	34.7%	35.1%				
0.1%	0.1%	0.1%	0.0%	0.0%				
383	409	320	307	327				
25.6%	29.6%	33.4%	29.6%	34.3%				
24.0%	30.8%	28.1%	30.6%	23.2%				
13.6%	13.9%	14.7%	16.9%	15.6%				
18.0%	25.4%	21.3%	19.2%	18.0%				
18.8%	0.2%	2.5%	3.6%	8.9%				
19,759	18,897	17,567	16,615	16,402				
51.2%	58.6%	63.0%	64.3%	63.3%				
12.1%	14.6%	19.1%	18.3%	18.5%				
4.6%	5.3%	7.3%	7.2%	7.3%				
4.8%	5.6%	8.1%	7.6%	7.6%				
27.3%	15.9%	2.6%	2.6%	3.3%				
	383 27.4% 72.6% 19,759 59.5% 40.4% 0.1%  383 25.6% 24.0% 13.6% 18.0% 18.8% 19,759 51.2% 12.1% 4.6% 4.8%	383         409           27.4%         27.9%           72.6%         72.1%           19,759         18,897           59.5%         64.7%           40.4%         35.2%           0.1%         0.1%           383         409           25.6%         29.6%           24.0%         30.8%           13.6%         13.9%           18.0%         25.4%           18.8%         0.2%           19,759         18,897           51.2%         58.6%           12.1%         14.6%           4.6%         5.3%           4.8%         5.6%	2006         2007         2008           383         409         320           27.4%         27.9%         31.3%           72.6%         72.1%         68.8%           19,759         18,897         17,567           59.5%         64.7%         64.0%           40.4%         35.2%         36.0%           0.1%         0.1%         0.1%           383         409         320           25.6%         29.6%         33.4%           24.0%         30.8%         28.1%           13.6%         13.9%         14.7%           18.0%         25.4%         21.3%           18.8%         0.2%         2.5%           19,759         18,897         17,567           51.2%         58.6%         63.0%           12.1%         14.6%         19.1%           4.6%         5.3%         7.3%           4.8%         5.6%         8.1%	383         409         320         307           27.4%         27.9%         31.3%         29.3%           72.6%         72.1%         68.8%         70.7%           19,759         18,897         17,567         16,615           59.5%         64.7%         64.0%         65.3%           40.4%         35.2%         36.0%         34.7%           0.1%         0.1%         0.1%         0.0%           383         409         320         307           25.6%         29.6%         33.4%         29.6%           24.0%         30.8%         28.1%         30.6%           13.6%         13.9%         14.7%         16.9%           18.0%         25.4%         21.3%         19.2%           18.8%         0.2%         2.5%         3.6%           19,759         18,897         17,567         16,615           51.2%         58.6%         63.0%         64.3%           12.1%         14.6%         19.1%         18.3%           4.6%         5.3%         7.3%         7.2%           4.8%         5.6%         8.1%         7.6%				

Source: Indiana State Police

Figure 3 Relative risk of fatal collision for collisions involving light trucks, by locale, 2006-2010



Source: Indiana State Police

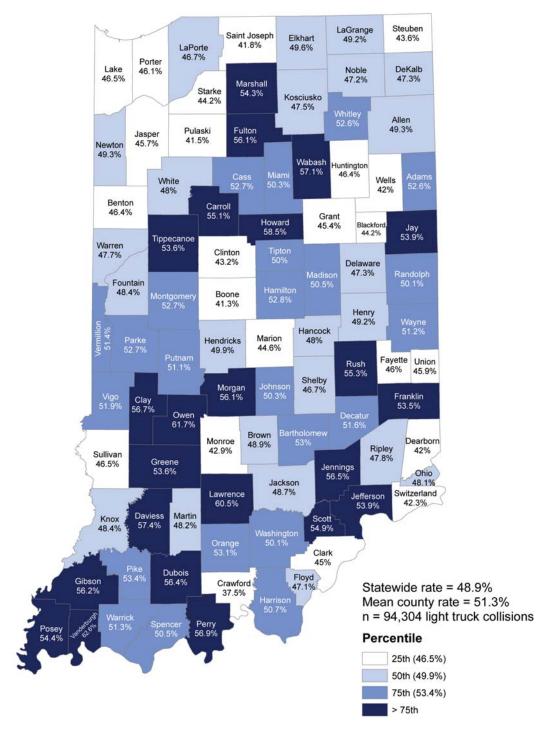
- 1 IL = locale defined using incorporated limits definition; C = locale defined using census-derived definitions. 2 Relative risk defined as ratio of % fatal (rural) to % fatal (other locales).

# TIME AND LOCATION (continued)

In 2010 in Indiana, collisions involving light trucks accounted for a larger share of total collisions in rural counties of the state. Of the 23 counties with the highest proportions of collisions involving light trucks (i.e., top quartile), 12 are outside of a Census-defined Metropolitan Statistical Area

(MSA) and another eight contain no Census-defined Urbanized Areas with 50,000 or more people (Map 1). Sixteen of these 23 counties are in the southern portion of the state. Vanderburgh County, the county with the largest proportion of collisions involving light trucks, recorded a rate nearly twice as high as Crawford County, the county with the smallest proportion.

Map 1. Proportion of Indiana collisions involving light trucks, by county, 2010



Source: Indiana State Police

Note: Excludes collisions with invalid county.

### TIME AND LOCATION (continued)

On every known road class except interstates, collisions involving light trucks decreased from 2009 to 2010 and on average from 2006 to 2010, with the largest decrease, 8.7 percent, observed on county roads (Table 5). Fatal light truck-involved collisions on state roads increased 22 percent from 2009 to 2010, a rate of increase three times greater than fatal light truck-involved collisions overall (6.5 percent). In 2010, fatal light truckinvolved collision rates were highest on county roads with nearly seven of every 1,000 light truck collisions resulting in at least one fatality.

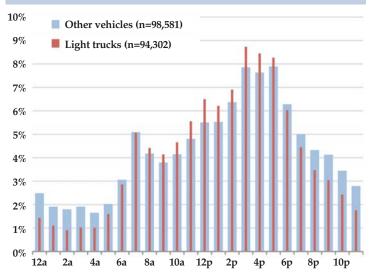
In 2010, the hourly distribution of collisions and risk of a serious injury collision varied by vehicles involved. Compared to collisions not involving light trucks, a greater share of light truck-involved collisions occurred from 8am to 5:59pm, while a greater share of collisions not involving light trucks occurred from 6pm to 6:59am (Figure 4). Collisions involving light trucks were more likely than collisions involving other vehicles to result in a serious injury during most morning hours (12am-11:59am) and less likely to result in a serious injury during afternoon and evening hours (12pm-11:59pm) (Figure 5).

Table 5. Collisions involving light trucks, by road class, 2006-2010

		Cou		% Change			
Collision severity/road class	2006	2007	2008	2009	2010	'09-'10	Average annual '06-'10
All light truck	100,345	105,508	103,053	96,105	94,304	-1.9%	-1.4%
Local/city road	46,202	47,761	46,618	43,911	43,140	-1.8%	-1.6%
State road	15,231	16,020	15,639	14,525	14,258	-1.8%	-1.5%
County road	13,444	14,020	13,493	12,030	10,981	-8.7%	-4.8%
US Route	10,129	10,126	9,988	9,570	9,152	-4.4%	-2.5%
Interstate	5,191	6,175	5,766	4,877	5,229	7.2%	1.0%
Unknown	10,148	11,406	11,549	11,192	11,544	3.1%	3.4%
Fatal light truck	383	409	320	307	327	6.5%	-3.1%
Local/city road	67	73	74	71	77	8.5%	3.7%
State road	132	113	84	76	93	22.4%	-6.8%
County road	86	108	67	80	76	-5.0%	0.5%
US Route	55	73	64	57	53	-7.0%	0.6%
Interstate	41	39	29	20	23	15.0%	-11.6%
Unknown	2	3	2	3	5	66.7%	33.3%
Fatal collision rate per 1,000 collisions	3.8	3.9	3.1	3.2	3.5		
Local/city road	1.5	1.5	1.6	1.6	1.8		
State road	8.7	7.1	5.4	5.2	6.5		
County road	6.4	7.7	5.0	6.7	6.9		
US Route	5.4	7.2	6.4	6.0	5.8		
Interstate	7.9	6.3	5.0	4.1	4.4		
Unknown	0.2	0.3	0.2	0.3	0.4		

Source: Indiana State Police

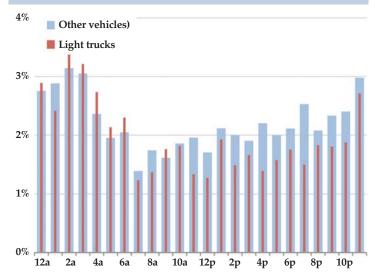
Figure 4. Distribution of collisions, by hour of day and vehicles involved, 2010



Source: Indiana State Police

Note: Data exclude cases with unknown time.

Figure 5. Serious injury collisions as a proportion of all collisions, by hour of day and vehicles involved, 2010



Source: Indiana State Police

Note: Data exclude cases with unknown time.

## **ALCOHOL INVOLVEMENT**

With the exception of motorcycle operators, drivers of light trucks involved in collisions have historically been more likely to be alcohol impaired (i.e., BAC  $\geq$  0.08 g/dL) than drivers of other types of vehicles involved in collisions. In 2010, 6.4 percent of light truck drivers involved in collisions were impaired, an increase from 5.1 percent in 2009 and 4.1 percent in 2008 (Table 6). While the number of impaired light truck drivers involved in collisions increased from 2009 to 2010 and on average from 2006 to 2010, the rate of increase was less than that of drivers of passenger cars and motorcycle/mopeds. As with drivers of other vehicles,

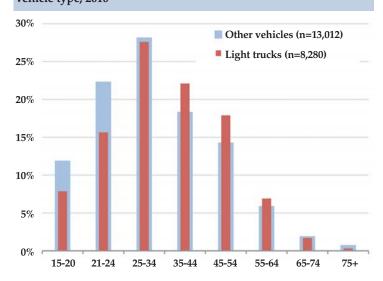
the largest share of impaired light truck drivers involved in collisions in 2010 were in the 25-34 year old age group (Figure 6). Compared to drivers of other vehicles, a larger share of impaired light truck drivers were 35-64 years of age, while younger drivers ages 15-24 comprised a larger share of impaired drivers of other vehicles relative to drivers of light trucks. The likelihood of alcohol-impairment decreased with driver age (Figure 7). Drivers ages 21-24 years old involved in collisions were most likely to be impaired, regardless of vehicle type. With the exception of drivers 35-44 years of age, drivers of light trucks involved in collisions were slightly more likely to be impaired than drivers of other vehicles.

Table 6. Drivers in serious injury collisions who were alcohol impaired, by vehicle type, 2006-2010

		C	% C	% Change			
Vehicle type	2006	2007	2008	2009	2010	'09-'10	Average annual '06-'10
All drivers	6,288	6,020	5,660	5,309	5,628	6.0%	-2.6%
Passenger car	3,109	2,810	2,746	2,632	2,794	6.2%	-2.5%
Light truck	2,180	2,101	1,921	1,761	1,838	4.4%	-4.0%
Motorcycle/moped	561	666	602	562	620	10.3%	3.2%
Large truck	330	338	309	272	298	9.6%	-2.1%
Other	108	105	82	82	78	-4.9%	-7.4%
Impaired (BAC >= 0.08)	336	264	235	250	349	39.6%	3.4%
Passenger car	161	110	118	113	163	44.2%	3.9%
Light truck	127	108	79	89	117	31.5%	0.6%
Motorcycle/moped	43	41	37	44	66	50.0%	13.6%
Large truck	2	1	1	2	0	-100.0%	-12.5%
Other	3	4	0	2	3	50.0%	0.0%
% Impaired	5.3%	4.4%	4.2%	4.7%	6.2%		
Passenger car	5.2%	3.9%	4.3%	4.3%	5.8%		
Light truck	5.8%	5.1%	4.1%	5.1%	6.4%		
Motorcycle/moped	7.7%	6.2%	6.1%	7.8%	10.6%		
Large truck	0.6%	0.3%	0.3%	0.7%	0.0%		
Other	2.8%	3.8%	0.0%	2.4%	3.8%		

Source: Indiana State Police

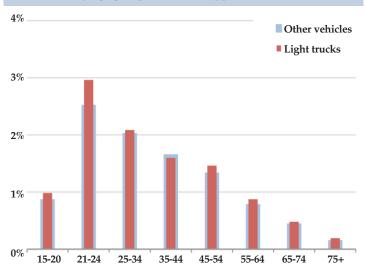
Figure 6. Distribution of alcohol impaired drivers, by age and vehicle type, 2010



Source: Indiana State Police

Note: Data exclude cases with invalid or unknown age.

Figure 7. Alcohol-impaired drivers as a proportion of all drivers in collisions, by age group and vehicle type, 2010



Source: Indiana State Police

Note: Data exclude cases with invalid or unknown age.

# INDIANA TRAFFIC SAFETY FACTS

# **RESTRAINT USE**

Occupants of light trucks involved in collisions in 2010 were more likely to be restrained than occupants of other motor vehicles. Approximately 98.1 percent of light truck occupants involved in collisions were restrained, compared to 97 percent of occupants of other vehicles (Table 7). Restraint use rates were highest for occupants of light truck sport utility vehicles (98.6 percent). In 2010, only 40 percent of pickup truck occupants fatally injured were restrained, compared to 48.6 percent of all light truck occupants and 47.6 percent of occupants of other motor vehicles. In July 2007, a new passenger restraint law took effect in Indiana requiring all passengers of passenger vehicles to be properly restrained, including pickup trucks and SUVs (registered as trucks) that were previously

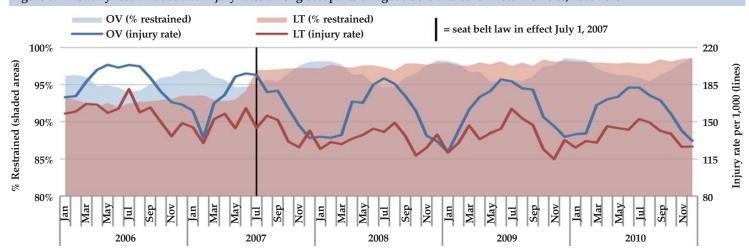
exempted from the law. Following this law, restraint use rates among light truck occupants increased sharply and have continued to rise, while injury rates per 1,000 involved have decreased (Figure 8). Unlike restraint use rates for occupants of other vehicles that have exhibited a pattern of peaks during winter months and troughs during summer months, restraint use rates for occupants of light trucks have exhibited a relatively stable rate of growth over time. Injury rates for light truck occupants involved in collisions have historically been below those of occupants of other vehicles, converging only during winter months, and diverging considerably during summer months when restraint use rates for occupants of other vehicles drop.

Table 7. Restraint use rates among vehicle occupants involved in Indiana collisions, by vehicle type and collision/injury severity, 2009-2010

	2009					2010						
		Light	trucks					Light	trucks			
Persons involved in	Pickup trucks	SUVs	Vans	All	Other motor vehicles	All vehicle types	Pickup trucks	SUVs	Vans	All	Other motor vehicles	All vehicle types
All collisions	97.2%	98.3%	98.5%	97.9%	96.8%	97.2%	97.4%	98.6%	98.3%	98.1%	97.0%	97.4%
Fatal	64.9%	59.1%	85.2%	66.4%	67.2%	66.9%	63.0%	78.8%	75.0%	71.3%	61.9%	65.1%
Incapacitating	80.4%	85.7%	91.1%	84.9%	77.6%	80.1%	79.7%	88.8%	90.1%	85.5%	79.9%	81.8%
Non-incapacitating	93.3%	96.2%	96.5%	95.3%	92.0%	93.1%	93.8%	96.5%	96.7%	95.6%	92.6%	93.6%
Property damage	98.7%	99.3%	99.3%	99.1%	98.9%	98.9%	99.0%	99.5%	99.3%	99.2%	99.0%	99.1%
Daytime collisions (6a-5:59p)	98.0%	98.8%	98.9%	98.5%	97.4%	97.8%	98.1%	99.0%	98.7%	98.6%	97.6%	97.9%
Evening collisions (6p-5:59a)	94.8%	96.8%	97.1%	96.1%	95.1%	95.5%	95.4%	97.4%	97.1%	96.6%	95.6%	95.9%
Persons by injury status and occupant type												
Fatal injury	34.6%	27.9%	75.9%	38.9%	51.7%	47.7%	40.0%	58.3%	50.0%	48.6%	47.6%	47.9%
Incapacitating injury	67.1%	75.0%	85.0%	74.0%	66.8%	68.8%	63.7%	80.6%	82.1%	74.2%	70.1%	71.3%
Non-incapacitating injury	88.6%	94.0%	94.6%	92.4%	88.3%	89.7%	89.1%	94.6%	94.8%	92.9%	89.0%	90.3%
Other injury	97.6%	98.7%	99.4%	98.4%	98.0%	98.1%	96.5%	98.0%	99.4%	97.7%	96.3%	96.8%
Not injured	98.6%	99.3%	99.3%	99.0%	98.8%	98.9%	98.9%	99.5%	99.3%	99.2%	98.9%	99.0%
Drivers	97.6%	98.7%	98.9%	98.3%	97.4%	97.7%	97.9%	99.0%	98.8%	98.5%	97.6%	97.9%
Injured occupants	82.7%	90.2%	91.2%	88.4%	84.2%	85.7%	81.6%	90.5%	91.5%	88.4%	85.0%	86.2%

Source: Indiana State Police

Figure 8. Monthly restraint use and injury rates among occupants of light trucks and other motor vehicles, 2006-2010



Source: Indiana State Police

Note

<sup>1</sup> OV = Other motor vehicles; LT = Light trucks.

<sup>2</sup> Data are for individuals where restraint use is known.

<sup>3</sup> Injury rates based on individuals with fatal, incapacitating, non-incapacitating, or possible injuries.

# **LICENSE STATUS**

With the exception of drivers of large trucks, in 2010, drivers of light trucks involved in collisions were more likely than drivers of other vehicle types to have valid licenses and less likely to have suspended or unlicensed/revoked license statuses at the time of collision. Nearly 85 percent

of light truck drivers involved in collisions in 2010 had valid licenses at the time of collision (Table 8). This rate dropped to 80.4 percent for light truck drivers involved in serious injury collisions, but was still better than drivers of passenger cars (79.5 percent), motorcycles/mopeds (68.4 percent), and vehicles overall (79 percent).

Table 8. License status of drivers involved in Indiana collisions, by collision severity and vehicle type, 2010

	Count of drivers									
Collision severity/license status	Light trucks	Passenger cars	Large trucks	Motorcycles/ mopeds	All vehicles					
All collisions	92,004	154,422	6,073	2,838	258,235					
Valid	77,967	130,390	5,171	1,998	218,139					
Suspended	12,724	21,498	860	650	35,994					
Unlicensed/revoked	1,066	2,174	29	97	3,382					
Habitual traffic violator	73	98	1	80	254					
Other	174	262	12	13	466					
% Of total										
Valid	84.7%	84.4%	85.1%	70.4%	84.5%					
Suspended	13.8%	13.9%	14.2%	22.9%	13.9%					
Unlicensed/revoked	1.2%	1.4%	0.5%	3.4%	1.3%					
Habitual traffic violator	0.1%	0.1%	0.0%	2.8%	0.1%					
Other	0.2%	0.2%	0.2%	0.5%	0.2%					
Serious injury collisions	1,660	2,465	165	512	4,866					
Valid	1,334	1,960	138	350	3,842					
Suspended	302	450	27	127	910					
Unlicensed/revoked	19	48	0	14	81					
Habitual traffic violator	3	4	0	17	24					
Other	2	3	0	4	9					
% Of total										
Valid	80.4%	79.5%	83.6%	68.4%	79.0%					
Suspended	18.2%	18.3%	16.4%	24.8%	18.7%					
Unlicensed/revoked	1.1%	1.9%	0.0%	2.7%	1.7%					
Habitual traffic violator	0.2%	0.2%	0.0%	3.3%	0.5%					
Other	0.1%	0.1%	0.0%	0.8%	0.2%					

Source: Indiana State Police

Note: Limited to drivers where license status was known at the time of the crash.

# INDIANA TRAFFIC SAFETY FACTS

## **DEFINITIONS**

Light trucks defined as vans, sport utility vehicles, and pickup trucks with a gross vehicle weight rating of 10,000 pounds or less.

Large trucks defined as units identified as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi trailer, and pickup trucks over 10,000 pounds.

Other motor vehicles defined as buses, combination vehicles, farm vehicles, motor home/recreational vehicles, animal drawn vehicles, and unknown vehicle types.

Non-fatal collision severity applies when no fatalities and at least one incapacitating, non-incapacitating, or possible injury occurred.

Serious injury collision severity applies when at least one fatal or incapacitating injury occurred.

Non-incapacitating injury includes non-incapacitating and possible injuries.

Other injury includes not reported, unknown, refused (treatment), and invalid injury categories.

Restraint use - Vehicle occupants injured in Indiana collisions are counted as having been restrained when the investigating officer selected any one of the following passenger vehicle safety equipment categories on the Indiana Crash Report: (1) Lap belt only; (2) Harness; (3) Airbag deployed and harness; (4) Child restraint; or (5) Lap and harness.

Driver impaired defined as drivers with a blood alcohol concentration (BAC) greater than or equal to 0.08 grams per deciliter (g/dL).

*Census Locale - Urban* defined as Census 2000 Urban Areas; *suburban* as areas within 2.5 miles of urban boundaries; *exurban* as areas within 2.5 miles of suburban boundaries; and *rural* as areas beyond exurban boundaries (i.e., everything else).

*Incorporated limits* – *Urban* defined as areas inside the incorporated limits of a municipality; *rural* as areas outside the incorporated limits of a municipality.

*Metropolitan Statistical Areas (MSA)* – U.S. Census defined areas that have at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.

## **DATA SOURCES**

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2011

Indiana Bureau of Motor Vehicles, current as of March 1, 2011

# NDIANA TRAFFIC SAFETY FACTS

This publication was prepared on behalf of the Indiana Criminal Justice Institute (ICJI) by the Indiana University Center for Criminal Justice Research (CCJR). Please direct any questions concerning data in this document to ICJI at 317-232-1233.

This publication is one of a series of fact sheets that, along with the annual Indiana Crash Fact Book, form the analytical foundation of traffic safety program planning and design in the state of Indiana. Funding for these publications is provided by the ICJI and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the CCJR website (www.ccjr.iupui.edu), the ICJI website (www.in.gov/cji/), or you may contact the Center for Criminal Justice Research at 317-261-3000.







INDIANA UNIVERSITY
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#### **Traffic Safety Project**

A collision produces three levels of data: collision, unit (vehicles), and individual. For this reason, readers should pay particular attention to the wording of statements about the data to avoid misinterpretations.

Designing and implementing effective traffic safety policies requires data-driven analysis of traffic collisions. To help in the policy-making process, the Indiana University Center for Criminal Justice Research is collaborating with the Indiana Criminal Justice Institute to analyze 2010 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the fifth year of this partnership. Research findings will be summarized in a series of fact sheets on various aspects of traffic collisions, including alcohol-related crashes, light and large trucks, dangerous driving, children, motorcycles, occupant protection, and drivers. An additional publication will provide information on county and municipality data and the final publication will be the annual Indiana Crash Fact Book. These publications serve as the analytical foundation of traffic safety program planning and design in Indiana.

Indiana collision data are obtained from Indiana Crash Reports, as completed by law enforcement officers. As of December 31, 2010, approximately 99 percent of all collisions are entered electronically through ARIES. Trends in collisions incidence as reported in these publications could incorporate the effects of changes to data elements on the Crash Report, agency-specific enforcement policy changes, re-engineered roadways, driver safety education programs, and other unspecified effects. If you have questions regarding trends or unexpected results, please contact the Indiana Criminal Justice Institute, Traffic Safety Division for more information.

#### **The Indiana Criminal Justice Institute**

Guided by a Board of Trustees representing all components of Indiana's criminal and juvenile justice systems, the Indiana Criminal Justice Institute serves as the state's planning agency for criminal justice, juvenile justice, traffic safety, and victim services. ICJI develops long-range strategies for the effective administration of Indiana's criminal and juvenile justice systems and administers federal and state funds to carry out these strategies.

#### The Governor's Council on Impaired & Dangerous Driving

The Governor's Council on Impaired & Dangerous Driving, a division of the Indiana Criminal Justice Institute, serves as the public opinion catalyst and the implementing body for statewide action to reduce death and injury on Indiana roadways. The Council provides grant funding, training, coordination, and ongoing support to state and local traffic safety advocates.

#### **Indiana University Public Policy Institute**

The Indiana University (IU) Public Policy Institute is a collaborative, multidisciplinary research institute within the Indiana University School of Public and Environmental Affairs (SPEA), Indianapolis. The Institute serves as an umbrella organization for research centers affiliated with SPEA, including the Center for Urban Policy and the Environment and the Center for Criminal Justice Research. The Institute also supports the Office of International Community Development and the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

#### **The Center for Criminal Justice Research**

The Center for Criminal Justice Research, one of two applied research centers currently affiliated with the Indiana University Public Policy Institute, works with public safety agencies and social services organizations to provide impartial applied research on criminal justice and public safety issues. CCJR provides analysis, evaluation, and assistance to criminal justice agencies; and community information and education on public safety questions. CCJR research topics include traffic safety, crime prevention, criminal justice systems, drugs and alcohol, policing, violence and victimization, and youth.

#### The National Highway Traffic Safety Administration (NHTSA)

NHTSA provides leadership to the motor vehicle and highway safety community through the development of innovative approaches to reducing motor vehicle crashes and injuries. The mission of NHTSA is to save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity.

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