

INDIANA TRAFFIC SAFETY QUICK FACTS - 2007

- ➤ 205,005 traffic-related collisions resulting in injury or property damage occurred, a 6.4 percent increase from 2006.
- ➤ 898 people were killed in 804 fatal traffic collisions.
- ➤ 52,468 people were known to have suffered incapacitating, non-incapacitating or possible injuries in traffic collisions.
- ➤ 9 percent (18,491) of all collisions were speed-related; 20.5 percent (165) of fatal collisions were speed-related.
- ➤ 4.8 percent (9,942) of all collisions were alcohol-related, a decrease of 1.3 percentage points from 2006 (6.1 percent).
- ➤ 28.9 percent (232) of fatal collisions were alcohol-related, a decrease of 1.6 percentage points from 2006 (30.5 percent).
- ➤ 253 people were killed in alcohol-related collisions; 187 people were killed in speed-related collisions.
- ➤ 64.6 percent of all collisions were known to have occurred in urban areas; 70.4 percent of fatal collisions occurred in rural areas.
- ➤ December had the highest frequency of collisions among all months (20,800, or 10.2 percent of all collisions in 2007).
- ➤ The 18 to 20 year old age group had the highest rate of drivers killed in 2007 (2.3 per 10,000 licensed).
- ➤ 73 non-motorists were killed in collisions in 2007 (60 pedestrians and 13 pedalcyclists).
- ➤ 43.4 percent of persons killed in motor vehicle collisions were known to be restrained.*
- ➤ There were 356,540 vehicles involved in collisions in 2007, a six percent increase from 2006.
- ➤ The number of registered vehicles in Indiana increased 2.7 percent from 6,309,100 in 2006 to 6,482,078 in 2007.
- ➤ There were 5,470,429 licensed drivers in Indiana in 2007, a 2.8 percent increase from 2006.
- ➤ In 2007, the economic costs of motor vehicle crashes in Indiana exceeded \$4.5 billion.

Source: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008.

^{*}excludes bicycles, pedestrians, farm vehicles, motorcycles and mopeds.



INTRODUCTION AND ACKNOWLEDGEMENTS

Designing and implementing effective traffic safety policies requires data-driven analysis of traffic collisions. To help in the policy-making process, the Indiana University Public Policy Institute, Center for Criminal Justice Research (CCJR or Center) has collaborated with the Indiana Criminal Justice Institute (ICJI) to analyze data from the Automated Reporting Information Exchange System (ARIES) database maintained by the Indiana State Police. Research findings have been summarized in a series of *Fact Sheets* on various aspects of traffic collisions, including alcohol-related crashes, children, motorcycles, light trucks, large trucks, dangerous driving, occupant protection, and drivers. Portions of the content in those reports and in this *Crash Fact Book* are based on guidelines provided by the U.S. National Highway Traffic Safety Administration (NHTSA).

The *Indiana Officer's Standard Crash Report*, completed by local and state law enforcement officers, contains over 200 data items for each collision reported. These include the date, time and location of the collision, the types of vehicle(s) involved, a description of the events prior to the collision, conditions at the time of the collision, as well as information on the driver and other passengers, pedestrians, and/or pedalcyclists involved in the collision. These statistics are used to inform the public, as well as state and national policymakers, on matters of road safety and serve as the analytical foundation of traffic safety program planning and design in Indiana.

The Center would like to thank the Indiana Criminal Justice Institute, NHTSA, the Federal Highway Administration (FHWA), the Indiana State Police and Holt, Sheets and Associates for their continued support and guidance throughout the process of creating these reports. The Center would also like to acknowledge the assistance and cooperation of the Indiana Bureau of Motor Vehicles in providing data on Indiana registered vehicles and licensed drivers and to the Indiana Department of Transportation for the Vehicle Miles Travelled data.

Funding for these publications is provided by the Indiana Criminal Justice Institute and the National Highway Traffic Safety Administration. An electronic copy of the *Fact Sheets* and this document can be accessed via the Center website (www.criminaljustice.iupui.edu), the ICJI traffic safety website (www.in.gov/cji/), or you may contact the Center for Criminal Justice Research at 317-261-3000. This publication may be reproduced free of charge.

NOTE: One must take note of the definitions used (see glossary) so misinterpretations of the data are minimized.

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Cover design is a density map of 2007 Indiana motorcycle collisions involving an injury per 1,000 county registered motorcycles.



September 12, 2008

Dear Traffic Safety Advocates:

I am pleased to announce that for three consecutive years now, Indiana has seen a reduction in the number of lives lost on our roadways. Building on previous accomplishments in traffic safety, Indiana is turning the curve and using result based accountability to make Hoosier roadways safer. Continuing the trend of reducing fatalities in Indiana will require traffic safety advocates, as well as state and local law enforcement agencies, to utilize all available information to make informed traffic safety countermeasure decisions.

The results have been impressive thus far:

- Seat belt use has increased from 81.2 percent in 2005 to 88.4 percent in 2007.
- Impaired driving related deaths are down from 293 in 2005 to 253 in 2007.
- Restraint use jumped nearly 10 points from 77.5 percent in June among pickup truck occupants to 85.1 percent in July when the primary seat belt bill took affect last year.

These results are even more impressive when you consider that more vehicles and drivers travel our roadways every year. My sincerest thanks and praise to those who have make traffic safety a priority in Indiana.

The information provided in various *Indiana Crash Fact* sheets and this book produced by the Center for Criminal Justice Research at the Indiana University Public Policy Institute should be beneficial to all traffic safety advocates in Indiana. With the improvements made in the timeliness and accuracy of traffic safety data, advocates will be able to indentify traffic safety issues in their communities and implement measures to save lives.

Sincerely,

mitel Daniel





Governor's Council on Impaired & Dangerous Driving

Dear Reader,

During the past two years the Traffic Safety Division (TSD) of the Indiana Criminal Justice Institute (ICJI) has been looking beyond traditional traffic safety partners. In addition to partnering with law enforcement, the TSD has reached out to the Indiana Bureau of Motor Vehicles, Department of Transportation, Department of Homeland Security, Coroners Association, Supreme Court as well as non-profit organizations. This increased collaboration has helped to improve data collection and analysis and has brought in additional financial resources, never before sought, to improve all aspects of traffic safety in Indiana.

With the TSDs emphasis on looking "beyond the ticket" Indiana has received over \$5.5 million in funding from non-traditional partners such as the Department of Justice, Homeland Security and Federal Motor Carrier Safety Administration. This new partnership has worked toward improving Indiana's efforts in the area of traffic records in Indiana since 2006. Our new partners have determined that traffic safety is important to their efforts in improving community safety in Indiana. Research has demonstrated that traffic enforcement not only improves motorist safety but also removes criminals, guns and drugs from Hoosier communities. Reframing the impact that traffic safety has on communities helps to strengthen these partnerships and garner additional public and media support for their efforts.

As we continue to address traffic safety in the future, we would like to express our gratitude to the many traffic safety partners at the local, county, state and federal levels for their ongoing support and dedication to traffic safety programs and initiatives in Indiana. We hope that this latest version of the *Indiana Crash Facts* serves as a guide for them in making Indiana a safer and healthier place to live.

Sincerely,

T. Neil Moore, Ed.D. Executive Director,

Criminal Justice Institute

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GOVERNOR'S COUNCIL ON IMPAIRED & DANGEROUS DRIVING

Dear Fellow Hoosiers,

I am pleased to report that Indiana has continued to make great strides in improving traffic safety in 2007. The Governor's Council on Impaired and Dangerous Driving has concentrated on making roadways safer for all Hoosiers by implementing programs that combine education, prevention and enforcement to reduce traffic injuries and fatalities.

The largest accomplishment in 2007 came when Governor Daniels signed the seat belt law in May, which created primary enforcement of seat belts in all seating positions in all vehicles. With the passage of this law, seat belt usage reached a new record of 88.4 percent for all vehicles. The greater than seven point increase in seat belt usage over the past two years translated into an estimated 437,795 more Hoosiers buckling up. The successful campaign can be attributed to \$2.5 million in grants awarded by the Indiana Criminal Justice Institute to over 250 law enforcement agencies throughout Indiana to support seat belt enforcement.

In total, over \$13 million was allocated toward research, media, program management and law enforcement for the advancement of traffic safety in Indiana for 2007. Grants were allocated to results-driven programs in the areas of impaired driving, seat belt and child safety seat usage, aggressive driving, traffic records and young drivers.

Indiana's traffic safety community is working harder than ever to help address traffic safety challenges so that resources are allocated where the need is greatest and where life saving results can be achieved. As the Chairman of the Governor's Council on Impaired and Dangerous Driving, I am proud of the Traffic Safety Division and their partners for their efforts in 2007 and look forward to working with them in continuing to make Hoosier roadways even safer in the future.

Sincerely

Curtis Hill

Chairman, Governor's Council

on Impaired and Dangerous Driving,

Elkhart County Prosecutor



GOVERNOR'S COUNCIL ON IMPAIRED & DANGEROUS DRIVING

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A division of the

The Governor's Council on Impaired and 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.

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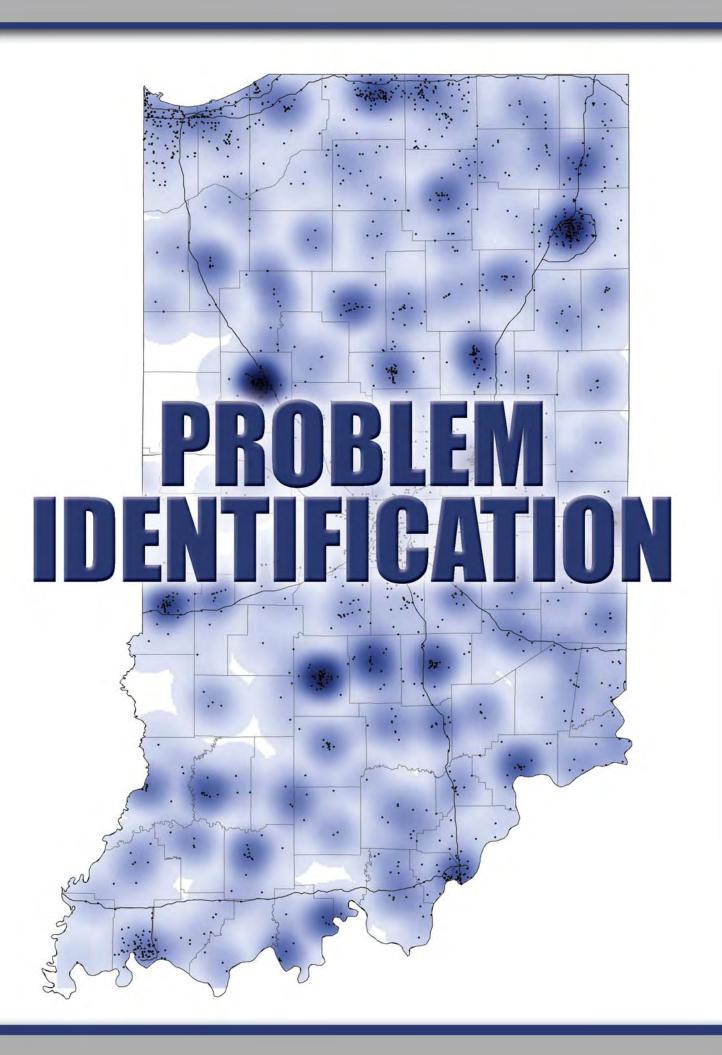
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PROBLEM IDENTIFICATION, 2007

The mission of the Governor's Council on Impaired and Dangerous Driving (GCIDD or Governor's Council), a division of the Indiana Criminal Justice Institute (ICJI), is to reduce death, injury, property damage and economic costs associated with traffic crashes on Indiana's roadways. The Traffic Safety Division (TSD) within ICJI, in conjunction with the Governor's Council, developed a set of benchmarks as part of the Highway Safety Plan for fiscal year 2009 to assess the state of traffic safety in Indiana. These benchmarks correspond to priority program areas established by the National Highway Traffic Safety

Administration (NHTSA), targeting the occurrence of fatal collisions as they relate to alcohol involvement, safety belt usage, young drivers, motorcycle safety, and dangerous driving. Within each area, ICJI has established specific goals and performance measures that relate to the occurrence of collisions and their impact on Indiana. The content of the *Traffic Safety Fact Sheets* series (produced in July to August for each year) is geared toward these areas, providing analytical context and serving as a resource for policy decision making.

NOTE: Short term and long term goals listed in subsequent sections are taken from the Indiana Strategic Highway Safety Plan 2009. This document uses data from the 2008 Fact Sheets series produced by the Center for Criminal Justice Research. Some of these publications were produced using the collision dataset current as of March 16, 2008. The Crash Book now has a more recent dataset available (as of May 4, 2008); discrepancies between figures in the goals and the exhibits presented are due to this change.

Fatalities

Short term goals

- To reduce the number of traffic fatalities from 898 in 2007 to 879 in 2009
- To reduce the rate of fatalities per 100,000 population from 14.1 in 2007 to 13.9 in 2009

Long term goals

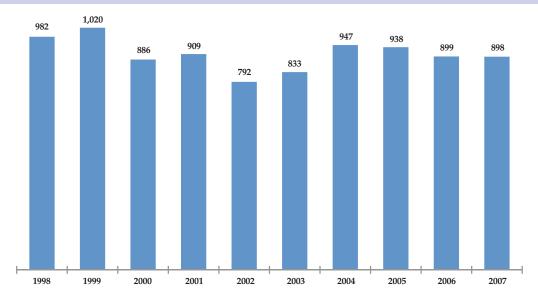
• To reduce the number of traffic fatalities to 844 by 2011

 To reduce the rate of traffic fatalities per 100,000 population to 13.3 by 2011

Context

Traffic fatalities decreased 0.1 percent from 2006 to 2007 and 0.7 percent on average since 1998. Normalized by population and vehicle miles travelled, fatalities decreased from 2006 to 2007 by 0.112 and 0.006, respectively. Since 1998, Indiana has had a lower fatality rate per vehicle mile travelled than that of the United States.

Figure 1. Fatalities in Indiana collisions, 1998-2007



Sources:

1998-2006: Fatality Analysis Reporting System, http://www-fars.nhtsa.dot.gov/Trends/TrendsGeneral.aspx 2007: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

¹State of Indiana Highway Safety Plan, Federal Fiscal Year 2009, Indiana Criminal Justice Institute, Traffic Safety Division, August 31, 2007.

Table 1. Fatalities and rates in traffic collisions, 1998-2007

			INDIANA			U	JSA
Year	Traffic fatalities	Population (thousands)	Vehicle miles travelled (millions)	Fatalities, per 100K population	Fatalities, per 100M VMT	Fatalities, per 100K population	Fatalities, per 100M VMT
1998	982	5,999	69,129	16.37	1.42	14.24	1.58
1999	1,020	6,045	70,040	16.87	1.46	15.36	1.55
2000	886	6,092	70,862	14.54	1.25	15.30	1.53
2001	909	6,126	71,802	14.84	1.27	14.86	1.51
2002	792	6,151	72,523	12.88	1.09	14.79	1.51
2003	833	6,185	72,511	13.47	1.15	14.93	1.48
2004	947	6,219	72,713	15.23	1.30	14.75	1.44
2005	938	6,257	74,252	14.99	1.26	14.59	1.46
2006	899	6,303	74,187	14.26	1.21	14.67	1.41
2007	898	6,345	74,847	14.15	1.20		
Change ('06 - '07)	-1	43	660	-0.11	-0.01		
Average annual % change	-0.7%	0.6%	0.9%	-1.3%	-1.5%		

VMT for 2007 not available at time of publication; value presented was estimated from 10-year average annual change in series.

Sources

Fatalities, 1998-2006: Fatality Analysis Reporting System, http://www-fars.nhtsa.dot.gov/Trends/Trends/General.aspx

Fatalities, 2007; Indiana: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Population, 1998-1999: Table CO-EST2001-12-00 - Time Series of Intercensal State Population Estimates: April 1, 1990 to April 1, 2000; Population Division, U.S. Census Bureau; Release Date: 4/11/2002

Population, 2000-2007: Table NST-EST2007-01 - Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2007; Population Division, U.S. Census Bureau; Release Date: 12/27/2007

Vehicle miles travelled, 1998-2006: Federal Highway Administration, Highway Statistics, http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm

Alcohol

Short term goals

- To reduce the number of alcohol-related fatalities from 253 in 2007 to 248 in 2009
- To reduce the percent of alcohol-related fatal collisions as a rate of all collisions from 28.2 percent in 2007 to 27.6 percent in 2009
- To reduce the rate of alcohol-related fatalities from 0.36 per 100 million VMT in 2007 to 0.35 by 2009
- To reduce the number of driver fatalities with a BAC of 0.08 g/dL or higher from 136 in 2007 to 133 by 2009

Long term goals

- To reduce the number of alcohol-related fatalities to 238 in 2011
- To reduce the percent of alcohol-related collisions as a rate of all collisions to 26.5 percent in 2011

- To reduce the rate of alcohol-related fatalities 0.33 per 100 million VMT in 2011
- To reduce the number of driver fatalities with a BAC of 0.08 g/dL or greater to 128 by 2011

Context

Alcohol-related fatal collisions decreased by 17 (6.8 percent) from 2006 to 2007 and increased 2.5 percent on average since 2003. Alcohol-related fatalities decreased by 20 (0.1 percent) from 2006 to 2007 and increased 1.7 percent on average since 2003. Proportional to all fatal collisions and fatalities, alcohol-related fatal collisions increased 0.3 percent on average since 2003, whereas alcohol-related fatalities decreased 0.5 percent on average. In 2007, 136 drivers who had a blood alcohol content (BAC) of 0.08 g/dL or higher were killed in Indiana collisions, a 3.5 percent decrease from 2006. This number represented 22 percent of all driver fatalities in 2007.



Table 2. Fatal collisions and fatalities in Indiana, by alcohol involvement, 2003-2007

Year	Total fatal collisions	Alcohol- related fatal collisions	Alcohol- related, as % total	Total fatalities	Alcohol- related fatalities	Alcohol- related, as % total	Vehicle miles travelled (millions)	Alcohol- related, per 100M VMT
2003	753	215	28.6%	833	241	28.9%	72,511	0.33
2004	857	260	30.3%	947	284	30.0%	72,713	0.39
2005	855	262	30.6%	938	293	31.2%	74,252	0.39
2006	817	249	30.5%	899	273	30.4%	74,187	0.37
2007	804	232	28.9%	898	253	28.2%	74,847	0.34
Change ('06 - '07)	-13	-17	-1.6%	-1	-20	-2.2%	660	-0.03
Average annual % change	1.9%	2.5%	0.3%	2.1%	1.7%	-0.5%	0.8%	0.9%

The Indiana expanded definition of alcohol-related is used for analyses of Indiana collision data. See glossary for more information.

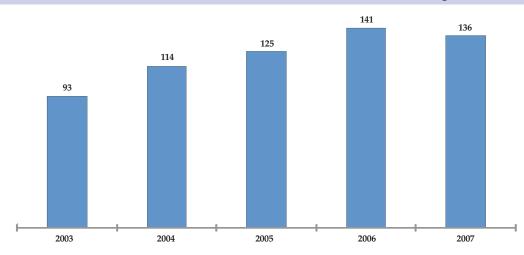
VMT for 2007 was unavailable at time of publication; see Table 1 for imputation notes.

Sources

Collisions and fatalities: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Vehicle miles travelled, 2003-2006: Federal Highway Administration, Highway Statistics, http://www.fhwa.dot.gov/policy/ohpi/hss/hsspubs.htm

Figure 2. Drivers killed in Indiana collisions with a blood alcohol content (BAC) result of 0.08 g/dL or above, 2003-2007



Notes:

Limited to drivers with BAC results of 0.08 g/dL or higher.

Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Safety belt usage

Short term goals

- To increase the percent of the population wearing seatbelts in all vehicles from 91.2 percent in June of 2008 to 93.0 percent for the same time period in 2009
- Increase the percent of pickup truck occupants wearing seat belts from 72 percent in 2007 to 82.6 percent by 2009
- To decrease fatalities involving unrestrained occupants from 292 in 2007 to 286 in 2009

Long term goals

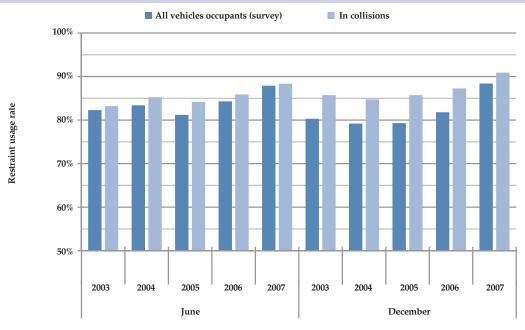
- To increase the percent of the population wearing seat belts to 96.7 percent by 2011
- To increase the percent of pickup truck occupants wearing seat belts to 86.6 percent by 2011

 To decrease the fatalities of unrestrained occupants to 274 by 2011

Context

Since 2003, restraint use has generally increased, both in observational surveys and among individuals involved in traffic collisions. Restraint use among pickup truck occupants increased significantly, following the passage of Indiana HB 1237 that removed the pickup truck occupant seat belt exemption. Restraint use among passenger vehicle occupants involved in collisions reached a five-year high of 91 percent in December 2007, as did restraint use among pickup truck occupants (87 percent). Among passenger vehicle occupants killed in collisions, restraint use increased on average each year among occupants of passenger cars (0.7 percent), pickup trucks (9 percent) and vans (11.8 percent), but decreased among SUV occupants (-6.7 percent).

Figure 3. Indiana passenger vehicle occupant restraint use rates, 2003-2007

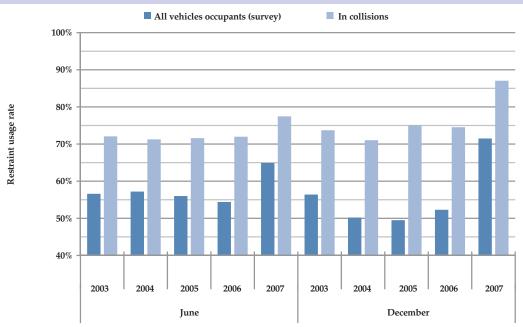


Limited to occupants of passenger cars and light trucks. See glossary for definition of *light truck*.

Restraint use rate defined as ratio of number using proper safety equipment to total involved (including those with no equipment type reported).

Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, December 2007, Center for Road Safety, Purdue University Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Figure 4. Indiana pickup truck occupant restraint use rates, 2003-2007



Notes:

Limited to pickup trucks with gross vehicle weight rating under 10,001 pounds.

Restraint use rate defined as ratio of number using proper safety equipment to total involved (including those with no equipment type reported).

Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, December 2007, Center for Road Safety, Purdue University Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008



Table 3. Restraint use among passenger vehicle occupants killed in collisions in Indiana, 2003-2007

Vehicle type/restraint use Fatalities Passenger car Restrained Unrestrained Unknown Pickup truck Restrained Unrestrained Unrestrained Unrestrained Unknown	2003 423 223 154 46 114 26 75 13	2004 465 230 178 57 117 21 82	2005 410 207 155 48 165	2006 405 198 158 49	374 201 134 39	-31 3 -24	% change -2.7% -2.4%
Passenger car Restrained Unrestrained Unknown Pickup truck Restrained Unrestrained Unknown	223 154 46 114 26 75	230 178 57 117 21	207 155 48 165	198 158 49	201 134	3	-2.4%
Restrained Unrestrained Unknown Pickup truck Restrained Unrestrained Unknown	223 154 46 114 26 75	230 178 57 117 21	207 155 48 165	198 158 49	201 134	3	-2.4%
Unrestrained Unknown Pickup truck Restrained Unrestrained Unknown	154 46 114 26 75	178 57 117 21	155 48 165	158 49	134		
Unknown Pickup truck Restrained Unrestrained Unknown	46 114 26 75	57 117 21	48 165	49		-24	
Pickup truck Restrained Unrestrained Unknown	114 26 75	117 21	165		20		-2.6%
Restrained Unrestrained Unknown	26 75	21			39	-10	-2.6%
Unrestrained Unknown	75		22	118	139	21	8.2%
Unknown		82	32	21	39	18	21.1%
	13		110	78	79	1	3.9%
		14	23	19	21	2	16.3%
Van	50	52	54	43	57	14	5.0%
Restrained	21	20	27	17	33	16	21.8%
Unrestrained	26	20	23	18	19	1	-6.1%
Unknown	3	12	4	8	5	-3	74.0%
SUV	64	78	82	90	100	10	12.0%
Restrained	21	21	30	25	22	-3	3.5%
Unrestrained	36	44	46	54	60	6	13.8%
Unknown	7	13	6	11	18	7	44.7%
All passenger vehicles	651	712	711	656	670	14	0.9%
Restrained	291	292	296	261	295	34	0.7%
Unrestrained	291	324	334	308	292	-16	0.4%
Unknown	69	96	81	87	83	-4	6.6%
Restraint use rates							
Passenger car	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
Restrained	52.7%	49.5%	50.5%	48.9%	53.7%	4.9%	0.7%
Unrestrained	36.4%	38.3%	37.8%	39.0%	35.8%	-3.2%	-0.3%
Unknown	10.9%	12.3%	11.7%	12.1%	10.4%	-1.7%	-0.6%
Pickup truck	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
Restrained	22.8%	17.9%	19.4%	17.8%	28.1%	10.3%	9.0%
Unrestrained	65.8%	70.1%	66.7%	66.1%	56.8%	-9.3%	-3.3%
Unknown	11.4%	12.0%	13.9%	16.1%	15.1%	-1.0%	7.7%
Van	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
Restrained	42.0%	38.5%	50.0%	39.5%	57.9%	18.4%	11.8%
Unrestrained	52.0%	38.5%	42.6%	41.9%	33.3%	-8.5%	-9.3%
Unknown	6.0%	23.1%	7.4%	18.6%	8.8%	-9.8%	78.8%
SUV	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
Restrained	32.8%	26.9%	36.6%	27.8%	22.0%	-5.8%	-6.7%
Unrestrained	56.3%	56.4%	56.1%	60.0%	60.0%	0.0%	1.7%
Unknown	10.9%	16.7%	7.3%	12.2%	18.0%	5.8%	27.6%
All passenger vehicles	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
Restrained	44.7%	41.0%	41.6%	39.8%	44.0%	4.2%	-0.1%
Unrestrained	44.7%	45.5%	47.0%	47.0%	43.6%	-3.4%	-0.5%
Unknown	10.6%	13.5%	11.4%	13.3%	12.4%	-0.9%	5.4%

 $\begin{tabular}{ll} \textbf{Notes:}\\ Pickup trucks constrained to those of gross vehicle weight rating less than 10,001 pounds.\\ \end{tabular}$

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

Young Drivers (16 to 24 years old)

Short term goals

- To decrease the number of young drivers involved in fatal crashes from 256 in 2007 to 251 in 2009
- To decrease the percent of young drivers killed in traffic collisions while not wearing their safety restraint from 67.5 percent in 2007 to 66 percent by 2009

Long term goals

- To decrease the number of fatalities for young drivers to 241 in 2011
- To reduce the percent of unrestrained young driver fatalities to 64 percent in 2011

Context

The incidence of young drivers involved in fatal collisions decreased from 2006 to 2007 by 49 (16.1 percent) and 4.2 percent on average since 2003. Within this age group, the incidence of 24 year-olds increased 9 percent on average since 2003. Per 10,000 licensed drivers, this age group (16-24) had a fatal collision involvement rate at least 1.6 times greater than any other age group. Sixteen year-olds had the highest fatal collision involvement rate (7.2 per 10,000 licensed).

In 2007, 61.9 percent of young drivers killed in traffic collisions were not restrained (where restraint use was reported), a 1.8 percent average annual percent increase since 2003. Within the young driver age group, non-restraint use rates were highest among 19 year-olds (80 percent), 21 year olds (80 percent) and 22 year olds (83.3 percent).

Table 4. Drivers involved in fatal collisions, by age group, 2003-2007

Age	2003	2004	2005	2006	2007	2007 Licensed drivers	Per 10,000 licensed	Change ('06 - '07)	Average annual % change
< 16	7	8	3	2	5			3	17.1%
16 - 24	310	344	323	305	256	658,510	3.9	-49	-4.2%
16	30	47	22	33	16	22,174	7.2	-17	0.5%
17	34	33	37	32	33	56,969	5.8	1	-0.3%
18	42	51	31	39	39	72,969	5.3	0	2.0%
19	33	29	41	38	38	79,056	4.8	0	5.5%
20	39	44	33	37	25	82,327	3.0	-12	-8.1%
21	33	43	47	33	25	82,408	3.0	-8	-3.6%
22	41	32	46	31	23	85,106	2.7	-8	-9.2%
23	35	31	40	33	28	88,338	3.2	-5	-3.8%
24	23	34	26	29	29	89,163	3.3	0	9.0%
25 - 34	218	260	257	232	232	980,613	2.4	0	2.1%
35 - 44	237	233	222	232	221	982,441	2.2	-11	-1.7%
45 - 54	213	208	227	205	228	995,026	2.3	23	2.1%
55 - 64	116	142	134	134	146	772,639	1.9	12	6.4%
65 - 74	62	68	77	73	82	491,095	1.7	9	7.5%
75 +	72	74	60	56	66	590,105	1.1	10	-1.2%
Jnknown age	0	1	2	0	0	0		0	
TOTAL	1,235	1,338	1,305	1,239	1,236	5,470,433	2.3	-3	0.1%

Sources:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Indiana Bureau of Motor Vehicles, as of February 1, 2008



Table 5. Drivers killed in traffic collisions in Indiana, and restraint non-use rates, 2003-2007

	Low	< <		> >	High		
						Change	Average
age	2003	2004	2005	2006	2007	('06 - '07)	% change
otal killed							
< 16	5	5	2	1	5	4	72.5%
16 - 24	146	170	161	150	117	-33	-4.4%
16	16	24	14	17	5	-12	-10.2%
17	12	14	24	14	10	-4	4.5%
18	20	22	16	18	22	4	4.4%
19	14	13	18	22	18	-4	8.8%
20	20	24	9	18	13	- - -5	7.4%
21	16	18	24	17	11	-6	-4.7%
22	18	15	29	17	13		2.9%
23				13	13	-4	
	18	16	14			0	-7.7%
24	12	24	13	14	12	-2	11.9%
25 - 34	87	122	118	100	118	18	9.9%
35 - 44	97	91	110	114	100	-14	1.5%
45 - 54	79	92	103	92	110	18	9.3%
55 - 64	55	71	79	75	77	2	9.5%
65 - 74	37	41	42	37	47	10	7.1%
75 +	48	51	46	40	52	12	3.4%
75 1	40	31	40	40		12	5.170
Unknown age	0	1	0	0	0	0	
ALL AGES	554	644	661	609	626	17	3.5%
not restrained							
< 16	40.0%	100.0%	100.0%		100.0%		
16 - 24	58.1%	53.9%	54.5%	58.5%	61.9%	3.4%	1.8%
16	40.0%	50.0%	38.5%	73.3%	75.0%	1.7%	23.7%
17	33.3%	40.0%	33.3%	57.1%	30.0%	-27.1%	6.8%
18	75.0%	42.9%	38.5%	66.7%	36.8%	-29.8%	-6.1%
19	54.5%	63.6%	58.8%	68.4%	80.0%	11.6%	10.6%
20	47.4%	57.9%	22.2%	50.0%	66.7%	16.7%	29.7%
21	53.3%	60.0%	54.5%	46.7%	80.0%	33.3%	15.1%
22	76.5%	45.5%	76.9%	53.3%	83.3%	30.0%	13.6%
23	64.7%	69.2%	66.7%	50.0%	66.7%	16.7%	2.9%
24	70.0%	57.1%	90.0%	57.1%	54.5%	-2.6%	-0.5%
25 - 34	56.9%	70.2%	63.6%	70.4%	66.3%	-4.0%	4.7%
35 - 44	53.1%	58.5%	72.5%	75.2%	62.6%	-12.6%	5.3%
45 - 54	48.5%	58.2%	70.6%	56.1%	55.6%	-0.5%	4.9%
55 - 64	49.0%	59.1%	47.8%	46.8%	46.4%	-0.4%	-0.4%
65 - 74	39.4%	48.7%	29.7%	32.4%	43.9%	11.5%	7.3%
75 +	40.0%	28.0%	34.2%	36.1%	28.0%	-8.1%	-6.2%
70 1							
Unknown age		100.0%					

Notes: % not restrained calculated as the count of non-restrained killed to total killed where restraint use was reported (possibly less than Total killed).

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

Motorcycle Safety

Short term goals

- To reduce the number of motorcycle fatalities from 121 in 2007 to 119 in 2009
- To decrease the percent of motorcycle fatalities per 10,000 motorcycle registrations from 6.7 percent in 2007 to 6.6 percent in 2009

Long term goals

- To reduce the number of motorcycle fatalities to 114 by 2011
- To continue to decrease the percent of motorcycle fatalities per 10,000 motorcycle registrations to 6.3 percent by 2011

NHTSA national goal

 To reduce the percent of improperly licensed motorcyclists fatally injured in motorcycle collisions to 22 percent by 2011

Context

Motorcyclist fatalities increased by 14 (13 percent) from 2006 to 2007 and have increased 7.4 percent on average per year since 1998. Per 10,000 registered motorcycles, fatalities remained relatively constant (0.05 decrease per 10,000 registered from 2006 to 2007 and a 0.8 percent increase on average since 1998).

In 2007, 52.8 percent of all motorcycle operators involved in collisions in Indiana did not have proper licensing. Delineated by age groups, younger and older operators were most likely to have been improperly licensed when in a collision (16-24 year-olds = 67.3 percent; 75+ year-olds = 58.8 percent). Proper licensing among operators in collisions has improved since 2003, as each age category has general decreases in non-license rates. This trend also holds true for operators killed in collisions, as the proportion without proper licensing decreased 11 percent from 2006 to 2007 and 10 percent on average since 2003. However, this rate (50% in 2007) is well above the national goal set by NHTSA.

Table 6. Fatal collisions	involving mo	torcycles, 1998-2007
---------------------------	--------------	----------------------

Year	Registered motorcycles	Motorcycles involved	Involved, per 10,000 registered	Motorcyclist fatalities	Fatalities, per 10,000 registered
1998	104,106	71	6.82	69	6.63
1999	108,716	67	6.16	67	6.16
2000	118,796	73	6.14	73	6.14
2001	128,130	85	6.63	75	5.85
2002	134,881	89	6.60	88	6.52
2003	145,948	78	5.34	77	5.28
2004	154,739	105	6.79	108	6.98
2005	164,423	114	6.93	112	6.81
2006	162,683	113	6.95	108	6.64
2007	185,048	121	6.54	122	6.59
Change ('06 - '07)	22,365	8	-0.41	14	-0.05
Average annual % change	6.7%	6.8%	0.2%	7.4%	0.8%

Notes:

Includes motorcycle and moped riders.

Source

Fatalities, 1998-2002: Fatality Analysis Reporting System, http://www-fars.nhtsa.dot.gov/Trends/Trends/General.aspx Fatalities, 2003-2007: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Registered motorcycles: Indiana Bureau of Motor Vehicles, as of February 1, 2008



Table 7. Proportion of motorcycle operators involved in collisions in Indiana that did not have proper licensing, 2003-2007

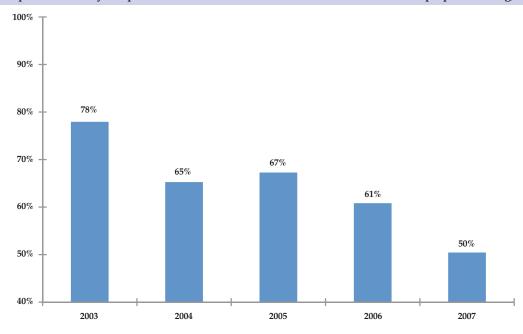
Low <	<		>	>	High			
Age group		2003	2004	2005	2006	2007	Change ('06 - '07)	Average annual % change
< 16		98.2%	95.8%	98.0%	99.1%	97.4%	-1.7%	-0.2%
16 - 24		86.9%	79.3%	76.8%	70.7%	67.3%	-3.4%	-6.2%
25 - 34		84.1%	77.1%	71.4%	63.1%	55.0%	-8.1%	-10.0%
35 - 44		81.2%	68.6%	68.7%	58.6%	49.4%	-9.1%	-11.4%
45 - 54		79.6%	69.7%	60.6%	56.2%	43.4%	-12.8%	-13.9%
55 - 64		76.5%	65.2%	57.4%	49.6%	36.5%	-13.1%	-16.7%
65 - 74		84.0%	68.1%	51.0%	55.1%	40.6%	-14.6%	-15.6%
75 +		100.0%	66.7%	61.5%	58.8%	58.8%	0.0%	-11.4%
Unknown age		90.9%	75.0%	80.0%	100.0%	100.0%	0.0%	3.5%
ALL AGES		82.9%	73.5%	68.9%	61.7%	52.8%	-9.0%	-10.6%

Includes motorcycle and moped operators.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Figure 5. Proportion motorcycle operators killed in collisions in Indiana that did not have proper licensing, 2003-2007



Notes:

Includes motorcycle and moped operators.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Dangerous Driving

Short term goals

- To reduce the number of speed-related traffic fatalities from 165 in 2007 to 162 in 2009
- To reduce the percentage of speed-related collisions from 9 percent in 2007 to 8.8 percent in 2009
- To reduce the percentage of speed-related fatalities from 21 percent in 2007 to 20.1 percent in 2009
- To reduce the number of collisions caused by a vehicle that (engaged in) red light running from 4,740 in 2007 to 4,559 in 2009²
- To reduce the number of aggressive driving collisions from 3,045 in 2007 to 2,677 in 2009

Long term goals

- To reduce the percentage of speed-related collisions to 8.5 percent in 2011
- To reduce the number of speed-related traffic fatalities to 151 in 2011
- To reduce the number of speed-related fatalities to 19.3 percent in 2011
- To reduce the number of collisions caused by red light running to 4,456 by 2011

• To reduce the number of aggressive driving collisions to 2,570 by 2011

Context

Speed-related traffic fatalities increased by 13 (7.5 percent) from 2006 to 2007, and have remained relatively stable since 2003 (0.2 percent average annual decrease). As a proportion of all collisions, speed-related collisions increased by 1.5 percent from 2006 to 2007 and have increased 1.7 percent on average since 2003. As a proportion of all fatalities, speed-related fatalities have decreased by a marginal amount, on average since 2003 (0.5 percent per year).

Collisions involving a vehicle that disregarded a traffic signal have increased 3.9 percent on average per year since 2003. Fatalities in these collisions increased by 12 from 2006 to 2007 (15 to 27). As a proportion of all fatalities, fatalities in collisions where a vehicle disregarded a signal accounted for three percent in 2007.

As a proportion of all collisions, those involving aggressive driving have decreased 11.3 percent on average since 2003. Among fatal collisions, however, the proportion that involved aggressive driving has increased 6.4 percent on average. In 2007, 21 people were killed in aggressive driving collisions, 2.3 percent of all fatalities.

Table 8. Collisions involving dangerous driving actions, 2003-2007

	2003	2004	2005	2006	2007	Change ('06 - '07)	Average annual % change
All collisions	211,731	208,682	208,359	192,721	205,005	12,284	-0.7%
Speed-related	18,680	18,812	20,010	14,570	18,491	3,921	1.7%
Disregarding signal	5,320	5,115	4,517	2,855	4,797	1,942	3.9%
Aggressive driving	5,121	4,111	3,582	3,240	3,045	-195	-12.0%
% speed-related	8.8%	9.0%	9.6%	7.6%	9.0%	1.5%	1.7%
% disregarding signal	2.5%	2.5%	2.2%	1.5%	2.3%	0.9%	3.1%
% aggressive driving	2.4%	2.0%	1.7%	1.7%	1.5%	-0.2%	-11.3%
Fatal collisions	753	857	855	817	804	-13	1.9%
Speed-related	175	177	203	159	165	6	-0.5%
Disregarding signal	28	17	12	15	23	8	2.4%
Aggressive driving	27	29	23	11	21	10	6.4%
% speed-related	23.2%	20.7%	23.7%	19.5%	20.5%	1.1%	-2.2%
% disregarding signal	3.7%	2.0%	1.4%	1.8%	2.9%	1.0%	2.7%
% aggressive driving	3.6%	3.4%	2.7%	1.3%	2.6%	1.3%	4.5%
Fatalities	833	947	938	899	898	-1	2.1%
Speed-related	197	207	229	174	187	13	-0.2%
Disregarding signal	29	18	13	15	27	12	7.4%
Aggressive driving	34	32	26	14	21	7	-5.2%
% speed-related	23.6%	21.9%	24.4%	19.4%	20.8%	1.5%	-2.3%
% disregarding signal	3.5%	1.9%	1.4%	1.7%	3.0%	1.3%	7.0%
% aggressive driving	4.1%	3.4%	2.8%	1.6%	2.3%	0.8%	-7.2%

Notes:

See glossary for definitions of speed-related, disregarding signal, and aggressive driving.

Counts for disregarding signal will differ from those in the Dangerous Driving fact sheet; here, collisions occurring on interstates are excluded and collisions occurring at a road junction type of Ramp are included.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

²Counts for *disregarding signal* will differ from those in the *Dangerous Driving* fact sheet; here, collisions occurring on interstates are excluded and collisions occurring at a road junction type of Ramp are included.





GENERAL TRENDS, 2007

The General Trends section provides a time series analysis of Indiana collisions based on various parameters that describe the conditions and circumstances of those collisions. Collision data are categorized by the most severe injury involved (*fatal* collisions involve at least one fatality; *incapacitating* collisions involve no fatalities but at least one incapacitating injury; etc.). Trends in collisions and individuals involved in collisions are shown. Topics include alcohol- and speed-related collisions, aggressive driving, collisions by date and holiday, as well as citations issued, economic costs, and other relevant variables.

HIGHLIGHTS

Fatalities in traffic collisions, per 100,000 licensed drivers, decreased on average 4 percent since 1998.

Since 2003, fatal collisions increased 1.9 percent annually on average.

From 2003 to 2007, the occurrence of speed-related collisions increased on average (+1.7 percent), compared to average annual decreases in alcohol-related collisions (-8.1 percent) and collisions involving aggressive driving (-12 percent).

The months of September and October had the greatest average number of fatal collisions in the past five years (82 and 80, respectively).

In 2007, the likelihood of a felony citation being issued in a fatal collision (31.7 percent) was 4.3 times greater than a non-fatal injury collision (7.4 percent) and 6.5 times greater than a property damage collision (4.9 percent).

On average from 2003 to 2007, Independence Day and Labor Day were the two most deadly holidays, having an average of 3.0 and 3.4 fatal collisions per holiday, respectively.

In 2007, economic costs from traffic collisions were \$4.55 billion, a 1.3 percent decrease from 2006 and were the lowest in the past 5 years. 1

Costs associated with fatalities, as a proportion of total economic costs, rose 3.9 percent on average per year to 21.8 percent in 2007.

- ➤ Fatal collisions decreased by 1.6 percent from 2006 to 2007; both fatal collisions and fatalities have decreased an average of 0.7 percent annually since 1998.
- Accounting for increases in the number of licensed drivers, registered vehicles, and vehicle miles travelled (VMT), fatalities have decreased.
- ➤ Indiana fatalities per 100,000 licensed drivers were lower in 2007 than any other point since 1998; per one billion VMT, fatalities are at their lowest since 2003.

Table 9. Indiana traffic collisions, fatalities, and demographic trends, 1998-2007

Year	Total Collisions	Fatal collisions	Fatalities	Resident population (thousand)	Fatalities, per 100,000 population	Licensed drivers (thousand)	Fatalities, per 100,000 licensed	Registered vehicles (thousand)	Fatalities per 100,000 registered	Vehicle miles travelled (billion)	Fatalities, per one billion VMT
1998	216,510	884	982	5,999	16.4	3,976	24.7	5,753	17.1	69.1	14.2
1999	217,340	892	1,020	6,045	16.9	3,856	26.5	5,687	17.9	70.0	14.6
2000	220,883	793	886	6,092	14.5	3,976	22.3	5,982	14.8	70.9	12.5
2001		825	909	6,126	14.8	4,117	22.1	6,143	14.8	71.8	12.7
2002		714	792	6,151	12.9	4,221	18.8	6,180	12.8	72.5	10.9
2003	211,731	753	833	6,185	13.5	4,536	18.4	6,344	13.1	72.5	11.5
2004	208,682	857	947	6,219	15.2	4,521	20.9	6,432	14.7	72.7	13.0
2005	208,361	855	938	6,257	15.0	4,965	18.9	6,557	14.3	74.3	12.6
2006	192,724	817	899	6,303	14.3	5,324	16.9	6,309	14.2	74.2	12.1
2007	205,005	804	898	6,345	14.2	5,470	16.4	6,482	13.9	74.8	12.0
Average annual change		-0.7%	-0.7%	0.6%	-1.3%	3.7%	-4.0%	1.4%	-1.9%	0.9%	-1.5%

Notes

Collision data for 2001 and 2002 omitted because of incomplete records within state records database.

Vehicle miles travelled (VMT) not available for 2007; values imputed from 10-year average annual change.

Registered vehicles data differ from that presented in Indiana Crash Facts 2006 because farm tractors, special machinery and water craft are now excluded.

Sources:

Collisions - 1998-2000: Indiana Crash Facts, 2000

 $\hbox{-}\,2003\hbox{-}2007\hbox{:}\,Indiana\,State\,Police\,Automated\,Reporting\,Information\,Exchange\,System,\,as\,of\,May\,4,2008$

Fatal collisions and fatalities - 1998-2002: Fatality Analysis Reporting System

 $\hbox{-}\ 2003-2007: Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System, as\ of\ May\ 4,2008}$

Resident population - 1998-1999: Table CO-EST2001-12-00 - Time Series of Intercensal State Population Estimates: April 1, 1990 to April 1, 2000;

Population Division, U.S. Census Bureau; Release Date: 4/11/2002

-2000-2007: Table NST-EST2007-01-Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico:

April 1, 2000 to July 1, 2007; Population Division, U.S. Census Bureau; Release Date: 12/27/2007

Licensed drivers - 1998-2004: Federal Highway Administration, Highway Statistics

- 2005-2007: Indiana Bureau of Motor Vehicles, as of February 1, 2008

Registered vehicles - Indiana Bureau of Motor Vehicles, as of February 1, 2008

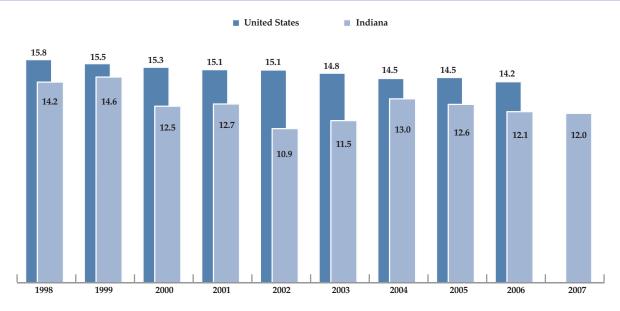
Vehicle miles travelled - 1998-2004: Federal Highway Administration, Highway Statistics

- 2005-2006: Indiana Department of Transportation, as of February 1, 2008



- ➤ On average, over the past 10 years, fatalities per billion vehicle miles travelled decreased by 1.2 percent in Indiana, compared to 1.3 percent nationwide.
- ➤ Indiana fatalities, per billion vehicle miles travelled, continue to be lower than national fatalities per billion vehicle miles travelled.

Figure 6. Fatalities, per billion vehicle miles travelled (BMVT), 1998-2007



Vehicle miles travelled not available for 2007; Indiana values imputed from 10-year average annual change.

Sources:

Fatalities

- 1998-2006: Fatality Analysis Reporting System
- 2007: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Vehicle miles travelled

- United States, 1998-2005: Federal Highway Administration, Highway Statistics
- United States, 2006: Federal Highway Administration Traffic Volume Trends (June 2007)
- Indiana, 1998-2005: Federal Highway Administration, Highway Statistics
- Indiana, 2005-2006: Indiana Department of Transportation, as of February 1, 2007

- ➤ Fatal collisions and non-fatal injury collisions are at 4- and 5-year lows, respectively.
- ➤ Since 2003, fatal collisions increased 1.9 percent annually on average.
- ➤ The number of pedestrians and pedalcyclists involved in collisions has increased on average since 2003 (2.5 percent and 4.4 percent, respectively).

Table 10. Collisions in Indiana and individuals involved, 2003-2007

	_						
	2003	2004	2005	2006	2007	% 2007 total	Average annual change
All collisions	211,731	208,682	208,359	192,721	205,005	100.0%	-0.7%
Fatal	753	857	855	817	804	0.4%	1.9%
Non-fatal injury	40,980	43,303	41,761	38,849	37,419	18.3%	-2.1%
Property damage only	169,998	164,522	165,743	153,055	166,782	81.4%	-0.3%
Drivers involved	332,714	330,349	325,206	298,082	312,783	100.0%	-1.4%
Fatalities	554	644	661	609	626	0.2%	3.5%
Incapacitating injuries	2,952	2,745	2,562	2,583	2,491	0.8%	-4.1%
Non-incapacitating injuries	37,393	40,475	39,077	36,016	33,704	10.8%	-2.4%
Unknown injury status	291,815	286,485	282,906	258,874	275,962	88.2%	-1.2%
Injured vehicle							
passengers involved	18,793	17,332	16,713	15,099	14,315	100.0%	-6.5%
Fatalities	212	218	200	196	199	1.4%	-1.5%
Incapacitating injuries	940	936	962	913	870	6.1%	-1.9%
Non-incapacitating injuries	14,885	15,248	14,520	13,427	12,853	89.8%	-3.5%
Unknown injury status	2,756	930	1,031	563	393	2.7%	-32.7%
Pedestrians involved	1,683	1,552	1,557	1,601	1,835	100.0%	2.5%
Fatalities	61	72	64	75	60	3.3%	1.0%
Incapacitating injuries	220	194	228	222	217	11.8%	0.2%
Non-incapacitating injuries	1,195	1,169	1,136	1,183	1,374	74.9%	3.8%
Unknown injury status	207	117	129	121	184	10.0%	3.2%
Pedalcyclists involved	993	985	882	978	1,153	100.0%	4.4%
Fatalities	6	13	13	19	13	1.1%	32.8%
Incapacitating injuries	80	86	71	89	84	7.3%	2.4%
Non-incapacitating injuries	770	799	694	763	875	75.9%	3.8%
Unknown injury status	137	87	104	107	181	15.7%	13.8%

Non-fatal injury collisions includes collisions with no fatalities and at least one incapacitating, non-incapacitating, or possible injury.

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

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

Three collisions reported in Indiana Crash Facts 2006 were re-classified as occurring in 2007; accordingly this table reports 192,721 collisions for 2006.

Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008



- ➤ Fatal alcohol-related collisions have increased 2.5 percent on average since 2003.
- ➤ Vehicle drivers accounted for 72 percent of all fatalities in alcohol-related collisions (183 of 253).
- ➤ Since 2003, the number of pedalcyclists involved in alcohol-related collisions has decreased 12.9 percent on average.

Table 11. Alcohol-related collisions in Indiana and individuals involved, 2003-2007

	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Alcohol-related collisions	14,115	13,435	13,684	11,851	9,942	100.0%	-8.1%
Fatal	215	260	262	249	232	2.3%	2.5%
Non-fatal injury	4,600	4,676	4,696	4,197	3,557	35.8%	-5.9%
Property damage only	9,300	8,499	8,726	7,405	6,153	61.9%	-9.5%
Drivers involved	20,715	20,056	20,301	16,716	13,277	100.0%	-10.0%
Fatalities	152	195	200	192	183	1.4%	5.5%
Incapacitating injuries	559	512	471	479	466	3.5%	-4.4%
Non-incapacitating injuries	4,033	4,258	4,317	3,788	3,060	23.0%	-6.1%
Unknown injury status	15,971	15,091	15,313	12,257	9,568	72.1%	-11.5%
Injured vehicle							
passengers involved	2,107	1,821	1,858	1,560	1,410	100.0%	-9.3%
Fatalities	71	61	77	57	54	3.8%	-4.8%
Incapacitating injuries	200	173	202	198	138	9.8%	-7.3%
Non-incapacitating injuries	1,519	1,473	1,473	1,207	1,142	81.0%	-6.6%
Unknown injury status	317	114	106	98	76	5.4%	-25.3%
Pedestrians involved	200	157	138	175	171	100.0%	-2.3%
Fatalities	17	22	15	19	14	8.2%	-0.5%
Incapacitating injuries	32	28	26	36	33	19.3%	2.6%
Non-incapacitating injuries	129	99	89	110	105	61.4%	-3.6%
Unknown injury status	22	8	8	10	19	11.1%	12.8%
Pedalcyclists involved	92	59	52	61	48	100.0%	-12.9%
Fatalities	1	6	1	5	2	4.2%	189.2%
Incapacitating injuries	8	7	5	6	8	16.7%	3.1%
Non-incapacitating injuries	73	43	44	45	34	70.8%	-15.2%
Unknown injury status	10	3	2	5	4	8.3%	6.7%

Notes:

See glossary for definition of alcohol-related.

Non-fatal injury collisions includes collisions with no fatalities and at least one incapacitating, non-incapacitating, or possible injury.

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

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

Source

 $Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System,\ as\ of\ May\ 4,2008$

- > Speed-related collisions increased 27 percent from 2006 to 2007, compared to a 6.4 percent increase in all collisions.
- ➤ In 2007, vehicle drivers accounted for 73 percent of all fatalities in speed-related collisions (136 of 187).
- ➤ Since 2003, the number of pedestrians involved in speed-related collisions has increased 3.2 percent on average.

Table 12. Speed-related collisions in Indiana and individuals involved, 2003-2007

	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Speed-related collisions	18,680	18,812	20,010	14,570	18,491	100.0%	1.7%
Fatal	175	177	203	159	165	0.9%	-0.5%
Non-fatal injury	5,056	5,212	5,107	4,317	4,376	23.7%	-3.3%
Property damage only	13,449	13,423	14,700	10,094	13,950	75.4%	4.0%
Drivers involved	27,383	27,926	29,076	21,369	26,228	100.0%	0.6%
Fatalities	128	140	161	128	136	0.5%	2.5%
Incapacitating injuries	472	403	406	415	375	1.4%	-5.3%
Non-incapacitating injuries	4,660	4,929	4,777	3,975	3,948	15.1%	-3.7%
Unknown injury status	22,123	22,454	23,732	16,851	21,769	83.0%	1.8%
Injured vehicle	2.5	2 400	2.12.1	4.000	• • • •	100.00	- 400
passengers involved	2,653	2,480	2,434	1,982	2,088	100.0%	-5.4%
Fatalities	65	64	64	40	47	2.3%	-5.4%
Incapacitating injuries	183	154	195	163	171	8.2%	-0.2%
Non-incapacitating injuries	2,048	2,120	2,040	1,712	1,818	87.1%	-2.5%
Unknown injury status	357	142	135	67	52	2.5%	-34.5%
Pedestrians involved	87	54	68	65	84	100.0%	3.2%
Fatalities	3	3	4	6	4	4.8%	12.5%
Incapacitating injuries	18	4	14	21	10	11.9%	42.5%
Non-incapacitating injuries	58	43	45	35	66	78.6%	11.3%
Unknown injury status	8	4	5	3	4	4.8%	-7.9%
Pedalcyclists involved	25	20	15	21	13	100.0%	-10.8%
Fatalities	1	0	0	0	0	0.0%	
Incapacitating injuries	2	2	2	8	3	23.1%	59.4%
Non-incapacitating injuries	20	16	9	11	7	53.8%	-19.5%
Unknown injury status	2	2	4	2	3	23.1%	25.0%

See glossary for definition of speed-related.

Non-fatal injury collisions includes collisions with no fatalities and at least one incapacitating, non-incapacitating, or possible injury.

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

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

Source

 $Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System,\ as\ of\ May\ 4,2008$



- ➤ Fatal collisions involving aggressive driving increased 6.4 percent on average since 2003, compared to a 12 percent overall average decrease.
- ➤ Vehicle drivers accounted for 85.7 percent of all fatalities in aggressive driving collisions (18 of 21) in 2007.
- ➤ In 2007, the number of pedalcyclists involved in aggressive driving collisions was at a 5-year high (10).

Table 13. Aggressive driving collisions in Indiana and individuals involved, 2003-2007

	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Aggressive driving collisions	5,121	4,111	3,582	3,240	3,045	100.0%	-12.0%
Fatal	27	29	23	11	21	0.7%	6.4%
Non-fatal injury	1,289	1,140	967	947	832	27.3%	-10.2%
Property damage only	3,805	2,942	2,592	2,282	2,192	72.0%	-12.6%
Drivers involved	10,033	7,904	6,923	6,260	5,849	100.0%	-12.4%
Fatalities	24	23	17	9	18	0.3%	5.7%
Incapacitating injuries	91	83	63	81	66	1.1%	-5.7%
Non-incapacitating injuries	1,306	1,168	1,031	993	862	14.7%	-9.8%
Unknown injury status	8,612	6,630	5,812	5,177	4,903	83.8%	-12.9%
Injured vehicle							
passengers involved	646	583	507	476	435	100.0%	-9.4%
Fatalities	9	9	9	4	2	0.5%	-26.4%
Incapacitating injuries	24	24	28	48	37	8.5%	16.3%
Non-incapacitating injuries	517	529	445	404	382	87.8%	-7.1%
Unknown injury status	96	21	25	20	14	3.2%	-27.3%
Pedestrians involved	19	13	6	6	9	100.0%	-8.9%
Fatalities	1	0	0	1	1	11.1%	
Incapacitating injuries	5	1	1	1	0	0.0%	-45.0%
Non-incapacitating injuries	13	11	5	4	8	88.9%	2.5%
Unknown injury status	0	1	0	0	0	0.0%	
Pedalcyclists involved	7	7	5	3	10	100.0%	41.2%
Fatalities	0	0	0	0	0	0.0%	
Incapacitating injuries	0	1	0	0	2	20.0%	
Non-incapacitating injuries	6	5	4	2	7	70.0%	40.8%
Unknown injury status	1	1	1	1	1	10.0%	0.0%

See glossary for definition of aggressive driving. Note also that in Indiana Crash Facts 2006, aggressive driving was defined by the crash report data element, whereas the 2007 definition is expanded by using contributing circumstances.

Non-fatal injury collisions includes collisions with no fatalities and at least one incapacitating, non-incapacitating, or possible injury.

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

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- ➤ Fatal hit-and-run collisions have decreased 10.1 percent on average since 2003 and 29.6 percent since 2006 (27 to 19).
- ➤ Overall, hit-and-run collisions have generally remained consistent since 2003, with only a slight decrease on average (-0.3 percent).

Table 14. Hit-and-run collisions in Indiana and individuals involved, 2003-2007

	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Hit-and-run collisions	25,915	28,349	27,450	23,924	25,220	100.0%	-0.3%
Fatal	31	34	34	27	19	0.1%	-10.1%
Non-fatal injury	2,447	2,680	2,559	2,131	2,055	8.1%	-3.8%
Property damage only	23,437	25,635	24,857	21,766	23,146	91.8%	0.1%
Drivers involved	21,162	24,503	22,564	18,380	18,344	100.0%	-2.7%
Fatalities	10	16	13	11	5	0.0%	-7.2%
Incapacitating injuries	108	104	95	77	59	0.3%	-13.7%
Non-incapacitating injuries	1,808	2,044	1,963	1,529	1,459	8.0%	-4.4%
Unknown injury status	19,236	22,339	20,493	16,763	16,821	91.7%	-2.5%
Injured vehicle passengers involved	1,076	1,085	1,011	848	865	100.0%	-5.0%
Fatalities	7	6	7	5	2	0.2%	-21.5%
Incapacitating injuries	73	53	63	49	36	4.2%	-14.3%
Non-incapacitating injuries	741	844	734	606	649	75.0%	-2.4%
Unknown injury status	255	182	207	188	178	20.6%	-7.3%
Pedestrians involved	322	342	287	311	339	100.0%	1.9%
Fatalities	15	10	15	8	8	2.4%	-7.5%
Incapacitating injuries	44	28	38	37	35	10.3%	-2.2%
Non-incapacitating injuries	199	257	192	227	228	67.3%	5.6%
Unknown injury status	64	47	42	39	68	20.1%	7.5%
Pedalcyclists involved	150	129	127	136	156	100.0%	1.6%
Fatalities	1	3	1	3	4	2.6%	91.7%
Incapacitating injuries	8	11	11	10	8	5.1%	2.1%
Non-incapacitating injuries	115	90	90	103	105	67.3%	-1.3%
Unknown injury status	26	25	25	20	39	25.0%	17.8%

Notes:

Non-fatal injury collisions includes collisions with no fatalities and at least one *incapacitating*, *non-incapacitating*, or *possible* injury *Non-incapacitating injuries* includes *non-incapacitating* and *possible* injury status codes.

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

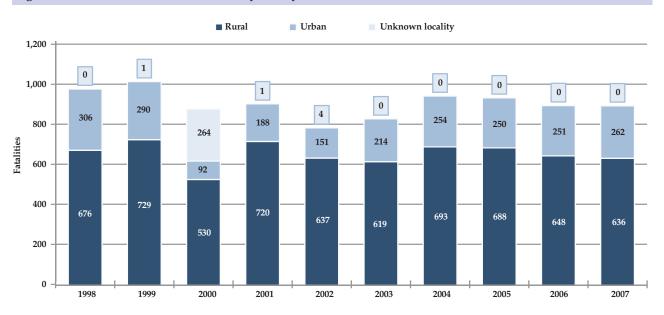
Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008



> Since 1998, rural fatalities occurred an average of 2.6 times more often than urban fatalities (year 2000 excluded).

Figure 7. Fatalities in collisions in Indiana, by locality, 1998-2007



Data from 2003 to 2007 may not match data from this figure in Indiana Crash Facts 2006 (all data prior to 2006 from Fatality Analysis Reporting System)

1998-2002: Fatality Analysis Reporting System 2003-2007: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- ➤ October 2004 had the most fatal collisions (104) of any month in the past five years.
- ➤ The months of September and October had the greatest average number of fatal collisions in the past five years (82 and 80, respectively).
- ➤ December had the lowest average fatal collisions (52), and the highest average property damage collisions (16,436).

Table 15. Collisions in Indiana, by severity and month, 2003-2007

Year	January				February				March			
	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage
2003	20,540	57	3,272	17,211	18,496	65	2,995	15,436	14,530	44	2,717	11,769
2004	18,942	50	3,445	15,447	15,464	57	2,832	12,575	15,162	55	3,074	12,033
2005	20,056	60	3,434	16,562	15,364	62	2,986	12,316	16,240	59	3,157	13,024
2006	15,529	55	2,957	12,517	14,310	64	2,705	11,541	14,994	51	3,039	11,904
2007	18,025	59	3,126	14,840	19,743	52	2,962	16,729	15,576	67	2,834	12,675
Average	18,618	56	3,247	15,315	16,675	60	2,896	13,719	15,300	55	2,964	12,281

Year	April				May				June			
	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage
2003	15,048	45	2,993	12,010	17,143	67	3,482	13,594	17,245	69	3,572	13,604
2004	15,694	73	3,475	12,146	17,735	68	3,974	13,693	17,065	75	3,876	13,114
2005	15,497	85	3,370	12,042	16,767	66	3,615	13,086	16,993	71	3,778	13,144
2006	15,151	48	3,237	11,866	16,778	87	3,598	13,093	16,266	75	3,463	12,728
2007	14,779	62	2,906	11,811	15,819	86	3,236	12,497	15,104	70	3,148	11,886
Average	15,234	63	3,196	11,975	16,848	75	3,581	13,193	16,535	72	3,567	12,895

Year	July				August				Septemb	er		
	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage
2003	16,847	73	3,451	13,323	17,231	72	3,761	13,398	16,525	86	3,719	12,720
2004	16,710	89	3,875	12,746	16,781	84	4,028	12,669	16,182	75	3,723	12,384
2005	16,416	96	3,784	12,536	16,781	73	3,817	12,891	15,507	90	3,397	12,020
2006	15,193	66	3,454	11,673	15,763	79	3,465	12,219	15,672	80	3,397	12,195
2007	15,440	70	3,157	12,213	16,355	86	3,347	12,922	16,068	77	3,299	12,692
Average	16,121	79	3,544	12,498	16,582	79	3,684	12,820	15,991	82	3,507	12,402

Year	October				Novemb	er			Decembe	er		
	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage	Total	Fatal	Non-fatal injury	Property damage
2003	19,069	53	3,892	15,124	19,172	75	3,563	15,534	19,885	47	3,563	16,275
2004	18,917	104	3,874	14,939	19,765	72	3,542	16,151	20,265	55	3,585	16,625
2005	17,528	88	3,436	14,004	19,481	54	3,382	16,045	21,729	51	3,605	18,073
2006	18,486	78	3,607	14,801	18,084	72	3,079	14,933	16,495	62	2,848	13,585
2007	18,242	75	3,262	14,905	19,054	56	3,006	15,992	20,800	44	3,136	17,620
Average	18,448	80	3,614	14,755	19,111	66	3,314	15,731	19,835	52	3,347	16,436



- ➤ The month of April had the greatest average annual increase in fatalities over the past five years (20.4 percent).
- ➤ In 2007, the month of August had the greatest number of fatalities (98).

Table 16. Individual fatalities in collisions in Indiana, by month, 2003-2007

Month	2003	2004	2005	2006	2007	% 2007 total	Average annual change
January	64	54	68	55	62	6.9%	1.0%
February	73	62	66	70	59	6.6%	-4.6%
March	48	60	63	55	77	8.6%	14.3%
April	47	84	97	61	76	8.5%	20.4%
May	70	74	69	98	89	9.9%	8.0%
June	74	84	76	79	76	8.5%	1.0%
July	81	96	109	77	78	8.7%	1.0%
August	77	96	88	87	98	10.9%	7.0%
September	102	84	96	89	87	9.7%	-3.2%
October	59	111	92	85	84	9.4%	15.6%
November	84	82	58	73	60	6.7%	-5.9%
December	54	60	56	70	52	5.8%	0.9%
Total	833	947	938	899	898	100.0%	2.1%

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- ➤ Incidence rates of alcohol-related and aggressive driving collisions decreased over the past five years per all three categories: population, licensed drivers, and vehicle miles travelled.
- Speed-related collisions increased on average per population (1.1 percent) and per vehicle miles travelled (0.8 percent), and decreased per licensed drivers (-2.7 percent).

Table 17. Incidence rates of traffic collisions in Indiana, 2003-2007

	2003	2004	2005	2006	2007	Average annual change
Speed-related collisions	18,680	18,812	20,010	14,570	18,491	1.7%
Alcohol-related collisions	14,115	13,435	13,684	11,851	9,942	-8.1%
Aggressive driving collisions	5,121	4,111	3,582	3,240	3,045	-12.0%
Resident population (thousands, K)	6,185	6,219	6,257	6,303	6,345	0.6%
Speed-related collisions, per 100K pop.	302	302	319	231	291	1.1%
Alcohol-related collisions, per 100K pop.	228	216	219	188	157	-8.7%
Aggressive driving collisions, per 100K pop.	83	66	57	51	48	-12.6%
Licensed drivers (thousands, K)	4,536	4,521	4,965	5,324	5,470	4.9%
Speed-related collisions, per 100K lic.	412	416	403	274	338	-2.7%
Alcohol-related collisions, per 100K lic.	311	297	276	223	182	-12.3%
Aggressive driving collisions, per 100K lic.	113	91	72	61	56	-16.1%
Vehicle miles travelled (billions, B)	72.5	72.7	74.3	74.2	74.8	0.8%
Speed-related collisions, per BVMT	258	259	269	196	247	0.8%
Alcohol-related collisions, per BVMT	195	185	184	160	133	-8.9%
Aggressive driving collisions, per BVMT	71	57	48	44	41	-12.7%

Notes:

Resident population data and vehicle miles travelled (VMT) not available for 2007; values imputed from 10-year average annual change.

Sources:

Collisions - Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Resident population - Indiana Business Research Center in collaboration with the National Center for Health Statistics, as of August 16, 2006

Licensed drivers - 2003-2004. Federal Highway Administration, Highway Statistics

- 2005-2007. Indiana Bureau of Motor Vehicles, as of February 1, 2008

Vehicle miles travelled - 2003-2004. Federal Highway Administration, Highway Statistics

- 2005-2006. Indiana Department of Transportation, as of February 1, 2008

- ➤ Alcohol-related fatalities increased an average of 1.7 percent annually since 2003.
- ➤ In 2007, the likelihood that a traffic fatality resulted from an alcohol-related collision (28.2 percent) was 1.4 times greater than from a speed-related collision (20.8 percent) and 12 times greater than from an aggressive driving collision (2.3 percent).
- ➤ Known injuries decreased since 2003 on average for all three types of collisions (alcohol-related, speed-related, aggressive driving), except for fatal alcohol-related injuries.

Table 18. Individuals involved in collisions in Indiana, by injury status and collision circumstances, 2003-2007

Count of individual injuries	2003	2004	2005	2006	2007	Average annual change
Fatal	833	947	938	899	898	2.1%
Alcohol-related	241	284	293	273	253	1.7%
Speed-related	197	207	229	174	187	-0.2%
Aggressive driving	34	32	26	14	21	-5.2%
% alcohol-related	28.9%	30.0%	31.2%	30.4%	28.2%	-0.5%
% speed-related	23.6%	21.9%	24.4%	19.4%	20.8%	-2.3%
% aggressive driving	4.1%	3.4%	2.8%	1.6%	2.3%	-7.2%
ncapacitating	4,192	3,961	3,823	3,807	3,662	-3.3%
Alcohol-related	799	720	704	719	645	-5.1%
Speed-related	675	563	617	607	559	-4.1%
Aggressive driving	120	109	92	130	105	-0.7%
% alcohol-related	19.1%	18.2%	18.4%	18.9%	17.6%	-1.9%
% speed-related	16.1%	14.2%	16.1%	15.9%	15.3%	-0.9%
% aggressive driving	2.9%	2.8%	2.4%	3.4%	2.9%	2.4%
Non-incapacitating	54,243	57,691	55,427	51,389	48,806	-2.5%
Alcohol-related	5,754	5,873	5,923	5,150	4,341	-6.5%
Speed-related	6,786	7,108	6,871	5,733	5,839	-3.3%
Aggressive driving	1,842	1,713	1,485	1,403	1,259	-9.0%
% speed-related	10.6%	10.2%	10.7%	10.0%	8.9%	-4.1%
% alcohol-related	12.5%	12.3%	12.4%	11.2%	12.0%	-0.9%
% aggressive driving	3.4%	3.0%	2.7%	2.7%	2.6%	-6.5%
Jnknown injury status	294,915	287,619	284,170	259,665	276,720	-1.4%
Alcohol-related	16,320	15,216	15,429	12,370	9,667	-11.8%
Speed-related	22,490	22,602	23,876	16,923	21,828	1.5%
Aggressive driving	8,709	6,653	5,838	5,198	4,918	-13.1%
% speed-related	5.5%	5.3%	5.4%	4.8%	3.5%	-10.2%
% alcohol-related	7.6%	7.9%	8.4%	6.5%	7.9%	2.1%
% aggressive driving	3.0%	2.3%	2.1%	2.0%	1.8%	-11.7%

Non-incapacitating includes non-incapacitating and possible injury status codes.

Unknown injury status includes not reported, refused (treatment), unknown, invalid codes, and missing codes.

Source



- ➤ In 2007, the likelihood of a felony citation being issued in a fatal collision (31.7 percent) was 4.3 times greater than an injury collision (7.4 percent) and 6.5 times greater than a property damage collision (4.9 percent).
- ➤ Citations issued in fatal collisions increased 2.7 percent on average since 2003, whereas citations in injury collisions and property damage collisions decreased on average.
- ➤ Since 2004, approximately 0.4 percent of all citations issued in collisions were in fatal collisions.
- ➤ The incidence of felony citations decreased an average of 15.4 percent annually since 2003.

Table 19. Citations issued in collisions in Indiana, by collision severity, 2003-2007

Count of citations	2003	2004	2005	2006	2007	% 2007 total	Average annual change
In fatal collisions	115	132	138	125	126	100.0%	2.7%
Felonies	47	45	64	44	40	31.7%	-0.6%
Misdemeanors	20	23	27	24	30	23.8%	11.6%
Infractions	48	64	47	57	56	44.4%	6.6%
In non-fatal injury collisions	9,949	10,707	10,696	9,954	9,359	100.0%	-1.3%
Felonies	1,072	1,073	1,031	893	691	7.4%	-10.0%
Misdemeanors	3,600	3,871	3,836	3,499	3,439	36.7%	-1.0%
Infractions	5,277	5,763	5,829	5,562	5,229	55.9%	-0.1%
In property damage collisions	22,632	22,584	22,991	21,353	21,780	100.0%	-0.9%
Felonies	2,404	1,998	1,643	1,316	1,064	4.9%	-18.4%
Misdemeanors	8,913	8,867	8,928	8,571	8,695	39.9%	-0.6%
Infractions	11,315	11,719	12,420	11,466	12,021	55.2%	1.7%
In all collisions	32,696	33,423	33,825	31,432	31,265	100.0%	-1.0%
Felonies	3,523	3,116	2,738	2,253	1,795	5.7%	-15.4%
Misdemeanors	12,533	12,761	12,791	12,094	12,164	38.9%	-0.7%
Infractions	16,640	17,546	18,296	17,085	17,306	55.4%	1.1%

Notes:

Data include citations issued only to drivers, vehicle passengers and non-motorists.

Multiple citations may be issued to one person.

Non-fatal injury collisions includes collisions with no fatalties and at least one incapacitating, non-incapacitating, or possible injury.

Source

- ➤ On average since 2003, *Labor Day* has been the most deadly holiday (3.4 fatal collisions per 24 hour period).
- ➤ In 2007, New Year's was the most deadly holiday, with 12 fatalities in an 84 hour period (3.4 per 24 hours).
- ➤ Independence Day 2005 had the greatest number of fatalities in the five year period (17 fatal collisions and 19 fatalities).
- ➤ Labor Day 2005 had the greatest number of alcohol-related fatalities in the five year period (9 fatal collisions and 9 fatalities).

Table 20. Fatal collisions and fatalities on legal holidays, 2003-2007

	Effectiv	e holiday date range			Fatal	collisions			F	atalities	
Holiday	Begin	End	Length (hours)	Count	per 24 hour period	Alcohol- related	% alcohol- related	Count	per 24 hour period	Alcohol- related	% alcohol- related
New Year's											
2003 *	Tue, Dec 31 2002	Thu, Jan 2 2003	36	0		0		0		0	
2004	Wed, Dec 31 2003	Mon, Jan 5 2004	108	8	1.8	1	12.5%	9	2.0	1	11.1%
2005	Fri, Dec 31 2004	Mon, Jan 3 2005	60	1	0.4	1	100.0%	1	0.4	1	100.0%
2006	Fri, Dec 30 2005	Mon, Jan 2 2006	60	5	2.0	2	40.0%	5	2.0	2	40.0%
2007	Fri, Dec 29 2006	Tue, Jan 2 2007	84	12	3.4	4	33.3%	12	3.4	4	33.3%
Average		, , =			1.9						
Memorial Day	v										
2003	Fri, May 23 2003	Tue, May 27 2003	84	8	2.3	4	50.0%	8	2.3	4	50.0%
2004	Fri, May 28 2004	Tue, Jun 1 2004	84	9	2.6	5	55.6%	11	3.1	7	63.6%
2005	Fri, May 27 2005	Tue, May 31 2005	84	10	2.9	6	60.0%	10	2.9	6	60.0%
2006	Fri, May 26 2006	Tue, May 30 2006	84	11	3.1	4	36.4%	12	3.4	4	33.3%
2007	Fri, May 25 2007	Tue, May 29 2007	84	8	2.3	4	50.0%	9	2.6	5	55.6%
Average	111, 14ldy 20 2007	iac, way 2) 2007	01		2.6	1	30.070		2.0	O	00.070
Independence					2.0						
Day											
2003	Thu, Jul 3 2003	Mon, Jul 7 2003	84	10	2.9	3	30.0%	13	3.7	3	23.1%
2004	Fri, Jul 2 2004	Mon, Jul 5 2004	60	8	3.2	7	87.5%	9	3.6	7	77.8%
2005	Fri, Jul 1 2005	Tue, Jul 5 2005	84	17	4.9	5	29.4%	19	5.4	6	31.6%
2006	Fri, Jun 30 2006	Wed, Jul 5 2006	108	13	2.9	5	38.5%	15	3.3	5	33.3%
2007	Tue, Jul 3 2007	Thu, Jul 5 2007	36	2	1.3	1	50.0%	2	1.3	1	50.0%
Average					3.0						
Labor Day											
2003	Fri, Aug 29 2003	Tue, Sep 2 2003	84	16	4.6	4	25.0%	18	5.1	4	22.2%
2004	Fri, Sep 3 2004	Tue, Sep 7 2004	84	8	2.3	0	0.0%	8	2.3	0	0.0%
2005	Fri, Sep 2 2005	Tue, Sep 6 2005	84	15	4.3	9	60.0%	16	4.6	9	56.3%
2006	Fri, Sep 1 2006	Tue, Sep 5 2006	84	12	3.4	5	41.7%	13	3.7	5	38.5%
2007	Fri, Aug 31 2007	Tue, Sep 4 2007	84	9	2.6	2	22.2%	11	3.1	2	18.2%
Average	, 0	, 1			3.4						
Thanksgiving											
2003	Wed, Nov 26 2003	Mon, Dec 1 2003	108	9	2.0	5	55.6%	9	2.0	5	55.6%
2004	Wed, Nov 24 2004	Mon, Nov 29 2004	108	15	3.3	7	46.7%	17	3.8	7	41.2%
2005	Wed, Nov 23 2005	Mon, Nov 28 2005	108	9	2.0	5	55.6%	10	2.2	5	50.0%
2006	Wed, Nov 22 2006	Mon, Nov 27 2006	108	11	2.4	5	45.5%	11	2.4	5	45.5%
2007	Wed, Nov 21 2007	Mon, Nov 26 2007	108	8	1.8	2	25.0%	10	2.2	2	20.0%
Average	/ (ca, 1 to v 21 2007	141011, 1404 20 2007	100		2.3	_	20.070	10	2.2	-	20.070
Christmas					2.0						
2003	Wed, Dec 24 2003	Mon, Dec 29 2003	108	9	2.0	3	33.3%	12	2.7	5	41.7%
2003	Fri, Dec 24 2004	Mon, Dec 27 2004	60	1	0.4	0	0.0%	1	0.4	0	0.0%
2004	Fri, Dec 23 2005	Mon, Dec 26 2005	60	4	1.6	0	0.0%	5	2.0	0	0.0%
2005	Fri, Dec 23 2005	Tue, Dec 26 2006	84	6	1.6	5	83.3%	8	2.3	5	62.5%
2006	Fri, Dec 22 2006 Fri, Dec 21 2007	Wed, Dec 26 2007	108	7	1.7	2	28.6%	9	2.3	2	22.2%
	111, Dec 21 2007	vveu, Dec 20 2007	100	'	1.5	2	20.070	9	2.0	2	22.270
Average					1.5						

Notes

Holiday range begins at 6pm of the first day and ends at 6am of the last day in the effective date range.

Source

^{*}Data not available for New Year's holiday range for 2002.



- ➤ In general, Sundays had the lowest incidence of collisions.
- ➤ In general, winter months (November through February) had the greatest number of collisions.

high

➤ February 6, 2007 had the most collisions (1,642) of any day in the last five years.

Table 21. Collisions, by collision date, 2003-2007

		low	<	<		>	>	high											
Year	Month	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
2003	January	1			275	1,287	648	572	523	749	620	566	458	533	402	332	417	1,083	557
	February	1						679	436	567	718	515	1,039	796	488	272	989	975	606
	March	1		Fac	465	4.05	CEA	468	385	549	523	645	949	559	484	303	442	428	438
	April	1		516	465	465	651	376	290	630	420	449	489	627	491	357	544	583	493
	May	205	F00	F.10	505	678	641	530	427	667	505	573	546	724	631	389	576	543	576
	June	397	508	549	505	586	901	552	453	528	559	595	654	845	555	381	567	593	535
	July	1		568	573	702	441	478	423	582	641	575	545	716	507	413	544	592	609
	August	1	ECA		F0.4	E 457	746	539	405	611	540	494	564	650	498	409	573	545	539
	September	1	564	577	524	547	698	498	353 452	473	526	507	558 525	629	500 521	437	606	598 802	592
	October	1			613	603	956	589 601	516	567 664	609 642	576 607	680	700 722	618	410 472	543 625	762	617 787
	November December	1	585	478	496	761	1,105	526	385	519	621	676	488	772	1,108	774	626	597	614
2004	January	-	363	4/0	490	287	526	451	809	550	626	514	564	638	431	320	521	483	455
2004	February	430	732	815	618	758	725	698	371	613	591	541	494	592	495	358	424	497	542
	March	450	540	465	465	584	671	397	326	451	429	515	494	536	442	335	448	751	525
	April		340	403	403	566	608	470	326	482	429	476	488	632	483	320	471	496	548
	May	1				300	000	744	416	528	546	586	637	725	602	440	612	596	558
	June	1		666	552	559	667	552	414	593	596	524	725	693	625	429	544	558	670
	July	1		000	332	581	684	596	470	368	600	521	522	693	495	427	541	543	544
	August	406	562	544	584	550	640	501	403	519	508	462	524	633	548	383	567	583	516
	September	400	302	344	506	593	813	459	356	320	543	459	557	698	495	377	520	569	545
	October				300	393	750	580	430	603	617	653	600	750	544	450	480	695	864
	November	1	792	712	595	687	869	601	441	627	682	598	753	848	622	406	580	634	705
	December		172	/12	979	599	716	530	392	623	662	515	612	880	585	321	879	672	634
2005	January				717	3//	710	395	315	556	497	969	587	662	678	357	512	593	613
2003	February	1		498	495	580	697	603	327	513	437	1,072	753	605	479	386	501	528	538
	March	1		1.431	660	527	627	464	378	428	377	434	1,084	899	625	279	438	430	437
	April			1,101	000	027	582	484	384	512	525	444	509	612	492	352	488	540	497
	May	368	449	502	504	573	677	602	447	531	620	571	521	742	571	316	497	489	545
	June	000	11)	002	599	718	646	532	462	615	596	574	598	687	517	533	597	583	497
	July	1			0,,	710	661	473	351	435	558	558	524	612	472	385	577	625	573
	August	1	568	551	583	478	708	495	360	573	515	520	590	668	583	414	583	531	521
	September	1	500	001	000	509	652	480	341	316	553	485	497	597	522	324	508	494	506
	October	1				007	002	573	346	521	505	527	481	662	464	387	477	527	485
	November	1		662	690	694	731	582	463	646	628	615	673	723	656	450	728	946	603
	December	1		002	0,0	1,245	740	846	657	781	656	693	1,278	987	819	570	696	581	860
2006	January	318	400	434	415	413	530	402	302	417	553	479	632	762	433	320	420	1.005	1.214
	February				468	567	596	857	531	629	420	489	512	560	601	557	542	588	431
	March	1			413	411	549	439	463	558	547	528	615	544	515	402	474	425	449
	April	1						406	413	426	506	452	531	614	449	382	570	499	484
	May	1	486	535	467	562	635	523	388	482	509	710	673	897	618	456	452	457	566
	June	1				557	677	511	383	560	561	559	536	594	582	394	500	519	534
	July	1						502	395	485	424	542	544	542	413	325	450	697	519
	August	1		513	501	582	645	460	369	525	507	489	549	604	488	365	567	565	526
	September						614	447	324	292	509	522	545	575	460	314	582	673	586
	October	440	538	670	568	524	790	584	439	520	525	730	535	730	576	387	809	642	512
	November				547	598	757	563	425	609	673	603	645	745	598	403	519	607	765
	December						755	556	357	490	566	529	1,092	732	505	354	503	675	603
2007	January		354	615	690	562	732	411	369	571	485	429	474	738	524	436	676	821	518
	February					709	844	618	413	686	1,642	1,083	791	779	558	352	607	776	721
	March					481	1,092	976	423	428	443	500	515	609	402	343	444	493	514
	April	359	459	521	380	551	487	519	293	474	490	773	446	549	553	353	447	498	469
	May			538	514	545	639	494	346	524	490	557	555	665	568	365	548	620	476
	June						639	513	363	589	512	532	581	584	441	333	463	518	519
	July	373	522	565	434	490	573	448	346	497	532	511	516	632	441	391	488	596	550
	August				550	545	624	465	361	559	510	505	559	643	474	388	519	498	481
		1		1				475	409	371	595	525	531	757	583	367	488	525	577
	September																		
	October		564	520	635	579	665	500	439	485	573	551	501	664	477	355	568	603	602
			564	520	635	579 705	665 858	500 568	439 521	485 600	573 544	551 650	501 611	664 831	477 607	355 509	568 675	603 734	602 680

Notes:

First value for a row represents collisions for the first day of the month, with subsequent values representing collisions for subsequent days.

Source:

Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tota
896	867	685	591	529	550	626	723	609	491	932	767	617	781	560	1,294				20,54
513	785	844	544	543	519	622	673	570	1,008	521	795	641	586	541	711				18,49
467	634	452	381	430	413	432	506	470	371	331	431	440	492	425	568	403	267	444	14,53
597	568	486	380	486	469	495	469	759	475	383	537	557	541						15,04
532	640	613	381	489	601	531	594	611	540	362	361	572	600	487	725	498			17,14
585	710	584	427	600	564	567	691	702	550	405	597								17,24
577	638	540	440	587	552	524	573	630	440	378	573	496	490	500					16,84
542	685	507	381	608	513	572	582	664	498	378	511	594	618	569	922	478	496		17,23
574	623	568	422	589	575	584	602	828	527	387	552	507							16,5
589	724	582	430	604	500	586	601	738	786	455	543	841	640	625	742				19,0
623	759	770	522	640	901	657	688	719	535	432	586	571	681	431	983	539	439		19,1
1,041	1,501	702	407	659	710	868	247	504	398	276	490	486	465						19,8
504	558	958	409	516	484	508	497	759	471	599	1,082	927	777	884	1,075	759			18,9
461	608	547	312	413	395	496	504	599	473	362									15,4
650	570	503	279	474	413	433	537	702	444	337	456	535	501				l .		15,1
582	656	545	415	516	606	537	662	634	502	389	477	545	543	532	696				15,6
623	909	529	398	607	573	546	517	680	535	442	563	558	539	586	722	484	497	437	17,7
597	667	584	398	562	543	548	551	617	526	418	552	562	573						17,0
536	664	510	404	500	520	524	631	597	441	396	540	501	459	484	883	535			16,7
522	1,095	513	390	599	528	517	597	622	560	338	533	534							16,7
559	678	525	411	656	608	596	568	565	561	411	551	533	543	607					16,1
609	830	497	356	791	496	545	554	653	792	485	645	635	614	626	705	634	434		18,9
711	972	531	393	649	740	1,314	508	518	618	390	599	670							19,7
600	740	661	812	626	728	897	983	726	376	540	737	604	575	621	440				20,2
674	638	436	824	711	656	806	1,166	955	832	504	671	681	575	623	555	1042	436	537	20,0
531	604	430	788	370	409	419	570	584	443	289	915								15,3
494	526	412	327	456	470	418	539	610	373	279	487	449	444	438					16,2
561	679	516	367	507	551	529	490	795	477	362	525	616	487	472	677	465			15,4
659	605	530	409	575	535	593	558	742	587	414	380	655							16,7
543	623	491	396	542	559	586	603	718	503	368	543	597	591	576					16,9
559	672	542	404	536	561	536	602	651	473	380	506	539	539	557	651	505	399		16,4
553	686	494	420	539	539	549	536	579	527	401	517	749	451						16,7
574	564	523	391	570	553	485	523	640	515	583	480	496	524	559	743				15,5
551	683	628	470	633	609	610	798	795	553	468	557	536	590	602	725	653	475	637	17,5
766	713	626	386	564	676	1,615	375	474	513	549	673	478	583						19,4
1,010	1,108	620	479	670	618	674	729	782	457	465	362	520	465	458	512	391			21,7
603	562	508	286	445	502	453	521	533	430	397	420	420							15,5
544	544	689	315	413	475	471	476	506	380	298	399	452					l .		14,3
432	540	435	334	392	963	525	463	629	419	275	455	399	377	471	553				14,9
613	685	530	374	521	576	521	541	576	500	385	476	577	500	513	589	483	459		15,1
604	621	524	383	553	545	525	587	572	538	428	359	631	492						16,7
567	648	545	472	581	568	471	579	630	510	375	510	527	565	558	693				16,2
535	617	470	365	490	450	496	548	590	471	346	490	478	498	570	629	431	398	483	15,1
570	618	417	398	469	526	482	480	585	537	340	611	527	478	470					15,7
487	671	497	363	627	534	509	533	701	545	375	514	536	604	547	641	545			15,6
521	686	546	377	481	570	610	859	1,005	584	460	635	633							18,4
857	712	577	479	788	651	742	391	535	460	381	539	490	667	758					18,0
554	610	526	391	504	579	611	720	759	395	324	259	393	488	445	474	364	382		16,4
501	580	440	893	588	524	565	600	675	494	596	652	800	712						18,0
867	937	937	465	621	594	937	603	609	762	367	529	488	448						19,7
477	534	419	350	492	449	526	445	640	454	386	425	450	421	448	558	439			15,5
443	639	518	404	479	532	566	641	548	512	377	499								14,7
525	584	501	381	492	515	467	551	685	473	357	330	508	496	510					15,8
566	649	523	389	537	551	476	487	562	551	337	435	473	516	506	524	435			15,1
590	621	496	369	477	463	479	495	704	459	370	484	528							15,4
507	613	411	378	743	485	539	620	691	513	384	544	491	498	529	728				16,3
598	658	559	365	496	565	535	522	668	528	395	567	612	602	556	684	540	415		16,0
664	622	577	474	724	683	587	672	860	562	490	703	674	669	-000	001	010	110		18,2
597	783	649	419	603	648	1,035	434	582	475	506	850	669	524	534	653				19,0
493	651	1,302	588	691	772	645	655	821	588	495	398	238	542	578	792	343	275	807	20,8
				. U/I		UTU	000	021	500	エノン	070	200	J4Z	0/0	114				



- February 11, 2003 had the greatest number of fatal collisions (9) of any day in the past five years .
- Four days had eight (8) fatal collisions: July 3, 2005, October 15, 2005, May 5, 2006, August 2, 2006.

Table 22. Fatal collisions, by collision date, 2003-2007

		low	<	<		>	>	high											
Year	Month	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
2003	January				0	2	0	1	1	2	1	4	3	2	2	1	4	4	1
	February	1						1	3	4	5	0	1	4	1	0	6	9	0
	March	1						1	2	2	1	4	0	0	4	1	1	2	0
	April			2	2	1	1	0	2	0	2	1	0	2	2	0	3	1	2
	May					4	1	2 2	4	3	2	1	0	1	1	1	2	2 3	1
	June	4	0	4	1	6	2	2	1	2	0	2	3	3	3	2	4		2
	July			2	2	2	3	4	2	3	0	2	0	1	1	3	2	2	2
	August						3	2	2	0	1	0	3	3	0	5	4		4
	September	1	4	3	3	5	2	2	3	1	3	2	2	3	3	1	2	2	2
	October		1		2	1	4	1	4	4	0	2	5	2	2	1	0	1	1
	November			_				4	2	4	0	1	0	4	0	4	3	2	2
	December	_	1	0	0	2	3	5	1	2	0	2	1	1	1	2	2		
2004	January					2	4	1	1	2		0	1	3	1	1	3	1	3
	February	2	1	2	1	5	2	5	2	2	0	2	0	1	2	2	2	1	3
	March		0	2	2	4	4	4	1	1	1	1	2	1	1	0	3	1	2
	April					2	3	2	3	1	2	1	1	5	5	0	3	2	6
	May	1						2	1	3	2	3	2	3	2	6	1	5	2
	June		1	3	0	2	2	2	5	1	0	3	1	4	1	3	2	2	2
	July					1	3	5	3	3	1	2	3	1	2	5	7	4	0
	August	3	1	3	3	3	4	3	3	4	0	4	1	3	3	1	3	2	1
	September				0	4	6	3	1	0	3	2	4	4	3	3	4	2	0
	October	1					4	3	1	5	1	3	5	2	3	4	1	1	2
	November		2	3	2	2	3	1	1	2	2	2	3	1	2	3	1	3	2
	December	_	-		2	3	2	1	2	1	1	1	3	2	0	2	2	2	3
2005	January							0	1	0	2	1	1	3	3	0	1	0	4
	February	1		1	2	3	3	3	3	0	2	3	3	3	1	1	1	1	1
	March	1	1	4	1	2	2	2	0	1	1	3	1	3	2	1	1	1	3
	April						5	3	4	1	0	3	2	4	2	3	6	2	5
	May	1	2	1	3	1	1	6	2	1	4	5	3	1	3	3	0	0	2
	June			1	3	4	1	2	3	2	4	0	0	1	4	1	3	1	3
	July		_				7	3	8	3	2	0	1	4	6	6	2	3	3
	August	1	3	4	4	3	2	6	3	3	1	0	1	4	4	4	3	1	1
	September	1				3	3	5	3	4	2	4	1	2	6	5	1	3	6
	October	1						2	3	1	1	0	3	6	1	2	1	2	1
	November			1	1	0	3	2	0	3	2	1	1	2	3	0	4	3	1
	December		_		-	1	1	3	0	2	1	1	2	3	3	2	3	1	3
2006	January	3	2	1	1	1	0	0	3	2	3	1	3	0	2	3	1	7	4
	February	1			2 2	3	1	4	1	4	1	1	2	4	4	5	3	1	2
	March	1			2	0	2	1	7	0	0	0	2	3	3	2	0	2	3
	April							0	1	2	1	0	1	1	2	3	2	2	1
	May		2	0	1	2	8	2	2	3	1	3	1	2	1	4	2	2	4
	June					4	1	5	2	2	0	4	3	1	2	3	1	3	5
	July	1						3	5	2	1	1	2	3	4	1	2	1	3
	August	1		3	8	4	4	6	3	1	1	2	1	1	5	4	4	2	4
	September						3	4	3	4	2	1	3	1	1	2	2	4	1
	October	6	2	3	1	1	2	4	5	3	3	4	2 3	2	4	1	0	3	2
	November				0	2	1	5	0	2	1	4	3	3	1	2	1	3	2
	December	_			-	0	0	0	1	2	2	3	2	6	2	2	3	1	3
2007	January	1	3	1	4	0	3	2	1	1	0	2	2	3		3	0	4	
	February					1	3	4	3	0	6	0	1	3	0	5	2	2 2	0
	March					3	2	4	1	3	1	1	1	1	3	2	2		1
	April	3	2	3	0	4	2	2	4	0	2	1	1	3	2 3	1	1	1	2
	May			3	1	0	1	0	2	4	2	4	3	1	3	2	6	2	2
	June						2	1	0	3	4	4	5	1	5	2	1	1	2
	July	2	1	1	1	5	3	5	3	2	1	1	1	3	2 5	4	6	1	1
	August				2	6	2	4	1	3	1	2	2	4	5	5	1	3	3
	September							3	5	0	1	3	2	2	4	1	0	3	1
	October		2	3	0	4	3	4	4	3	2	1	3	3	4	2	2	1	3
	November					0	7	5	1	1	0	1	2	1	3	2	1	1	1
	December		1	1	1			1	3	0	2	6	1	2	1	2	2	2	0

Notes:

First value for a row represents fatal collisions for the first day of the month, with subsequent values representing fatal collisions for subsequent days

Source

Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tot
4	6	0	1	0	2	2	1	2	0	1	2	0	2	1	5				
1 0	2 2	3 2	2 3	2 2	2 2	1 1	1 1	1 3	7 0	1 2	2 2	2	2	0	2	3	0	0	
1	4	5	2	2	0	0	2	0	3	3	0	1	1		-	3	0		
1	4	3	4	0	1	2	3	1	1	2	4	3	3	0	5	5			
1	4	0	2	1	2	2	4	1	3	1	4								
1 2	2 2	6 6	2 2	2 4	4 2	3	2 2	5 2	4	1 2	3	3 2	1 2	3 2	4	6	3		
1	3	7	6	3	4	4	0	2	4	2	3	4	2	4	4	0	3		
2	1	3	2	0	0	4	1	3	2	1	0	0	1	1	2				
1	2	4	2	4	5	0	3	5	5	2	3	2	3	0	3	1	4		
1	0	1	0	1	1	3	3	2	2	0	2	4	1	1	2	0			
1 2	3	2 2	0	2	2 2	1	1 0	1	2 4	2	1	4	1	1	2	0			
3	3	0	2	1	0	1	2	2	3	1	4	2	1						
2	2	5	6	3	3	1	1	4	5	0	2	0	0	1	2				
3	4	0	0	2	3	1	1	2	1	5	3	0	1	0	2	6	0	2	
0	0	5	1	4	4	1	1	4	5	6	4	2	5	1	2	4			
3 2	3	3 5	6	2	3	5 4	2	1 5	5 5	0 2	2	3 5	3	1	3	4			
3	2	1	3	4	3	3	2	2	4	1	3	0	1	4					
2	5	7	2	5	4	3	4	5	7	3	2	3	2	4	5	2	4		
2	2	4	1	3	1	7	2	2	3	5	4	1							
1	1	5	3	3	3	3 4	2	3	0	0 2	1 0	3	3	3 5	1 2	3	2	2	
2	1	3	2	2	1	3	4	2	7	1	3	3	3	3	2	3	2	2	
2	6	4	2	2	3	1	2	0	3	1	0	2	2	1					
1	2	4	4	2	5	5	2	3	2	2	1	1	2	3	2	4			
1	3	1	2	3	0	3	3	2	3	4	2	0		0					
0	3 2	2 4	3	0 2	3 2	3 4	0	3	4 5	4 3	0 2	2 2	6 5	2 2	3	6	1		
1	2	3	3	3	3	1	0	2	4	2	2	0	0	4	3	0	1		
3	4	3	3	1	3	3	4	3	6	3	0	2	2	1	1				
2	2	8	6	5	4	3	5	3	2	3	3	2	3	1	1	3	6	3	
2 2	1 2	3 4	2	1 3	0	6	1	2 2	3	1 3	0	3	2	2	1	1			
1	0	1	1	1	3	3	2	1	2	1	1	1	1		1	1			
3	2	0	2	0	1	0	2	2	6	4	2	2							
1	0	2	2	0	2	1	0	3	2	4	1	2	0	2	2				
1	1	3	3	0	1	1	2	4	1	3	1	1	2	1	2	3	2		
2 3	3 2	4 5	7 2	5 3	1 0	4 2	1 1	4 3	2 3	4	3 2	3	4	6	4				
2	5	2	1	1	2	1	2	2	0	2	2	2	0	3	1	3	6	1	
1	4	2	4	1	1	0	1	3	1	2	2	2	1	1					
0	5	6	4	1	4	0	2	4	3	1	1	3	5	5	3	2			
1 3	1 2	3 5	4 2	0 3	1 3	0 3	1 1	3	3	4 3	7 3	2 3	2	5					
1	1	2	3	1	3	2	2	2	1	0	3	0	1	1	3	6	3		
0	0	3	0	1	2	1	5	3	2	4	4	2	3						
2	4	3	0	1	0	2	2	2	2	1	2	1	0						
2	0	2	1 5	2 2	3	3	1	1	4 2	4 5	2	2	5	3	3	2			
2 2	2 5	4	7	3	2	3	4	1 4	1	3	2	1	6	6					
0	3	5	3	1	1	0	3	1	6	1	2	4	3	1	1	4			
5	1	1	5	3	1	2	0	1	5	1	1	1							
3	1	3	1	4	0	1	3	3	5	4	4	4	1	2	3				
3	2	4	2	7	1	3	1	1	6	5	2	1	5	2	3	0	4		
2	2 5	1 2	1 3	1 2	3 2	2	4	4 3	3	3	2 3	3 2	0	2	1				
1	1	4	0	1	0	0	0	2	3	2	2	0	0	3	0	0	0	3	



- ➤ The total economic cost of traffic collisions decreased 1.8 percent on average per year.
- ➤ Total economic costs in 2007 were a 5-year low.
- ➤ In 2007, economic costs associated with fatalities represented 21.8 percent of the total economic cost of traffic collisions.

Table 23. Incidence and economic costs (million USD) associated with traffic injuries and property damage to vehicles, by cost category and injury type, 2003-2007

			Incapa- citating	Non-incapa citating	Possible	Not	Injured, severity	Unknown if	Property damage	TOTAL ECONOMIC
Year/c	cost category	Fatalities	injuries	injuries	injuries	injured	unknown	injured	only vehicles	COST
2003	Incidence (count)	833	4,192	47,092	7,151	270,348	2,896	21,671	322,054	
	Economic costs	\$920.8 m	\$418.9 m	\$1,341.2 m	\$132.8 m	\$875.1 m	\$115.3 m	\$162.2 m	\$937.2 m	\$4,903.5 m
	Medical	\$24.2 m	\$126.8 m	\$360.5 m	\$34.0 m	\$80.0 m	\$33.7 m	\$33.4 m	-	\$692.6 m
	Emergency services	\$0.9 m	\$1.1 m	\$7.3 m	\$0.9 m	\$10.0 m	\$0.5 m	\$1.1 m	\$13.1 m	\$35.1 m
	Market productivity	\$555.4 m	\$143.7 m	\$382.2 m	\$33.4 m	\$61.6 m	\$34.6 m	\$35.4 m	-	\$1,246.3 m
	Household productivity	\$178.7 m	\$43.6 m	\$115.0 m	\$10.2 m	\$28.6 m	\$10.2 m	\$11.5 m	\$17.0 m	\$414.8 m
	Insurance administration	\$35.9 m	\$37.0 m	\$117.9 m	\$11.1 m	\$46.8 m	\$10.4 m	\$12.1 m	\$43.4 m	\$314.3 m
	Workplace costs	\$8.5 m	\$8.2 m	\$32.6 m	\$3.3 m	\$17.5 m	\$2.6 m	\$3.5 m	\$19.2 m	\$95.4 m
	Legal costs	\$98.8 m	\$31.6 m	\$74.4 m	\$6.0 m	\$8.3 m	\$7.6 m	\$6.8 m	-	\$233.5 m
	Travel delay	\$8.5 m	\$4.6 m	\$42.0 m	\$6.3 m	\$234.2 m	\$2.6 m	\$18.9 m	\$289.6 m	\$606.8 m
	Property damage	\$9.9 m	\$22.4 m	\$209.2 m	\$27.7 m	\$388.1 m	\$13.1 m	\$39.5 m	\$554.9 m	\$1,264.7 m
2004	Incidence (count)	947	3,961	48,091	9,600	257,973	4,200	25,446	314,805	
	Economic costs	\$1,046.9 m	\$395.9 m	\$1,369.6 m	\$178.3 m	\$835.0 m	\$167.2 m	\$190.4 m	\$916.1 m	\$5,099.4 m
	Medical	\$27.5 m	\$119.8 m	\$368.1 m	\$45.6 m	\$76.3 m	\$48.9 m	\$39.2 m	-	\$725.6 m
	Emergency services	\$1.0 m	\$1.1 m	\$7.5 m	\$1.2 m	\$9.5 m	\$0.7 m	\$1.3 m	\$12.8 m	\$35.3 m
	Market productivity	\$631.4 m	\$135.8 m	\$390.3 m	\$44.9 m	\$58.8 m	\$50.2 m	\$41.6 m	-	\$1,352.9 m
	Household productivity	\$203.1 m	\$41.2 m	\$117.5 m	\$13.7 m	\$27.3 m	\$14.8 m	\$13.5 m	\$16.6 m	\$447.7 m
	Insurance administration	\$40.8 m	\$34.9 m	\$120.4 m	\$14.9 m	\$44.6 m	\$15.0 m	\$14.2 m	\$42.4 m	\$327.2 m
	Workplace costs	\$9.6 m	\$7.7 m	\$33.3 m	\$4.4 m	\$16.7 m	\$3.8 m	\$4.1 m	\$18.8 m	\$98.4 m
	Legal costs	\$112.3 m	\$29.9 m	\$76.0 m	\$8.0 m	\$7.9 m	\$11.0 m	\$8.0 m	-	\$253.1 m
	Travel delay	\$9.7 m	\$4.3 m	\$42.9 m	\$8.4 m	\$223.5 m	\$3.8 m	\$22.2 m	\$283.1 m	\$598.0 m
	Property damage	\$11.3 m	\$21.1 m	\$213.7 m	\$37.2 m	\$370.3 m	\$19.0 m	\$46.3 m	\$542.4 m	\$1,261.3 m
2005	Incidence (count)	938	3,823	44,774	10,653	249,576	4,662	29,932	313,173	
	Economic costs	\$1,036.9 m	\$382.1 m	\$1,275.2 m	\$197.8 m	\$807.8 m	\$185.6 m	\$224.0 m	\$911.3 m	\$5,020.8 m
	Medical	\$27.3 m	\$115.6 m	\$342.7 m	\$50.6 m	\$73.9 m	\$54.3 m	\$46.1 m	-	\$710.6 m
	Emergency services	\$1.0 m	\$1.0 m	\$7.0 m	\$1.3 m	\$9.2 m	\$0.8 m	\$1.6 m	\$12.8 m	\$34.8 m
	Market productivity	\$625.4 m	\$131.1 m	\$363.4 m	\$49.8 m	\$56.9 m	\$55.7 m	\$48.9 m	-	\$1,331.1 m
	Household productivity	\$201.2 m	\$39.8 m	\$109.4 m	\$15.2 m	\$26.4 m	\$16.5 m	\$15.9 m	\$16.5 m	\$440.8 m
	Insurance administration	\$40.4 m	\$33.7 m	\$112.1 m	\$16.5 m	\$43.2 m	\$16.7 m	\$16.7 m	\$42.2 m	\$321.4 m
	Workplace costs	\$9.6 m	\$7.4 m	\$31.0 m	\$4.8 m	\$16.2 m	\$4.2 m	\$4.8 m	\$18.7 m	\$96.7 m
	Legal costs	\$111.2 m	\$28.8 m	\$70.8 m	\$8.9 m	\$7.6 m	\$12.2 m	\$9.4 m	-	\$249.0 m
	Travel delay	\$9.6 m	\$4.2 m	\$39.9 m	\$9.4 m	\$216.2 m	\$4.2 m	\$26.1 m	\$281.6 m	\$591.3 m
	Property damage	\$11.2 m	\$20.4 m	\$198.9 m	\$41.3 m	\$358.3 m	\$21.0 m	\$54.5 m	\$539.6 m	\$1,245.2 m
2006	Incidence (count)	899	3,807	41,926	9,463	237,849	2,759	19,057	289,687	
	Economic costs	\$993.8 m	\$380.5 m	\$1,194.1 m	\$175.7 m	\$769.9 m	\$109.9 m	\$142.6 m	\$843.0 m	\$4,609.4 m
	Medical	\$26.1 m	\$115.1 m	\$320.9 m	\$45.0 m	\$70.4 m	\$32.1 m	\$29.4 m	-	\$639.1 m
	Emergency services	\$1.0 m	\$1.0 m	\$6.5 m	\$1.2 m	\$8.8 m	\$0.5 m	\$1.0 m	\$11.8 m	\$31.8 m
	Market productivity	\$599.4 m	\$130.5 m	\$340.3 m	\$44.2 m	\$54.2 m	\$33.0 m	\$31.1 m	-	\$1,232.7 m
	Household productivity	\$192.8 m	\$39.6 m	\$102.4 m	\$13.5 m	\$25.2 m	\$9.7 m	\$10.1 m	\$15.2 m	\$408.6 m
	Insurance administration	\$38.7 m	\$33.6 m	\$104.9 m	\$14.6 m	\$41.1 m	\$9.9 m	\$10.6 m	\$39.0 m	\$292.5 m
	Workplace costs	\$9.2 m	\$7.4 m	\$29.0 m	\$4.3 m	\$15.4 m	\$2.5 m	\$3.1 m	\$17.3 m	\$88.2 m
	Legal costs	\$106.6 m	\$28.7 m	\$66.3 m	\$7.9 m	\$7.3 m	\$7.2 m	\$6.0 m	-	\$230.0 m
	Travel delay	\$9.2 m	\$4.2 m	\$37.4 m	\$8.3 m	\$206.0 m	\$2.5 m	\$16.6 m	\$260.5 m	\$544.8 m
	Property damage	\$10.7 m	\$20.3 m	\$186.3 m	\$36.7 m	\$341.4 m	\$12.5 m	\$34.7 m	\$499.1 m	\$1,141.7 m
2007	Incidence (count)	898	3,662	40,799	8,007	268,179	1,443	7,098	314,505	
	Economic costs	\$992.7 m	\$366.0 m	\$1,162.0 m	\$131.8 m	\$868.1 m	\$57.5 m	\$53.1 m	\$915.2 m	\$4,546.3 m
	Medical	\$26.1 m	\$110.8 m	\$312.3 m	\$33.7 m	\$79.4 m	\$16.8 m	\$10.9 m	-	\$590.0 m
	Emergency services	\$1.0 m	\$1.0 m	\$6.4 m	\$0.9 m	\$9.9 m	\$0.3 m	\$0.4 m	\$12.8 m	\$32.6 m
	Market productivity	\$598.7 m	\$125.5 m	\$331.1 m	\$33.2 m	\$61.1 m	\$17.3 m	\$11.6 m	-	\$1,178.5 m
	Household productivity	\$192.6 m	\$38.1 m	\$99.7 m	\$10.1 m	\$28.4 m	\$5.1 m	\$3.8 m	\$16.6 m	\$394.3 m
	Insurance administration	\$38.7 m	\$32.3 m	\$102.1 m	\$11.0 m	\$46.4 m	\$5.2 m	\$4.0 m	\$42.4 m	\$281.9 m
	Workplace costs	\$9.1 m	\$7.1 m	\$28.3 m	\$3.2 m	\$17.4 m	\$1.3 m	\$1.1 m	\$18.8 m	\$86.4 m
	Legal costs	\$106.5 m	\$27.6 m	\$64.5 m	\$5.9 m	\$8.2 m	\$3.8 m	\$2.2 m	-	\$218.7 m
	Travel delay	\$9.2 m	\$4.0 m	\$36.4 m	\$6.2 m	\$232.3 m	\$1.3 m	\$6.2 m	\$282.8 m	\$578.5 m
	Property damage									

Amounts are in 2007 dollars.

See Appendix A for discussion of methods

Not injured are individuals with a missing injury status code.

Injured, severity unknown are indiviuals with an injury status of Unknown.

Unknown are individuals with an injury status of *Not reported*, refused, and invalid codes.

Property damage only vehicles are those with no occupants with an injury status of fatal, incapacitating, non-incapacitating, or possible.

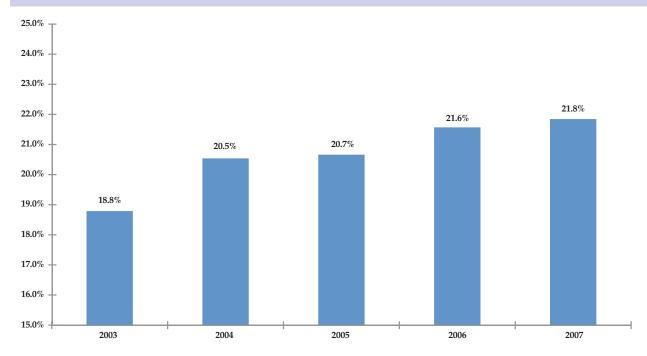
Sources:

Incidence: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Unit costs: The economic impact of motor vehicle crashes, 2000. National Highway Traffic Safety Administration, DOT HS 809 446. Washington, DC.

➤ Costs associated with fatalities, as a proportion of total economic costs, rose 3.9 percent on average per year.

Figure 8. Economic costs associated with traffic fatalities, as a proportion of total economic costs of traffic collisions, 2003-2007

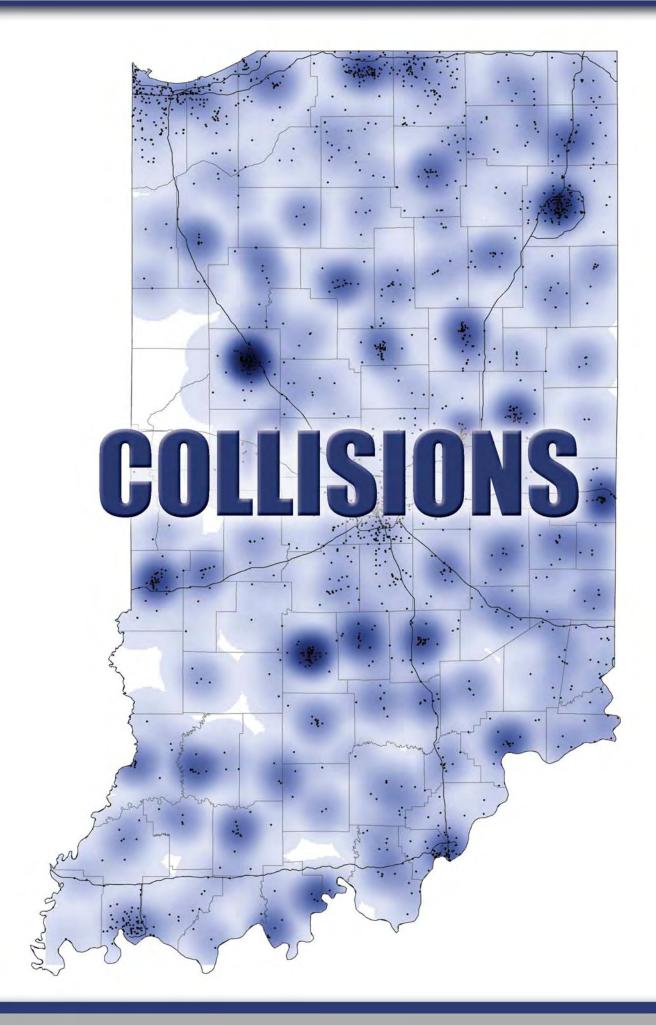


Amounts are in 2007 dollars.

See Appendix X for discussion of methods

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

The economic impact of motor vehicle crashes, 2000. National Highway Traffic Safety Administration, DOT HS 809 446. Washington, DC.





COLLISIONS, 2007

This section provides an analysis of Indiana crashes in 2007, based on various parameters that describe the conditions and circumstances of those collisions as marked by the reporting officer. Collision data are categorized by the most severe injury involved (i.e., 'fatal' collisions involve at least one fatality; 'incapacitating' collisions involve no fatalities but at least one incapacitating injury; etc.). Included are analyses by contributing circumstances, ambient conditions, road characteristics, time, date, location, road type, and manner of collision.

HIGHLIGHTS:

In 2007, there were 205,005 collisions in Indiana, a 6.4 percent increase from 2006 (192,721).

Fatal collisions (804) comprised 0.4 percent of all collisions, a 7.5 percent proportional decrease in the share of fatal collisions from the previous year. In general, fatalities and non-fatal injuries were most likely in collisions involving motorcycles, mopeds, and non-motorists.

Among all collisions, *failure to yield right of way* was the most common primary factor. Over 93 percent of all fatal collisions were listed as having some driver action as the primary factor.

Head on collisions, collisions where the vehicle *ran off the road,* and *right angle* collisions accounted for nearly 80 percent of all fatalities (714 of 898).

The highest proportion of aggressive driving collisions occurred during rush hour times (3pm to 5:59pm). Additionally, fatal collisions that occurred in urban localities were three times more likely to have involved aggressive driving than fatal collisions in rural localities.

Proportional to all road classes, fatal collisions were most common on county roads and state roads.

The likelihood of a fatal collision was highest on Thursdays between 4am and 4:59am (2.7 percent, or 9 of 335).

In 2007, the total economic costs of motor vehicle crashes in Indiana exceeded \$4.5 billion. Economic costs associated with fatalities represented 21.8 percent of the total economic cost of traffic collisions. Fatalities account for over 50 percent of market productivity losses (\$598.7m of \$1,182.8m).

Market productivity losses accounted for 60 percent of all losses associated with traffic fatalities, compared to 26 percent for total economic costs. Legal costs account for 11 percent of all losses associated with traffic fatalities, compared to five percent for total economic costs.

- Fatal collisions increased 1.9 percent on average since 2003.
- ➤ Fatal collisions decreased 1.5 percent from 2006 to 2007.
- ➤ Fatal collisions, per 1,000 total, decreased 7.5 percent from 2006 to 2007 (4.2 to 3.9).

Table 24. Indiana traffic collisions, 2003-2007

		Col	lisions			Injuries in collisions					
Year	Total	Fatal	Non-fatal injury	Property damage only	Fatal collisions, per 1,000 total	Fatal	Incapacitating	Non- incapacitating			
2003	211,731	753	40,980	169,998	3.6	833	4,192	54,243			
2004	208,682	857	43,303	164,522	4.1	947	3,961	57,691			
2005	208,359	855	41,761	165,743	4.1	938	3,823	55,427			
2006	192,721	817	38,849	153,055	4.2	899	3,807	51,389			
2007	205,005	804	37,419	166,782	3.9	898	3,662	48,806			
Average annual change	-0.7%	1.9%	-2.1%	-0.3%	2.8%	2.1%	-3.3%	-2.5%			

Notes:

Non-fatal injury collisions includes collisions with no fatalities and at least one incapacitating, non-incapacitating, or possible injury.

Source

- > Fatal collisions and incapacitating injury collisions were more likely to have occurred in rural localities, regardless of month.
- > Fatal collisions in June and August were nearly seven times more likely to have occurred in rural localities.

Table 25. Collisions, by locality, severity, and month
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Collision severity	Month	Urban locality	Rural locality	Relative risk (Rural-to-Urban)
Fatal	(Total)	238	566	4.4
	January	22	37	2.7
	February	16	36	3.6
	March	27	40	2.9
	April	16	46	5.9
	May	26	60	4.7
	June	15	55	7.0
	July	21	49	4.9
	August	22	64	7.0
	September	25	52	4.3
	October	25	50	3.7
	November	13	43	5.1
	December	10	34	5.1
	(Total)	1,592	1,483	1.7
ncapacitating	January	1,392	119	1.7
	February	84	115	2.2
	March	136	91	1.3
		133	104	1.6
	April	159	142	
	May		144	1.8
	June	145		1.9
	July	145	132	1.9
	August	156	120	1.8
	September	159	149	2.0
	October	131	133	1.9
	November	118	109	1.4
	December	104	125	1.8
Ion-incapacitating	(Total)	22,148	12,157	1.0
	January	1,774	1,108	1.0
	February	1,627	1,130	1.1
	March	1,755	846	0.9
	April	1,745	918	1.1
	May	1,946	985	1.0
	June	1,835	1,022	1.1
	July	1,831	1,047	1.2
	August	2,062	1,004	1.2
	September	1,956	1,034	1.1
	October	2,011	986	0.9
	November	1,866	911	0.8
	December	1,740	1,166	1.0
roperty damage only	(Total)	108,488	57,925	1.0
Toperty damage only	January	9,089	5,716	1.0
	February	10,350	6,338	1.0
	March	8,385	4,256	1.0
	April	8,021	3,745	1.0
	May	8,479	3,982	1.0
	June	7,911	3,948	1.0
	July	8,416	3,781	0.9
		9,275		I .
	August		3,623	0.9
	September	8,696	3,965	1.0
	October	9,659	5,225	1.0
	November	9,585	6,381	1.0
	December	10,622	6,965	1.0

Notes: *Relative risk* is defined as the proportion of rural severity-type collisions occurring in a month to urban severity-type collisions. Includes only collisions reported on the *Crash report* as having occurred inside or outside the incorporated limits of a city.



- ➤ Among all collisions, *Failure to yield right of way* was the most common primary factor.
- ➤ The highest probability of a fatal collision involved *Wrong way on one way* as the primary factor (37.0 per 1,000 total as primary factor).
- ➤ Among fatal collisions, the most likely primary factor was *Ran off road right* (21 percent, or 169 of 804 fatal collisions), resulting in 181 fatal injuries.
- ➤ Over 93 percent of all fatal collisions were listed as having driver action as the primary factor (750 of 804).

Table 26. Collisions, by primary factor, 2007

			Col	lisions, by sev	verity			Inj	uries in colli	isions
Primary factor (PF)	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All collisions	205,005	100.0%	804	3.9	3,076	34,343	166,782	898	3,662	48,806
Driver-related	167,639	81.8%	750	4.5	2,835	31,184	132,870	836	3,389	44,752
Failure to yield right of way	32,160	15.7%	98	3.0	577	7,612	23,873	106	698	11,900
Following too closely	26,252	12.8%	9	< 1	164	4,634	21,445	9	188	6,327
Other (explained in narrative)	21,817	10.6%	71	3.3	289	3,118	18,339	75	318	4,160
Unsafe backing	16,036	7.8%	2	< 1	18	304	15,712	2	18	354
Ran off road right	11,049	5.4%	169	15.3	367	2,634	7,879	181	434	3,254
Speed too fast for	0.4-						=		440	4.000
weather conditions	8,647	4.2%	22	2.5	96	1,416	7,113	25	110	1,928
Disregard signal/reg sign	7,533	3.7%	47	6.2	194	2,526	4,766	58	259	4,151
Driver distracted (explained	7 410	0.69		1.1		1 4774	E 052	10	00	0.101
in narrative)	7,412	3.6%	8	1.1	77	1,474	5,853	16	92	2,121
Improper lane usage	6,467	3.2%	5	0.8	44	533	5,885	5	56	731
Improper turning	5,998	2.9%	1	< 1	29	535	5,433	1	32	761
Unsafe speed	5,254	2.6%	74	14.1	197	1,372	3,611	83	242	2,107
Alcoholic beverages	3,887	1.9%	43	11.1	190	1,083	2,571	49	214	1,461
Overcorrecting/oversteering	3,391	1.7%	35	10.3	107	743	2,506	36	122	1,014
Left of center	3,055 2,237	1.5%	88	28.8 4.9	151 29	697 232	2,119	107	234 39	1,377
Improper passing		1.1%	11	4.9	71		1,965			333 854
Driver asleep or fatigued Pedestrian action	2,164 1,069	1.1% 0.5%	10	30.9	104	648 758	1,435 174	10	80 107	792
Driver illness	1,069	0.5%	7	6.9	79	758 434	174 494	7	81	792 548
	624	0.3%	0	0.0	8	130	494	0	9	169
Cell phone usage Not a factor - driver	427	0.2%	0	0.0	3	21	403	0	3	23
Ran off road left	291	0.2%	7	24.1	10	66	208	7	15	81
	216	0.1%	8	37.0	6	51	151	10	8	79
Wrong way on one way Passenger distraction	191	0.1%	1	5.2	10	48	131	1	15	79
Prescription drugs	150	0.1%	0	0.0	3	38	109	0	3	46
Illegal drugs	137	0.1%	0	0.0	9	53	75	0	9	70
Jackknifing	68	< 0.1%	1	14.7	1	4	62	2	1	6
Other telematics in use	63	< 0.1%	0	0.0	i	10	52	0	1	13
Violation of license restriction	30	< 0.1%	0	0.0	1	10	19	0	1	13
Environment-related	29,775	14.5%	38	1.3	169	2,292	27,276	46	186	2,855
Animal on roadway	19,807	9.7%	12	0.6	59	858	18,878	12	66	1,019
Roadway surface condition	6,932	3.4%	18	2.6	74	997	5,843	26	83	1,289
Other (explained in narrative)	1,419	0.7%	6	4.2	16	192	1,205	6	16	229
View obstructed	712	0.3%	0	0.0	6	99	607	0	6	121
Glare	455	0.2%	1	2.2	10	90	354	1	11	118
Obstruction not marked	118	0.1%	0	0.0	0	11	107	0	0	15
Holes/ruts in surface	82	< 0.1%	1	12.2	0	18	63	1	0	24
Severe crosswinds	75	< 0.1%	0	0.0	2	10	63	0	2	12
Road under construction	64	< 0.1%	0	0.0	2	4	58	0	2	6
Traffic control problem	53	< 0.1%	0	0.0	0	10	43	0	0	16
Not a factor - environment	21	< 0.1%	0	0.0	0	3	18	0	0	6
Utility work	21	< 0.1%	0	0.0	0	0	21	0	0	0
Lane marking obscured	10	< 0.1%	0	0.0	0	0	10	0	0	0
Shoulder defective	6	< 0.1%	0	0.0	0	0	6	0	0	0
Vehicle-related	5,153	2.5%	15	2.9	57	669	4,412	15	68	939
Other (explained in narrative)	1,702	0.8%	8	4.7	20	141	1,533	8	26	189
Brake failure or defective	1,355	0.7%	3	2.2	14	256	1,082	3	17	380
Tire failure or defective	696	0.3%	2	2.9	8	101	585	2	10	153
Insecure/leaky load	367	0.2%	1	2.7	1	14	351	1	1	15
Steering failure	235	0.1%	0	0.0	3	48	184	0	3	54
Engine failure or defective	193	0.1%	0	0.0	4	28	161	0	4	39
Oversize/overweight load	158	0.1%	0	0.0	1	5	152	0	1	7
Accelerator failure or defective	144	0.1%	0	0.0	2	39	103	0	2	53
Not a factor - vehicle	104	0.1%	0	0.0	0	4	100	0	0	4
Tow hitch failure	83	< 0.1%	1	12.0	0	3	79	1	0	6
Headlight defective or not on	67	< 0.1%	0	0.0	3	21	43	0	3	29
Other lights defective	38	< 0.1%	0	0.0	1	7	30	0	1	8
Window/windshield defective	11	< 0.1%	0	0.0	0	2	9	0	0	2
Invalid/Not reported	2,438	1.2%	1	<1	15	198	2,224	1	19	260

- ➤ The largest proportion of collisions occurred in *clear* weather conditions (60.2 percent) and in *daylight* (64.5 percent).
- ➤ Among all weather conditions, a collision that occurred in *Fog/smoke/smog* was most likely to have involved fatalities (8.1 per 1,000 total).
- Among all light conditions, a collision that occurred in the dark (not lighted) was most likely to have involved fatalities (7.8 per 1,000 total).

Table 27. Collisions, by weather condition and light condition, 2007

			Col	lisions, by sev	erity			Injı	ıries in colli	sions
	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All collisions	205,005	100.0%	804	3.9	3,076	34,343	166,782	898	3,662	48,806
Weather conditions		(100%)								
Clear	123,511	60.2%	525	4.3	2,024	21,386	99,576	586	2,413	30,516
Cloudy	45,846	22.4%	179	3.9	651	7,512	37,504	198	771	10,659
Rain	18,782	9.2%	53	2.8	236	3,251	15,242	59	281	4,632
Snow	9,468	4.6%	23	2.4	75	1,180	8,190	28	88	1,607
Sleet/hail/freezing rain	2,607	1.3%	4	1.5	32	388	2,183	7	34	542
Blowing sand/soil/snow	2,369	1.2%	8	3.4	18	320	2,023	8	24	436
Fog/smoke/smog	1,362	0.7%	11	8.1	34	192	1,125	11	44	267
Invalid/not reported	766	0.4%	1	1.3	3	70	692	1	4	95
Severe cross wind	294	0.1%	0	0.0	3	44	247	0	3	52
Light conditions		(100%)								
Daylight	132,133	64.5%	423	3.2	1,915	23,529	106,266	470	2,271	33,572
Dark (not lighted)	32,620	15.9%	254	7.8	626	4,585	27,155	281	775	6,400
Dark (lighted)	28,775	14.0%	77	2.7	404	4,642	23,652	87	458	6,577
Dawn/dusk	9,995	4.9%	46	4.6	127	1,543	8,279	56	154	2,198
Unknown	1,175	0.6%	4	3.4	2	16	1,153	4	2	16
Invalid/not reported	307	0.1%	0	0.0	2	28	277	0	2	43

 ${\bf Source:} \\ {\bf Indiana \, State \, Police \, Automated \, Reporting \, Information \, Exchange \, System, as of \, May \, 4,2008} \\$



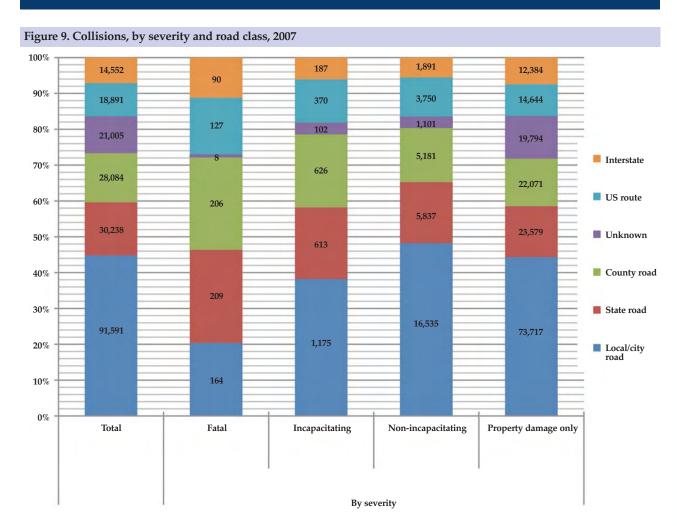
- ➤ The largest proportion of collisions occurred on *local/city* roads (44.7 percent), at locations with *no junction involved* (66.1 percent), and on *dry* road conditions (72 percent).
- ➤ Nearly 26 percent of all fatalities occurred at road junctions.
- Fatal collisions were most likely to have occurred on *county* roads (7.3 per 1,000 total county road collisions).

Table 28. Collisions, by road characteristics, 2007

			Coll	lisions, by sev	verity			Injı	ıries in colli	sions
	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All collisions	205,005	100.0%	804	3.9	3,076	34,343	166,782	898	3,662	48,806
Road class		(100%)								
Local/city road	91,591	44.7%	164	1.8	1.175	16,535	73,717	183	1,342	22,774
State road	30,238	14.7%	209	6.9	613	5,837	23,579	239	773	8,852
County road	28,084	13.7%	206	7.3	626	5,181	22,071	217	753	7,260
Unknown	21,005	10.2%	8	< 1	102	1,101	19,794	8	106	1,314
US route	18,891	9.2%	127	6.7	370	3,750	14,644	142	459	5,820
Interstate	14,552	7.1%	90	6.2	187	1,891	12,384	109	226	2,712
Invalid/not reported	644	0.3%	0	0.0	3	48	593	0	3	74
Road junction type		(100%)								
No junction involved	135,576	66.1%	593	4.4	2,041	19,608	113,334	665	2,411	27,081
Four-way intersection	41,468	20.2%	121	2.9	645	9,800	30,902	138	792	14,869
T-intersection	21,200	10.3%	66	3.1	306	3,906	16,922	68	364	5,457
Ramp	3,082	1.5%	14	4.5	40	452	2,576	14	42	585
Invalid/not reported	1,280	0.6%	2	1.6	14	151	1,113	2	15	191
Y-intersection	842	0.4%	3	3.6	12	149	678	5	17	201
Interchange	719	0.4%	3	4.2	10	142	564	3	13	223
Five point or more	515	0.3%	1	1.9	6	109	399	1	6	167
Traffic circle/roundabout	323	0.2%	1	3.1	2	26	294	2	2	32
Road surface conditions		(100%)								
Dry	147,520	72.0%	656	4.4	2,437	25,567	118,860	727	2,906	36,699
Wet	31,412	15.3%	92	2.9	390	5,302	25,628	106	469	7,542
Snow/slush	13,358	6.5%	24	1.8	99	1,574	11,661	29	120	2,075
Ice	9,676	4.7%	25	2.6	98	1,401	8,152	28	113	1,832
Invalid/not reported	1,165	0.6%	2	1.7	11	142	1,010	2	11	188
Loose material on road	994	0.5%	2	2.0	26	217	749	2	27	286
Water (standing or moving)	699	0.3%	3	4.3	11	120	565	4	12	161
Muddy	181	0.1%	0	0.0	4	20	157	0	4	23

Source:

- ➤ The majority of fatal collisions occurred on state and county roads, followed by local/city roads and U.S. highways.
- ➤ About 45 percent of all collisions occurred on local/city roads.
- ➤ Where road class is known, interstates generally accounted for the smallest counts of collisons, regardless of severity.



Source:



- ➤ Among all manners of collision, *Ran off road* was most likely to have been a fatal collision (282 of 26,586 or 10.6 per 1,000 total).
- ➤ Head on collisions, collisions where the vehicle ran off the road, and Right angle collisions accounted for nearly 80 percent of all fatalities (714 of 898).
- ➤ Head on collisions accounted for only 10.4 percent of all collisions, but 22.3 percent of all fatal collisions.

Table 29. Collisions, by manner of collision, 2007

			Coll	isions, by sev	erity			Inju	ries in colli	sions
Manner of collision	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All collisions	205,005	100.0%	804	3.9	3,076	34,343	166,782	898	3,662	48,806
Rear end	45,603	22.2%	60	1.3	420	8,696	36,427	70	486	12,430
Right angle	36,316	17.7%	171	4.7	667	8,208	27,270	201	830	12,821
Ran off road	26,586	13.0%	282	10.6	812	6,400	19,092	309	934	8,092
Head on	21,243	10.4%	180	8.5	476	3,473	17,114	204	630	5,113
Backing	18,966	9.3%	1	< 1	36	415	18,514	1	36	478
Same direction sideswipe	18,776	9.2%	18	1.0	78	1,129	17,551	19	84	1,461
Other (explained in narrative)	11,346	5.5%	49	4.3	203	1,613	9,481	49	224	2,084
Left turn	10,334	5.0%	9	0.9	161	2,219	7,945	9	190	3,359
Opposite direction sideswipe	5,337	2.6%	19	3.6	59	581	4,678	21	73	852
Non-collision	3,084	1.5%	12	3.9	111	725	2,236	12	119	896
Left/right turn	2,971	1.4%	2	0.7	30	508	2,431	2	32	734
Right turn	2,898	1.4%	1	< 1	16	269	2,612	1	17	347
Invalid/not reported	1,036	0.5%	0	0.0	4	55	977	0	4	69
Rear to rear	509	0.2%	0	0.0	3	52	454	0	3	70

Source

 $Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System,\ as\ of\ May\ 4,2008$

- ➤ Motorcycles had the highest probability of being involved in a fatal collision (3.7 percent, or 110 of 2,948).
- ➤ Large trucks were involved in only 6.5 percent of all collisions, but 16.5 percent of fatal collisions.

Table 30. Collisions, by vehicle type and person type involved, 2007

	Total	% all			Incapaci-		Non- incapaci-		Property damage	-
	collisions	collisions	Fatal	% all	tating	% all	tating	% all	only	% all
All collisions	205,005	100.0%	804	100.0%	3,076	100.0%	34,343	100.0%	166,782	100.0%
Collisions involving										
Passenger cars	146,216	71.3%	431	53.6%	1,849	60.1%	25,030	72.9%	118,906	71.3%
Light trucks	105,513	51.5%	409	50.9%	1,422	46.2%	17,477	50.9%	86,205	51.7%
Commercial vehicles	15,071	7.4%	141	17.5%	197	6.4%	1,067	3.1%	13,666	8.2%
Large trucks	13,399	6.5%	133	16.5%	184	6.0%	897	2.6%	12,185	7.3%
Motorcycles	2,948	1.4%	110	13.7%	445	14.5%	1,587	4.6%	806	0.5%
Buses	1,697	0.8%	9	1.1%	15	0.5%	179	0.5%	1,494	0.9%
Mopeds	614	0.3%	7	0.9%	80	2.6%	386	1.1%	141	0.1%
Pedestrians	1,745	0.9%	61	7.6%	215	7.0%	1,297	3.8%	172	0.1%
Pedalcyclists	1,125	0.5%	14	1.7%	82	2.7%	855	2.5%	174	0.1%

Notes

Values in % all collisions will not sum to 100 since multiple vehicle types can be and are involved in a collision. Commercial vehicles may overlap with over vehicle types, most likely light trucks and large trucks categories.

Source:

- ➤ Collisions occurring on road segments with *lane controls* accounted for one fourth of all collisions and one third of fatal collisions.
- ➤ Among all traffic signal types, collisions occurring at *RR crossing flashing signals* had the highest probability of being a fatal collision (2.1 percent, or 5 of 232).

Table 31. Collisions, by traffic signal type, 2007

			Coll	isions, by sev	erity			Inju	ries in colli	sions
Traffic signal type	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All collisions	205,005	100.0%	804	3.9	3,076	34,343	166,782	898	3,662	48,806
Flashing signal	1,370	0.7%	12	8.8	29	334	995	15	39	552
Lane control	49,275	24.0%	268	5.4	858	8,341	39,808	307	1,029	11,871
No passing zone	6,903	3.4%	71	10.3	205	1,435	5,192	76	247	2,039
Officer/crossing guard/flagman	240	0.1%	0	0.0	3	48	189	0	3	74
Other regulatory sign/marking	1,617	0.8%	13	8.0	19	250	1,335	14	31	336
RR crossing flashing signal	232	0.1%	5	21.6	3	40	184	8	4	46
RR crossing gate/flagman	140	0.1%	1	7.1	1	19	119	1	1	27
RR crossing sign	120	0.1%	2	16.7	4	30	84	2	4	43
Stop sign	20,610	10.1%	90	4.4	349	4,535	15,636	101	439	6,902
Traffic control signal	32,956	16.1%	50	1.5	429	7,376	25,101	53	504	10,913
Yield sign	1,390	0.7%	8	5.8	16	255	1,111	9	23	411
No traffic signal	86,982	42.4%	282	3.2	1,136	11,222	74,342	310	1,312	15,002
Invalid/not reported	3,170	1.5%	2	0.6	24	458	2,686	2	26	590

Notes:

See glossary for definition of lane control.

Source



- ➤ The highest proportion of aggressive driving collisions occurred during rush hour times (3pm to 5:59pm) and on Fridays.
- ➤ Over 47 percent of all aggressive driving collisions occurred between 12pm and 5:59pm.
- ➤ The highest number of fatal collisions involving aggressive driving occurred on Wednesdays (8).
- ➤ In 2007, August and November had the highest proportion of total collisions.

Table 32. Collisions involving aggressive driving, by month, week day, and time, 2007

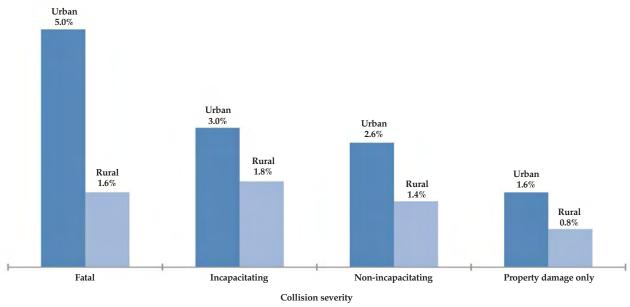
			Col	lisions, by sev	erity			Injı	ıries in colli	sions
	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All aggressive driving collisions	3,045	100.0%	21	6.9	74	758	2,192	21	105	1,259
By month		(100%)			_					
January	268	8.8%	1	3.7	7	60	200	1	13	101
February	236	7.8%	1	4.2	2	51	182	1	2	82
March	245	8.0%	0	0.0	5	70	170	0	10	101
April	228	7.5%	3	13.2	7	56	162	3	8	108
May	257	8.4%	3	11.7	17	68	169	3	26	124
June	236	7.8%	3	12.7	4	63	166	3	5	98
July	225	7.4%	0	0.0	6	63	156	0	10	96
August	289	9.5%	3	10.4	6	64	216	3	6	109
September	270	8.9%	3	11.1	6	74	187	3	7	124
October	271	8.9%	1	3.7	6	54	210	1	7	87
November	283	9.3%	2	7.1	4	78	199	2	5	126
December	237	7.8%	1	4.2	4	57	175	1	6	103
By week day		(100%)								
Monday	447	14.7%	3	6.7	2	114	328	3	3	175
Tuesday	463	15.2%	1	2.2	14	108	340	1	18	174
Wednesday	456	15.0%	8	17.5	9	101	338	8	11	147
Thursday	469	15.4%	3	6.4	15	107	344	3	21	187
Friday	553	18.2%	2	3.6	15	138	398	2	21	224
Saturday	397	13.0%	3	7.6	14	104	276	3	22	194
Sunday	260	8.5%	1	3.8	5	86	168	1	9	158
By time		(100%)								
12am - 2:59am	104	3.4%	2	19.2	5	17	80	2	5	30
3am - 5:59am	81	2.7%	0	0.0	4	23	54	0	8	37
6am - 8:59am	331	10.9%	4	12.1	6	99	222	4	8	138
9am - 11:59am	468	15.4%	1	2.1	8	116	343	1	8	181
12pm - 2:59pm	648	21.3%	4	6.2	10	167	467	4	13	260
3pm - 5:59pm	794	26.1%	4	5.0	21	163	606	4	30	289
6pm - 8:59pm	369	12.1%	4	10.8	11	106	248	4	19	197
9pm - 11:59pm	246	8.1%	2	8.1	9	65	170	2	14	125
Unknown time	4	0.1%	0	0.0	0	2	2	0	0	2

See glossary for definition of aggressvie driving.

Source

Urban fatal collisions were three times more likely to have involved aggressive driving than rural fatal collisions.

Figure 10. Proportion of collisions involving aggressive driving, by collision severity and locality, 2007



Notes:

See glossary for definition of urban and rural localities.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008.

- ➤ Between 12pm and 2:59pm, collisions where a vehicle disregarded a traffic signal accounted for 20.7 percent of all (traffic signal) collisions and 34.8 percent of fatal (traffic signal) collisions.
- Among all times of day, collisions where a vehicle disregarded a traffic signal were most likely to have been a fatal collision between 12am and 2:59am.

Table 33. Collisions involving vehicles that disregarded traffic signals, by time of day, 2007

			Coll	lisions, by sev	erity			Injı	ıries in colli	sions
Time of day of collisions where vehicle disregarded traffic signal	Total	% all collisions	Fatal	Per 1,000 total	Incapaci- tating	Non- incapaci- tating	Property damage only	Fatal	Incapaci- tating	Non- incapaci- tating
All hours	4,797	100.0%	23	4.8	117	1,655	3,002	27	155	2,723
12am - 2:59am	170	3.5%	2	11.8	5	50	113	4	7	89
3am - 5:59am	110	2.3%	0	0.0	3	45	62	0	3	73
6am - 8:59am	547	11.4%	0	0.0	10	191	346	0	13	295
9am - 11:59am	915	19.1%	6	6.6	25	312	572	6	34	483
12pm - 2:59pm	994	20.7%	8	8.0	29	367	590	9	39	616
3pm - 5:59pm	1,036	21.6%	5	4.8	20	347	664	5	21	557
6pm - 8:59pm	630	13.1%	1	1.6	20	204	405	2	29	358
9pm - 11:59pm	393	8.2%	1	2.5	5	139	248	1	9	252
Ûnknown time	2	0.0%	0	0.0	0	0	2	0	0	0

Notes

See glossary for definition of disregarding traffic signal.

Source:



- ➤ Nearly twenty percent (39,205) of all collisions occurred during rush hour times during the week (Mon-Fri, 3pm 5:59pm).
- ➤ Of all hours, collisions that occurred between 2am and 2:59am were most likely to have been fatal (1.2 percent, or 32 fatal of 2,652 total).
- ➤ The likelihood of a fatal collision was highest on Thursdays between 4am and 4:59am (2.7 percent, or 9 fatal of 335 total).

Table 34. Collisions, by severity, time of day, and day of week, 2007

	low	<	<		>	>	high						
	0	1	2	3	4	5	6						
	12am-	1am-	2am-	3am-	4am-	5am-	6am-	7am-	8am	9am-	10am-	11am-	_
All collisions	4,026	3,128	2,652	2,840	2,589	3,870	6,613	11,026	9,000	7,737	8,332	10,337	_
Monday	438	288	213	191	260	530	1,023	1,844	1,413	1,060	1,201	1,421	
Tuesday	389	321	228	239	324	567	1,117	1,956	1,468	1,187	1,244	1,554	
Wednesday	464	343	290	295	342	757	1,295	2,281	1,740	1,273	1,208	1,461	
Thursday	446	344	280	306	335	557	1,062	1,918	1,440	1,193	1,140	1,470	
Friday	492	347	336	368	395	579	1,035	1.859	1,415	1,146	1,389	1,826	
Saturday	879	719	628	719	442	438	590	710	974	1,186	1,340	1,648	
Sunday	918	766	677	722	491	442	491	458	550	692	810	957	
Fatal collisions	34	19	32	26	29	27	27	28	29	24	30	25	_
Monday	4	4	2	3	2	4	3	4	6	2	6	3	
Tuesday	3	1	3	0	2	2	5	8	1	0	5	2	
Wednesday	4	1	2	1	0	4	7	4	6	4	5	3	
Thursday	4	0	1	4	9	2	2	3	3	5	4	5	
Friday	6	4	4	1	4	4	4	3	5	3	6	7	
Saturday	8	6	10	8	7	8	3	0	4	7	3	3	
Sunday	5	3	10	9	5	3	3	6	4	3	1	2	
Incapacitating injury													
collisions	84	82	61	62	45	57	76	152	114	94	118	138	
Monday	8	8	2	4	6	7	8	23	17	11	12	18	
Tuesday	16	7	5	3	2	8	5	23	17	16	15	21	
Wednesday	8	13	4	5	6	10	16	36	27	10	29	16	
Thursday	11	8	4	4	6	7	10	17	13	15	17	22	
Friday	14	10	9	9	8	7	16	23	18	12	8	26	
Saturday	15	19	16	17	7	11	11	17	14	20	26	18	
Sunday	12	17	21	20	10	7	10	13	8	10	11	17	
Non-incapacitating													
injury collisions	599	527	404	463	363	526	981	1,743	1,394	1,220	1,354	1,720	
Monday	64	49	32	28	33	68	145	293	236	184	174	242	
Tuesday	55	52	38	33	47	76	184	310	223	166	210	257	
Wednesday	72	50	41	40	43	101	194	350	267	185	197	247	
Thursday	63	58	41	48	43	76	150	313	206	187	180	238	
Friday	75	62	44	59	47	79	141	289	225	181	237	270	
Saturday	128	122	101	128	79	56	92	109	152	200	198	288	
Sunday	142	134	107	127	71	70	75	79	85	117	158	178	
Property damage													
collisons	3,309	2,500	2,155	2,289	2,152	3,260	5,529	9,103	7,463	6,399	6,830	8,454	
Monday	362	227	177	156	219	451	867	1,524	1,154	863	1,009	1,158	
Tuesday	315	261	182	203	273	481	923	1,615	1,227	1,005	1,014	1,274	
Wednesday	380	279	243	249	293	642	1,078	1,891	1,440	1,074	977	1,195	
Thursday	368	278	234	250	277	472	900	1,585	1,218	986	939	1,205	
Friday	397	271	279	299	336	489	874	1,544	1,167	950	1,138	1,523	
Saturday	728	572	501	566	349	363	484	584	804	959	1,113	1,339	
Sunday	759	612	539	566	405	362	403	360	453	562	640	760	

Source

^{*} Total column includes cases where collision time value was invalid or not reported

12pm-	1pm-	2pm-	3pm-	4pm-	5pm-	6pm-	7pm-	8pm-	9pm	10pm-	11pm-	Total *	% total
12,061	11,376	13,247	16,987	15,871	15,537	12,294	9,212	7,818	7,185	6,113	4,911	205,005	100.0%
1,711	1,562	1,891	2,654	2,446	2,435	1,792	1,225	1,088	936	720	550	28,921	14.1%
1,818	1,802	2,063	2,725	2,437	2,443	1,735	1,223	1,067	934	773	575	30,225	14.7%
1,682	1,552	2,001	2,664	2,444	2,381	1,731	1,210	1,054	947	739	588	30,775	15.0%
1,664	1,504	1,870	2,592	2,452	2,327	1,724	1,246	1,066	975	795	616	29,356	14.3%
2,077	1,874	2,311	3,238	3,021	2,946	2,268	1,665	1,240	1,231	1,243	1,016	35,353	17.2%
1,776	1,780	1,713	1,776	1,734	1,756	1,773	1,492	1,259	1,304	1,135	1,068	28,879	14.1%
1,333	1,302	1,398	1,338	1,337	1,249	1,271	1,151	1,044	858	708	498	21,496	10.5%
34	37	43	49	51	47	47	32	32	41	26	35	804	100.0%
3	8	4	5	7	6	10	5	7	6	4	2	110	13.7%
7	5	7	9	11	3	8	4	4	3	0	2	95	11.8%
3	6	3	5	7	6	5	4	2	4	1	4	91	11.3%
5	3	8	8	7	7	8	6	5	6	3	8	116	14.4%
7	8	7	7	4	5	4	2	6	8	5	4	118	14.7%
3	3	9	9	7	10	5	7	5	5	5	10	145	18.0%
6	4	5	6	8	10	7	4	3	9	8	5	129	16.0%
									-				
184	171	177	210	232	217	163	165	145	138	99	90	3,076	100.0%
31	17	27	27	35	26	23	27	21	11	17	10	396	12.9%
39	37	18	32	30	34	20	21	14	24	10	8	425	13.8%
25	19	26	25	30	26	20	23	13	19	9	9	424	13.8%
24	20	27	29	32	32	24	22	20	15	14	11	404	13.1%
23	17	21	47	47	45	20	25	29	28	26	24	513	16.7%
27	35	27	19	31	29	21	25	28	23	15	21	493	16.0%
15	26	31	31	27	25	35	22	20	18	8	7	421	13.7%
2,033	2,022	2,369	3,057	2,892	2,806	2,035	1,504	1,337	1,108	1,033	831	34,343	100.0%
278	244	344	468	442	430	279	193	203	144	105	78	4,758	13.9%
277	332	370	458	449	465	294	203	166	147	120	104	5,039	14.7%
284	271	346	457	394	426	266	188	189	134	126	101	4,971	14.5%
285	256	308	491	452	411	257	210	197	158	145	91	4,869	14.2%
352	306	410	560	561	546	384	269	193	186	228	175	5,882	17.1%
304	350	321	333	317	274	332	245	201	213	196	194	4,938	14.4%
253	263	270	290	277	254	223	196	188	126	113	88	3,886	11.3%
9,810	9,146	10,658	13,671	12,696	12,467	10,049	7,511	6,304	5,898	4,955	3,955	166,782	100.0%
1,399	1,293	1,516	2,154	1,962	1,973	1,480	1,000	857	775	594	460	23,657	14.2%
1,495	1,428	1,668	2,226	1,947	1,941	1,413	995	883	760	643	461	24,666	14.8%
1,370	1,256	1,626	2,177	2,013	1,923	1,440	995	850	790	603	474	25,289	15.2%
1,350	1,225	1,527	2,064	1,961	1,877	1,435	1,008	844	796	633	506	23,967	14.4%
1,695	1,543	1,873	2,624	2,409	2,350	1,860	1,369	1,012	1,009	984	813	28,840	17.3%
1,442	1,392	1,356	1,415	1,379	1,443	1,415	1,215	1,025	1,063	919	843	23,303	14.0%
1,059	1,009	1,092	1,011	1,025	960	1,006	929	833	705	579	398	17,060	10.2%



- ➤ In 2007, economic costs associated with fatalities represented 21.8 percent of the total economic cost of traffic collisions.
- Fatalities accounted for over 50 percent of market productivity losses (\$598.7m of \$1,182.8m).
- ➤ Costs associated with property damage accounted for the largest portion of total economic costs (26.1 percent), followed by *market productivity* (25.9 percent).

Table 35. Incidence and economic costs (million USD) associated with traffic injuries and property damage to vehicles, by cost category and injury type, 2007

	Fatalities	Incapaci- tating injuries	Non- incapaci- tating injuries	Possible injuries	Not injured	Injured, severity unknown	Unknown if injured	Property damage only vehicles	TOTAL ECONOMIC COSTS
Incidence (count)	898	3,662	40,799	8,007	268,179	1,443	7,098	314,505	
Total costs (millions)	\$992.7 m	\$366.0 m	\$1,162.0 m	\$148.7 m	\$868.1 m	\$57.5 m	\$53.1 m	\$915.2 m	\$4,563.2 m
Medical	\$26.1 m	\$110.8 m	\$312.3 m	\$38.1 m	\$79.4 m	\$16.8 m	\$10.9 m	-	\$594.3 m
Emergency services	\$1.0 m	\$1.0 m	\$6.4 m	\$1.0 m	\$9.9 m	\$0.3 m	\$0.4 m	\$12.8 m	\$32.7 m
Market productivity	\$598.7 m	\$125.5 m	\$331.1 m	\$37.4 m	\$61.1 m	\$17.3 m	\$11.6 m	-	\$1,182.8 m
Household productivity	\$192.6 m	\$38.1 m	\$99.7 m	\$11.4 m	\$28.4 m	\$5.1 m	\$3.8 m	\$16.6 m	\$395.6 m
Insurance administration	\$38.7 m	\$32.3 m	\$102.1 m	\$12.4 m	\$46.4 m	\$5.2 m	\$4.0 m	\$42.4 m	\$283.3 m
Workplace costs	\$9.1 m	\$7.1 m	\$28.3 m	\$3.6 m	\$17.4 m	\$1.3 m	\$1.1 m	\$18.8 m	\$86.8 m
Legal costs	\$106.5 m	\$27.6 m	\$64.5 m	\$6.7 m	\$8.2 m	\$3.8 m	\$2.2 m	-	\$219.5 m
Travel delay	\$9.2 m	\$4.0 m	\$36.4 m	\$7.0 m	\$232.3 m	\$1.3 m	\$6.2 m	\$282.8 m	\$579.3 m
Property damage	\$10.7 m	\$19.6 m	\$181.3 m	\$31.0 m	\$385.0 m	\$6.5 m	\$12.9 m	\$541.9 m	\$1,188.8 m

Costs are in 2007 dollars.

See Appendix A for discussion of methods.

Not injured are individuals with a missing injury status code.

Injured, severity unknown are individuals with an injury status of Unknown.

Unknown are individuals with an injury status of Not reported, refused, and invalid codes.

Property damage only vehicles are those with no occupants having an injury status of fatal, incapacitating, non-incapacitating, or possible.

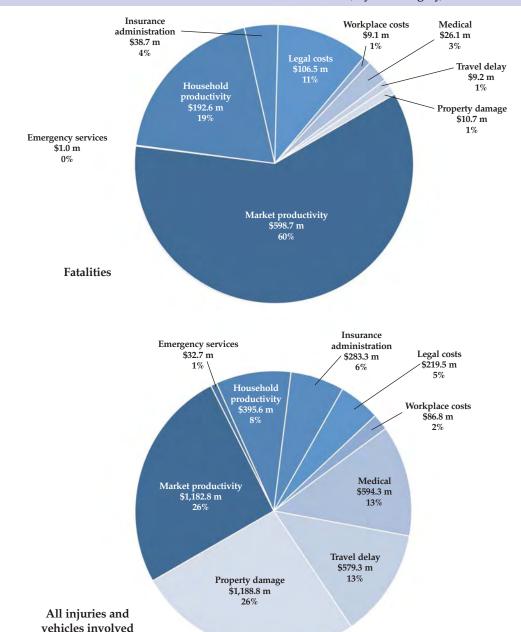
Sources:

Incidence: Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

Costs: Derived from The economic impact of motor vehicle crashes, 2000. National Highway Traffic Safety Administration, DOT HS 809 446. Washington, DC.

- Market productivity losses accounted for 60 percent of all losses associated with traffic fatalities, compared to 26 percent for total economic costs.
- > Legal costs accounted for 11 percent of all losses associated with traffic fatalities, compared to five percent for total economic costs.

Figure 11. Economic costs associated with fatalities and all traffic collisions, by cost category, 2007

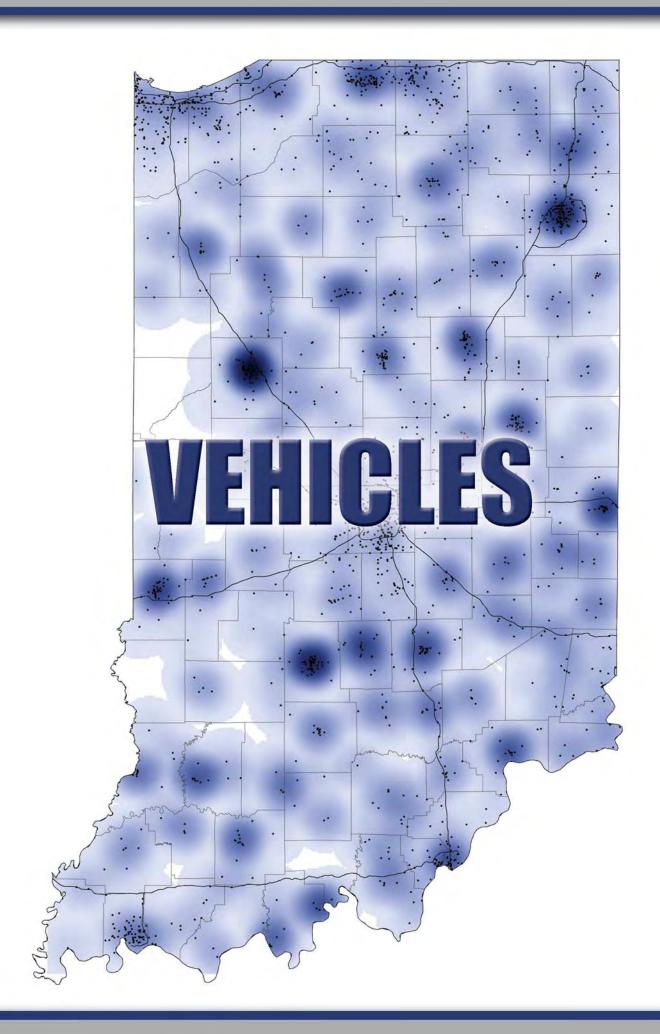


Costs are in 2007 dollars.

See Appendix A for discussion of methods

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008.

The economic impact of motor vehicle crashes, 2000. National Highway Traffic Safety Administration, DOT HS 809 446. Washington, DC.





VEHICLES, 2007

The vehicles section summarizes data on various types of motor vehicles involved in Indiana collisions in 2007. Special emphasis is given to passenger vehicles (passenger cars, pickup trucks, sport utility vehicles, and vans), large trucks, and school buses. Motorcycles and mopeds are described in the motorcycle section of this report. Vehicle data are categorized by variables such as collision severity, vehicle use, locality (urban and rural), road class, weather and light conditions, and primary contributing factor. Alcohol-related and speed-related collisions are also analyzed by vehicle type.

HIGHLIGHTS

Vehicles involved in collisions decreased on average between 2003 and 2007.

In 2007, passenger cars accounted for 39 percent of all vehicles involved in fatal collisions.

Most serious injury collisions involving passenger cars occurred in May for both urban and rural localities.

Nearly 70 percent of passenger cars involved in serious injury collisions collided with another vehicle.

Forty percent of large trucks involved in serious injury collisions were identified as the vehicle attributed to the primary contributing factor of the collision.

Only 1 percent of school buses involved in 2007 collisions were involved in serious injury collisions.

➤ Per 100,000 registered vehicles, the frequency of vehicles involved in collisions decreased 1.5 percent on average from 2003 to 2007.

Table 36. Motor vehicles involved in all Indiana collisions, 2003-2007

Year	Motor vehicles involved	Registered vehicles	Involved, per 100,000 registered
2003	371,335	6,343,907	5,853
2004	366,552	6,432,213	5,699
2005	362,726	6,556,762	5,532
2006	335,065	6,309,100	5,311
2007	356,540	6,482,078	5,500
Average annual change	-0.9%	0.6%	-1.5%

Notes:

Vehicles involved excludes pedestrians and bicycles.

Sources

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Indiana Bureau of Motor Vehicles, as of March 5,2008

- Over 91 percent of all vehicles involved in 2007 Indiana collisions were passenger vehicles.
- ➤ Thirty-three motorcycles per 1,000 involved in all Indiana collisions are involved in *fatal* collisions.
- ➤ In 2007, passenger cars accounted for 39 percent of all vehicles involved in *fatal* collisions and 48 percent of vehicles involved in *incapacitating injury* collisions.
- ➤ Pickup trucks accounted for nearly 19 percent of all vehicles involved in *fatal* collisions.
- ➤ While motorcycles/mopeds represented only 1 percent of all vehicles involved in all collisions, they accounted for nearly 10 percent of all vehicles involved in *fatal* collisions.

Table 37. Motor vehicles involved in 2007 Indiana collisions by collision severity

Vehicle type	All col	llisions	Fatal c	ollisions		citating		pacitating ollisions		damage llisions	Vehicles in fatal collisions per 1,000 in all collisions
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total	
Passenger vehicles	324,879	91.1%	974	76.6%	4,130	82.8%	56,900	93.4%	262,875	90.8%	3.0
Passenger car	197,110	55.3%	500	39.3%	2,408	48.3%	35,260	57.9%	158,942	54.9%	2.5
Pickup truck	53,858	15.1%	237	18.6%	756	15.2%	8,653	14.2%	44,212	15.3%	4.4
Sport utility vehicle (SUV)	46,606	13.1%	154	12.1%	622	12.5%	8,126	13.3%	37,704	13.0%	3.3
Van	27,305	7.7%	83	6.5%	344	6.9%	4,861	8.0%	22,017	7.6%	3.0
Other vehicles	31,661	8.9%	298	23.4%	855	17.2%	4,002	6.6%	26,506	9.2%	9.4
Motorcycle	3,656	1.0%	121	9.5%	546	11.0%	2,017	3.3%	972	0.3%	33.1
Motor home/recreational vehicle	268	0.1%	2	0.2%	7	0.1%	32	0.1%	227	0.1%	7.5
Large truck	15,032	4.2%	149	11.7%	206	4.1%	956	1.6%	13,721	4.7%	9.9
School bus	840	0.2%	4	0.3%	5	0.1%	78	0.1%	753	0.3%	4.8
Bus/seats 15+ persons with driver	612	0.2%	4	0.3%	4	0.1%	70	0.1%	534	0.2%	6.5
Bus/seats 9-15 persons with driver	285	0.1%	1	0.1%	7	0.1%	38	0.1%	239	0.1%	3.5
Combination vehicle	325	0.1%	0	0.0%	5	0.1%	33	0.1%	287	0.1%	0.0
Farm vehicle	381	0.1%	7	0.6%	12	0.2%	61	0.1%	301	0.1%	18.4
Unknown	10,262	2.9%	10	0.8%	63	1.3%	717	1.2%	9,472	3.3%	1.0
Total vehicles	356,540		1,272		4,985		60,902		289,381		

Notes:

Vehicles involved excludes pedestrians and bicycles.

Unknown vehicle type includes vehicles reported as unknown, blank and invalid values.

Large trucks are defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi-trailer, tractor/double trailer, tractor/triple trailer, or tractor (cab only, no trailer).

Motorcycles include vehicles reported as motorcycles and mopeds.

Source:



- ➤ Ten commercial vehicles per 1,000 involved in all Indiana collisions are involved in *fatal* collisions.
- ➤ Vehicles used for *personal* use represented the highest percentage of vehicles involved in collisions across all collision severity categories.
- ➤ Nearly 12 percent of vehicles involved in fatal collisions were categorized as *commercial* use.

Table 38. Motor vehicles involved in 2007 Indiana collisions by vehicle use and collision severity

Vehicles involved in...

Vehicle use	All col	lisions	Fatal collisions		Incapacitating injury collisions		Non-incapacitating injury collisions		Property damage only collisions		Vehicles in fatal collisions per 1,000 in all collisions
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total	
All vehicles	356,540	100.0%	1,272	100.0%	4,985	100.0%	60,902	100.0%	289,381	100.0%	3.6
Emergency	3,155	0.9%	2	0.2%	33	0.7%	414	0.7%	2,706	0.9%	0.6
Commercial	14,685	4.1%	151	11.9%	205	4.1%	972	1.6%	13,357	4.6%	10.3
Highway department	496	0.1%	2	0.2%	6	0.1%	48	0.1%	440	0.2%	4.0
Military	80	< 0.1%	0	0.0%	1	< 0.1%	8	< 0.1%	71	< 0.1%	0.0
Personal	323,996	90.9%	1,095	86.1%	4,652	93.3%	58,348	95.8%	259,901	89.8%	3.4
Public utilities (gas, electric, etc.)	335	0.1%	0	0.0%	4	0.1%	32	0.1%	299	0.1%	0.0
Rental, not leased	1,890	0.5%	6	0.5%	12	0.2%	244	0.4%	1,628	0.6%	3.2
School	1,154	0.3%	5	0.4%	10	0.2%	112	0.2%	1,027	0.4%	4.3
Other	1,842	0.5%	4	0.3%	24	0.5%	186	0.3%	1,628	0.6%	2.2
Other government (postal, etc.)	1,140	0.3%	2	0.2%	14	0.3%	127	0.2%	997	0.3%	1.8
Unknown	7,767	2.2%	5	0.4%	24	0.5%	411	0.7%	7,327	2.5%	0.6

Notes:

Unknown vehicle use includes uses reported as null values, and invalid values.

Source

- > Serious injury collisions involving passenger cars were more likely to occur in rural localities in all months, with the exceptions of February and December.
- > Serious injury collisions involving pickup trucks were more likely to occur in urban localities in all months except March.
- ➤ While serious injury collisions involving SUVs were fairly evenly distributed between urban and rural localities, serious injury collisions during the months of March and July were much more likely to occur in rural localities.
- Rural localities accounted for nearly 69 percent (not shown) of large trucks involved in serious injury collisions.

Table 39. Motor vehicles involved in Indiana serious injury collisions, by locality, vehicle type, and month, 2007

	RURAL L	OCALITY CO	LLISIONS				URBAN L	OCALITY CO	DLLISIONS	
Passenger cars	Pickup trucks	SUVs	Vans	Large trucks	Month	Passenger cars	Pickup trucks	SUVs	Vans	Large trucks
1,631	406	402	237	244	Annual	1,275	587	374	190	111
135	27	38	27	19	Jan	102	50	39	21	7
100	30	35	14	24	Feb	107	50	33	15	4
155	42	46	24	13	Mar	91	36	22	7	12
118	34	33	11	21	Apr	91	43	26	18	9
165	45	31	21	18	May	123	46	34	15	11
141	37	25	18	32	Jun	106	62	29	12	4
140	29	35	15	9	Jul	102	40	23	19	12
135	36	37	34	21	Aug	83	48	34	13	18
156	40	30	23	30	Sept	123	61	29	19	9
129	24	34	16	26	Oct	114	42	32	16	8
150	31	23	18	16	Nov	115	56	33	19	10
107	31	35	16	15	Dec	118	53	40	16	7

Includes only those vehicles where the locality was known (rural/urban).

Urban locality collisions are those that occurred within the incorporated limits of a city.

Large trucks are defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi-trailer, tractor/double trailer, or tractor (cab only, no trailer).

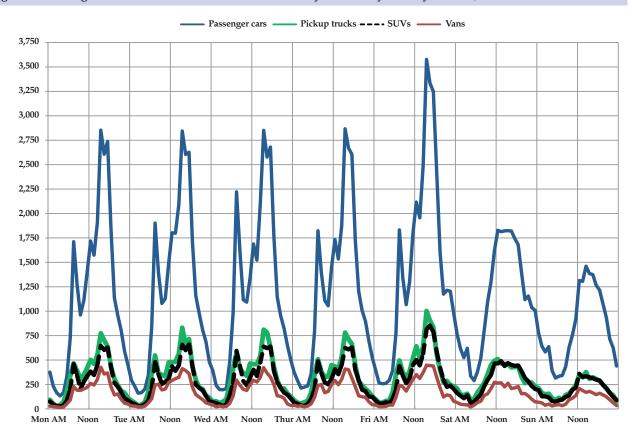
Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as fatal or incapacitating.

Source:



- ➤ The distribution of passenger vehicles involved in Indiana collisions follows similar patterns across all vehicle types.
- Across all passenger vehicle types, peaks in the hourly number of vehicles involved in collisions occurred during morning (between 7am and 9am) and afternoon (between 4pm and 6pm) rush hour periods.
- ➤ The highest number of vehicles involved in collisions occurred on Friday afternoons across vehicle types.
- ➤ The number of passenger vehicles involved in late night (between 10pm and 3am) collisions was highest on the weekends.

Figure 12. Passenger vehicles involved in Indiana collisions by time of day and day of week, 2007



Passenger vehicles are defined as those reported as passenger cars, pickup trucks, SUVs, and vans.

Source:

- ➤ With the exception of large trucks, across all vehicle types, the highest percentage of vehicles involved in collisions occurred on local/city roads.
- Twenty-eight percent of passenger cars involved in fatal collisions were among collisions occurring on *state roads*.
- Among pickup trucks involved in fatal collisions, 28 percent were among collisions occurring on *county roads* and 29 percent were involved in collisions occurring on *state roads*.
- ➤ Among large trucks involved in fatal collisions, more than 35 percent were among collisions occurring on *interstates*.

Table 40. Motor vehicles involved in 2007 Indiana collisions by vehicle type, road class, and collision severity

					7	Vehicles in	volved in				
Vehicle type	All co	llisions	Fatal c	ollisions		acitating collisions		pacitating	1 1	damage	Vehicles in fatal collisions per 1,000 in all collisions
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total	
Passenger cars	197,110	100.0%	500	100.0%	2,408	100.0%	35,260	100.0%	158,942	100.0%	2.5
County road	19,245	9.8%	94	18.8%	359	14.9%	3,697	10.5%	15,095	9.5%	4.9
Local/city road	102,038	51.8%	114	22.8%	1,050	43.6%	19,295	54.7%	81,579	51.3%	1.1
State road	26,175	13.3%	142	28.4%	481	20.0%	5,668	16.1%	19,884	12.5%	5.4
U.S. route	17,823	9.0%	89	17.8%	329	13.7%	3,982	11.3%	13,423	8.4%	5.0
Interstate	11,637	5.9%	57	11.4%	133	5.5%	1,652	4.7%	9,795	6.2%	4.9
Unknown	20,192	10.2%	4	0.8%	56	2.3%	966	2.7%	19,166	12.1%	0.2
Pickup trucks	53,858	100.0%	237	100.0%	756	100.0%	8,653	100.0%	44,212	100.0%	4.4
County road	8,008	14.9%	67	28.3%	167	22.1%	1,381	16.0%	6,393	14.5%	8.4
Local/city road	22,720	42.2%	36	15.2%	257	34.0%	3,683	42.6%	18,744	42.4%	1.6
State road	9,005	16.7%	69	29.1%	184	24.3%	1,774	20.5%	6,978	15.8%	7.7
U.S. route	5,425	10.1%	46	19.4%	88	11.6%	1,156	13.4%	4,135	9.4%	8.5
Interstate	2,882	5.4%	17	7.2%	29	3.8%	421	4.9%	2,415	5.5%	5.9
Unknown	5,818	10.8%	2	0.8%	31	4.1%	238	2.8%	5,547	12.5%	0.3
Sport utility vehicles (SUVs)	46,606	100.0%	154	100.0%	622	100.0%	8,126	100.0%	37,704	100.0%	3.3
County road	5,337	11.5%	37	24.0%	106	17.0%	1,017	12.5%	4,177	11.1%	6.9
Local/city road	22,494	48.3%	36	23.4%	252	40.5%	4,111	50.6%	18,095	48.0%	1.6
State road	6,519	14.0%	30	19.5%	109	17.5%	1,392	17.1%	4,988	13.2%	4.6
U.S. route	4,461	9.6%	28	18.2%	89	14.3%	960	11.8%	3,384	9.0%	6.3
Interstate	2,862	6.1%	22	14.3%	46	7.4%	427	5.3%	2,367	6.3%	7.7
Unknown	4,933	10.6%	1	0.6%	20	3.2%	219	2.7%	4,693	12.4%	0.2
Vans	27,305	100.0%	83	100.0%	344	100.0%	4,861	100.0%	22,017	100.0%	3.0
County road	2,577	9.4%	9	10.8%	41	11.9%	440	9.1%	2,017	9.5%	3.5
Local/city road	13,715	50.2%	15	18.1%	151	43.9%	2,649	54.5%	10,900	49.5%	1.1
State road	3,866	14.2%	40		69		785		2,972	13.5%	10.3
U.S. route	1 '		12	48.2% 14.5%	57	20.1% 16.6%	634	16.1%			4.5
	2,646	9.7%						13.0%	1,943	8.8%	
Interstate	1,513	5.5%	7	8.4%	13	3.8%	207	4.3%	1,286	5.8%	4.6
Unknown	2,988	10.9%	0	0.0%	13	3.8%	146	3.0%	2,829	12.8%	0.0
Large trucks	15,032	100.0%	149	100.0%	206	100.0%	956	100.0%	13,721	100.0%	9.9
County road	845	5.6%	8	5.4%	11	5.3%	57	6.0%	769	5.6%	9.5
Local/city road	4,066	27.0%	10	6.7%	25	12.1%	212	22.2%	3,819	27.8%	2.5
State road	1,985	13.2%	31	20.8%	43	20.9%	173	18.1%	1,738	12.7%	15.6
U.S. route	1,898	12.6%	43	28.9%	53	25.7%	195	20.4%	1,607	11.7%	22.7
Interstate	4,239	28.2%	53	35.6%	73	35.4%	293	30.6%	3,820	27.8%	12.5
Unknown	1,999	13.3%	4	2.7%	1	0.5%	26	2.7%	1,968	14.3%	2.0
Total vehicles	339,911		1,123		4,336		57,856		276,596		

Large trucks are defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi-trailer, tractor/double trailer, tractor/triple trailer, or tractor (cab only, no trailer).

Unknown road class type includes roads reported as unknown, blank and invalid values.

Source



- > Failure to yield right of way was the primary factor with the largest number of instances in serious injury collisions across all passenger vehicle types.
- > Sixty-five percent of passenger cars involved in serious injury collisions were identified as the vehicle attributed to the primary contributing factor of the collision.
- ➤ Ninety-five percent of SUVs and 83 percent of pickup trucks involved in serious injury collisions with *alcoholic beverages* as the primary factor were identified as the vehicle attributed to the primary contributing factor of the collision.

Table 41. Top ten primary factors in serious injury passenger vehicle collisions, by vehicle type and collision severity, 2007

		Vehicles involve	ed in	
			Serious injury collisions where vehicle contributing circumstance matched	Vehicle attributed to primary factor as %
Top 10 primary factors	All collsions	Serious injury collisions	collision primary factor	of serious injury
assenger cars	197,110	2,908	1,878	64.6
Failure to yield right of way	39,942	676	398	58.9
Left of center	3,084	247	142	57.5
Disregard signal/reg sign	9,109	247	119	48.2
Other (explained in narrative) - driver	20,040	234	159	67.9
Ran off road right	6,549	231	222	96.1
Following too closely	32,828	192	74	38.5
Unsafe speed	4,851	187	134	71.7
Alcoholic beverages	3,399	128	100	78.1
Speed too fast for weather conditions	6,795	88	56	63.6
Pedestrian action	650	82	0	0.0
Top 10 subtotal	127,247	2,312	1,404	
Top 10 as % of all passenger cars	64.6%	79.5%	74.8%	
ckup trucks	53,858	993	631	63.5
Failure to yield right of way	8,841	222	117	52.7
Ran off road right	2,035	97	90	92.8
Other (explained in narrative) - driver	5,945	86	60	69.8
Left of center	1,112	78	32	41.0
Disregard signal/reg sign	2,092	70	37	52.9
Alcoholic beverages	1,124	59	49	83.1
Following too closely	7,872	59	28	47.5
Unsafe speed	1,245	43	18	41.9
Overcorrecting/oversteering	600	40	28	70.0
Speed too fast for weather conditions	2,233	36	23	63.9
Top 10 subtotal	33,099	790	482	
Top 10 as % of all pickup trucks	61.5%	79.6%	76.4%	
UVs	46,606	776	475	61.2
Failure to yield right of way	7,841	156	71	45.5
Other (explained in narrative) - driver	4,842	75	46	61.3
Disregard signal/reg sign	1,933	70	32	45.7
Ran off road right	1,453	59	58	98.3
Left of center	730	58	27	46.6
Following too closely	8,596	55	22	40.0
Alcoholic beverages	785	40	38	95.0
Speed too fast for weather conditions	2,058	39	27	69.2
Unsafe speed	992	34	25	73.5
Overcorrecting/oversteering	599	31	26	83.9
Top 10 subtotal	29,829	617	372	
Top 10 as % of all SUVs	64.0%	79.5%	78.3%	
ans	27,305	427	228	53.4
Failure to yield right of way	5,034	90	40	44.4
Following too closely	4,483	47	18	38.3
Disregard signal/reg sign	1,388	42	23	54.8
Other (explained in narrative) - driver	3,085	37	23	62.2
Left of center	421	33	16	48.5
Ran off road right	596	26	0	0.0
Alcoholic beverages	381	19	11	57.9
Unsafe speed	491	18	7	38.9
Speed too fast for weather conditions	881	14	7	50.0
Driver illness	128	11	1	9.1
Top 10 subtotal	16,888	337	146	/
Top 10 as % of all vans	61.8%	78.9%	64.0%	

Top 10 primary factors are counts of vehicles, by each vehicle type, involved in collisions. For example, there were 39,942 passenger cars involved in collisions where the primary factor for each collision was *Failure to yield right of way*. Note that if the collision was a multi-vehicle collision, more than one vehicle may have contributing circumstances that match the primary factor.

Passenger vehicles are defined as those reported as *passenger cars*, *pickup trucks*, *SUIVs*, and *vans*.

Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as *fatal* or *incapacitating*.

- ➤ Nearly 7 percent of passenger cars and SUVs involved in serious injury collisions were involved in an *overturn/rollover*.
- ➤ Across all passenger vehicle types, collisions that involved the vehicle colliding with a *pedestrian* were most likely to result in serious injury.
- Eleven percent of pickup trucks and 9 percent of SUVs involved in serious injury crashes collided with a bicycle.

Table 42. Top ten harmful events in serious injury passenger vehicle collisions by vehicle type and collision severity, 2007

	Passeng	er cars invo	lved in	Pickup t	trucks invo	lved in	SUV	s involved	in	Van	s involved	in
Collided with	All collisons	Serious injury collisions	Serious injury as % of total	All collisons	Serious injury collisions	Serious injury as % of total	All collisons	Serious injury collisions	Serious injury as % of total	All collisons	Serious injury collisions	Serious injury as % of total
Total vehicles	197,110	2,908	1.5%	53,858	993	1.8%	46,606	776	1.7%	27,305	427	1.6%
Another motor vehicle	159,888	2,013	1.3%	41,399	635	1.5%	36,965	506	1.4%	22,544	327	1.5%
Tree	2,616	169	6.5%	1,075	74	6.9%	712	32	4.5%	242	14	5.8%
Pedestrian	955	127	13.3%	249	52	20.9%	206	34	16.5%	174	19	10.9%
Utility pole	2,767	93	3.4%	1,096	31	2.8%	693	27	3.9%	398	9	2.3%
Ditch	2,324	66	2.8%	701	25	3.6%	600	24	4.0%	166	7	4.2%
Off roadway	2,052	57	2.8%	630	25	4.0%	507	26	5.1%	185	7	3.8%
Other	3,117	54	1.7%	911	22	2.4%	675	13	1.9%	104	5	4.8%
Bicycle	723	45	6.2%	176	20	11.4%	132	12	9.1%	78	3	3.8%
Embankment	986	42	4.3%	337	16	4.7%	279	15	5.4%	91	7	7.7%
Overturn/rollover	528	36	6.8%	340	21	6.2%	438	30	6.8%	283	14	4.9%
Top 10 subtotal	175,956	2,702		46,914	921		41,207	719		24,265	412	
Top 10 as % of all vehicles	89.3%	92.9%		87.1%	92.7%		88.4%	92.7%		88.9%	96.5%	

Passenger vehicles are defined as those reported as passenger cars, pickup trucks, SUVs, and vans.

Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as fatal or incapacitating.

Source



- ➤ *Clear* and *cloudy* weather conditions accounted for the highest percentage of vehicles involved in collisions across all passenger vehicle types and collision severity categories.
- Among pickup trucks involved in all Indiana collisions under *fog/smoke/smog* weather conditions, nearly 16 pickup trucks per 1,000 were involved in *fatal* collisions.

Table 43. Passenger vehicles involved in Indiana collisions by weather condition and collision severity, 2007

Vehicles involved in...

Vehicle type Passenger cars Blowing sand/soil/snow Clear Cloudy Fog/smoke/smog	All col Count 197,110 1,835 121,132	llisions % Total 100.0%	Fatal c	ollisions		citating	Non-inca	nacitating	Droporty	,	Vehicles in fatal collisions per
Blowing sand/soil/snow Clear Cloudy Fog/smoke/smog	197,110 1,835		Count		injury o	collisions		ollisions	only collisions		1,000 in all collisions
Blowing sand/soil/snow Clear Cloudy Fog/smoke/smog	1,835	100.0%		% Total	Count	% Total	Count	% Total	Count	% Total	
Clear Cloudy Fog/smoke/smog			500	100.0%	2,408	100.0%	35,260	100.0%	158,942	100.0%	2.5
Cloudy Fog/smoke/smog	121,132	0.9%	6	1.2%	12	0.5%	285	0.8%	1,532	1.0%	3.3
Fog/smoke/smog		61.5%	318	63.6%	1,529	63.5%	22,057	62.6%	97,228	61.2%	2.6
	44,010	22.3%	115	23.0%	537	22.3%	7,878	22.3%	35,480	22.3%	2.6
	1,028	0.5%	5	1.0%	32	1.3%	152	0.4%	839	0.5%	4.9
Rain	18,824	9.5%	40	8.0%	215	8.9%	3,513	10.0%	15,056	9.5%	2.1
Severe cross wind	165	0.1%	0	0.0%	0	0.0%	24	0.1%	141	0.1%	0.0
Sleet/hail/freezing rain	1,927	1.0%	1	0.2%	25	1.0%	269	0.8%	1,632	1.0%	0.5
Snow	7,566	3.8%	15	3.0%	55	2.3%	1,004	2.8%	6,492	4.1%	2.0
Invalid/not reported	623	0.3%	0	0.0%	3	0.1%	78	0.2%	542	0.3%	0.0
Pickup trucks	53,858	100.0%	237	100.0%	756	100.0%	8,653	100.0%	44,212	100.0%	4.4
Blowing sand/soil/snow	609	1.1%	2	0.8%	5	0.7%	61	0.7%	541	1.2%	3.3
Clear	32,467	60.3%	139	58.6%	486	64.3%	5,313	61.4%	26,529	60.0%	4.3
Cloudy	12,282	22.8%	64	27.0%	171	22.6%	1,998	23.1%	10,049	22.7%	5.2
Fog/smoke/smog	380	0.7%	6	2.5%	10	1.3%	66	0.8%	298	0.7%	15.8
Rain	4,951	9.2%	15	6.3%	49	6.5%	841	9.7%	4,046	9.2%	3.0
Severe cross wind	65	0.1%	0	0.0%	0	0.0%	8	0.1%	57	0.1%	0.0
Sleet/hail/freezing rain	622	1.2%	0	0.0%	13	1.7%	83	1.0%	526	1.2%	0.0
Snow	2,359	4.4%	11	4.6%	22	2.9%	270	3.1%	2,056	4.7%	4.7
Invalid/not reported	123	0.2%	0	0.0%	0	0.0%	13	0.2%	110	0.2%	0.0
Sport utility vehicles (SUVs)	46,606	100.0%	154	100.0%	622	100.0%	8,126	100.0%	37,704	100.0%	3.3
Blowing sand/soil/snow	570	1.2%	2	1.3%	6	1.0%	90	1.1%	472	1.3%	3.5
Clear	27,543	59.1%	98	63.6%	379	60.9%	4,875	60.0%	22,191	58.9%	3.6
Cloudy	10,651	22.9%	40	26.0%	145	23.3%	1,842	22.7%	8,624	22.9%	3.8
Fog/smoke/smog	270	0.6%	0	0.0%	3	0.5%	39	0.5%	228	0.6%	0.0
Rain	4,368	9.4%	8	5.2%	56	9.0%	790	9.7%	3,514	9.3%	1.8
Severe cross wind	48	0.1%	0	0.0%	1	0.2%	9	0.1%	38	0.1%	0.0
Sleet/hail/freezing rain	645	1.4%	1	0.6%	9	1.4%	112	1.4%	523	1.4%	1.6
Snow	2,381	5.1%	5	3.2%	23	3.7%	353	4.3%	2,000	5.3%	2.1
Invalid/not reported	130	0.3%	0	0.0%	0	0.0%	16	0.2%	114	0.3%	0.0
Vans	27,305	100.0%	83	100.0%	344	100.0%	4,861	100.0%	22,017	100.0%	3.0
Blowing sand/soil/snow	240	0.9%	0	0.0%	4	1.2%	37	0.8%	199	0.9%	0.0
Clear	16,633	60.9%	52	62.7%	231	67.2%	2,947	60.6%	13,403	60.9%	3.1
Cloudy	6,436	23.6%	22	26.5%	75	21.8%	1,144	23.5%	5,195	23.6%	3.4
Fog/smoke/smog	130	0.5%	0	0.0%	1	0.3%	19	0.4%	110	0.5%	0.0
Rain	2,393	8.8%	6	7.2%	21	6.1%	470	9.7%	1,896	8.6%	2.5
Severe cross wind	25	0.1%	0	0.0%	0	0.0%	6	0.1%	19	0.1%	0.0
Sleet/hail/freezing rain	250	0.9%	2	2.4%	2	0.6%	47	1.0%	199	0.9%	8.0
Snow	1,103	4.0%	1	1.2%	9	2.6%	178	3.7%	915	4.2%	0.9
Invalid/not reported	95	0.3%	0	0.0%	1	0.3%	13	0.3%	81	0.4%	0.0
Total vehicles	324,879		974		4,130		56,900		262,875		

Notes

Passenger vehicles are defined as those reported as passenger cars, pickup trucks, SUVs, and vans.

Invalid/not reported weather condition includes conditions identified as null values and invalid values.

Source:

- Among all vehicle types, the percentage of vehicles involved in *fatal* and *incapacitating* injury collisions under *dark* (*not lighted*) conditions was proportionally higher than for all collisions.
- ➤ Among pickup trucks involved in all Indiana collisions under *dark* (*not lighted*) conditions, 9 pickup trucks per 1,000 were involved in *fatal* collisions.

Table 44. Passenger vehicles involved in 2007 Indiana collisions by light condition and collision severity

Vehicles involved in...

											Vehicles in fatal
Vehicle type	All col	lisions	Fatal c	ollisions		citating		pacitating ollisions		damage llisions	collisions per 1,000 in all collisions
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total	
Passenger cars	197,110	100.0%	500	100.0%	2,408	100.0%	35,260	100.0%	158,942	100.0%	2.5
Dark (lighted)	30,506	15.5%	59	11.8%	346	14.4%	5,304	15.0%	24,797	15.6%	1.9
Dark (not lighted)	22,140	11.2%	144	28.8%	386	16.0%	3,410	9.7%	18,200	11.5%	6.5
Dawn/dusk	8,974	4.6%	30	6.0%	102	4.2%	1,514	4.3%	7,328	4.6%	3.3
Daylight	134,487	68.2%	265	53.0%	1,572	65.3%	24,987	70.9%	107,663	67.7%	2.0
Unknown	771	0.4%	2	0.4%	1	0.0%	13	0.0%	755	0.5%	2.6
Invalid/not reported	232	0.1%	0	0.0%	1	0.0%	32	0.1%	199	0.1%	0.0
Pickup trucks	53,858	100.0%	237	100.0%	756	100.0%	8,653	100.0%	44,212	100.0%	4.4
Dark (lighted)	6,576	12.2%	13	5.5%	78	10.3%	943	10.9%	5,542	12.5%	2.0
Dark (not lighted)	7,533	14.0%	66	27.8%	146	19.3%	1,127	13.0%	6,194	14.0%	8.8
Dawn/dusk	2,562	4.8%	14	5.9%	32	4.2%	351	4.1%	2,165	4.9%	5.5
Daylight	36,966	68.6%	143	60.3%	499	66.0%	6,219	71.9%	30,105	68.1%	3.9
Unknown	174	0.3%	1	0.4%	1	0.1%	3	0.0%	169	0.4%	5.7
Invalid/not reported	47	0.1%	0	0.0%	0	0.0%	10	0.1%	37	0.1%	0.0
Sport utility vehicles (SUVs)	46,606	100.0%	154	100.0%	622	100.0%	8,126	100.0%	37,704	100.0%	3.3
Dark (lighted)	6,477	13.9%	15	9.7%	86	13.8%	1,126	13.9%	5,250	13.9%	2.3
Dark (not lighted)	5,640	12.1%	38	24.7%	112	18.0%	833	10.3%	4,657	12.4%	6.7
Dawn/dusk	2,191	4.7%	12	7.8%	26	4.2%	376	4.6%	1,777	4.7%	5.5
Daylight	32,112	68.9%	88	57.1%	398	64.0%	5,780	71.1%	25,846	68.5%	2.7
Unknown	130	0.3%	1	0.6%	0	0.0%	5	0.1%	124	0.3%	7.7
Invalid/not reported	56	0.1%	0	0.0%	0	0.0%	6	0.1%	50	0.1%	0.0
Vans	27,305	100.0%	83	100.0%	344	100.0%	4,861	100.0%	22,017	100.0%	3.0
Dark (lighted)	3,195	11.7%	8	9.6%	33	9.6%	575	11.8%	2,579	11.7%	2.5
Dark (not lighted)	2,862	10.5%	24	28.9%	39	11.3%	379	7.8%	2,420	11.0%	8.4
Dawn/dusk	1,156	4.2%	3	3.6%	16	4.7%	187	3.8%	950	4.3%	2.6
Daylight	19,983	73.2%	48	57.8%	256	74.4%	3,717	76.5%	15,962	72.5%	2.4
Unknown	77	0.3%	0	0.0%	0	0.0%	0	0.0%	77	0.3%	0.0
Invalid/not reported	32	0.1%	0	0.0%	0	0.0%	3	0.1%	29	0.1%	0.0
Total vehicles	324,879		974		4,130		56,900		262,875		

Notes:

Passenger vehicles are defined as those reported as passenger cars, pickup trucks, SUVs, and vans.

Unknown light condition includes conditions reported as unknown.

Invalid/not reported light condition includes conditions identified as blank or invalid values.

Source:



- ➤ One in 57 people injured in *passenger cars* where alcohol was present was killed, compared to one in 684 in *passenger cars* where NO alcohol was present.
- ➤ One in 40 people injured in SUVs where alcohol was present was killed, compared to one in 667 in SUVs where NO alcohol was present.
- ➤ One in 145 people injured in speeding *passenger cars* was killed, compared to one in 612 in *passenger cars* that were not speeding.
- ➤ One in 147 people injured in speeding *pickup trucks* was killed, compared to one in 427 in *pickup trucks* that were not speeding.

Table 45. Frequency of fatal injuries in Indiana alcohol-related and speed-related passenger vehicle collisions by vehicle type, 2007

	Passeng	ger cars	Pickup	trucks	Sport to vehicles		Va	ns
	Vehicles involved in all collisions	Fatal injuries in all collisions						
Total vehicles	197,110	377	53,858	140	46,606	100	27,305	57
Vehicles where alcohol was present	5,537	97	2,073	36	1,273	32	502	10
Vehicles where NO alcohol was present	191,573	280	51,785	104	45,333	68	26,803	47
Frequency of fatal injuries in vehicles where alcohol was present		57.1		57.6		39.8		50.2
Frequency of fatal injuries in vehicles where NO alcohol was present		684.2		497.9		666.7		570.3
Vehicles identified as speeding	10,453	72	3,081	21	2,675	15	968	7
Vehicles not identified as speeding	186,657	305	50,777	119	43,931	85	26,337	50
Frequency of fatal injuries in speeding vehicles		145.2		146.7		178.3		138.3
Frequency of fatal injuries in non-speeding vehicles		612.0		426.7		516.8		526.7

Notes:

Passenger vehicles are defined as those reported as passenger cars, pickup trucks, SUVs, and vans.

Alcohol frequencies are calculated by dividing the number of vehicles where alcohol was present by the number of fatalities occurring in vehicles where alcohol was present.

Non-alcohol frequencies are calculated by dividing the number of vehicles where NO alcohol was present by the number of fatalities occurring in vehicles where NO alcohol was present.

Speeding frequencies are calculated by dividing the number of speeding vehicles by the number of fatalities occurring in speeding vehicles.

Non-speeding frequencies are calculated by dividing the number of non-speeding vehicles by the number of fatalities occurring in non-speeding vehicles.

Source

- Failure to yield right of way was the primary factor with the highest number of large trucks in serious injury collisions.
- Fifty-four percent of large trucks involved in serious injury collisions with the primary factor of *following too closely* were identified as the vehicle *attributed* to the primary contributing factor of the collision.
- Thirty-eight percent of large trucks involved in serious injury collisions with a primary factor of *unsafe speed* were identified as the vehicle *attributed* to the primary contributing factor of the collision.

Table 46. Top ten primary factors in serious injury collisions involving large trucks by collision severity, 2007

			Large trucks invo	lved in	
				Serious injury collisions where large truck contributing circumstance matched	Large truck attributed to primary factor as
Vehicle type	Top 10 primary factors	All collsions	Serious injury collisions	collision primary factor	% of serious injury
Large trucks		15,032	355	143	40.3
Failure to yie	ld right of way	1,478	53	11	20.8
Unsafe speed	i	382	42	16	38.1
Left of center	r	297	38	4	10.5
Other (explai	ined in narrative) - driver	2,124	31	19	61.3
Disregard sig	mal/Reg sign	382	30	15	50.0
Following to	o closely	1,598	26	14	53.8
Ran off road	right	490	25	14	56.0
Speed too fas	st for weather conditions	670	15	4	26.7
Driver asleep	or fatigued	171	11	5	45.5
Driver illness	3	52	9	5	55.6
Top 10 sub	total	7,644	280	107	
Top 10 as 9	% of all large trucks	50.9%	78.9%	74.8%	

Top 10 primary factors are counts of vehicles, by vehicle type, involved in collisions. For example, there were 1,478 large trucks involved in collisions where the primary factor for each collision was *Failure to yield right of way*. Note that if the collision was a multi-vehicle collision, more than one vehicle may have contributing circumstances that match the primary factor.

Large trucks are defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi-trailer, tractor/double trailer, tractor/triple trailer, or tractor (cab only, no trailer).

Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as fatal or incapacitating.

Source



- ➤ Eight percent of large trucks involved in serious injury crashes collided with an *embankment*.
- ➤ Twenty percent (7/35) of large trucks involved in serious injury crashes collided with a *pedestrian*.

Table 47. Top twelve harmful events in serious injury collisions involving large trucks by collision severity, 2007

	Large trucks involved in								
Collided with	All collsions	Serious injury collisions	Serious injury as % of total						
All large trucks	15,032	355	2.4						
Another motor vehicle	11,665	302	2.6						
Overturn/rollover	193	8	4.1						
Pedestrian	35	7	20.0						
Embankment	62	5	8.1						
Off roadway	178	5	2.8						
Ditch	136	4	2.9						
Guardrail face	124	3	2.4						
Other	655	3	0.5						
Cargo/equipment shift	103	2	1.9						
Guardrail end	44	2	4.5						
Utility pole	255	2	0.8						
Wall/building/tunnel	133	2	1.5						
Top 12 subtotal	13,583	345							
Top 12 as % of all large trucks	90.4%	97.2%							

Notes:

Large trucks are defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck/trailer (not semi), tractor/one semi-trailer, tractor/double trailer, tractor/triple trailer, or tractor (cab only, no trailer).

Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as fatal or incapacitating.

Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- Less than 3 percent of large trucks with trailers involved in all collisions revealed a *hazard placard*, and 1.4 percent were reported as having a *hazard release*.
- Less than 1 percent of single unit large trucks involved in all collisions revealed a hazard placard, and 1 percent were reported as having a hazard release.

Table 48. Large trucks involved in collisions, by hazard placard and release, and collision severity, 2007

			Large trucks	s involved in		
Vehicle use	All collisions	% of total	Fatal collisions	Incapacitating injury collisions	Non-incapacitating injury collisions	Property damage only collisions
Large truck w/ trailer	9,740		113	149	610	8,868
w/ hazard placard	222	2.3	4	6	15	197
hazard release	132	1.4	2	4	10	116
Large truck single unit	5,292		36	57	346	4,853
w/ hazard placard	49	0.9	0	0	2	47
hazard release	51	1.0	0	0	3	48
Total large trucks	15,032		149	206	956	13,721

Notes:

Large truck w/trailer is defined as those vehicles reported as tractor/one semi-trailer, tractor/double trailer, tractor/triple trailer.

Large truck single unit is defined as those vehicles reported as truck (single 2 axle, 6 tires), truck (single 3 or more axles), truck|trailer (not semi), or tractor (cab only, no trailer)

Source:

- ➤ With the exception of *fatal* collisions, the frequency of school buses involved in collisions decreased on average across all collision severity categories from 2003 to 2007.
- ➤ Generally if fatalities exist due to a school bus collision, the fatalities occur in the other vehicle, and not within the school bus.
- ➤ Incapacitating injuries from collisions involving school buses have decreased on average 13 percent from 2003 to 2007.

Table 49. Indiana collisions involving school buses by collision severity, 2003 to 2007

	20	003	2	2004	2	005	20	006	20	007	Average
	Count	%	annual change								
Total collisions	1,095	100.0%	946	100.0%	1,021	100.0%	853	100.0%	826	100.0%	-6.9%
By most severe injury											
Fatal	3	0.3%	1	0.1%	5	0.5%	3	0.4%	4	0.5%	8.3%
Incapacitating	11	1.0%	13	1.4%	14	1.4%	5	0.6%	5	0.6%	-14.0%
Non-incapacitating	151	13.8%	125	13.2%	123	12.0%	124	14.5%	74	9.0%	-14.7%
Property damage only	930	84.9%	807	85.3%	879	86.1%	721	84.5%	743	90.0%	-5.6%
Known injuries											
Fatal	3	100.0%	1	100.0%	5	100.0%	4	100.0%	4	100.0%	7.7%
School bus occupant	1	33.3%	0	0.0%	1	20.0%	0	0.0%	1	25.0%	0.0%
Non-motorist	1	33.3%	0	0.0%	1	20.0%	0	0.0%	2	50.0%	50.0%
Other vehicle occupant	1	33.3%	1	100.0%	3	60.0%	4	100.0%	1	25.0%	0.0%
Incapacitating	12	100.0%	21	100.0%	14	100.0%	6	100.0%	5	100.0%	-13.2%
School bus occupant	3	25.0%	9	42.9%	0	0.0%	1	16.7%	0	0.0%	-23.1%
Non-motorist	0	0.0%	1	4.8%	3	21.4%	0	0.0%	0	0.0%	0.0%
Other vehicle occupant	9	75.0%	11	52.4%	11	78.6%	5	83.3%	5	100.0%	-11.1%
Non-incapacitating	269	100.0%	245	100.0%	277	100.0%	318	100.0%	171	100.0%	-8.8%
School bus occupant	147	54.6%	101	41.2%	166	59.9%	176	55.3%	98	57.3%	-8.3%
Non-motorist	5	1.9%	6	2.4%	5	1.8%	4	1.3%	7	4.1%	10.0%
Other vehicle occupant	117	43.5%	138	56.3%	106	38.3%	138	43.4%	66	38.6%	-10.2%

Notes:

Non-motorists consists of pedestrians or pedalcyclists.

Non-incapacitating includes non-incapacitating and possible injuries.

Source



- ➤ Fifty-three percent of school buses involved in traffic collisions were identified as the vehicle attributed to the primary contributing factor of the collision.
- > Seventy-five percent of school buses involved in traffic collisions were identified as the vehicle attributed to the primary contributing factor of *unsafe backing*.
- ➤ Fifty-four percent of school buses involved in traffic collisions were identified as the vehicle attributed to the primary contributing factor of *driver distracted*.

Table 50. Top ten primary factors in collisions involving school buses by collision severity, 2007

		School buses invo	lved in	
			Serious injury collisions	School buses
			where school bus contributing	attributed to
			circumstance matched	primary factor as
Top 10 primary factors	All collisions	Serious injury collisions	collision primary factor	% of serious injury
School buses	840	9	445	53.0
Other - driver	176	1	125	71.0
Failure to yield right of way	95	0	40	42.1
Following too closely	84	0	21	25.0
Improper turning	74	0	60	81.1
Unsafe backing	72	0	54	75.0
Speed too fast for weather conditions	39	0	2	5.1
Driver distracted	37	1	20	54.1
Roadway surface condition	36	0	14	38.9
Left of center	28	4	12	42.9
Disregard signal/reg sign	23	0	4	17.4
Top 10 subtotal	664	6	352	
Top 10 as % of all school buses	79.0%	66.7%	79.1%	

Notes:

Top 10 primary factors are counts of vehicles, by vehicle type, involved in collisions. For example, there were 176 school buses involved in collisions where the primary factor for each collision was *Other-driver*. Note that if the collision was a multi-vehicle collision, more than one vehicle may have contributing circumstances that match the primary factor.

Serious injury collisions are defined as those collisions where one or more injured occupants obtained injuries reported as fatal or incapacitating.

Source

- ➤ Nearly 90 percent (755/840) of school buses involved in all traffic crashes collided with *another motor vehicle*.
- ➤ Two of four school buses involved in *fatal* collisions collided with a *pedestrian*.

Table 51. School buses involved in Indiana collisions by harmful event and collision severity, 2007

School buses involved in...

Collided with	All collisions	Fatal collisions	Incapacitating injury collisions	Non-incapacitating injury collisions	Property damage only collisions
Another motor vehicle	755	1	5	71	678
Other	22	0	0	0	22
Utility pole	11	0	0	0	11
Deer	8	0	0	0	8
Pedestrian	8	2	0	6	0
Tree	7	0	0	0	7
Light/luminaire support	6	0	0	0	6
Ditch	3	0	0	0	3
Fence	3	0	0	1	2
Off roadway	3	0	0	0	3
Wall/building/tunnel	3	0	0	0	3
Unknown	3	0	0	0	3
Animal other than deer	2	0	0	0	2
Animal drawn vehicle	1	0	0	0	1
Bridge overhead structure	1	0	0	0	1
Bridge, pier, or abutment	1	0	0	0	1
Curb	1	0	0	0	1
Guardrail face	1	1	0	0	0
Mailbox	1	0	0	0	1
Total school buses	840	4	5	78	753

Notes:

Other harmful event is defined as those reported as other and other post/pole/support.

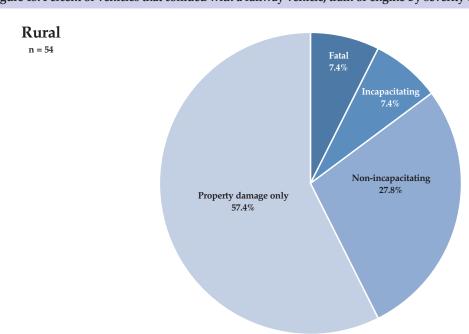
Unknown harmful event includes blank and invalid values.

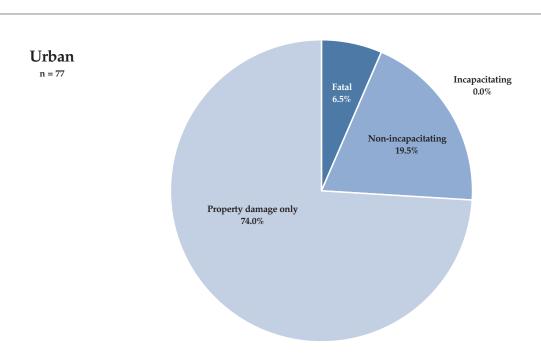
Source:



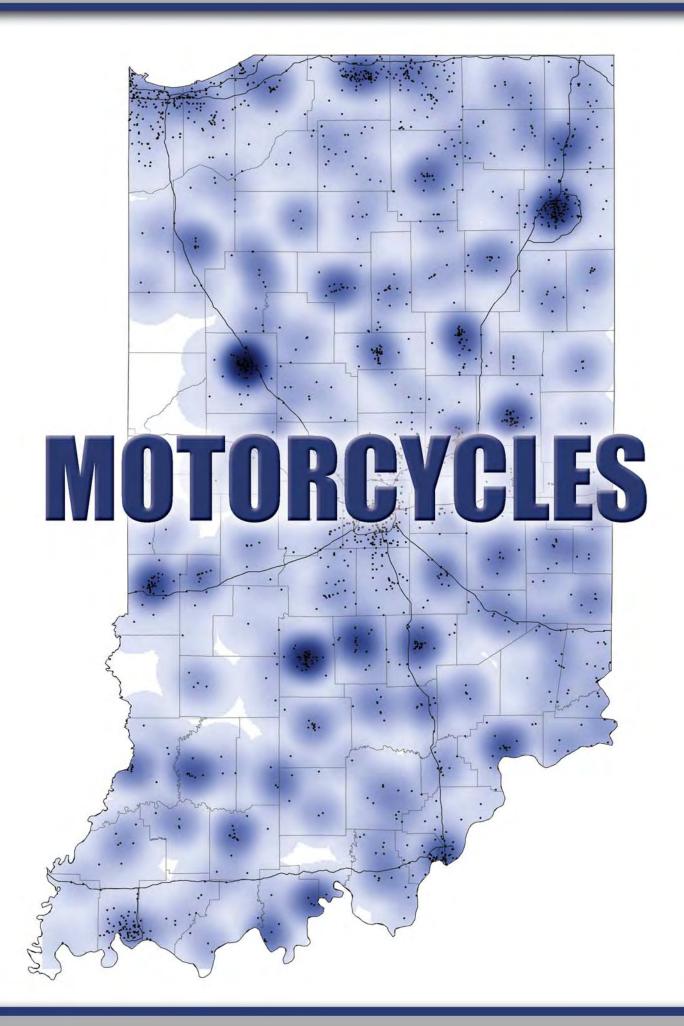
- ➤ Eight percent of vehicles that collide with a *railway vehicle, train,* or *engine* in rural areas result in fatalities, compared to 7 percent in urban areas.
- Fifty-seven percent of vehicles that collide with a *railway vehicle, train,* or *engine* in rural areas result in *property damage only* collisions, compared to 74 percent in urban areas.

Figure 13. Percent of vehicles that collided with a railway vehicle, train or engine by severity of collision and locality, 2007





Source





MOTORCYCLES, 2007

In 2007, there were 3,556 collisions involving motorcycles and mopeds. Of these, 1,644 were classified as single-vehicle collisions, while 1,912 were multi-vehicle. Considering all units involved in motorcycle collisions (5,626), there were 3,656 motorcycles or mopeds and 1,970 other units. Among the 5,569 total individuals in motorcycle collisions, there were 3,468 motorcycle operators and 335 motorcycle passengers. Non-motorcyclists totaled 1,766 individuals (which included 23 pedestrians and 11 pedalcyclists). Fatality counts in 2007 totaled 122 motorcyclists, and three individuals who were in other passenger vehicles. There were an additional 2,744 motorcyclists injured in collisions. Fewer than one-half of all motorcycle operators in collisions were properly licensed in 2007.

HIGHLIGHTS

Motorcycle crashes in 2007 had several notable characteristics. Although multi-vehicle motorcycle collisions had slightly higher fatality rates than single-vehicle crashes, single vehicle motorcycle crashes had higher serious (fatal plus incapacitating) injury rates.

More than 47 percent of single-vehicle motorcycle collision fatalities involved alcohol.

Motorcycle collisions occurred proportionately more often in clear weather conditions, on straight roads with no intersections involved, and on local/city roads. However, the probabilities of more serious (fatal or incapacitating) collision severities were highest on interstate highways, interchanges and ramps, curves, and when visibility was poor.

In motorcycle collisions, other non-motorcycle vehicles are slightly more likely to have been given a citation (felony, misdemeanor, or infraction) than the involved motorcycles. However, motorcycles contribute disproportionately to the primary (causal) factor in multi-vehicle collisions when they involve such factors as *unsafe speed* or *improper passing;* non-motorcycle units (other vehicles) contribute disproportionately to the primary factor in multi-vehicle collisions when they involve such factors as *failure to yield right of way* or *improper turning*.

There was a low rate of helmet use in Indiana collisions. In 2007, helmets were reportedly used by only 28.7 percent of motorcyclists in all collisions. Among age groups, the highest rates of helmet use (as reported from collision data) are for riders between 16 and 20 years old (33.4 percent) and 60 years or older (40.1 percent). The lowest rate reported was among riders aged 40 to 49 (22.9 percent).

Considering all motorcycle collisions, the absence of a helmet was associated with injuries to the neck and above nearly 27 percent of the time; when helmet use was reported, the percentage of injuries located in the neck and head dropped to less than 12 percent. More than 44 percent of motorcyclists in collisions were characterized by injuries to the neck and head of unhelmeted riders.

- ➤ Motorcycle collisions increased by more than 14 percent from 2006 to 2007.
- Fatal motorcycle collisions have grown at nearly 11 percent annually since 2003.
- Due to their small overall numbers, moped collisions have increased annually at a higher rate than motorcycles.
- Average annual change of fatal motorcycle collisions (10.9 percent) is more than twice the overall motorcycle average annual change.

Table 52. Number of collisions involving motorcycles, mopeds, or both by severity and year

Collision severity	2003	2004	2005	2006	2007	Average annual change
Motorcycles						
Fatal	75	90	104	92	110	10.9%
Incapacitating	328	362	341	377	445	8.3%
Non-incapacitating	1,248	1,421	1,396	1,380	1,587	6.5%
Property damage only	776	691	744	725	806	1.3%
Total	2,427	2,564	2,585	2,574	2,948	5.1%
Mopeds						
Fatal	1	10	9	12	7	-6.1%
Incapacitating	0	37	38	63	80	31.8%
Non-incapacitating	12	191	210	334	386	28.2%
Property damage only	2	72	66	116	141	29.7%
Total	15	310	323	525	614	27.9%

Notes:

Cells report count of collisions, unless otherwise noted.

Due to apparent change in classifying mopeds after 2003, average annual change for mopeds is calculated for 2004-2007.

Rules used by police to classify vehicles as 'mopeds' are not clearly stated in the Indiana code.

From 2004 to 2007 there were 11 collisions involving a motorcycle and moped colliding. These are double-counted, as one motorcycle collison and one moped collision.

Source:

- ➤ Multi-vehicle collisions involving motorcycles have higher fatal collision rates than single-vehicle crashes.
- ➤ Generally single vehicle motorcycle crashes have higher proportions of combined fatal plus incapacitating collision severities than multi-vehicle motorcycle crashes
- ➤ Multi-vehicle collisions have higher probabilities of property damage only.

Table 53. Probability of motorcycle or moped collision severity by vehicles involved and year

Type of motorcycle			Collision severity (percent of total annual collision	ons)
or moped collision	Year	Fatal	Incapacitating	Non-incapacitating	Property damage only
	2003	2.4%	15.1%	59.0%	23.4%
	2004	2.9%	13.2%	65.7%	18.3%
Single vehicle	2005	3.6%	14.4%	62.6%	19.5%
	2006	2.9%	16.6%	63.7%	16.8%
	2007	3.1%	17.4%	63.3%	16.2%
	2003	3.7%	12.0%	45.5%	38.9%
	2004	4.0%	14.5%	47.9%	33.6%
Multi-vehicle	2005	4.2%	11.9%	48.9%	35.1%
	2006	3.8%	12.0%	47.8%	36.4%
	2007	3.5%	12.5%	48.6%	35.5%

Includes motorcycles and mopeds.

Source:



- ➤ The largest numbers of motorcycle collisions occur in clear weather conditions, on straight/level roads, with no road junctions involved.
- Nearly three-quarters of motorcycle collisions (and more than two-thirds of fatal collisions) occur on local/city roads and state/US highways.
- ➤ Although small in number, collisions on interchanges/ramps have the highest probability of fatal collision outcomes.
- ➤ Also small in number, motorcycle collisions on interstate highways have a high likelihood of fatal or incapacitating injury outcomes.
- Motorcycle crashes on curves result in fatal or incapacitating collision severities nearly a quarter of the time.

Table 54. Characteristics of motorcycle collisions by severity of collision, 2007

		Collision sev	erity (number	of collisions)		Probab	ility of collision	severity
Characteristics	Fatal	Incapacitating	Non-incap- acitating	Property damage only	Total	Fatal (F)	Incap- acitating (I)	F + I
ALL COLLISIONS	117	525	1,969	945	3,556	3.3%	14.8%	18.1%
Weather conditions								
Poor visibility	12	85	267	128	492	2.4%	17.3%	19.7%
Clear	102	428	1,637	779	2,946	3.5%	14.5%	18.0%
Extreme weather	2	12	63	34	111	1.8%	10.8%	12.6%
Unknown	1	0	2	4	7	14.3%	0.0%	14.3%
Road junctions								
Interchange/Ramp	9	10	41	17	77	11.7%	13.0%	24.7%
Intersections	35	182	667	323	1,207	2.9%	15.1%	18.0%
No junction involved	73	329	1,256	597	2,255	3.2%	14.6%	17.8%
Unknown	0	4	5	8	17	0.0%	23.5%	23.5%
Road character								
Curves	38	142	446	142	768	4.9%	18.5%	23.4%
Straight/grade/hillcrest	18	74	255	94	441	4.1%	16.8%	20.9%
Straight/Level	60	303	1,241	676	2,280	2.6%	13.3%	15.9%
Non-roadway crash	0	6	27	31	64	0.0%	9.4%	9.4%
Unknown	1	0	0	2	3	33.3%	0.0%	33.3%
Road class								
Interstate	12	17	59	32	120	10.0%	14.2%	24.2%
County road	24	114	359	116	613	3.9%	18.6%	22.5%
Highway	50	163	568	229	1,010	5.0%	16.1%	21.1%
Local/City road	31	218	900	468	1,617	1.9%	13.5%	15.4%
Unknown	0	13	83	100	196	0.0%	6.6%	6.6%

Includes motorcycles and mopeds.

Cells report count of collisions, unless otherwise noted.

Includes multi-vehicle and single vehicle collisions.

Unknown includes blank and invalid codes.

Characteristics (weather, road junctions/character/class) are re-grouped from collision characteristics reported in ARIES, as shown below.

Poor visibility includes cloudy, fog/smoke/smog, and blowing sand/soil/snow.

Extreme weather includes rain, severe cross wind, sleet/hail/freezing rain, and snow.

Intersections includes five point or more, four-way intersection, T-intersection, traffic circle/roundabout, and Y-intersection.

Interchange/Ramp includes interchange and ramp.

Curves includes curve/grade, curve/hillcrest, and curve/level.

 ${\it Straight/grade/hillcrest}\ includes\ {\it straight/grade}\ and\ {\it straight/hillcrest}.$

Highway includes state road and US route.

Source

- ➤ In 2007, someone (an operator, a passenger, or both) died on 118 different motorcycles or mopeds.
- ➤ Nearly 2,500 other motorcycles or mopeds had riders who suffered other non-fatal injuries in 2007.
- ➤ Single-vehicle fatal motorcycle crashes grew annually 19 percent between 2003 and 2007.
- Multi-vehicle motorcycle crashes are slightly more likely to result in a fatal unit outcome in 2007.
- ➤ About one in five motorcycles involved in collisions in 2007 resulted in a fatal or incapacitating injury to its rider(s).

Table 55. Number of motorcycles and mopeds involved in collisions by unit severity, vehicles involved, and year

		Un	it severity		
Type of collision	Fatal	Incapacitating	Non-incapacitating	Property damage only	Total
All collisions					
2003	75	322	1,260	847	2,504
2004	101	399	1,619	819	2,938
2005	112	378	1,606	869	2,965
2006	104	437	1,720	902	3,163
2007	118	523	1,973	1,042	3,656
Probability of unit severity, 2007	3.2%	14.3%	54.0%	28.5%	
Single vehicle					
2003	27	168	654	260	1,109
2004	38	174	864	243	1,319
2005	48	191	839	263	1,341
2006	42	241	930	250	1,463
2007	51	283	1,029	281	1,644
Probability of unit severity, 2007	3.1%	17.2%	62.6%	17.1%	
Multi-vehicle					
2003	48	154	606	587	1,395
2004	63	225	755	576	1,619
2005	64	187	767	606	1,624
2006	62	196	790	652	1,700
2007	67	240	944	761	2,012
Probability of unit severity, 2007	3.3%	11.9%	46.9%	37.8%	
Average annual change					
All collisions	13.0%	13.5%	12.4%	5.5%	10.1%
Single vehicle	19.0%	14.2%	12.7%	2.3%	10.5%
Multi-vehicle	9.4%	14.1%	12.2%	6.9%	9.8%

Includes motorcycles and mopeds; excludes all other vehicles/units.

Cells report count of motorcycles and mopeds involved in collisions, unless noted otherwise.

Unit severity means the worst injury suffered by someone on a motorcycle or moped.

Source:



- ➤ Citations are given to vehicles at a fairly low rate--just above 11 percent of units are cited.
- ➤ Units/vehicles other than motorcycles had a slightly larger proportion of unit citations (6.1 percent) than motorcycles (5 percent).
- ➤ Units/vehicles other than motorcycles received citations at higher rates than motorcycles in 2007 (12.7 percent compared to 9.9 percent).

Table 56. Number of units/vehicles involved in multi-vehicle collisions and citations given, 2007

	Citation (given	
	No	Yes	Total
All units	3,515	441	3,956
Motorcycles and mopeds	1,813	199	2,012
All other units/vehicles	1,652	240	1,892
Unknown	50	2	52
As percent of all units involved			
Motorcycles and mopeds	45.8%	5.0%	50.9%
All other units/vehicles	41.8%	6.1%	47.8%
Unknown	1.3%	0.1%	1.3%
Total	88.9%	11.1%	100%
As percent of unit type			
Motorcycles and mopeds	90.1%	9.9%	100%
All other units/vehicles	87.3%	12.7%	100%
Unknown	96.2%	3.8%	100%
Total	88.9%	11.1%	100%

Notes:

Includes all units involved in multi-vehicle motorcycle collisions; excludes single-vehicle collisions. *Citation given* includes *infractions, misdemeanors*, or *felonies*.

Unknown includes *unknown*, *null*, and *invalid*.

Source:

- ➤ Helmets were reportedly used by 28.7 percent of motorcyclists in all collisions (calculated from table).
- ➤ Lowest helmet use in all collisions (22.9 percent) is for ages 40 to 49 years old (calculated from table).
- ➤ Lowest helmet use in fatal collisions (13 percent) is for ages 30 to 39 (calculated from table).
- ➤ Male motorcycle operators were more than twice as likely to be killed in collisions as female operators.
- Female passengers (injured occupants) had the highest incidence of fatal and incapacitating injuries (27 percent).
- ➤ Under one-half of all motorcycle operators in collisions are properly licensed.

Table 57. Characteristics of motorcycle operators and/or passengers, 2007

		Indi	vidual injury st	atus		Prob	ability of injury s	status
Characteristics	Fatal	Incapacitating	Non-incap- acitating	All other	Total	Fatal (F)	Incap- acitating (I)	F + I
Helmet use/age								
Helmet	30	114	603	269	1,016	3.0%	11.2%	14.2%
Under 16	0	4	31	1	36	0.0%	11.1%	11.1%
16-20	2	5	71	42	120	1.7%	4.2%	5.8%
21-29	4	16	121	72	213	1.9%	7.5%	9.4%
30-39	3	25	91	52	171	1.8%	14.6%	16.4%
40-49	10	17	117	45	189	5.3%	9.0%	14.3%
50-59	4	28	114	44	190	2.1%	14.7%	16.8%
60 and older	7	19	58	13	97	7.2%	19.6%	26.8%
No helmet indicated	87	421	1,434	582	2,524	3.4%	16.7%	20.1%
Under 16	1	10	66	25	102	1.0%	9.8%	10.8%
16-20	5	28	157	49	239	2.1%	11.7%	13.8%
21-29	11	82	294	118	505	2.2%	16.2%	18.4%
30-39	20	94	262	116	492	4.1%	19.1%	23.2%
40-49	25	115	358	137	635	3.9%	18.1%	22.0%
50-59	17	72	210	102	401	4.2%	18.0%	22.2%
60 and older	8	20	82	35	145	5.5%	13.8%	19.3%
Unknown	0	0	5	0	5	0	0	0
Gender								
Female	13	107	367	62	549	2.4%	19.5%	21.9%
Operator	4	41	170	56	271	1.5%	15.1%	16.6%
Injured occupant	9	66	197	6	278	3.2%	23.7%	27.0%
Male	109	461	1,807	870	3,247	3.4%	14.2%	17.6%
Operator	109	457	1,768	858	3,192	3.4%	14.3%	17.7%
Injured occupant	0	4	39	12	55	0	7.3%	7.3%
Operators' license status								
Motorcycle / endorsement	56	240	873	469	1,638	3.4%	14.7%	18.1%
Other operator license	50	213	830	358	1,451	3.4%	14.7%	18.1%
No License	6	41	191	67	305	2.0%	13.4%	15.4%
Percent with MC license	50.0%	48.6%	46.1%	52.5%	48.3%			

Includes motorcycle operators and passengers only (n = 3,803), unless noted otherwise; excludes all others.

Motorcycle / endorsement license status includes Chauffeur W/MC Endorcement, Learner Motorcycle, Operators w/MC Endorsement, and PP Chauffeur w/MC Endorsement.

Source:

n = 3,540 individuals where helmet use is known.

 $n=3,\!796$ individuals where gender is known.

 $n=3,\!394\,$ motorcycle operators where license status is known.

Non-incapacitating includes non-incapacitating and possible.

All other injury status includes not reported, null, refused, and unknown.



- ➤ Helmet use or non-use is associated with slightly different patterns of personal injury.
- ➤ Motorcyclists without helmets have head and neck injuries 26.7 percent of the time, compared to 11.5 percent when helmets are reported.
- ➤ Motorcyclists with helmets have proportionally more injuries to the arms and torso (34 percent) than those without helmets (22.4 percent).

Table 58. Nature and location of injuries to motorcycle operators and passengers, by reported helmet use, 2007

			Location	of injury				Percent of
Nature of injury	Neck and above	Entire body	Torso	Arms	Legs	Not indicated	Total	injuries l nature
		No h	elmet indicate	ed				
Severed	2	2	1	1	10	0	16	0.6%
Severe bleeding	86	4	2	3	10	0	105	4.2%
Fracture/Dislocation	64	19	17	65	165	0	330	13.1%
Internal	106	26	26	1	7	1	167	6.6%
Minor bleeding	169	10	5	57	48	2	291	11.5%
Abrasion-minor burn- contusion-bruise	156	55	21	139	113	3	487	19.3%
Complaint of pain	63	48	128	87	158	2	486	19.3%
Other	21	6	3	2	11	0	43	1.7%
None visible	5	0	4	1	5	19	34	1.3%
Not indicated	1	1	3	1	3	556	565	22.4%
Subtotal, no helmet	673	171	210	357	530	583	2,524	100.0%
Percent of injuries by location	26.7%	6.8%	8.3%	14.1%	21.0%	23.1%	100%	
	'		Helmet					'
Severed	0	0	0	0	0	0	0	na
Severe bleeding	10	1	1	2	2	0	16	1.6%
Fracture/Dislocation	10	6	14	54	56	0	140	13.8%
Internal	19	14	15	1	2	1	52	5.1%
Minor bleeding	26	5	7	22	17	0	77	7.6%
Abrasion-minor burn- contusion-bruise	18	21	15	93	57	2	206	20.3%
Complaint of pain	27	22	70	46	69	0	234	23.0%
Other	4	4	0	3	4	0	15	1.5%
None visible	0	1	0	2	1	6	10	1.0%
Not indicated	3	1	0	1	1	260	266	26.2%
Subtotal, helmet	117	75	122	224	209	269	1,016	100.0%
Percent of injuries by location	11.5%	7.4%	12.0%	22.0%	20.6%	26.5%	100%	

Includes motorcycle operators and passengers only; excludes all others.

n = 3,540 individuals where helmet use is known.

Includes all individual injury status categories.

Location of injury is defined as follows based on ARIES categories:

Torso includes abdomen/pelvis, back, and chest.

 $Arms\ includes\ elbow/lower\ arm\ and\ shoulder/upper\ arm.$

Neck + above includes eye, face, head, and neck.

Legs includes hip/upper leg and knee/lower leg/foot.

Not indicated includes null and invalid.

Source

- ➤ Unhelmeted motorcyclists account for a disproportionate share of total motorcycle fatalities (71.3 percent).
- ➤ The nature of injuries in more than one-half of fatalities (51.7 percent) is classified as 'internal'.
- ➤ More than 44 percent of motorcycle fatalities are characterized by injuries to the neck and head of unhelmeted riders.
- More than one-third of motorcycle fatalities involve internal injuries or severe bleeding in the neck and head of unhelmeted riders.

Table 59. Percentage of total motorcyclist fatalities by helmet use and nature and location of injuries, 2007

			Location of inju	ry		
	Neck and	Entire			Not	
Helmet use/nature of injury	above	body	Torso	Legs	indicated	Total
No helmet indicated	44.3%	18.0%	4.9%	3.3%	0.8%	71.3%
Internal	19.7%	13.1%	3.3%		0.8%	36.9%
Severe bleeding	14.8%	0.8%				15.6%
Other	4.1%	0.8%	0.8%	0.8%		6.6%
Severed	1.6%	1.6%	0.8%	1.6%		5.7%
Fracture/Dislocation	3.3%	1.6%		0.8%		5.7%
Minor bleeding	0.8%					0.8%
Helmet	12.3%	7.4%	1.6%	2.5%	0.8%	24.6%
Internal	4.9%	6.6%	0.8%			12.3%
Fracture/Dislocation	4.1%			1.6%		5.7%
Severe bleeding	0.8%	0.8%	0.8%			2.5%
Other	1.6%					1.6%
Complaint of pain				0.8%		0.8%
Not indicated					0.8%	0.8%
Abrasion-minor burn-contusion-bruise	0.8%					0.8%
Unknown helmet use	0.8%	1.6%	0.8%	0.0%	0.8%	4.1%
Internal	0.8%	0.8%	0.8%			2.5%
Not indicated					0.8%	0.8%
Fracture/Dislocation		0.8%				0.8%
Total	57.4%	27.0%	7.4%	5.7%	2.5%	100.0%

Includes motorcycle operators and passengers only; excludes all others.

N = 122 motorcycle or moped fatalities.

Not indicated includes null and invalid.

Source



- ➤ Lower percentages (of 'Yes') indicate collisions that were more likely to be caused by actions of the other (non-motorcycle) vehicle.
- For example, when the primary factor in the collision was *failure to yield right of way*, the motorcyclist *failed to yield* 18.2 percent of the time.
- ➤ High percentages mean the motorcycle operator was more of a contributor to the collision primary factor.
- ➤ For example, when the *primary factor* was *improper passing*, the motorcyclist was engaged in this behavior 79.7 percent of the time.
- ➤ Motorcyclists contribute disproportionately to the *primary factor* in collisions when *unsafe speed, improper passing,* and *alcoholic beverages* are involved.
- ➤ Other vehicles/units contribute disproportionately to the *primary factor* in collisions when *unsafe backing, failure to yield,* and *improper turning* are involved.

Table 60. Percent of time motorcycle operator contributed to primary factor in multi-vehicle collisions, 2007

Collision primary factors (Driver group)	Total MC operators		orcycle contributing circumsta atched collision primary facto	
	operators	No	Yes	Percent "Yes"
Cell phone usage	5	5	0	0.0%
Unsafe backing	37	35	2	5.4%
Failure to yield right of way	648	530	118	18.2%
Improper turning	54	40	14	25.9%
Driver asleep or fatigued	5	3	2	40.0%
Driver distracted	74	36	38	51.4%
Disregard signal/Reg sign	100	48	52	52.0%
Following too closely	263	123	140	53.2%
Left of center	79	35	44	55.7%
Improper lane usage	50	22	28	56.0%
Alcoholic beverages	44	15	29	65.9%
Speed too fast for weather conditions	6	2	4	66.7%
Not a factor - driver	3	1	2	66.7%
Pedestrian action	3	1	2	66.7%
Other (Explained in narrative) - driver	197	64	133	67.5%
Improper passing	59	12	47	79.7%
Overcorrecting/oversteering	20	4	16	80.0%
Wrong way on one way	5	1	4	80.0%
Ran off road right	7	1	6	85.7%
Unsafe speed	77	8	69	89.6%
Violation of license restriction	1	0	1	100.0%
Other telematics in use	1	0	1	100.0%
Total	1,738	986	752	43.3%

Includes motorcycle operators only in multi-vehicle collisions. Excludes single vehicle collisions.

Includes only collisions in which Driver behavior was identified as the primary factor in the collision.

Excludes collisions for which Environment or Vehicle factors were identified as the primary factor in the collision.

Yes/no based on an *indicator* which denotes a motor vehicle with a contributing factor (as assessed by the reporting officer) that matches the *primary factor* to the occurrence of the collision.

More than one vehicle in a collision can have a role in causing collisions if those vehicles each have the contributing factor that matches the primary factor.

Source

- ➤ Single-vehicle motorcycle crashes appear more likely to involve alcohol than multi-vehicle collisions.
- ➤ Considering all single vehicle motorcycle collisions, about one out of six motorcyclists are linked to alcohol-related units.
- ➤ Nearly one-half of single vehicle collision motorcycle fatalities are alcohol-related.
- ➤ Single vehicle fatalities are nearly twice as likely to involve alcohol as multi-vehicle fatalities.
- ➤ In multi-vehicle collisions, motorcycle operators and riders are twice as likely to be associated with an alcohol-related motorcycle—5.6 percent of nearly 2,000 motorcyclists were linked to a motorcycle having an alcohol-related individual. Only 2.8 percent of 1,729 individuals in other vehicles were in vehicles bearing alcohol-related persons.

Table 61. Individuals and individual injury status in alcohol-related units involved in motorcycle collisions, 2007

		Individual	injury status		
Type of vehicle/alcohol status	Fatal	Incapacitating	Non-incapacitating	All other	Total
SINGLE VEHICLE COLLISION					
Motorcycle and moped	51	302	1,139	312	1,804
Alcohol-related unit	24	66	170	31	291
Percent alcohol-related	47.1%	21.9%	14.9%	9.9%	16.1%
MULTI-VEHICLE COLLISION					
Motorcycle and moped	71	266	1,037	625	1,999
Alcohol-related unit	18	26	45	22	111
Percent alcohol-related	25.4%	9.8%	4.3%	3.5%	5.6%
All other units/vehicles	3	9	119	1,598	1,729
Alcohol-related unit			7	41	48
Percent alcohol-related	0.0%	0.0%	5.9%	2.6%	2.8%
Unknown		3	21	13	37
Totals	125	580	2,316	2,548	5,569

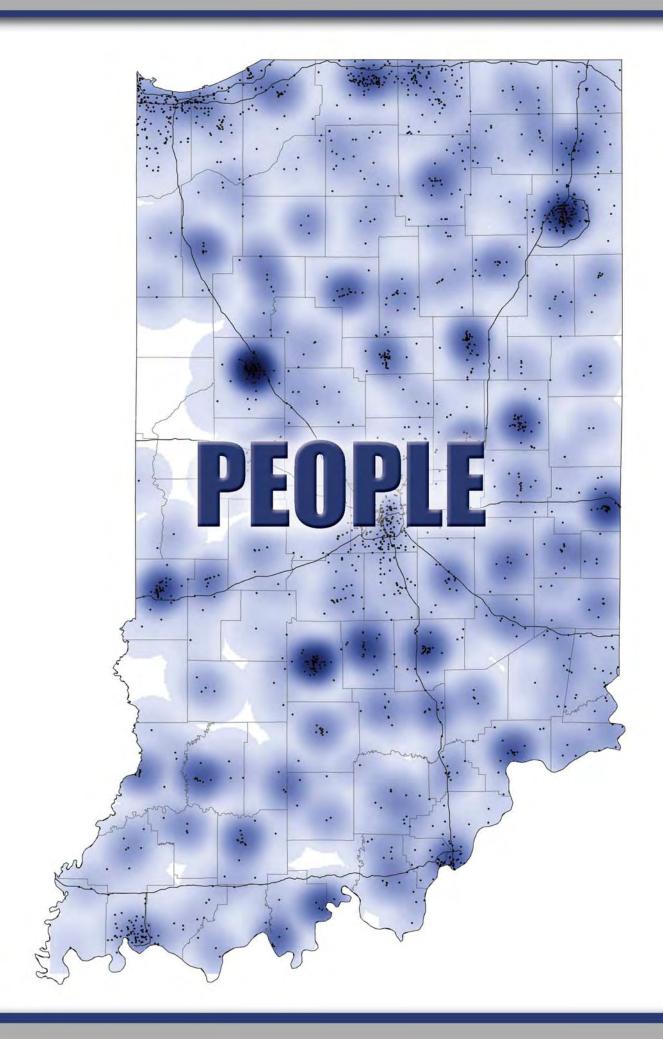
Cells report counts of individuals associated with units/vehicles unless noted otherwise; alcohol-related refers to unit status.

Of 37 unknowns, 26 were non-motorcyclists classified in single vehicle collisions.

Non-incapacitating includes non-incapacitating and possible.

All other injury status includes not reported, null, refused, and unknown.

Source





PEOPLE, 2007

This section on people looks at individuals involved in Indiana fatal and non-fatal collisions in 2007. Tables and figures summarize individuals involved by gender, age, locality (rural/urban), type of injury (fatal, incapacitating, non-incapacitating), physical condition, as well as restraint usage.

HIGHLIGHTS

There were 898 people killed in motor vehicle collisions and an additional 52,468 with known non-fatal injuries in 2007.

Forty-nine children (age 15 and under) were killed in traffic collisions in 2007.

Males aged 45 to 54 involved in rural collisions were nearly 4 times more likely to be killed than females of the same age.

The 16 to 17 age group represents the lowest percentage of licensed drivers, and the highest rate of licensed drivers in both fatal and all collisions.

3.9 percent of drivers involved in fatal collisions had no valid license.

Pedestrian fatalities (60) in 2007 were the lowest since 2003.

Most urban pedestrian fatalities occurred during *daylight* (18) and most rural pedestrian fatalities occurred during *dark*, not *lighted* times (9).

Over nine times more pedalcyclists were involved in collisions in urban areas than rural areas.

Overall restraint use has increased on average 1.7 percent each year since 2003.

Older drivers and occupants are more likely to be restrained than younger drivers.

Drivers and occupants of SUVs killed had the lowest percentage of restraint usage compared to any other vehicle type driver or occupant.

89 percent of those killed and ejected were not restrained.

If involved in a collision, a driver of a vehicle was 37.5 times more likely to have been killed if unrestrained than a driver who was restrained.

- ➤ Males aged 15 to 19 had the highest fatality rate of all age groups (31.8 per 100,000 population).
- ➤ Among females, those aged 75 and over were killed at the highest rate (15.6 per 100,000 population).
- ➤ Males were killed in traffic collisions at a rate nearly three times that of females (21.0 vs. 7.6).

Table 62. Individuals killed in motor vehicle collisions, by age, 2007

		Male			Female			Total	
Age group	Fatalities	Population	Fatalities per 100K population	Fatalities	Population	Fatalities per 100K population	Fatalities	Population	Fatalities per 100K population
Less than 5	6	220,373	2.7	0	210,077	0.0	6	430,450	1.4
5 to 9	9	222,512	4.0	7	215,916	3.2	16	438,428	3.6
10 to 14	10	227,372	4.4	9	220,344	4.1	19	447,716	4.2
15 to 19	75	236,001	31.8	31	226,864	13.7	106	462,865	22.9
20 to 24	64	216,504	29.6	23	207,429	11.1	87	423,933	20.5
25 to 34	114	432,427	26.4	34	416,806	8.2	148	849,233	17.4
35 to 44	94	446,066	21.1	38	438,488	8.7	132	884,554	14.9
45 to 54	119	457,196	26.0	23	461,569	5.0	142	918,765	15.5
55 to 64	71	325,664	21.8	25	346,343	7.2	96	672,007	14.3
65 to 74	47	181,719	25.9	16	215,521	7.4	63	397,240	15.9
75 and over	43	139,327	30.9	38	244,387	15.5	81	383,714	21.1
Unknown/									
invalid age	1	na	na	0	na	na	1	na	na
TOTAL	653	3,105,161	21.0	244	3,203,744	7.6	897	6,308,905	14.2

Notes:

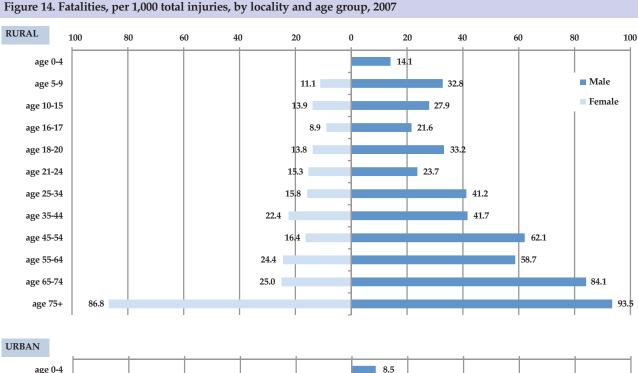
There were a total of 898 fatalities in 2007; one fatality in the age group 35 to 44 has an unknown gender and is not shown above.

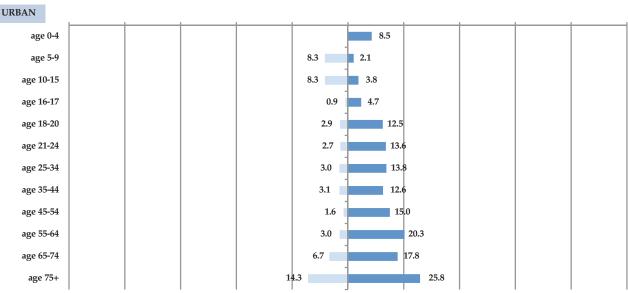
Sources

Population: US Census Bureau, Population Division, Interim State Population Projections; File2. Annual projections by 5 year and selected age groups by sex. Accessed at http://www.census.gov/population/www/projections/projectionsagesex.html.

Collision: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

- Female children aged 5 to 9 were 3 times more likely to be killed and female children aged 10 to 15 were over twice as likely to be killed in urban areas than male children the same age.
- ➤ As males involved in rural collisions get older, the likelihood of a fatal injury occurring increases.
- ➤ Males aged 45 to 54 involved in rural collisions were nearly 4 times more likely to be killed than females of the same age.
- There was a high rate of females killed age 75 and over in rural collisions (86.8 per 1,000 total injuries); this is in part due to a high number of fatalities and low number of overall females injured in this age group.





Total injuries includes fatal, incapacitating, non-incapacitating, and possible categories for each age group.

Source

- Nearly 71 percent of the fatalities occurred in rural areas.
- ➤ Children (age 15 and under) fatalities totaled 49.
- ➤ Males constituted 72.7 percent (653) of the fatalities.
- Thirty individuals (aged 16 and 17) were killed in motor vehicle crashes on rural roads, compared to five individuals in the same age group on urban roads. The 30 fatalities on rural roads is down from 44 in 2006; five on urban roads is same as in 2006.
- > While individuals aged 25 to 64 represent 56.7 percent (148 of 261) of the urban fatalities, they represent only 16.5 percent (148 of 897) of the total fatalities.

Table 63 Individuals killed, by locale, age, role and gender, 2007

Total	Total urban	Unknown age	75 + over	65 - 74	55 - 64	45 - 54	35 - 44	25 - 34	21 - 24	18 - 20	16 - 17	10 - 15	5 - 9	0 - 4	Age in years			Total rural	Unknown age	75 + over	65 - 74	55 - 64	45 - 54	35 - 44	25 - 34	21 - 24	18 - 20	16 - 17	10 - 15	5 - 9	0 - 4	Age in years		
500	141	0	12	9	21	22	22	27	15	10			0	г	Male			359	0	24	30	42	75	55	67	21	32	11	<u> </u>	1	0	Male		
126	29	0	4	ω	ω	4	ហ	6	. ω	- —	0	0	0	0	Female	Driver		97	0	12	ហ	11	9	18	18	10	10	ω	₽	0	0	Female	Driver	
626	170	0	16	12	24	26	27	33	18	11	: 1	. р	0	1	Total			456	0	36	35	53	84	73	85	31	42	14	2	⊣	0	Total		
103	25	1	0	0	0	₽	0	7	2	7	ω		<u> </u>	2	Male	Inj		78	0	· (Л	ω	₽	9	9	00	ഗ	12	10	00	IJ	သ	Male	Inj	
96	24	0	4	2	₽	0	2	2	2	ω	, Д	ن ن	2	0	Female	Injured occupant	U	72	0	14	4	8	10	9	IJ	2	6	6	5	ω	0	Female	Injured occupant	R
199	49	1	4	2	п	₽	2	9	4	10	4	6	ယ	2	Total	nt	JRBAN	150	0	19	7	9	19	18	13	7	18	16	13	8	ယ	Total	nt	RURAL
40	27	0	₽	ω	4	00	ហ	ω	2	- —	0	0	0	0	Male			13	0	0	2	₽	ω	2	2	₽	0	0	₽	₽	0	Male		
20	12	0	ω	┙	₽	0	┙	2	0	. —	0		2	0	Female	Pedestrian		œ	0	. —		⊣	0	1	1	2	0	0	₽	0	0	Female	Pedestrian	
60	39	0	4	4	ن ن	00	6	ഗ	2	2	0		2	0	Total			21	0	. —	ω	2	ω	ω	ω	ω	0	0	2	₽	0	Total		
10	3	0	0	0	0	0	1	0	-	0	0	-	0	0	Male	-		7	0	. —	0	2	1	0	0	1	0	0	┙	┙	0	Male	H	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Female	Pedalcyclist		2	0	0	0	0	0	2	0	0	0	0	0	0	0	Female	Pedalcyclist	
12	သ	0	0	0	0	0	1	0		0	0		0	0	Total			9	0	. —	0	2		2	0	1	0	0		-	0	Total		
897	261	1	24	18	30	35	36	47	25	23	່ ທ	9	ن ن ن	ω	age groups	Total		636	0	57	45	66	107	96	101	42	60	30	18	11	3	age groups	Total	
	100.0%	0.4%	9.2%	6.9%	11.5%	13.4%	13.8%	18.0%	9.6%	8.8%	1.9%	3.4%	1.9%	1.1%	fatals	% total	3	100.0%	0.0%	9.0%	7.1%	10.4%	16.8%	15.1%	15.9%	6.6%	9.4%	4.7%	2.8%	1.7%	0.5%	fatals	% total	
	29.1%	0.1%	2.7%	2.0%	3.3%	3.9%	4.0%	5.2%	2.8%	2.6%	0.6%	1.0%	0.6%	0.3%	fatals	% overall total	1	70.9%	0.0%	6.4%	5.0%	7.4%	11.9%	10.7%	11.3%	4.7%	6.7%	3.3%	2.0%	1.2%	0.3%	fatals	% overall total	1

Excludes individuals with unknown gender and locality (rural/urban). There were a total of 898 fatalities in 2007. One fatality is excluded due to an unknown gender.

- Sixty-two percent of non-fatal injuries occurred in collisions in urban localities (32,576 of 52,281).
- ➤ Female drivers comprised 44.3 percent of the drivers involved in non-fatal rural and 54 percent of the drivers involved in non-fatal urban collisions.
- ➤ More than 86 percent of the non-fatal injured pedestrians and nearly 91 percent of the non-fatal injured pedalcyclists occurred in urban area collisions.
- Individuals aged 25-34 in urban collisions comprised 11.3 percent of the non-fatal injured persons involved in collisions. A

Table 64. Individuals with non-fatal injuries by locale, age, role and gender, 2007

						RURAL									
		Driver		I.	Injured occupant	ant		Pedestrian			Pedalcyclist		Total for	% total rural non-fatal	% overall total non-
Age in years	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	age groups	injuries	fatal injuries
0 - 4	10	∞	18	187	189	376	13	8	21	0	0	0	415	2.1%	%8.0
5 - 9	S	2	7	217	255	472	5	6	14	6		10	503	2.6%	1.0%
10 - 15	37	28	65	314	459	773	11	7	18	21	4	22	881	4.5%	1.7%
16 - 17	999	638	1,303	274	355	629	∞	∞	16	4	₩	IJ	1,953	%6.6	3.7%
18 - 20	946	806	1,752	320	325	645	10	10	20	4	2	9	2,423	12.3%	4.6%
21 - 24	688	672	1,561	254	218	472	^	S	12	6	4	_	2,052	10.4%	3.9%
25 - 34	1,486	1,159	2,645	273	325	298	24	12	36	7	2	6	3,288	16.7%	6.3%
35 - 44	1,324	993	2,317	173	301	474	14	11	25	7	2	6	2,825	14.3%	5.4%
45 - 54	1,189	857	2,046	123	272	395	8	10	18	∞	2	10	2,469	12.5%	4.7%
55 - 64	664	615	1,279	9	176	236	10	9	16	8	2	Ŋ	1,536	7.8%	2.9%
65 - 74	328	247	575	48	140	188	4	8	_	1	0	\leftarrow	771	3.9%	1.5%
75 + over	247	166	413	31	117	148	11	1	12	2	0	2	575	2.9%	1.1%
Unknown age	2	4	9	9	1	7	П	0	П	0	0	0	14	0.1%	%0.0
Total rural	7,792	6,195	13,987	2,280	3,133	5,413	126	06	216	69	20	68	19,705	100.0%	37.7%
						URBAN								,	;
		Driver		T.	Injured occupant	ant		Pedestrian			Pedalcyclist		Total for	% total urban	% overall total non-
Age in years	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	age groups	injuries	fatal injuries
0 - 4	11	15	26	290	278	568	39	37	92	6	2	111	681	2.1%	1.3%
5 - 9	9	∞	14	347	399	746	63	43	106	69	27	96	962	3.0%	1.8%
10 - 15	64	32	96	417	578	995	105	26	164	500	52	261	1,516	4.7%	2.9%
16 - 17	493	662	1,155	270	429	669	42	37	42	34	10	44	1,977	6.1%	3.8%
18 - 20	1,030	1,172	2,202	274	511	785	61	41	102	29	16	75	3,164	6.7%	6.1%
21 - 24	1,078	1,337	2,415	284	440	724	49	46	95	41	13	54	3,288	10.1%	6.3%
25 - 34	2,098	2,494	4,592	393	682	1,075	100	78	178	57	21	28	5,923	18.2%	11.3%
35 - 44	1,766	2,001	3,767	566	514	780	26	29	164	20	23	93	4,804	14.7%	9.5%
45 - 54	1,678	1,873	3,551	196	528	724	83	82	165	75	20	92	4,535	13.9%	8.7%
55 - 64	1,003	1,263	2,266	105	351	456	26	22	116	40	<u></u>	41	2,879	8.8%	5.5%
65 - 74	545	209	1,152	29	255	322	38	26	64	12	0	12	1,550	4.8%	3.0%
75 + over	400	493	893	63	231	294	24	31	55	8	2	S	1,247	3.8%	2.4%
Unknown age	8	4	12	12	24	36	2	0	2	0	0	0	50	0.2%	0.1%
Total urban	10,180	11,961	22,141	2,984	5,220	8,204	762	604	1,366	829	187	865	32,576	100.0%	62.3%
Total	17,972	18,156	36,128	5,264	8,353	13,617	888	694	1,582	747	207	954	52,281		

Excludes individuals with unknown gender and locality (rural/urban). Non-fatal injuries are those individuals with injury status of incapacitating, non-incapacitating, and possible.

 ${\bf Source:} \\ {\bf Indiana \ State \ Police \ Automated \ Reporting \ Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ System \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ (ARIES), as of May 4, 2008} \\ {\bf Information \ Exchange \ (ARIES), as of May 4, 2008} \\ {\bf Information \ (ARIES), as of$



- ➤ In 2007, 53,366 persons were known injured or killed in motor vehicle collisions; 898 of those were fatalities.
- Pedestrians and motorcycle/moped riders had the highest likelihood of being killed (32.5 and 32.1 per 1,000 involved respectively).
- Motorcycle/moped riders accounted for 1.2 percent of all individuals involved and 13.6 percent of all fatalities.

Table 65. Individuals involved in collisions, by person type and injury status, 2007

				Injury statu	s				
Person type	Fatalities	% all fatalities	Fatalities, per 1,000 total	Incap- acitating	Non-incap- acitating	Unknown injury	Not injured	Total individuals	% all individuals
Vehicle occupants									
Driver	513	57.1%	1.7	1,993	31,766	8,251	266,817	309,340	93.7%
Injured occupant	190	21.2%	13.6	800	12,615	169	207	13,981	4.2%
Motorcycle/moped riders	122	13.6%	32.1	568	2,176	55	882	3,803	1.2%
Non-occupants									
Pedestrians	60	6.7%	32.5	217	1,374	42	154	1,847	0.6%
Pedalcyclists	13	1.4%	11.1	84	875	24	174	1,170	0.4%
TOTAL	898	100.0%	2.7	3,662	48,806	8,541	268,234	330,141	100.0%

Notes:

Unknown injury includes injury status of Not Reported, Unknown, Refused (treatment) and invalid injury codes.

Not injured status consists primarily of drivers involved in Property Damage Only collisions.

Killed, per 1,000 total defined as the number of fatalities per 1,000 individuals in the person type class involved.

Source:

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

- ➤ The 16 to 17 age group represents the lowest percentage of licensed drivers, and the highest rate of licensed drivers in both fatal and all collisions.
- ➤ The 18 to 20 year old age group had the highest rate of drivers killed in 2007 (2.3 per 10,000 licensed).
- Consistent with 2006, the 25 to 34 age group in 2007 had the highest total number of drivers in fatal collisions as well as in all collisions.
- Relative to their percentage of licensed drivers, several age groups are overrepresented in both fatal and all collisions including groups aged 16 to 17, 18 to 20, 21 to 24, and 25 to 34.

Table 66. Drivers in collisions, by age and rate, 2007

Age	Licensed drivers	Percent of total licensed drivers	Drivers in fatal collisions	Percent of total drivers in fatal collisions	Drivers in fatal collisions per 10,000 licensed drivers	Drivers killed	Percent of total drivers killed	Drivers killed per 10,000 licensed drivers	Drivers in all collisions	Percent of total drivers in all collisions	Drivers in all collisions per 10,000 licensed drivers
<16	0	0.0%	5	0.4%	na	5	0.8%	na	1,665	0.5%	na
16-17	79,143	1.4%	49	4.0%	6.2	15	2.4%	1.9	20,340	6.5%	2,570.0
18-20	234,352	4.3%	102	8.3%	4.4	53	8.5%	2.3	32,180	10.3%	1,373.1
21-24	345,015	6.3%	105	8.5%	3.0	49	7.8%	1.4	33,453	10.7%	969.6
25-34	980,613	17.9%	232	18.8%	2.4	118	18.8%	1.2	61,278	19.6%	624.9
35-44	982,441	18.0%	221	17.9%	2.2	100	16.0%	1.0	55,159	17.6%	561.4
45-54	995,026	18.2%	228	18.4%	2.3	110	17.6%	1.1	49,851	15.9%	501.0
55-64	772,639	14.1%	146	11.8%	1.9	77	12.3%	1.0	32,380	10.3%	419.1
65-74	491,095	9.0%	82	6.6%	1.7	47	7.5%	1.0	15,264	4.9%	310.8
75+over	590,105	10.8%	66	5.3%	1.1	52	8.3%	0.9	11,008	3.5%	186.5
Unknown age	0	0.0%	0	0.0%	na	0	0.0%	na	230	0.1%	na
Total	5,470,429	100.0%	1,236	100.0%	2.3	626	100.0%	1.1	312,808	100.00%	571.8

Notes:

NA = not applicable

Sources

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008 Indiana Bureau of Motor Vehicles, as of January 10, 2008

- More than one-half of all drivers involved in fatal collisions were classified as being in a Normal apparent physical condition and more than one-fourth were classi-
- Except for Normal, Had been drinking constituted the most common condition for fatal and all collisions (150 and 9,027 respectively). A
- For drivers in apparent normal physical condition, the rate per 1,000 collisions of a fatal injury increased with age. A
- Drivers aged 17 who were reported to have been drinking had a fatal injury rate of 50 per 1,000 total collisions higher than any other age group who had been drinking. A

Table 67. Drivers in collisions, by age and apparent physical condition, 2007

		Normal		Had be	Had been drinking	ing	Aslee	Asleep/Fatigued	-	I	Illness		Drugs/	Drugs/Medication	ion	Han	Handicapped	_	Ü	Unknown			Total	
	Drivers	Drivers		Drivers	Drivers		Drivers	Drivers		Drivers	Drivers		Drivers	Drivers		Drivers	Drivers		Drivers	Drivers		Drivers	Drivers	
	in fatal	in all		in fatal	in all		in fatal	in all		in fatal	in all		in fatal	in all		in fatal	in all		in fatal	in all	-=	in fatal	in all	
Driver age	collisions	collisions collisions Rate	Rate	collisions	collisions collisions	Rate	Rate collisions	collisions	Rate	collisions	collisions	Rate co	collisions	collisions	Rate	collisions o	collisions	Rate	collisions	collisions	Rate co	collisions o	collisions Rate	Rate
<16	2	1,207	1.7	0	29	0.0	0	7	0.0	0	3	0.0	0	3	0.0	0	2	0.0	3	407	7.4	5	1,658	3.0
16	16	8,431	1.9	0	20	0.0	0	80	0.0	0	7	0.0	0	7	0.0	0	1	0.0	0	63	0.0	16	8,639	1.9
17	19	11,302	1.7	9	120	50.0	1	116	9.8	0	19	0.0	2	22	6.06	0	4	0.0	9	123	48.8	34	11,706	2.9
18	24	11,485	2.1	5	226	22.1	0	177	0.0	0	34	0.0	0	36	0.0	0	3	0.0	10	149	67.1	39	12,110	3.2
19	18	098'6	1.8	7	250	28.0	0	191	0.0	0	20	0.0		30	33.3	0	3	0.0	12	136	88.2	38	10,490	3.6
20	13	9,004	1.4	2	296	8.9	1	158	6.3	0	18	0.0	0	34	0.0	0	7	0.0	10	116	86.2	26	9,633	2.7
21	10	8,552	1.2	8	499	16.0	0	156	0.0	0	23	0.0	0	39	0.0	0	_	0.0	_	131	53.4	25	9,407	2.7
22	8	7,869	1.0	7	458	15.3	0	102	0.0	0	25	0.0	1	59	34.5	0	11	0.0	∞	136	58.8	24	8,630	2.8
23	13	7,039	1.8	S	403	12.4	0	109	0.0	0	21	0.0	0	33	0.0	0	∞	0.0	10	126	79.4	28	7,739	3.6
24	15	7,137	2.1	6	380	23.7	0	96	0.0	0	25	0.0	1	37	27.0	0	14	0.0	Ŋ	105	47.6	30	7,794	3.8
25-34	117	26,869	2.1	35	2,530	13.8	33	643	4.7	2	219	9.1	8	279	28.7	1	61	16.4	73	846	86.3	239	61,447	3.9
35-44	123	51,882	2.4	25	1,826	13.7	7	411	17.0	1	245	4.1	2	221	0.6	0	64	0.0	99	615 1	107.3	224	55,264	4.1
45-54	129	47,176	2.7	30	1,332	22.5	Ŋ	421	11.9	0	271	0.0	1	179	9.9	1	75	13.3	64	500	128.0	230	49,954	4.6
55-64	88	31,053	2.8	9	446	13.5	2	260	7.7	4	243	16.5	0	53	0.0	0	64	0.0	48	290 1	165.5	148	32,409	4.6
65-74	48	14,661	3.3	4	136	29.4	3	121	24.8	8	155	19.4	0	22	0.0	0	46	0.0	25	132 1	189.4	83	15,273	5.4
75 + over	40	10,399	3.8	_	37	27.0	0	106	0.0	33	142	21.1	0	11	0.0	П	22	18.2	21	566	78.9	99	11,016	0.9
Unknown age	0	152	0.0	0	6	0.0	0	0	na	0	0	na	0	1	0.0	0	2	0.0	0	36	0.0	0	200	0.0
Total	683	294,078	2.3	150	9,027	16.6	22	3,154	7.0	13	1,470	8.8	16	1,036	15.4	3	427	7.0	368	4,177	88.1	1,255 3	313,369	4.0

Rate = drivers in fatal collisions per 1,000 drivers in all collisions for each age group and condition.

Unknown includes missing values.

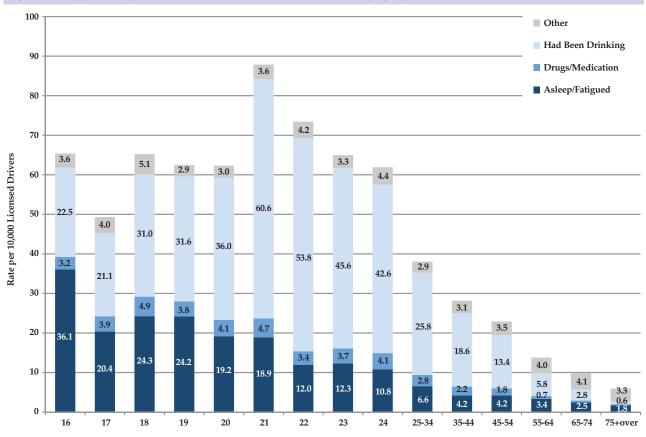
A driver can be assigned more than one condition type; totals will not match actual unique individual totals.

Source:



- ➤ Had been drinking is apparent across all ages and age groups, but highest for ages 17 to 24, then dramatically declines with age.
- > 21 year olds, the legal age of drinking, have a high propensity towards drinking and driving, resulting in collisions.
- ➤ 16 year olds are highest risk for being fatigued or asleep.

Figure 15. Apparent physical condition for drivers in all collisions by age, per 10,000 licensed drivers, 2007



Excludes Normal and Unknown categories of Apparent physical condition.

Other category consists of the apparent physical conditions of Handicapped and Illness.

Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Indiana Bureau of Motor Vehicles, as of January 10, 2008

- ➤ Out-of-state drivers typically represent a small proportion of all drivers in Indiana collisions (10.7 percent).
- > June, July and August represent the highest percent per month of out-of-state drivers involved in collisions (nearly 12 percent).
- > September represented the highest month for out-of-state drivers to be involved in fatal collisions (26, or 21.3 percent of total drivers for the month).
- ➤ August had the highest number of Indiana drivers involved in fatal collisions (114).

Figure 16. In-state and out-of-state drivers in all collisions by month of collision, 2007

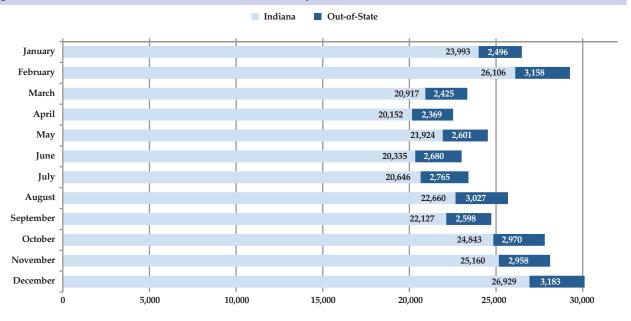
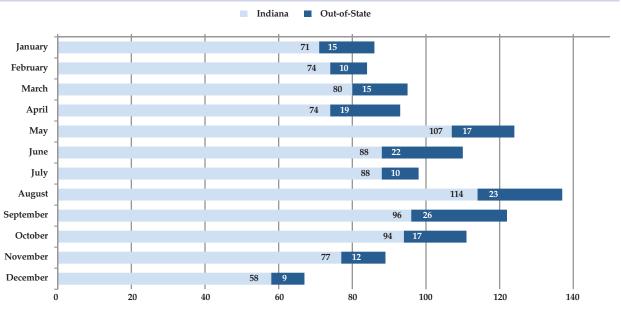


Figure 17. In-state and out-of-state drivers in fatal collisions by month of collision, 2007



Includes only those drivers where status of license state is known.

Source:



- Drivers with learner permits involved in fatal collisions comprised 1.8 percent of all drivers in fatal collisions, while totaling only 0.7 percent of drivers in all collisions.
- > 3.9 percent of drivers involved in fatal collisions and 1.4 percent of drivers in all collisions had no valid license.
- ➤ Nearly 98 percent of drivers involved in collisions were licensed.

Table 68. License types of drivers involved in collisions, 2007

			Driver injury statu	s			
License type	Fatal	% of fatal total	Incapacitating	Non- incapacitating	Unknown or no injury	Total	% of total
Operator	442	71.4%	1,902	29,363	235,484	267,191	86.9%
Commercial driver	39	6.3%	101	826	16,992	17,958	5.8%
Motorcycle	82	13.2%	257	1,189	4,726	6,254	2.0%
No license	24	3.9%	89	757	3,507	4,377	1.4%
Probationary operator	4	0.6%	14	386	3,547	3,951	1.3%
Chauffeur	11	1.8%	34	292	3,114	3,451	1.1%
Learner Permit	11	1.8%	38	375	1,661	2,085	0.7%
Unknown license type	6	1.0%	16	213	1,885	2,120	0.7%
Total	619	100.0%	2,451	33,401	270,916	307,387	100.0%

Includes only drivers of motorcycles/mopeds, passenger cars, SUVs, vans, pickup and large trucks.

Chauffeur includes chauffeur and public passenger chauffeur.

Learner permit includes learners permit, drivers education learners permit, and learner motorcycle.

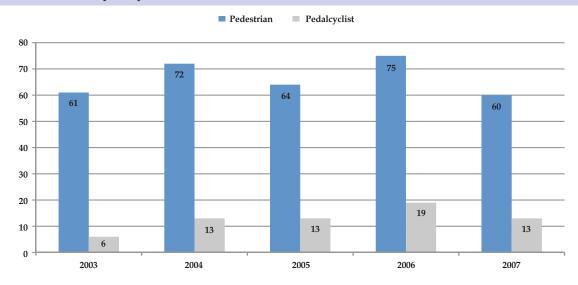
Motorcycle includes motorcycle, chauffeur with motorcycle endorsement, operators with motorcycle endorsement, and public passenger chauffeur with motorcycle endorsement. Non-incapacitating includes non-incapacitating and possible injuries.

Source:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- ➤ After a substantial increase from 2005 to 2006, pedestrian and pedalcyclist fatalities decreased in 2007.
- ➤ Pedestrian fatalities in 2007 were the lowest since 2003.

Figure 18. Pedestrian and pedalcyclist fatalities involved in motor vehicle collisions, 2003 - 2007



Source:

- ➤ Male pedestrians aged 45 to 54 comprised the largest number of pedestrians killed in traffic collisions in 2007. This changed from 2006, where the largest age group killed was the 25 to 34 year olds.
- ➤ There were twice as many male pedestrians killed as females in 2007.
- ➤ Male and female pedestrians aged 25 to 54 each comprised 38 percent of those involved in non-fatal collisions.

Figure 19. Pedestrians killed in motor vehicle collisions, by age and gender, 2007

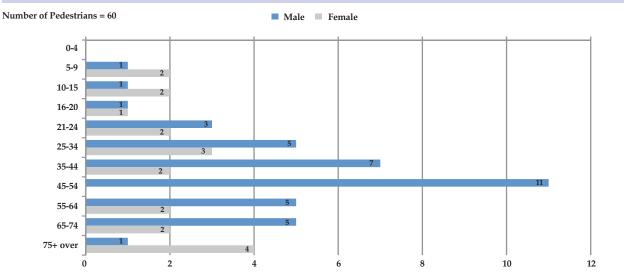
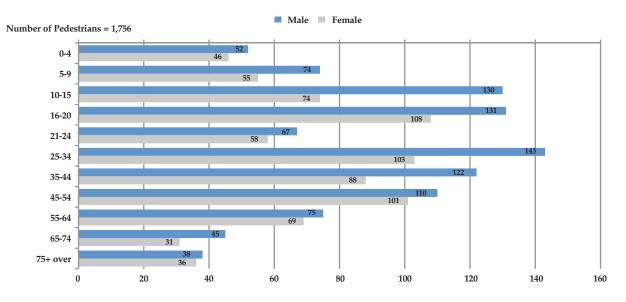


Figure 20. Pedestrians with non-fatal injuries or no injuries involved in motor vehicle collisions, by age and gender, 2007



An additional 31 pedestrians with missing or invalid ages or gender are not shown in Figure 6.

Source



- ➤ Consistent with 2006, *On roadway* and *Crossing not at an intersection* were the two actions that resulted in the largest number of fatalities for pedestrians in 2007.
- ➤ The main actions of 34.7 percent of pedestrians in non-fatal collisions involved crossing a road.

Figure 21. Pedestrians killed in motor vehicle collisions, by pedestrian action, 2007

Number of Pedestrians = 60

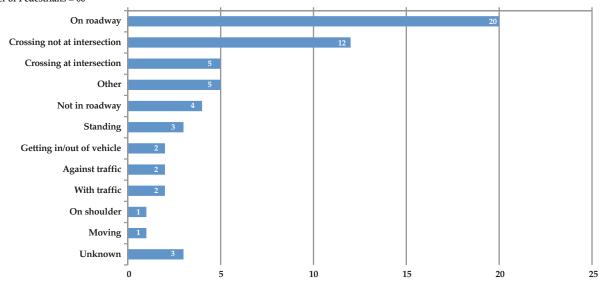
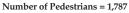
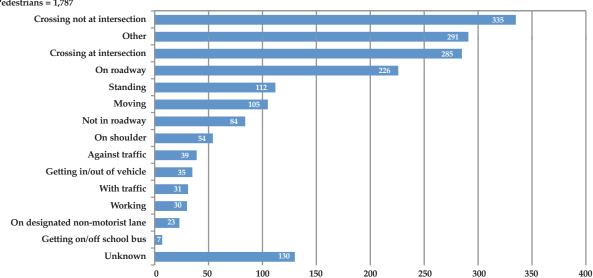


Figure 22. Pedestrians involved in non-fatal collisions, by pedestrian action, 2007

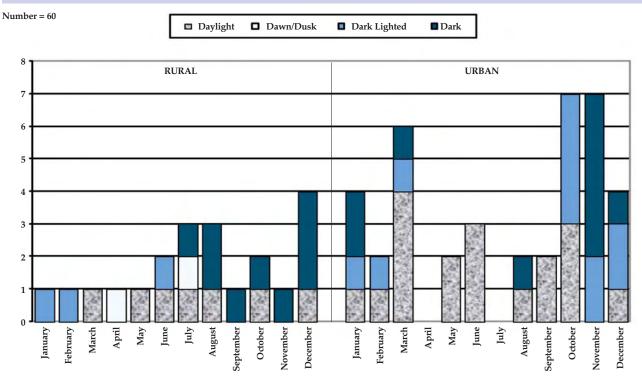




Source

- ➤ More pedestrian fatal collisions occurred in urban than rural areas.
- ➤ More pedestrian fatalities occurred in October (9) than in any other month, with November and December following (8 each).
- Most urban pedestrian fatalities occurred during daylight (18) and most rural pedestrian fatalities occurred during dark, not lighted times (9).

Figure 23. Pedestrians killed in motor vehicle collisions by locality, month of collision and light condition, 2007

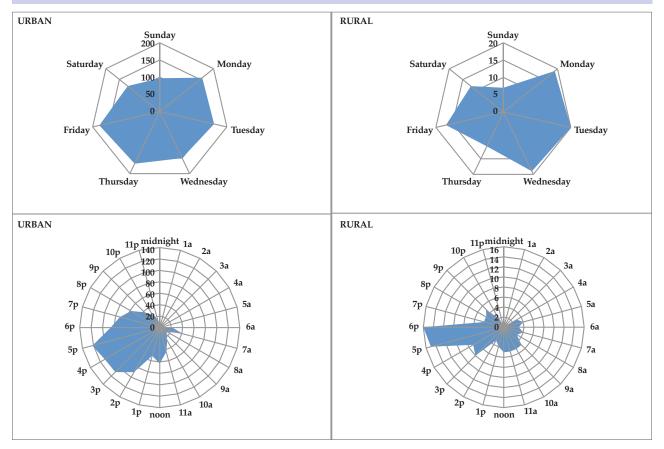


Source



- > Over nine (9) times more pedalcyclists were involved in collisions in urban areas than rural areas (1,055 vs. 112).
- ➤ Pedalcyclists were involved in collisions most often during the 5-6pm time in rural areas. Those involved in urban areas started mainly at 2pm, peaked at 5pm and then decreased dramatically.
- > Sundays had the lowest number of pedalcyclists involved in collisions in both rural and urban areas (8 and 99 respectively).
- Monday through Friday shows an even distribution of pedalcyclists involved in urban area collisions.

Figure 24. Pedalcyclists involved in collisions, by locale, time of day, day of week, 2007



Rural n = 112; Urban n = 1,055.

Includes all injury status of pedalcyclists involved in collisions; excludes those with unknown locales, time of day and day of week.

Source

- ➤ Overall restraint use has increased on average 1.7 percent each year since 2003.
- ➤ Less than half of the persons killed each year (2003-2007) were restrained.
- ➤ The percent of motor vehicle occupants restrained increased steadily as the injury severity decreased, indicating a person who is restrained is less likely to be killed when involved in a collision (e.g., in 2007, 43.4 percent for fatally injured persons to 90.1 percent for non-injured persons).

Table 69. Individuals in motor vehicle collisions, by restraint use and injury status, 2003 - 2007

	2003	2004	2005	2006	2007	Average annual change
All occupants	348,715	344,460	338,630	309,580	322,940	-1.8%
% Restraint used	83.4%	84.6%	84.1%	85.6%	89.0%	1.7%
% Restraint not used	5.4%	5.4%	4.8%	4.4%	3.1%	-12.4%
% Unknown restraint	11.2%	9.9%	11.2%	10.1%	7.9%	-7.7%
Fatal injuries	687	752	748	695	698	0.6%
% Restraint used	43.7%	40.4%	40.8%	39.4%	43.4%	0.1%
% Restraint not used	44.8%	46.0%	47.1%	46.8%	43.0%	-1.0%
% Unknown restraint	11.5%	13.6%	12.2%	13.8%	13.6%	4.9%
Incapacitating injuries	3,545	3,254	3,127	3,021	2,787	-5.8%
% Restraint used	65.2%	63.4%	61.1%	63.6%	64.8%	-0.1%
% Restraint not used	24.0%	26.4%	28.6%	27.7%	25.0%	1.4%
% Unknown restraint	10.7%	10.1%	10.3%	8.6%	10.2%	-0.7%
Non-incapacitating injuries	50,827	53,871	51,777	47,475	44,344	-3.2%
% Restraint used	80.8%	81.3%	80.9%	82.0%	85.6%	1.5%
% Restraint not used	12.0%	11.9%	11.3%	10.9%	9.0%	-6.6%
% Unknown restraint	7.2%	6.8%	7.8%	7.1%	5.3%	-6.3%
Unknown injuries	24,310	29,361	34,280	21,665	8,411	-15.1%
% Restraint used	85.0%	85.6%	84.5%	84.2%	85.0%	0.0%
% Restraint not used	5.2%	4.3%	3.8%	3.5%	2.7%	-15.0%
% Unknown restraint	9.8%	10.1%	11.7%	12.3%	12.3%	6.0%
Not injured	269,346	257,222	248,698	236,724	266,700	0.0%
% Restraint used	84.0%	85.6%	85.1%	86.8%	90.1%	1.8%
% Restraint not used	3.8%	3.8%	3.1%	2.7%	1.8%	-16.6%
% Unknown restraint	12.1%	10.6%	11.8%	10.5%	8.1%	-8.7%

Excludes unit types of bicycles, pedestrians, farm vehicles, motorcycles and mopeds.

Restraint used includes the use of one of the following: 1) Lap belt only, 2) Harness,

3) Airbag deployed and harness, 4) Child restraint, or 5) Lap and harness.

Non-incapacitating injuries include those injuries reported as non-incapacitating or possible.

Unknown injuries include Not reported, Unknown, Refused (treatment), and invalid injury codes.

Not injured includes individuals reported with blank values in the injury status code field (mainly drivers in property damage only collisions).

Source



- ➤ As a whole, occupants are less likely to be restrained than drivers.
- ➤ Older drivers and occupants are more likely to be restrained than younger drivers.
- > Drivers and occupants killed aged 21 to 34 were least likely to be properly restrained (29.6 and 29 percent respectively).

Table 70. Drivers and occupants, by age, restraint use and injury severity, 2007

					Injur	y status						
Age group	F	atal	Incap	acitating	Non-inc	apacitating	Unkno	wn injury	Not	injured	Т	otal
Restraint use	Driver	Occupant	Driver	Occupant	Driver	Occupant	Driver	Occupant	Driver	Occupant	Driver	Occupant
<21	64	83	339	343	5,971	6,304	1,504	89	45,808	77	53,686	6,896
% Restraint used	39.1%	42.2%	60.8%	55.7%	85.2%	80.2%	86.2%	88.8%	89.2%	51.9%	88.4%	78.3%
% Restraint not used	45.3%	37.3%	29.8%	33.2%	9.6%	14.8%	2.7%	5.6%	1.9%	3.9%	3.0%	15.7%
% Unknown restraint	15.6%	20.5%	9.4%	11.1%	5.2%	5.0%	11.2%	5.6%	8.9%	44.2%	8.6%	6.0%
21 - 34	142	31	628	190	9,885	2,618	2,478	37	80,504	56	93,637	2,932
% Restraint used	29.6%	29.0%	60.5%	46.3%	85.4%	78.7%	83.2%	70.3%	89.7%	26.8%	88.8%	75.0%
% Restraint not used	58.5%	51.6%	27.2%	39.5%	9.1%	14.7%	3.3%	8.1%	2.1%	5.4%	3.1%	16.5%
% Unknown restraint	12.0%	19.4%	12.3%	14.2%	5.5%	6.5%	13.5%	21.6%	8.3%	67.9%	8.2%	8.5%
35 - 54	153	36	656	150	9,997	2,108	2,717	22	89,857	41	103,380	2,357
% Restraint used	43.1%	38.9%	69.2%	65.3%	88.1%	82.4%	85.8%	72.7%	90.5%	39.0%	89.9%	79.8%
% Restraint not used	44.4%	38.9%	20.6%	24.7%	6.4%	11.3%	2.1%	4.5%	1.7%	2.4%	2.4%	12.4%
% Unknown restraint	12.4%	22.2%	10.2%	10.0%	5.5%	6.3%	12.0%	22.7%	7.8%	58.5%	7.7%	7.8%
55 + over	150	38	365	110	5,870	1,522	1,515	11	50,143	31	58,043	1,712
% Restraint used	58.0%	65.8%	80.8%	82.7%	91.3%	90.5%	86.3%	81.8%	91.2%	35.5%	91.0%	88.4%
% Restraint not used	32.7%	23.7%	13.2%	13.6%	4.3%	5.4%	2.1%	18.2%	1.3%	0.0%	1.8%	6.3%
% Unknown restraint	9.3%	10.5%	6.0%	3.6%	4.4%	4.1%	11.6%	0.0%	7.5%	64.5%	7.3%	5.3%
All ages	509	188	1,988	793	31,723	12,552	8,214	159	266,312	205	308,746	13,897
% Restraint used	43.2%	44.1%	67.2%	59.0%	87.3%	81.5%	85.2%	81.8%	90.2%	40.0%	89.5%	79.1%
% Restraint not used	45.0%	37.2%	22.9%	30.4%	7.5%	13.1%	2.6%	6.9%	1.8%	3.4%	2.6%	14.2%
% Unknown restraint	11.8%	18.6%	10.0%	10.6%	5.2%	5.4%	12.2%	11.3%	8.1%	56.6%	7.9%	6.7%

Notes:

Includes only individuals with valid age.

Excludes unit types of bicycles, pedestrians, farm vehicles, motorcycles and mopeds.

Restraint used includes the use of one of the following: 1) Lap belt only, 2) Harness, 3) Airbag deployed and harness, 4) Child restraint, or 5) Lap and harness.

Non-incapacitating injuries include those injuries reported as non-incapacitating or possible.

Unknown injuries include Not reported, Unknown, Refused (treatment), and invalid injury codes.

Not injured includes individuals reported with blank values in the injury status code field (mainly drivers in property damage only collisions).

Source

- ➤ Pickup truck drivers and occupants continue to have the lowest restraint use percentage.
- ➤ Drivers and occupants of SUVs killed had the lowest percentage of restraint usage compared to any other vehicle type driver or occupant.
- ➤ Generally, motor vehicle occupants were less properly restrained than drivers in all differing vehicle types.
- ➤ Generally, females were properly restrained more than males in all vehicle types.

Table 71. Drivers and occupants injured in collisions, by restraint use, vehicle type and gender, 2007

		F	atal			Person	al injury		
	N	/Iale	Fe	emale]	Male	F	emale	Total
Vehicle type	Driver	Occupant	Driver	Occupant	Driver	Occupant	Driver	Occupant	
Buses	1	0	0	0	21	89	21	114	246
% Restraint used	100.0%	na	na	na	76.2%	4.5%	95.2%	2.6%	17.9%
% Restraint not used	0.0%	na	na	na	4.8%	92.1%	0.0%	91.2%	76.0%
% Unknown restraint	0.0%	na	na	na	19.0%	3.4%	4.8%	6.1%	6.1%
Passenger cars	185	51	83	55	8,689	2,976	12,839	4,955	29,833
% Restraint used	50.8%	41.2%	57.8%	69.1%	84.8%	80.1%	92.5%	86.7%	87.6%
% Restraint not used	38.4%	41.2%	36.1%	21.8%	8.9%	13.5%	3.9%	8.6%	7.5%
% Unknown restraint	10.8%	17.6%	6.0%	9.1%	6.3%	6.4%	3.6%	4.7%	4.9%
Pickup trucks	104	16	10	9	3,584	677	914	783	6,097
% Restraint used	26.0%	12.5%	50.0%	55.6%	68.4%	56.7%	76.7%	72.4%	68.0%
% Restraint not used	63.5%	43.8%	50.0%	11.1%	22.0%	31.6%	15.4%	21.3%	22.8%
% Unknown restraint	10.6%	43.8%	0.0%	33.3%	9.5%	11.7%	7.9%	6.3%	9.2%
SUVs	51	25	13	11	1,849	781	2,706	1,281	6,717
% Restraint used	23.5%	12.0%	30.8%	27.3%	81.5%	78.0%	91.2%	84.6%	84.7%
% Restraint not used	60.8%	64.0%	61.5%	45.5%	12.5%	14.0%	4.9%	10.2%	9.9%
% Unknown restraint	15.7%	24.0%	7.7%	27.3%	6.0%	8.1%	3.9%	5.2%	5.4%
Vans	22	9	14	12	1,092	597	1,398	900	4,044
% Restraint used	54.5%	33.3%	71.4%	66.7%	86.1%	81.4%	92.5%	87.9%	87.6%
% Restraint not used	31.8%	66.7%	28.6%	16.7%	8.9%	14.7%	2.8%	9.2%	8.1%
% Unknown restraint	13.6%	0.0%	0.0%	16.7%	5.0%	3.9%	4.7%	2.9%	4.3%
Large trucks	23	0	1	0	303	36	12	11	386
% Restraint used	30.4%	na	0.0%	na	77.9%	38.9%	83.3%	54.5%	70.7%
% Restraint not used	26.1%	na	0.0%	na	10.6%	50.0%	8.3%	45.5%	16.1%
% Unknown restraint	43.5%	na	100.0%	na	11.6%	11.1%	8.3%	0.0%	13.2%
Other vehicle types	2	1	0	0	197	61	73	51	385
% Restraint used	0.0%	0.0%	na	na	46.7%	32.8%	68.5%	33.3%	46.5%
% Restraint not used	50.0%	100.0%	na	na	36.5%	47.5%	15.1%	41.2%	35.1%
% Unknown restraint	50.0%	0.0%	na	na	16.8%	19.7%	16.4%	25.5%	18.4%

Large trucks is defined as one of the following types, as defined on the Indiana Crash Report, (1) truck (single 2 axle, 6 tires), (2) truck (single 3 or more axles), (3) truck/trailer (not semi), (4) tractor/one semi-trailer, (5) tractor/double trailer, (6) tractor/triple trailer, (7) tractor (cab only, no trailer), (8) pickup truck with gross vehicle weight rating greater than 10,000 pounds.

 ${\it Other vehicle types consists of } {\it Unknown, Combination vehicles, and } {\it Motor Homes/RVs.}$

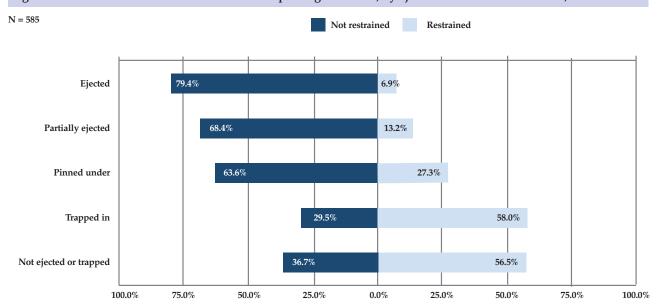
Restraint used includes the use of one of the following: 1) Lap belt only, 2) Harness, 3) Airbag deployed and harness, 4) Child restraint, or 5) Lap and harness. Personal injury includes injury statuses of incapacitating, non-incapacitating and possible.

Source



- > Persons not restrained are more likely to be ejected and suffer a fatal injury.
- > 76 percent of those killed and ejected (*ejected, partially ejected, pinned under*) were known not restrained (137 of 180).
- ➤ Nearly half (47.2 percent, 137 of 290) of those killed and known not restrained were ejected (*ejected, partially ejected, pinned under*).

Figure 25. Fatalities of individuals in collisions of passenger vehicles, by ejection status and restraint use, 2007



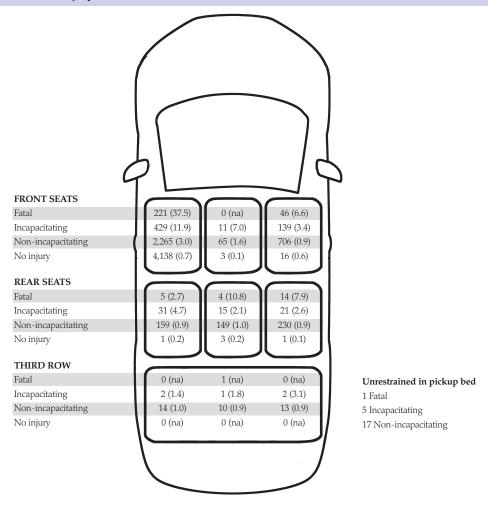
Includes vehicle types of passenger cars, pickup trucks, SUVs and vans.

Percents are individuals killed known to be restrained or not restrained as a percent of the total of individuals for each ejection status. For example, 79.4% represents 104 individuals killed, ejected and known not restrained of 131 individuals known to be ejected.

Source

- ➤ There were 650 drivers who were killed or suffered incapacitating injures who were not properly restrained.
- ➤ If involved in a collision, a driver of a vehicle was 37.5 times more likely to have been killed if unrestrained than a driver who was restrained.
- For all seat positions, a person was more likely to be killed or seriously injured if not restrained.
- ➤ A person in the center rear seat if unrestrained is more likely to be killed than persons unrestrained in the left or right rear seats.

Figure 26. Individuals known to be unrestrained in passenger vehicles involved in collisions, by seat positions, injury status, and the unrestrained risk of injury, 2007



Calculations include only individuals where injury status, restraint use and seat position were known.

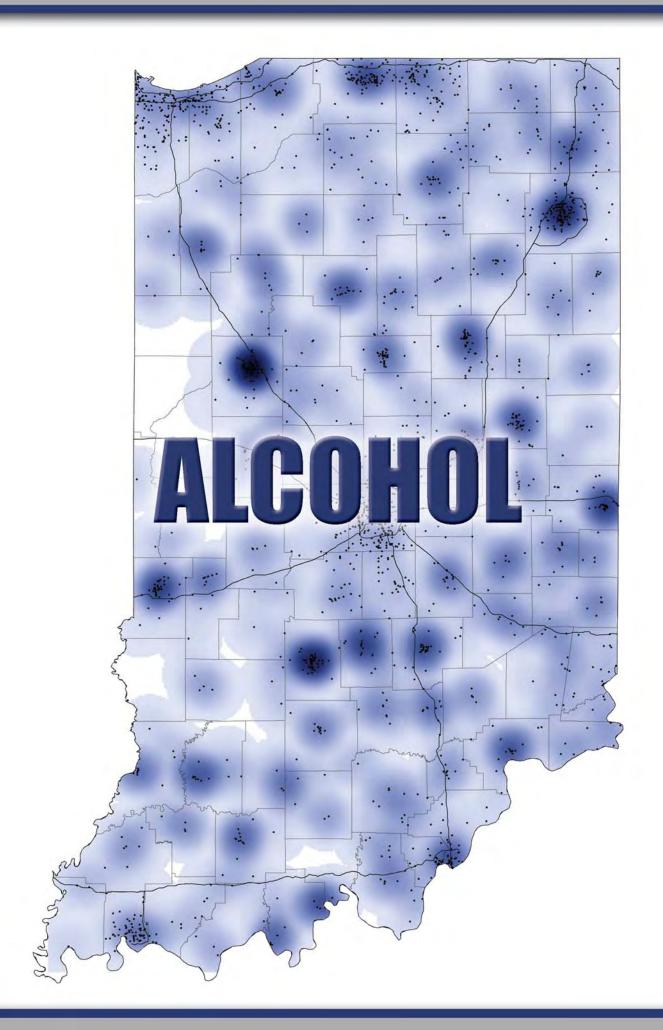
Numbers shown represent the number of known unrestrained persons in each seat position and the relative risk of injury (in parenthesis) for that injury and seat position if unrestrained.

Relative risk of injury is defined as the ratio of persons who incurred the injury given they were unrestrained, to those who incurred the injury given they were restrained.

Includes only persons in passenger vehicles only (passenger cars, SUVs, vans, pickup trucks) and where restraint use is known.

na = not applicable; there were no persons in that seat position or no persons in that seat position restrained.

Source:





ALCOHOL, 2007

A collision in the Indiana State Police Automated Reporting and Information Exchange System (ARIES) is identified as alcohol-related if any of the following conditions are met: (1) *Alcoholic beverages* is listed as the primary factor of the collision; (2) *Alcoholic beverages* is listed as a contributing circumstance in the collision; (3) any vehicle driver or non-motorist (pedestrian, bicyclist) involved in the collision had a blood alcohol content (BAC) test result greater than zero; (4) the collision report lists the apparent physical condition of any vehicle driver or non-motorist involved as *had been drinking*; or (5) a vehicle driver is issued an Operating While Intoxicated citation.

In 2007, there were 9,942 alcohol-related collisions, which resulted in 253 fatalities and another 4,986 personal injuries. Of the 626 drivers killed in motor vehicle crashes in 2007, nearly 25 percent (153 drivers) had positive BAC (g/dL) results (greater than zero), and nearly 22 percent (136 drivers) were legally intoxicated with BAC results of .08 g/dL or greater. There were 110 drivers killed who were reported to have positive drug tests in 2007 (17.5 percent of driver fatalities).

HIGHLIGHTS

The majority of individuals killed or injured in alcohol-related collisions are within the vehicles classified as alcohol-related.

The proportions of total fatalities and total injuries classified as alcohol-related have declined annually on average from 2003 to 2007.

Males between the ages of 20 to 24 comprised the demographic group most likely to experience injuries in alcohol-related collisions, with a rate of 333 injuries per 100,000 population. In comparison to females, male drivers exhibited higher proportions of alcohol-related crash involvement for all age groups 15 years and above in 2007.

Based on the age distribution of Indiana operator licenses in 2007, the groups with more than their proportional shares of alcohol-related collisions were (in order of disproportionality): 21 to 34 years, 18 to 20 years, and 16 to 17 years.

More than two-thirds (69.5 percent) of all drivers killed in 2007 were given alcohol, drug, or alcohol and drug tests.

Males aged 21 to 24 had the highest reported proportions of BAC above 0.08 g/dL (44.4 percent) among the basic age groupings of Indiana drivers killed. For female drivers, the highest proportion of legally intoxicated fatalities were in the age group between 25 and 34 (25 percent).

More than 30 percent of motorcycle operators killed in 2007 had positive BAC reports (g/dL = more than zero), and nearly 26 percent were legally intoxicated. About 16 percent of motorcycle operators killed had positive drug test results reported in 2007.

The largest proportions of alcohol-related fatalities and injuries occurred on county roads and local/city roads in 2007. Alcohol-related collisions occurred primarily during darkness. Peak numbers of alcohol-related fatalities occurred between the hours of 11pm and 3am during weekends (i.e., late Friday and Saturday nights, into the early morning hours).

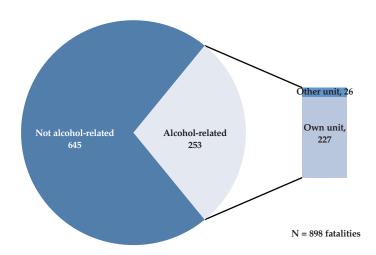
The top five primary factors reported for alcohol-related collisions in 2007 were *alcoholic beverages, ran off road right, unsafe speed, failure to yield right of way,* and *other driver factors.*

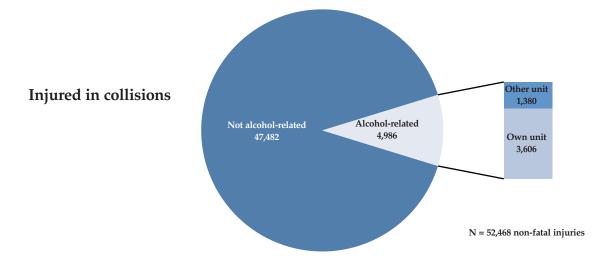
During 2007, the operators and occupants of motorcycle/mopeds and pickups were most likely to be involved in alcohol-related crashes, although pedestrians have had comparatively high rates of alcohol-related involvement as well from 2004 to 2007.

- ➤ The preponderance of alcohol-related fatalities and personal injuries occured within alcohol-related units in 2007.
- ➤ The numbers of alcohol-related personal injuries and fatalities declined from 2006 to 2007 (not shown in figure).

Figure 27. Fatalities and personal injuries, by alcohol involvement in collision and unit, 2007

Killed in collisions





Notes:

See glossary for definition of alcohol-related.

 ${\it Injuries} includes {\it incapacitating, nonincapacitating, and possible}.$

Source



- On average from 2003 to 2007, about 30 percent of fatalities have been classified as alcohol-related (calculated from table).
- Alcohol-related injuries average about 11 percent annually during the same period (calculated from table).
- ➤ Although alcohol-related fatalities declined (-20) from 2006 to 2007, they increased on average annually 1.7 percent between 2003 and 2007.
- Alcohol-related injuries have declined annually on average 6.3 percent from 2003 to 2007.

Table 72. Individuals killed and injured in alcohol-related collisions by year

Year	Alcohol-related fatalities	Total fatalities	Percent alcohol- related fatalities	Alcohol-related injuries	Total injuries	Percent alcohol- related injuries
2003	241	833	28.9%	6,553	58,435	11.2%
2004	284	947	30.0%	6,593	61,652	10.7%
2005	293	938	31.2%	6,627	59,250	11.2%
2006	273	899	30.4%	5,869	55,196	10.6%
2007	253	898	28.2%	4,986	52,468	9.5%
Change, 2006-07	-20	-1	-2.2%	-883	-2,728	-1.1%
Average annual % change	1.7%	2.1%	-0.5%	-6.3%	-2.5%	-3.9%

Notes:

See glossary for definition of alcohol-related collisions.

Injuries inlcudes incapacitating, nonincapacitating, and possible.

Source

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008

- ➤ Males across nearly all age categories exhibit higher risk of being involved in alcohol-related collisions in 2007.
- For both males and females, the age group at highest risk of alcohol-involved fatalities or injuries was 20 to 24 years.
- After the 20-24 year old peak in injuries per 1,000, the rate of involvement generally drops with age.
- ➤ Although the 20 to 34 year old age categories account for only 20.2 percent of total population, the same categories account for nearly 45 percent of total alcohol-related injuries and fatalities.

Table 73. Alcohol-related injury and fatality rates per 100,000 population for individuals in Indiana motor vehicle crashes by age and gender, 2007

		Males			Females			Total	
Age group	Fatalities and injuries	Est. 2007 population	Injuries per 100,000 population	Fatalities and injuries	Est. 2007 population	Injuries per 100,000 population	Fatalities and injuries	Est. 2007 population	Injuries per 100,000 population
Less than 5	41	220,373	18.6	29	210,077	13.8	70	430,450	16.3
5 to 9	59	222,512	26.5	44	215,916	20.4	103	438,428	23.5
10 to 14	41	227,372	18.0	46	220,344	20.9	88	447,716	19.7
15 to 19	363	236,001	153.8	267	226,864	117.7	630	462,865	136.1
20 to 24	721	216,504	333.0	301	207,429	145.1	1,023	423,933	241.3
25 to 34	909	432,427	210.2	404	416,806	96.9	1,315	849,233	154.8
35 to 44	633	446,066	141.9	286	438,488	65.2	921	884,554	104.1
45 to 54	503	457,196	110.0	190	461,569	41.2	695	918,765	75.6
55 to 64	169	325,664	51.9	91	346,343	26.3	260	672,007	38.7
65 to 74	49	181,719	27.0	41	215,521	19.0	90	397,240	22.7
75 and over	16	139,327	11.5	23	244,387	9.4	39	383,714	10.2
Unknown age	2	na	na	3	na	na	5	na	na
TOTAL	3,506	3,105,161	112.9	1,725	3,203,744	53.8	5,239	6,308,905	83.0

Notes:

Includes injuries and fatalities in alcohol-related collisions only.

Injuries includes incapacitating, nonincapacitating, and possible.

Eight (8) individuals with unknown gender are included in the Total columns.

Sources

Population: US Census Bureau, Population Division, *Interim State Population Projections; File2*. Annual projections by 5 year and selected age groups by sex. Accessed at http://www.census.gov/population/www/projections/projectionsagesex.html.

- ➤ Drivers in the four age groups from 16 through 34 had the highest rates of injury/fatality per 1,000 licenses.
- These age groups, plus the 35 to 44 year old group, are over-represented in their proportions of total injuries and fatalities.
- ➤ Rate of alcohol-related injuries and fatalities declined with age after the 25-34 year old category.

Table 74. Driver injury and fatality rates in Indiana alcohol-related motor vehicle crashes per 1,000 operator licenses, by age, 2007

	Operator	licenses, 2007	Alcohol-rela	ted collisions	
Age group	Number	Percent of total	Injuries and fatalities	Percent of total	Rate per 1,000 licenses
16-17	79,143	1.4%	101	2.7%	1.3
18-20	234,352	4.3%	357	9.7%	1.5
21-24	345,015	6.3%	605	16.4%	1.8
25-34	980,613	17.9%	1,034	28.0%	1.1
35-44	982,441	18.0%	740	20.0%	0.8
45-54	995,026	18.2%	553	15.0%	0.6
55-64	772,639	14.1%	211	5.7%	0.3
65-74	491,095	9.0%	71	1.9%	0.1
75+over	590,105	10.8%	23	0.6%	0.0
Unknown age	na	0.0%	1	0.0%	na
TOTAL	5,470,429	100.0%	3,696	100.0%	0.7

Includes driver injuries and fatalities in alcohol-related collisions only.

Injuries includes incapacitating, nonincapacitating, and possible.

Excludes ages 15 and under.

Includes drivers only.

Sources:

 $Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System\ (ARIES),\ as\ of\ May\ 4,2008$

Indiana Bureau of Motor Vehicles, as of January 10, 2008

- Alcohol and drugs were key components of driver fatalities in 2007.
- Considering all age groups, males were reported with BACs of 0.08 g/dL or greater at 2.4 times the rate of females in 2007.
- Younger age groups (under 25 years) generally show much higher proportions of driver fatalities with reported BACs of 0.08 g/dL or more.
- Age groups 25 years and younger generally reported higher proportions of positive drug tests.
- Considering only the test results as of May 4, 2008, nearly 30 percent of male driver fatalities and 26 percent of female driver fatalities tested positive for drugs (calculated from table).

Table 75 Driver fatalities by reported blood alcohol content (BAC) and drug test results, age, and gender, 2007

						ВА	C test re	BAC test results (g/dL)	Ľ)									Drug test results	results	
															Percent	ent				
											Missing results	results/	Total	driver	driver fatalities	atalities			Percen	Percent driver
Driver age	Drivers tested	tested	Z	Zero	> 0 to	> 0 to < 0.08	0.08 to < 0.15	< 0.15	0.15 or	0.15 or greater	Not reported	ported	fatal	alities	0.08 BAC or more	or more	Positive	ive	fatalities	fatalities positive
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15 and under	2	0	1	0	0	0	0	0	0	0	1	0	4	1	0.0%	0.0%	0	na	0.0%	na
16-20	39	10	16	6	2	1	57	1	7	2	9	0	54	14	22.2%	21.4%	12	1	22.2%	7.1%
16	ω	0	2	0	0	0	0	0	0	0	⊢	0	ഗ	0	0.0%	na		na	20.0%	na
17	ഗ	2	ω	2		0	0	0	0	0	⊢	0	7	ယ	0.0%	0.0%	2	0	28.6%	0.0%
18	9	ယ	ω	2	<u> </u>	↦	↦	0	ሥ	0	ယ	0	17	ഗ	11.8%	0.0%	2	0	11.8%	0.0%
19	14	ယ	(J)	_	0	0	ယ	0	ယ	2	ယ	0	15	ယ	40.0%	66.7%	6	0	40.0%	0.0%
20	8	2	ယ	↦	0	0	₽	_	ယ	0	⊢	0	10	ယ	40.0%	33.3%			10.0%	33.3%
21-24	27	10	10	2	1	2	4	0	12	S	0	3	36	13	44.4%	23.1%	6	5	16.7%	38.5%
21	6	2	2		0	<u> </u>	2	0	2	0	0	0	∞	ယ	50.0%	0.0%	0	0	0.0%	0.0%
22	9	ш	4	0	↦	0	ሥ	0	ယ	ш	0	0	12	↦	33.3%	100.0%	4	0	33.3%	0.0%
23	8		4	0	0	0	0	0	4	0	0		10	ယ	40.0%	0.0%			10.0%	33.3%
24	4	6	0	_	0	<u> </u>	┙	0	ယ	2	0	2	6	6	66.7%	33.3%	ᆫ	4	16.7%	66.7%
25-34	73	21	25	11	2	0	σı	_	30	σı	11	4	94	24	37.2%	25.0%	29	7	30.9%	29.2%
35-44	59	16	28	15	ഗ	0	6	0	18	0	2		77	23	31.2%	0.0%	21	4	27.3%	17.4%
45-54	71	000	34	8	2	0	ယ	0	23	0	9	0	97	13	26.8%	0.0%	18	2	18.6%	15.4%
55-64	47	∞	29	7	2	0	ω	0	4	0	9	<u> </u>	63	14	11.1%	0.0%	σı	0	7.9%	0.0%
65-74	24	ن ت	19	ω	0	0	↦	0	2	ሥ	2	↦	39	∞	7.7%	12.5%	0	0	0.0%	0.0%
75 and older	9	6	9	6	0	0	0	0	0	0	0	0	36	16	0.0%	0.0%	0	0	0.0%	0.0%
Total	351	84	171	58	14	3	27	2	96	11	43	10	500	126	24.6%	10.3%	91	19	18.2%	15.1%
Notes:																				

g/dL = grams per deciliter

- Motorcycle operators have generally had the highest rates of alcohol-involvement in Indiana crashes during the 2003-2007 period (see Table 10).
- ➤ Considering only the test results returned as of May 4, 2008, one-half of motorcycle operator fatalities had positive BAC tests (calculated from table). Nearly 43 percent were legally intoxicated (or more).
- ➤ In 2007, looking only at tests results reported (80 12, or 68), more than one-fourth of motorcycle operator fatalities (18) had positive drug tests.

Table 76. Motorcycle operator fatalities by reported BAC (g/dL) and drug test results, 2003-2007

			BAC	(g/dL) resul	ts					Drug tes	st results
Year	Operators tested	Zero	> 0.00 to < 0.08	0.08 to < 0.15	0.15 and greater	Missing results/Not reported	Total operator fatalities	Percent positive BAC	Percent fatalities 0.08 BAC or greater	Positive	Percent fatalities positive
2003	41	11	2	7	8	13	68	25.0%	22.1%	0	0%
2004	71	43	5	4	9	10	95	18.9%	13.7%	1	1.1%
2005	80	40	7	9	17	7	110	30.0%	23.6%	10	9.1%
2006	57	21	5	7	16	8	97	28.9%	23.7%	14	14.4%
2007	80	34	5	10	19	12	113	30.1%	25.7%	18	15.9%

Notes:

Includes *motorcycles* and *mopeds*. g/dL = grams per deciliter.

Source

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

- ➤ Nearly 70 percent of driver fatalties had alcohol, alcohol/drug, or drug tests in 2007.
- ➤ The rate of testing declines as drive ages increase, from nearly 80 percent of 25-34 year old drivers to about 62 percent for drivers aged 65-74.
- As of May 4, 2008, alcohol test results were reported for 88 percent of drivers tested (382/435). Of these 382 with results, 40 percent tested positive for alcohol (153) (calculated from Table 4).
- Of the 363 driver drug test results reported in ARIES, just over 30 percent (110) tested positive for drugs in 2007 (calculated from Table 4).

Table 77. Driver fatalities, drivers tested, and alcohol or drug results reported, 2007

		Driver tests give	en (all test types)	BAC resul	ts reported	Drug test res	ults reported
Drivers by age	Total driver fatalities	Total	Percent of fatalities	Total	Percent of fatalities	Total	Percent of fatalities
<16	5	2	40.0%	1	20.0%	1	20.0%
16-17	15	10	66.7%	8	53.3%	9	60.0%
18-20	53	39	73.6%	32	60.4%	29	54.7%
21-24	49	37	75.5%	34	69.4%	34	69.4%
25-34	118	94	79.7%	79	66.9%	78	66.1%
35-44	100	75	75.0%	72	72.0%	69	69.0%
15-54	110	79	71.8%	70	63.6%	58	52.7%
55-64	77	55	71.4%	45	58.4%	47	61.0%
55-74	47	29	61.7%	26	55.3%	23	48.9%
75 and older	52	15	28.8%	15	28.8%	15	28.8%
Grand Total	626	435	69.5%	382	61.0%	363	58.0%

Notes

Driver tests given includes Alcohol, Alcohol and drug, and Drug test categories.

Includes drivers only.

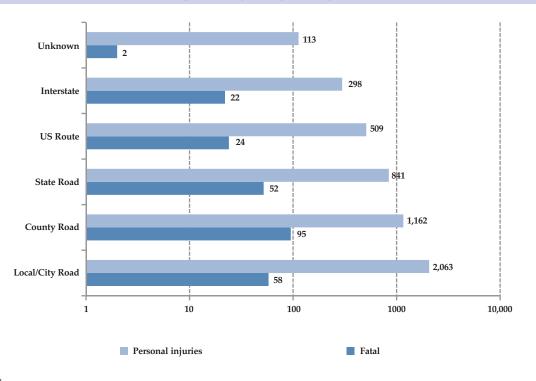
Excludes four (4) drug test results reported as pending.

Source



- Local/city roads hosted the highest volume of non-fatal personal injuries in alcohol-related collisions in 2007.
- ➤ County roads reflected the highest volume of fatal injuries (95) in alcohol-related collisions in 2007, followed by local/city roads (58) and state roads (52).

Figure 28. Alcohol-related fatalities and personal injuries by roadway class, 2007



X-axis is measured on a log 10 scale. Because each gridmark is 10 times the previous, lengths of bars are therefore not proportional to actual counts. Includes alcohol-related collisions only (Fatalities = 253; nonfatal injuries = 4,986).

Injuries includes incapacitating, nonincapacitating, and possible.

Source:

- ➤ Nearly 5,000 persons were injured and 253 persons killed in collisions classified as alcohol-related.
- ➤ Alcoholic beverages continues to be the most frequent primary factor in alcohol-related collisions.
- ➤ Various kinds of reckless driving (running off the road, speeding, failure to yield) are primary factors in a fourth of alcohol-related collisions.
- ➤ The single largest number of alcohol-related fatalities occurred when vehicles ran off road right.

Table 78. Alcohol-related collisions, fatalities, and injuries, by primary factor to collision occurrence, 2007

		Alcohol-rel	ated collisions	
Primary factor to collision	Number of collisions	Percent of total	Fatalities	Personal injuries
Alcoholic beverages	3,887	39.10%	49	1,675
Ran off road right	1,454	14.62%	71	699
Unsafe speed	582	5.85%	30	403
Failure to yield right of way	527	5.30%	10	387
Other (explained in narrative) - driver	471	4.74%	16	195
Following too closely	414	4.16%	0	231
Left of center	314	3.16%	23	285
Disregard signal/reg sign	298	3.00%	13	259
Improper lane usage	263	2.65%	0	106
Unsafe backing	231	2.32%	1	13
Overcorrecting/Oversteering	175	1.76%	10	100
Speed too fast for weather conditions	167	1.68%	5	82
Improper turning	132	1.33%	0	41
Animal on roadway	120	1.21%	5	65
Driver distracted (explained in narrative)	117	1.18%	0	49
Illegal drugs	95	0.96%	0	55
Driver asleep or fatigued	93	0.94%	0	41
Pedestrian action	89	0.94 %	8	76
	79	0.79%	2	34
Improper passing	62	0.62%	0	16
Prescription drugs Ran off road left	60	0.62%	2	25
			0	
Unknown	58	0.58%	-	14
Roadway surface condition	51	0.51%	2	27
Cell phone usage	50	0.50%	0	25
Wrong way on one way	35	0.35%	4	32
Passenger distraction	14	0.14%	0	10
Driver illness	13	0.13%	0	7
Other (explained in narrative) - environment	13	0.13%	0	6
Other (explained in narrative) - vehicle	13	0.13%	2	3
Brake failure or defective	12	0.12%	0	4
Tire failure or defective	11	0.11%	0	3
Steering failure	9	0.09%	0	1
Headlight defective or not on	5	0.05%	0	3
View obstructed	5	0.05%	0	2
Not a factor - driver	4	0.04%	0	1
Engine failure or defective	3	0.03%	0	2
Glare	3	0.03%	0	3
Other telematics in use	3	0.03%	0	0
Accelerator failure or defective	2	0.02%	0	3
Other lights defective	2	0.02%	0	2
Oversize/Overweight load	2	0.02%	0	0
ackknifing	1	0.01%	0	0
Severe crosswinds	1	0.01%	0	0
Traffic control problem	1	0.01%	0	1
Violation of license restriction	1	0.01%	0	0
Total	9,942	100%	253	4,986

See glossary for definition of alcohol-related collisions.

Unknown includes multiple codes, Blank, or Null

Includes all alcohol-related collisions (fatal, injury, property damage).

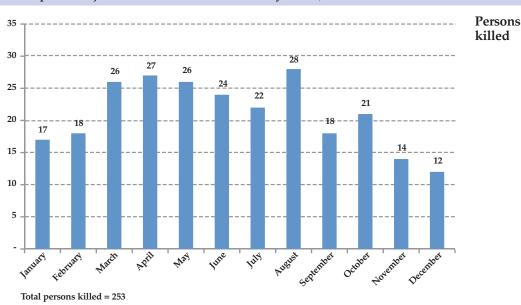
Injuries includes incapacitating, nonincapacitating, and possible.

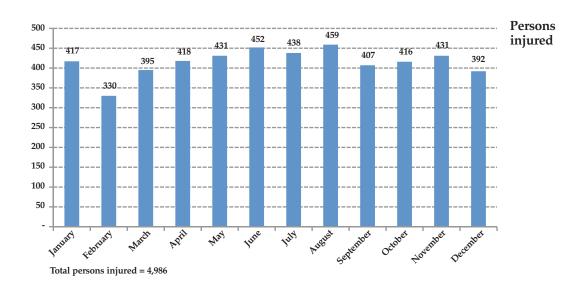
Source



- ➤ In 2007, persons killed monthly in alcohol-related collisions generally declined from a high of 28 in August to 12 in December.
- Monthly alcohol-related fatalities exhibited sudden spikes from February to March and from July to August .
- ➤ Alcohol-related fatalities as a proportion of all fatalities were highest in March (33.8) and April (35.5) (not shown in figure).
- > Alcohol-related injuries are generally lowest in the winter months, but began to climb from February through June .

Figure 29. Fatalities and persons injured in alcohol-related collisions by month, 2007





Injuries includes incapacitating, nonincapacitating, and possible.

Source

- ➤ Overall, alcohol-related collisions occur in evenings and at night.
- ➤ Generally, the daily volume of alcohol-related collisions increases from Monday to Sunday.
- ➤ Alcohol-related collisions occurred disproportionately in 2007 from midnight to 4 am on Saturdays and Sundays.



Table 79. Alcohol-related collisions and individual injuries, by time of day and day of week, 2007

				Alcohol-rel	lated collisio	ns				
Collision time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total	Fatalities	Non-fatal injuries
12am -	107	69	72	76	88	184	220	816	19	353
1am -	60	58	61	85	87	192	218	761	17	357
2am -	32	48	54	67	89	198	247	735	23	309
3am -	26	40	61	81	96	258	262	824	20	365
4am -	13	19	28	40	48	136	146	430	20	170
5am -	8	16	10	14	31	60	68	207	8	112
6am -	3	13	17	14	15	47	53	162	8	82
7am -	9	11	19	7	18	35	35	134	4	61
8am -	11	12	10	11	14	21	21	100	1	48
9am -	5	11	12	11	8	16	15	78	3	38
10am -	5	11	13	5	16	27	21	98	3	59
11am -	14	8	6	13	20	22	16	99	2	28
12pm -	11	25	14	14	16	29	18	127	2	66
1pm -	18	14	13	15	19	33	25	137	1	75
2pm -	19	32	28	26	28	51	21	205	8	128
3pm -	38	34	28	30	62	59	44	295	7	197
4pm -	44	42	31	47	68	59	51	342	7	165
5pm -	56	45	53	60	78	86	49	427	9	229
6pm -	80	56	50	69	71	116	100	542	13	301
7pm -	76	61	56	65	91	97	83	529	12	290
8pm -	103	59	68	76	94	120	86	606	9	346
9pm -	85	71	83	108	126	148	90	711	17	383
10pm -	63	79	94	96	193	153	83	761	15	385
11pm -	64	74	94	111	165	217	78	803	25	433
Unknown	0	1	2	0	4	4	2	13	0	6
TOTAL	950	909	977	1,141	1,545	2,368	2,052	9,942	253	4,986

Source

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of May 4, 2008

- ➤ Alcohol involvement occurs more frequently in crashes involving single vehicles or other units (e.g., pedestrians, pedalcyclists).
- ➤ Considering all collisions, proportions that are alcohol-related have generally declined in the 2003-2007 period.

Table 80. Alcohol-related single and multiple vehicle collisions, 2003-2007

	0 1	,			
Collisions	2003	2004	2005	2006	2007
Single vehicle	65,541	64,466	66,898	62,102	65,765
Alcohol-related	6,029	5,585	5,625	5,715	5,256
Percent alcohol-related	9.2%	8.7%	8.4%	9.2%	8.0%
Multiple vehicle	146,190	144,216	141,461	130,619	139,240
Alcohol-related	8,086	7,850	8,059	6,136	4,686
Percent alcohol-related	5.5%	5.4%	5.7%	4.7%	3.4%
Total	211,731	208,682	208,359	192,721	205,005
Alcohol-related	14,115	13,435	13,684	11,851	9,942
Percent alcohol-related	6.7%	6.4%	6.6%	6.1%	4.8%

Notes:

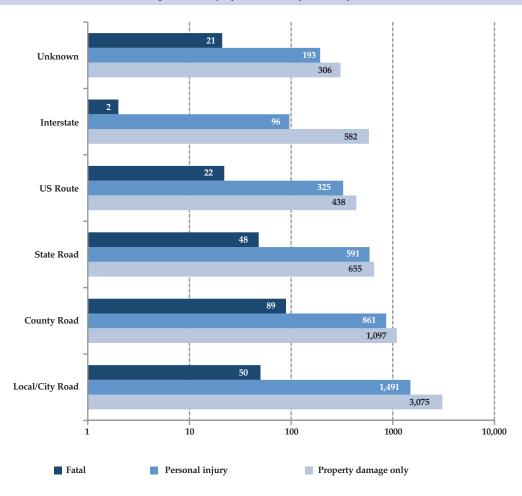
Includes all unit types.

Source:



- ➤ Alcohol-related fatal collisions as a proportion of all alcohol-related collisions per road class was highest on county roads (4.3 percent), followed by interstates (4 percent).
- ➤ The largest number of alcohol-related collisions occurred on local/city roads.
- Considering alcohol-related collisions on state roads, nearly half resulted in some type of personal injury (45.7 percent) or fatality (3.7 percent).
- ➤ About one-third of alcohol-related collisions on local/city streets produced personal injuries or fatalities.

Figure 30. Alcohol-related fatal and personal injury collisions by roadway class, 2007



X-axis is measured on a log 10 scale. Because each gridmark is 10 times the previous, lengths of bars are therefore not proportional to actual counts. Includes alcohol-related collisions only (Fatal = 232; Personal injury = 3,557; Property damage = 6,153).

Source

- Overall, less than 3 percent of vehicles/units were classified as alcohol-related in 2007, although there was much variation among vehicle/unit types.
- ➤ Motorcycles and mopeds have high alcohol involvement--a five-year average of 10.3 percent of motorcycles involved in collisions are alcohol-related.
- ➤ The next highest risk of alcohol involvment was among pedestrians (4.9 percent) and pickup trucks (4.7 percent).
- ➤ Commercial and other large vehicles had the lowest levels of alcohol involvement.
- ➤ On average during the five year period, passenger cars and SUVs had similar proportions of alcohol-related units.

Table 81. Percent of unit type classified as alcohol-related in collisions, 2003-2007

Unit type	2003	2004	2005	2006	2007	Average 2003-07
Motorcycle and moped	10.9%	11.0%	9.7%	10.0%	10.1%	10.3%
Pedestrian	0.0%	5.5%	4.4%	7.8%	6.7%	4.9%
Pickup truck	5.3%	4.8%	4.9%	4.8%	3.8%	4.7%
Passenger car	4.1%	4.3%	4.5%	3.8%	2.8%	3.9%
Sport utility vehicle	4.0%	4.0%	3.9%	3.8%	2.7%	3.7%
Van	3.1%	3.2%	3.4%	2.6%	1.8%	2.8%
Bicycle	0.0%	2.0%	2.4%	3.7%	3.4%	2.3%
Unknown	2.9%	2.6%	2.6%	1.9%	0.9%	2.2%
Other vehicle type	2.5%	2.0%	2.2%	1.0%	1.1%	1.8%
Bus	1.4%	1.9%	2.2%	1.4%	0.2%	1.4%
Large truck	1.6%	1.2%	1.1%	0.8%	0.3%	1.0%
Total	4.1%	4.1%	4.2%	3.8%	2.8%	3.8%
N (total units)	371,357	367,077	363,538	336,585	359,401	
N (alcohol-related units)	15,205	15,024	15,408	12,661	10,055	

Notes:

Unknown includes unknown, blank, and invalid codes.

Large truck includes Tractor (Cab Only, No Trailer), Tractor/Double Trailer, Tractor/One Semi Trailer, Tractor/Triple Trailer, Truck (Single 2 Axle, 6 Tires), Truck (Single 3 or more Axles), Truck/Trailer (not semi).

See glossary for definition of alcohol-related units.

Other vehicle type includes Combination vehicle, farm vehicle, and Motorhome/Recreational Vehicle.

Bus includes Bus/Seats 15+ Persons with Driver, Bus/Seats 9-15 Persons with Driver, and School Bus.

Source



- ➤ In 2007, pickup truck drivers had the highest reported BAC test results--nearly five percent of individuals in pickup truck injury crashes were legally intoxicated.
- ➤ Motorcycle operators had the next highest rate of legal intoxication.

Table 82. Unit/vehicle operator/driver fatalities and injuries by reported BAC (g/dL) results, 2007

		1	BAC (g/dL) resul	lts				
Drivers/operators in unit type	Zero	> 0 to < 0.08	0.08 to < 0.15	0.15 and greater	No test or Not reported	Total fatalities and injuries	Percent positive BAC	Percent 0.08 BAC or more
Pickup truck	166	45	61	151	4,211	4,634	5.5%	4.6%
Motorcycle and moped	60	16	33	55	2,385	2,549	4.1%	3.5%
Unknown	5	5	3	6	245	264	5.3%	3.4%
Sport utility vehicle	102	43	48	71	4,389	4,653	3.5%	2.6%
Passenger car	402	130	178	306	20,888	21,904	2.8%	2.2%
Van	45	5	18	25	2,449	2,542	1.9%	1.7%
Other vehicle type	5	0	1	0	55	61	1.6%	1.6%
Pedestrian	17	1	6	8	1,507	1,539	1.0%	0.9%
Large truck	44	1	1	1	295	342	0.9%	0.6%
Bicycle	3	3	0	1	905	912	0.4%	0.1%
Bus	5	1	0	0	38	44	2.3%	0.0%
Total	854	250	349	624	37,367	39,444	3.1%	2.5%

Notes:

Includes drivers, pedestrians, and pedalcyclists only.

Injuries includes incapacitating, nonincapacitating, and possible.

Excludes non-injury crashes.

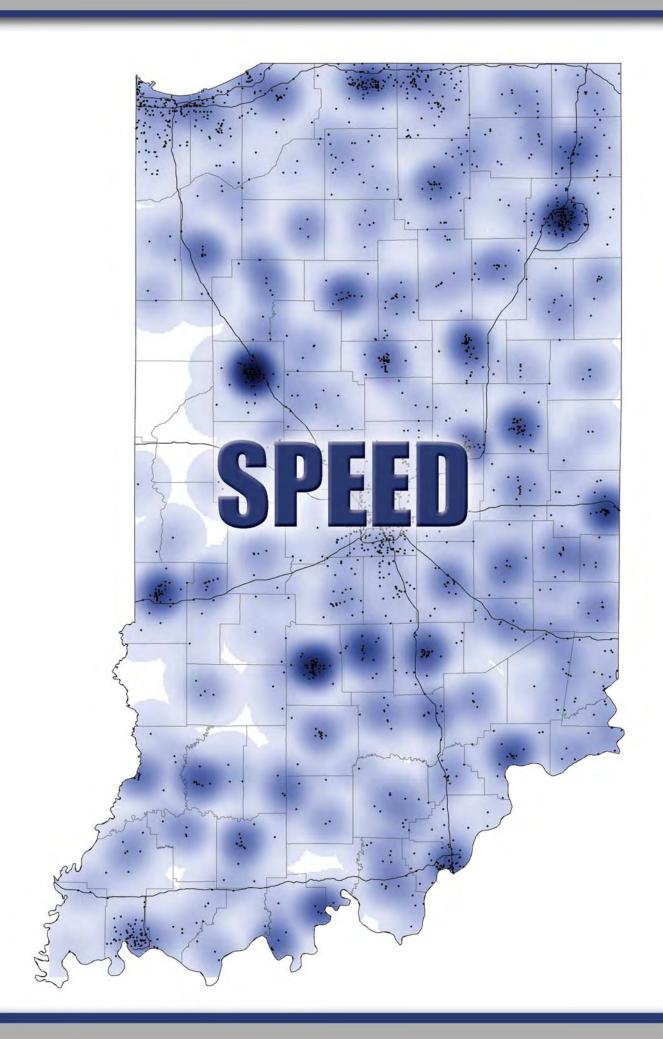
Unknown includes *unknown*, blank, and invalid codes.

Large truck includes Tractor (Cab Only, No Trailer), Tractor/Double Trailer, Tractor/One Semi Trailer, Tractor/Triple Trailer, Truck (Single 2 Axle, 6 Tires), Truck (Single 3 or more Axles), Truck/Trailer (not semi).

Other vehicle type includes Combination vehicle, farm vehicle, and Motorhome/Recreational Vehicle.

Bus includes Bus/Seats 15+ Persons with Driver, Bus/Seats 9-15 Persons with Driver, and School Bus.

Source





SPEED, 2007

Based on the Indiana ARIES database, a collision is defined as speed-related if any one of the following conditions is met: (1) *Unsafe speed or Speed too fast for weather conditions* is listed as the primary or a contributing factor of the collision; or (2) a vehicle driver is issued a speeding citation.

There were 18,491 speed-related collisions in Indiana in 2007 representing nine percent of all collisions. These collisions involved 18,565 speeding motor vehicles (5.2 percent of all motor vehicles in collisions) and 28,414 known drivers, injured occupants, pedestrians or pedalcyclists (8.6 percent of all individuals in collisions).

HIGHLIGHTS

Speed-related collisions were more than two times as likely to be fatal in 2007 compared to non-speed-related collisions (0.9 percent versus 0.4 percent). In addition in 2007, one in five fatal collisions (165/804), about one in seven (459/3,076) incapacitating collisions, and one in nine (3,917/34,343) non-incapacitating collisions were speed-related.

The proportion of collisions in each severity category that are speed-related has decreased on average since 2003; 0.5 percent for fatal, 2.8 percent for incapacitating, and 3.2 percent for non-incapacitating.

In 2007, collisions involving speed occurred most frequently during morning (7 – 9am; 13.4 percent) and evening (3 – 6pm; 18.5 percent) rush hours, and were especially prominent during the morning rush hour period on Wednesdays.

2007 was the first year since 2003 that more individuals were involved in speed-related collisions in *urban* (53.4 percent) rather than *rural* (46.6 percent) localities—a five year period exhibiting a 2.5 percent average annual increase in the number of individuals involved in *rural* speed-related collisions.

Since 2003, male drivers of all ages have continually had higher percentages of drivers who were speeding in collisions compared to their female counterparts.

16-20 year old males have the highest proportion of drivers speeding in collisions—generally four percentage points higher than female drivers 16-20 years old and nearly three percentage points higher than the next highest male group (21-24). Male drivers of all age groups who are speeding are more likely to be killed as a result of the collision.

The percent of speed-related collisions involving alcohol decreased from 10.1 percent (1,478/14,570) in 2006 to 7.0 percent (1,296/18,491) in 2007, and has decreased on average 5.9 percent since 2003.

- ➤ One of every 11 collisions in 2007 was speed-related.
- ➤ One of every five fatal collisions in 2007 was speed-related.
- ➤ Fatal, incapacitating, and non-incapacitating speed-related collisions have decreased on average each year from 2003 to 2007.

Table 83. Indiana speed-related collisions, by severity, 2003-2007

	2003	2004	2005	2006	2007	Average annual change
All collisions	211,731	208,682	208,359	192,721	205,005	-0.7%
Speed-related collisions	18,680	18,812	20,010	14,570	18,491	1.7%
Percent speed-related	8.8%	9.0%	9.6%	7.6%	9.0%	1.7%
By injury severity						
Fatal	753	857	855	817	804	1.9%
Speed-related	175	177	203	159	165	-0.5%
Percent speed-related	23.2%	20.7%	23.7%	19.5%	20.5%	-2.2%
Incapacitating	3,339	3,295	3,141	3,190	3,076	-2.0%
Speed-related	518	464	486	473	459	-2.8%
Percent speed-related	15.5%	14.1%	15.5%	14.8%	14.9%	-0.7%
Non-incapacitating	37,641	40,008	38,620	35,659	34,343	-2.1%
Speed-related	4,538	4,748	4,621	3,844	3,917	-3.2%
Percent speed-related	12.1%	11.9%	12.0%	10.8%	11.4%	-1.2%
Property damage only	169,998	164,522	165,743	153,055	166,782	-0.3%
Speed-related	13,449	13,423	14,700	10,094	13,950	4.0%
Percent speed-related	7.9%	8.2%	8.9%	6.6%	8.4%	3.3%

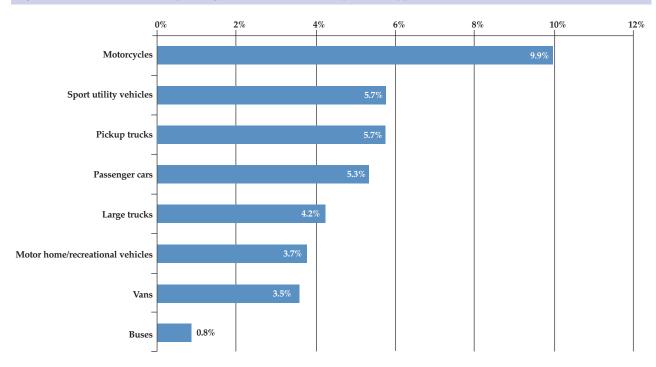
Notes:

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

Source

➤ In 2007, motorcycles involved in collisions were 1.7 times (9.9 percent versus 5.7 percent) more likely than sport utility vehicles and pickup trucks to have been speeding.

Figure 31. Percent of vehicles speeding in Indiana collisions, by vehicle type, 2007



Notes

Percent is percent of total vehicles for a given vehicle type.

Excludes vehicle types of farm vehicle, combination vehicle, pedestrian, bicycle, and unknown type.

Buses includes vehicle types of bus/seats 9-15 persons with driver, bus/seats 15+ persons with driver, and school bus. Motorcycles includes mopeds.



- > Approximately one of every four (23.2 percent) individuals involved in speed-related collisions in 2007 were injured.
- ➤ Individuals involved in speed-related collisions in 2007 were nearly three times as likely as individuals involved in non-speed-related collisions to suffer a fatal injury.
- ➤ In 2007, 20.8 percent of all fatalities were speed-related (187 of 898).

Table 84. Individuals involved in Indiana collisions, by speed status and injury type, 2003-2007

	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Individuals involved in:	354,418	350,527	344,609	315,894	330,141	100.0%	-1.7%
Speed-related collisions	30,171	30,501	31,605	23,444	28,414	100.0%	0.0%
Fatal	197	207	229	174	187	0.7%	-0.2%
Incapacitating	675	563	617	607	559	2.0%	-4.1%
Non-incapacitating	6,786	7,108	6,871	5,733	5,839	20.5%	-3.3%
Not injured	20,380	20,030	20,984	15,372	21,125	74.3%	3.4%
Unknown injury	2,133	2,593	2,904	1,558	704	2.5%	-16.9%
Non speed-related collisions	324,247	320,026	313,004	292,450	301,727	100.0%	-1.7%
Fatal	636	740	709	725	711	0.2%	3.1%
Incapacitating	3,517	3,398	3,206	3,200	3,103	1.0%	-3.1%
Non-incapacitating	47,457	50,583	48,556	45,656	42,967	14.2%	-2.3%
Not injured	250,203	238,252	228,843	222,611	247,109	81.9%	-0.1%
Unknown injury	22,434	27,053	31,690	20,258	7,837	2.6%	-14.9%
Relative risk (speed-related to non-speed-related)							
Fatal	3.3	2.9	3.2	3.0	2.8		
Incapacitating	2.1	1.8	2.1	2.0	1.9		
Non-incapacitating	1.5	1.5	1.5	1.3	1.5		

Notes:

Relative risk equals the percent of given injury type in speed-related collisions divided by the percent of same injury type in non-speed-related collisions. *Non-incapacitating* includes *non-incapacitating* and *possible* injuries.

Unknown injury includes refused, unknown, not reported and invalid codes.

Not injured are mainly drivers of vehicles involved in property damage only collisions.

Source

- ➤ The youngest males continue to have the highest proportion of drivers who were speeding in collisions. For example, in 2007, 12 percent of 16-20 year old male drivers involved in collisions were speeding.
- ➤ In 2007, males (all ages) were 1.5 times (6.5 percent versus 4.5 percent) more likely than females to have been speeding in collisions.
- ➤ In 2007, male drivers (all ages) who were speeding were 3.7 times (0.91 percent versus 0.25 percent) more likely than female drivers who were speeding to have been killed.
- ➤ In 2007, 1.58 percent of 45-49 year old male drivers who were speeding were killed -- more than any other male (or female) age group.

Table 85. Proportion of drivers who were speeding in Indiana collisions, by age group and gender, 2003-2007

	low						high			
	2	003	20	04	20	05	20	006	20	007
Age group	Male	Female								
16 - 20	11.4	7.0	11.8	7.3	11.8	7.9	10.9	6.3	12.0	7.3
21 - 24	8.5	5.4	9.3	5.6	9.5	6.5	8.3	4.9	9.4	6.0
25 - 29	7.0	4.8	7.2	4.9	8.5	5.8	6.4	4.0	7.8	5.2
30 - 34	5.6	3.9	6.0	4.4	6.3	4.8	5.1	3.4	6.7	4.5
35 - 39	4.9	3.7	5.1	3.7	5.6	4.6	4.3	3.1	5.6	4.0
40 - 44	4.5	3.4	4.6	3.3	4.8	4.0	3.7	2.8	4.8	3.9
45 - 49	3.9	2.8	4.1	3.0	4.4	3.3	3.6	2.4	4.1	3.6
50 - 54	3.2	2.8	3.7	2.7	4.1	3.0	3.1	2.2	3.8	2.9
55 - 59	3.3	2.7	2.9	2.3	3.6	3.1	2.4	1.6	3.2	2.6
60 - 64	3.1	2.1	2.9	2.4	3.2	2.6	2.1	1.9	2.9	2.3
65 - 69	2.5	1.7	2.7	1.7	2.5	2.3	2.3	1.3	2.6	1.8
70 - 74	2.1	1.2	2.0	1.7	2.1	2.1	1.7	1.5	2.4	1.6
75+	2.3	1.8	2.4	1.4	2.7	1.7	1.9	1.2	2.2	1.1
All ages	6.1	4.2	6.4	4.3	6.7	4.9	5.5	3.6	6.5	4.5

Table 86. Proportion of spe	eeding drivers kill	led in Indiana collisions	by age group and ge	nder, 2003-2007

	2	003	2	2004		005	20	006	20	007
Age group	Male	Female								
16 - 20	0.48	0.42	0.67	0.58	0.56	0.29	0.53	0.34	0.67	0.17
21 - 24	1.10	0.22	0.68	0.33	1.23	0.29	1.37	0.29	0.92	0.34
25 - 29	0.53	0.42	1.07	0.55	1.04	0.24	1.35	0.56	1.15	0.26
30 - 34	0.91	0.18	1.03	0.00	0.38	0.32	1.43	0.00	1.04	0.19
35 - 39	0.98	0.21	1.18	0.00	1.52	0.52	2.04	0.85	1.01	0.42
40 - 44	1.36	0.22	0.76	0.23	1.50	0.78	1.11	0.93	1.08	0.44
45 - 49	1.53	0.00	0.93	0.00	1.02	0.27	0.59	0.00	1.58	0.25
50 - 54	0.49	1.15	0.82	0.39	1.82	0.00	1.04	0.51	1.15	0.00
55 - 59	0.31	1.05	1.00	0.00	2.09	0.85	1.20	0.81	0.29	0.00
60 - 64	0.95	1.89	0.94	0.00	0.41	0.79	1.31	1.10	0.44	0.79
65 - 69	2.48	0.00	1.52	0.00	1.57	0.00	0.91	0.00	1.46	0.00
70 - 74	0.00	0.00	0.00	0.00	0.00	0.00	1.61	0.00	0.00	0.00
75 +	2.84	1.05	1.35	1.33	1.24	0.00	0.00	0.00	0.00	0.00
All ages	0.83	0.40	0.84	0.35	0.99	0.35	1.04	0.41	0.91	0.25

Includes only drivers where gender and age is known.

Numbers represent percentage of total drivers in each age/gender group.

Source:



- ➤ In 2007, speed-related collisions occured most frequently Wednesdays 6am to 10am, Tuesdays 12pm to 6pm and Saturdays 3pm to 8pm.
- ➤ In 2007, 7.1 percent of speed related collisions occurred during the 7am to 7:59am hour.
- ➤ 17.4 percent of speed-related collisions in 2007 occurred on Saturday.

Table 87. Indiana speed-related collisions, by time of day and day of week, 2007

	low						high		
Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total collisions	% of total collisions,
12am -	123	55	47	63	53	69	85	495	2.7%
1am -	108	37	53	50	46	44	89	427	2.3%
2am -	87	31	33	42	34	42	69	338	1.8%
3am -	97	31	25	49	37	39	68	346	1.9%
4am -	58	40	42	65	37	44	51	337	1.8%
5am -	50	69	62	129	62	58	58	488	2.6%
6am -	53	130	108	221	117	105	70	804	4.4%
7am -	68	217	210	318	200	179	127	1,319	7.1%
8am -	97	158	177	281	149	123	179	1,164	6.3%
9am -	117	87	120	186	114	91	140	855	4.6%
10am -	127	78	115	126	83	121	123	773	4.2%
11am -	103	75	141	116	77	164	110	786	4.3%
12pm -	119	82	186	103	92	120	110	812	4.4%
1pm -	141	68	222	94	64	107	139	835	4.5%
2pm -	140	96	206	113	96	122	154	927	5.0%
3pm -	138	159	207	174	144	177	183	1,182	6.4%
4pm -	136	136	189	133	126	158	208	1,086	5.9%
5pm -	110	165	177	144	110	201	242	1,149	6.2%
6pm -	111	147	138	119	96	136	246	993	5.4%
7pm -	102	113	100	91	67	120	190	783	4.2%
8pm -	86	102	96	80	74	85	163	686	3.7%
9pm -	79	87	99	68	72	97	138	640	3.5%
10pm -	76	68	105	77	73	110	136	645	3.5%
11pm -	64	86	85	67	53	120	133	608	3.3%
Total	2,390	2,317	2,943	2,909	2,076	2,632	3,211	18,478	100.0%
% of total collisions, all days	12.9%	12.5%	15.9%	15.7%	11.2%	14.2%	17.4%	100.0%	

Includes only collisions where time was indicated.

Source

- ➤ One-third of fatalities in speed-related collisions in 2007 occurred on roadways where the posted speed limit was 55 mph.
- ➤ Fatalities in speed-related collisions on roadways with a posted speed limit of 35 have increased on average 26 percent from 2003 to 2007 while decreasing on average 30 percent on roadways where the posted speed limit was 65.
- Non-incapacitating injuries in speed-related collisions on roadways with a posted speed limit of 60 have increased on average 27 percent from 2003 to 2007 while decreasing on average 23 percent on roadways where the posted speed limit was 65.

Table 88. Individuals injured in Indiana speed-related collisions, by injury type and posted speed limit, 2003-2007

Injury type/posted							
speed limit (mph)	2003	2004	2005	2006	2007	% 2007 total	Average annual change
Known injuries	7,658	7,878	7,717	6,514	6,585	100.0%	-3.4%
Fatal	197	207	229	174	187	100.0%	-0.2%
< 35	31	37	41	34	24	12.8%	-4.1%
35	15	16	27	16	27	14.4%	25.9%
40	22	16	26	18	10	5.3%	-10.0%
45	19	23	38	28	29	15.5%	15.9%
50	10	12	11	8	9	4.8%	-0.8%
55	70	84	69	52	59	31.6%	-2.3%
60	0	0	4	2	4	2.1%	N/A
65	21	13	10	6	5	2.7%	-29.5%
70 +	0	0	3	6	16	8.6%	N/A
Unknown speed limit	9	6	0	4	4	2.1%	N/A
Incapacitating	675	563	617	607	559	100.0%	-4.1%
< 35	158	119	138	135	113	20.2%	-6.8%
35	80	58	65	83	65	11.6%	-2.4%
40	81	64	63	63	61	10.9%	-6.4%
45	79	68	73	77	72	12.9%	-1.9%
50	34	26	33	35	22	3.9%	-6.9%
55	176	156	177	133	154	27.5%	-1.7%
60	4	2	8	6	15	2.7%	93.8%
65	32	32	22	11	8	1.4%	-27.1%
70 +	0	0	12	31	30	5.4%	N/A
Unknown speed limit	31	38	26	33	19	3.4%	-6.1%
Non-incapacitating	6,786	7,108	6,871	5,733	5,839	100.0%	-3.3%
< 35	1,490	1,730	1,551	1,323	1,404	24.0%	-0.7%
35	936	1,004	913	950	822	14.1%	-2.8%
40	758	750	712	640	599	10.3%	-5.7%
45	819	843	839	683	742	12.7%	-1.9%
50	384	339	384	264	250	4.3%	-8.7%
55	1,659	1,798	1,737	1,316	1,424	24.4%	-2.8%
60	29	29	52	58	67	1.1%	26.6%
65	385	318	289	138	121	2.1%	-22.8%
70 +	0	0	93	169	254	4.4%	N/A
Unknown speed limit	326	297	301	192	156	2.7%	-15.6%

Non-incapacitating includes non-incapacitating and possible injuries.

 $Includes \ only \ individuals \ with injury \ status \ of \ \textit{fatal, incapacitating} \ and \ \textit{non-incapacitating}.$

Speed limit categories other than < 35 and 70 + include speeds up to the next category (e.g. 35 includes 35 - 39).

N/A average annual change cannot be calculated due to zeros in first years.

Source:



- > Speed-related collisions involving alcohol have decreased eight percent on average each year from 2003 to 2007.
- Among speeding drivers tested for alcohol, the proportion with a BAC between 0.00 and 0.08 has increased on average 3.8 percent while speeding drivers with higher BAC levels have decreased on average.

Table 89. Speed-related collisions and speeding drivers involved by blood alcohol concentration (BAC), 2003-2007

	2003	2004	2005	2006	2007	Percent 2007 total	Average annual change
Speed-related collisions	18,680	18,812	20,010	14,570	18,491	100.0%	1.7%
Alcohol-related	1,815	1,692	1,653	1,478	1,296	7.0%	-8.0%
Percent alcohol-related	9.7%	9.0%	8.3%	10.1%	7.0%		-5.9%
Speeding drivers' BAC results	1,063	955	1,058	986	915	100.0%	-3.3%
g/dL = 0.00	253	253	251	257	280	30.6%	2.6%
Percent	23.8%	26.5%	23.7%	26.1%	30.6%		7.0%
g/dL >0/00 < 0.08	174	154	185	163	172	18.8%	0.6%
Percent	16.4%	16.1%	17.5%	16.5%	18.8%		3.8%
g/dL >= 0.08 < 0.15	246	209	217	247	197	21.5%	-4.4%
Percent	23.1%	21.9%	20.5%	25.1%	21.5%		-0.9%
g/dL > 0.15	390	339	405	319	266	29.1%	-7.9%
Percent	36.7%	35.5%	38.3%	32.4%	29.1%		-5.3%

Notes

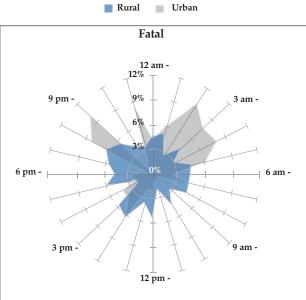
See glosary for definition of alcohol-related and speed-related.

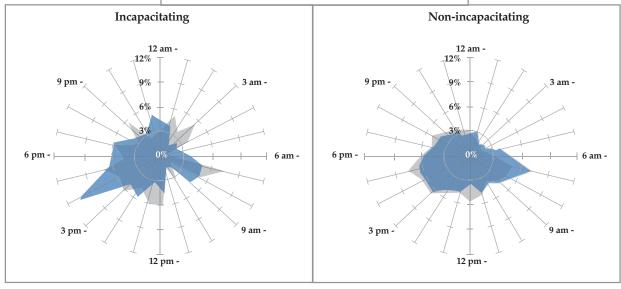
BAC is measured in grams per deciliter (g/dL).

Source

- ➤ In 2007, ten percent of fatal speed-related collisions in urban areas occurred at 9pm and ten percent at 2am, while the largest percentage of fatal speed-related collisions in rural areas occurred at 2pm (6.1 percent).
- ➤ In 2007, 10.9 percent of incapacitating speed-related collisions in rural areas occurred at 4pm. The largest proportion for these collisions in urban areas occurred at 7am (7.2 percent).
- In 2007, non-incapacitating speed-related collisions in rural areas were most common at 7am (7.2 percent) and in urban areas at 5pm (7.3 percent).

Figure 32. Percent of total rural/urban speed-related collisions, by collision severity and time of day, 2007





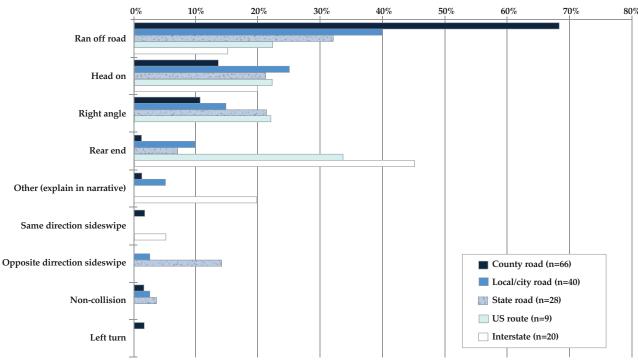
Includes only records where time and locality are known. Non-incapacitating includes non-incapacitating and possible injuries. N = Fatal - Rural=115, Urban=50

N = Incapacitating - Rural=265, Urban=194 N= Non-incapacitating - Rural=1,976, Urban=1,934



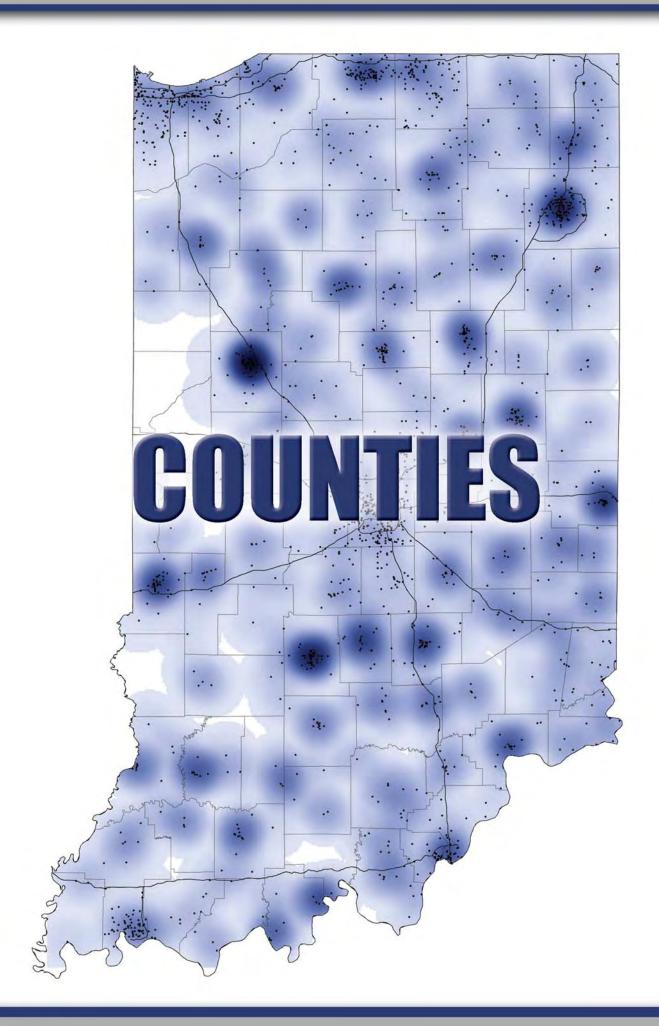
- In 2007, running off the road was the most common manner of collision for fatal speed-related collisions on county roads (68.2 percent) local/city roads (40 percent) and state roads (32.1 percent).
- ➤ The greatest proportion of fatal speed-related collisions on Interstates (45 percent) and US routes (33.3 percent) in 2007 resulted from rear end collisions.

Figure 33. Percent of fatal speed-related collisions on each road class, by manner of collision, 2007



Includes only records where roadclass and manner of collision are known.

Source





COUNTIES, 2007

Introduction

Understanding the spatial distribution of traffic collisions and injuries can assist officials in developing policies and targeting resources to address the varying issues related to those crashes. A variety of factors may influence when and where traffic collisions occur including the size and makeup of the population and the number of registered vehicles, licensed drivers, and vehicle miles travelled (VMT). The following *choropleth* and *density grid* maps show which counties had the highest rates as well as where various types of traffic collisions and injuries were

concentrated in Indiana in 2007. Some maps are normalized in an attempt to account for the disparate volumes of the aforementioned factors.

Notes: All density grid maps were created using a ten mile search radius.

Choropleth maps use themes, such as color or shading, to depict spatial feature values for a given attribute of the features. Themes are typically based on different categories of the mapped attribute

- ➤ In 2007, 205,005 traffic collisions occurred in Indiana counties, 804 of which were fatal collisions.
- ➤ The mean number of total collisions per county was 2,228, while the mean number of fatal collisions per county was nine.
- ➤ Benton (26.3) and Warren (20.0) counties had the highest rates of fatal collisions per 1,000 of all collisions in 2007.

Table 90. Indiana collisions by severity and county, 2007

		Fatal	Incaj	pacitating	Non-inc	apacitating	Property of	lamage only		
County	Count	% total county collisions	Count	% total county collisions	Count	% total county collisions	Count	% total county collisions	Total	Fatal collisions per 1,000 total collisions
Indiana	804	0.4%	3,076	1.5%	34,343	16.8%	166,782	81.4%	205,005	3.9
Mean	9	n/a	33	n/a	373	n/a	1,813	n/a	2,228	n/a
Minimum	0	n/a	2	n/a	22	n/a	115	n/a	152	n/a
Maximum	72	n/a	411	n/a	5,264	n/a	22,218	n/a	27,965	n/a
Adams	3	0.4%	20	2.6%	88	11.2%	673	85.8%	784	3.8
Allen	21	0.2%	144	1.2%	2,058	16.8%	10,038	81.9%	12,261	1.7
Bartholomew	18	0.8%	73	3.1%	539	23.0%	1,716	73.1%	2,346	7.7
Benton	4	2.6%	2	1.3%	31	20.4%	115	75.7%	152	26.3
Blackford	2	0.5%	7	1.8%	43	11.3%	328	86.3%	380	5.3
Boone	10	0.5%	17	0.9%	246	13.1%	1,601	85.4%	1,874	5.3
Brown	4	0.7%	25	4.5%	107	19.3%	419	75.5%	555	7.2
Carroll	0	0.0%	9	1.2%	111	15.4%	603	83.4%	723	0.0
Cass	6	0.4%	24	1.6%	206	13.7%	1,271	84.3%	1,507	4.0
Clark	7	0.2%	53	1.2%	744	17.0%	3,576	81.6%	4,380	1.6
Clay	8	1.0%	19	2.5%	114	14.8%	630	81.7%	771	10.4
Clinton	3	0.3%	17	1.7%	174	17.7%	787	80.2%	981	3.1
Crawford	5	1.3%	9	2.4%	48	12.8%	313	83.5%	375	13.3
Daviess	5	1.0%	15	2.9%	124	24.4%	365	71.7%	509	9.8
Dearborn	8	0.4%	39	2.0%	240	12.1%	1,692	85.5%	1,979	4.0
Decatur	5	0.7%	10	1.3%	96	12.6%	650	85.4%	761	6.6
DeKalb	5	0.3%	22	1.5%	203	13.7%	1,249	84.4%	1,479	3.4
Delaware	21	0.4%	46	1.0%	710	15.2%	3,904	83.4%	4,681	4.5
Dubois	8	0.8%	16	1.6%	197	19.8%	775	77.8%	996	8.0
Elkhart	37	0.5%	100	1.3%	1,089	14.1%	6,500	84.1%	7,726	4.8
Fayette	2	0.3%	7	1.1%	109	17.0%	523	81.6%	641	3.1
Floyd	10	0.4%	34	1.3%	515	19.7%	2,049	78.6%	2,608	3.8
Fountain	3	0.7%	7	1.6%	64	14.5%	366	83.2%	440	6.8
Franklin	7	1.2%	19	3.3%	97	16.9%	452	78.6%	575	12.2
Fulton	2	0.3%	16	2.6%	74	12.2%	515	84.8%	607	3.3
Gibson	8	0.7%	22	2.0%	136	12.4%	934	84.9%	1,100	7.3
Grant	14	0.6%	32	1.3%	368	15.5%	1,958	82.5%	2,372	5.9
Greene	15	1.6%	13	1.4%	144	15.7%	747	81.3%	919	16.3
Hamilton	18	0.3%	78	1.2%	996	14.7%	5,689	83.9%	6,781	2.7
Hancock	10	0.6%	28	1.8%	309	20.0%	1,196	77.5%	1,543	6.5
Harrison	9	0.7%	29	2.3%	178	13.9%	1,067	83.2%	1,283	7.0
Hendricks	16	0.4%	38	1.0%	596	16.1%	3,046	82.4%	3,696	4.3
Henry	9	0.7%	28	2.2%	240	18.7%	1,007	78.4%	1,284	7.0
Howard	9	0.4%	59	2.3%	451	17.7%	2,029	79.6%	2,548	3.5
Huntington	4	0.3%	18	1.4%	188	14.9%	1,055	83.4%	1,265	3.2
Jackson	6	0.4%	30	2.0%	237	15.4%	1,264	82.2%	1,537	3.9

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Table 90. (continued)

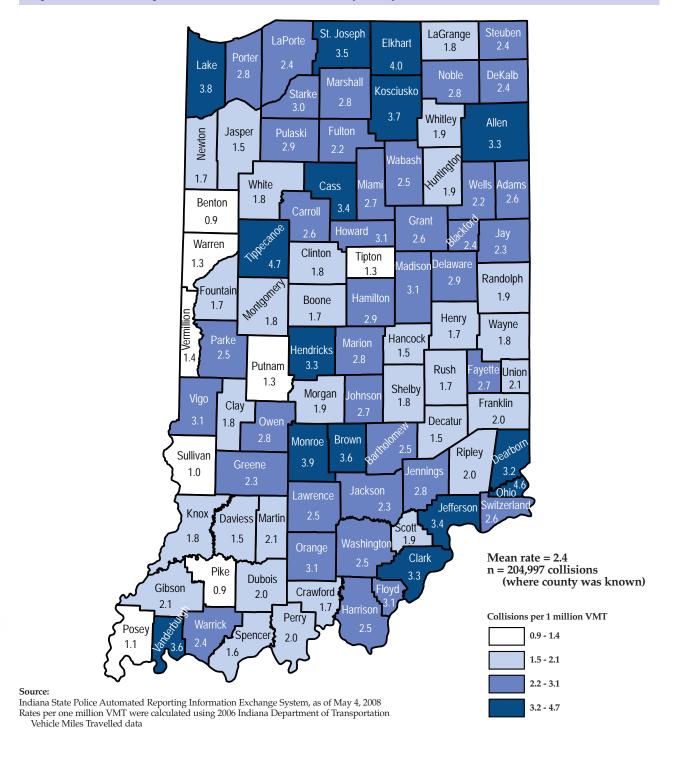
		Fatal	Inca	pacitating	Non-inc	apacitating	Property of	damage only		
County	Count	% total county collisions	Count	% total county collisions	Count	% total county collisions	Count	% total county collisions	Total	Fatal collisions per 1,000 total collisions
Jasper	8	0.6%	26	2.0%	211	16.6%	1,029	80.8%	1,274	6.3
Jay	2	0.3%	10	1.5%	99	14.8%	558	83.4%	669	3.0
Jefferson	7	0.7%	25	2.3%	166	15.5%	874	81.5%	1,072	6.5
Jennings	5	0.6%	28	3.3%	142	17.0%	661	79.1%	836	6.0
Johnson	14	0.5%	46	1.5%	593	19.9%	2,326	78.1%	2,979	4.7
Knox	7	0.8%	18	2.0%	206	22.6%	681	74.7%	912	7.7
Kosciusko	8	0.3%	36	1.2%	381	12.7%	2,586	85.9%	3,011	2.7
LaGrange	2	0.2%	10	1.0%	109	10.4%	923	88.4%	1,044	1.9
Lake	46	0.2%	208	1.1%	2,898	15.6%	15,436	83.0%	18,588	2.5
LaPorte	26	0.7%	59	1.7%	662	18.5%	2,827	79.1%	3,574	7.3
Lawrence	9	0.7%	21	1.7%	266	21.1%	962	76.5%	1,258	7.2
Madison	16	0.4%	51	1.2%	809	18.6%	3,485	79.9%	4,361	3.7
Marion	72	0.3%	411	1.5%	5,264	18.8%	22,218	79.4%	27,965	2.6
Marshall	5	0.3%	19	1.1%	265	14.9%	1,484	83.7%	1,773	2.8
Martin	2	0.7%	7	2.6%	35	12.8%	229	83.9%	273	7.3
Miami	7	0.6%	12	1.1%	151	13.8%	924	84.5%	1,094	6.4
Monroe	3	0.1%	65	1.6%	837	20.6%	3,151	77.7%	4,056	0.7
Montgomery	4	0.4%	21	1.9%	182	16.2%	918	81.6%	1,125	3.6
Morgan	10	0.6%	36	2.2%	322	20.0%	1,246	77.2%	1,614	6.2
Newton	5	1.2%	6	1.4%	52	12.0%	371	85.5%	434	11.5
Noble	2	0.1%	31	2.0%	174	11.4%	1,323	86.5%	1,530	1.3
Ohio	2	0.8%	2	0.8%	22	8.3%	239	90.2%	265	7.5
Orange	2	0.3%	13	2.1%	106	16.9%	506	80.7%	627	3.2
Owen	4	0.7%	17	2.9%	110	18.5%	464	78.0%	595	6.7
Parke	1	0.2%	16	2.6%	69	11.2%	531	86.1%	617	1.6
Perry	2	0.4%	14	2.7%	90	17.6%	404	79.2%	510	3.9
Pike	3	1.6%	2	1.1%	38	20.7%	141	76.6%	184	16.3
Porter	22	0.4%	104	2.0%	960	18.9%	3,999	78.6%	5,085	4.3
Posey	2	0.4%	5	1.1%	76	16.3%	382	82.2%	465	4.3
Pulaski	4	0.7%	9	1.6%	72	12.7%	483	85.0%	568	7.0
Putnam	10	1.3%	12	1.6%	130	16.9%	619	80.3%	771	13.0
Randolph	6	1.0%	4	0.7%	87	14.1%	518	84.2%	615	9.8
Ripley	5	0.6%	23	3.0%	128	16.5%	622	79.9%	778	6.4
Rush	3	0.7%	13	3.1%	97	23.4%	301	72.7%	414	7.2
St. Joseph	14	0.2%	117	1.4%	1,585	19.2%	6,548	79.2%	8,264	1.7
Scott	4	0.7%	13	2.2%	161	27.4%	410	69.7%	588	6.8
Shelby	9	0.7%	27	2.1%	243	19.2%	988	78.0%	1,267	7.1
Spencer	4	0.6%	7	1.1%	92	14.2%	546	84.1%	649	6.2
Starke	6	0.8%	12	1.5%	118	15.1%	646	82.6%	782	7.7
Steuben	7	0.4%	16	1.0%	156	9.3%	1,504	89.4%	1,683	4.2
Sullivan	4	1.4%	16	5.5%	42	14.5%	228	78.6%	290	13.8
Switzerland	1	0.4%	5	2.0%	44	17.8%	197	79.8%	247	4.0
Tippecanoe	20	0.3%	61	0.8%	1,018	13.6%	6,375	85.3%	7,474	2.7
Tipton	3	0.8%	6	1.5%	86	21.6%	303	76.1%	398	7.5
Union	2	1.1%	2	1.1%	37	20.0%	144	77.8%	185	10.8
Vanderburgh	14	0.2%	85	1.5%	1,031	18.2%	4,537	80.1%	5,667	2.5
Vermillion	4	1.0%	12	2.9%	85	20.5%	314	75.7%	415	9.6
Vigo	13	0.4%	67	1.8%	704	19.2%	2,878	78.6%	3,662	3.5
Wabash	2	0.2%	14	1.3%	175	16.1%	897	82.4%	1,088	1.8
Warren	5	2.0%	5	2.0%	37	14.8%	203	81.2%	250	20.0
Warrick	4	0.3%	24	1.7%	167	11.6%	1,241	86.4%	1,436	2.8
Washington	9	1.2%	12	1.6%	116	15.1%	629	82.1%	766	11.7
Wayne	6	0.3%	29	1.5%	404	20.8%	1,502	77.4%	1,941	3.1
Wells	10	1.4%	15	2.1%	116	16.0%	583	80.5%	724	13.8
White	5	0.5%	11	1.1%	128	13.0%	843	85.4%	987	5.1
Whitley	10	1.1%	15	1.7%	119	13.5%	735	83.6%	879	11.4
Unknown	0	0.0%	0	0.0%	0	0.0%	8	100.0%	8	0.0

Notes: n/a = Percent calculations not applicable to these categories. Non-incapacitating collisions include collisions with non-incapacitating and possible injuries.



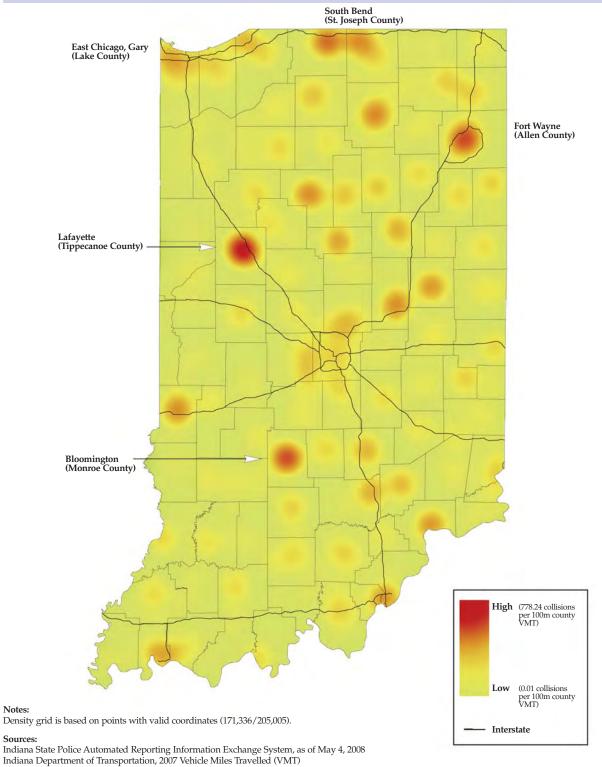
- ➤ The highest collision rate, normalized by vehicle miles travelled, occurred in Tippecanoe county (4.7), while the lowest rate occurred in Pike and Benton counties (0.9).
- ➤ A number of counties in the northern and southeastern regions of the state had proportionally higher collision rates per vehicle miles travelled.

Map 1. Traffic collisions per 1 million vehicle miles travelled by county, 2007



➤ When normalized per 100 million county vehicle miles travelled, (VMT), the greatest concentrations of collisions were in Tippecanoe, central Allen, northern St. Joseph, and central Monroe counties.

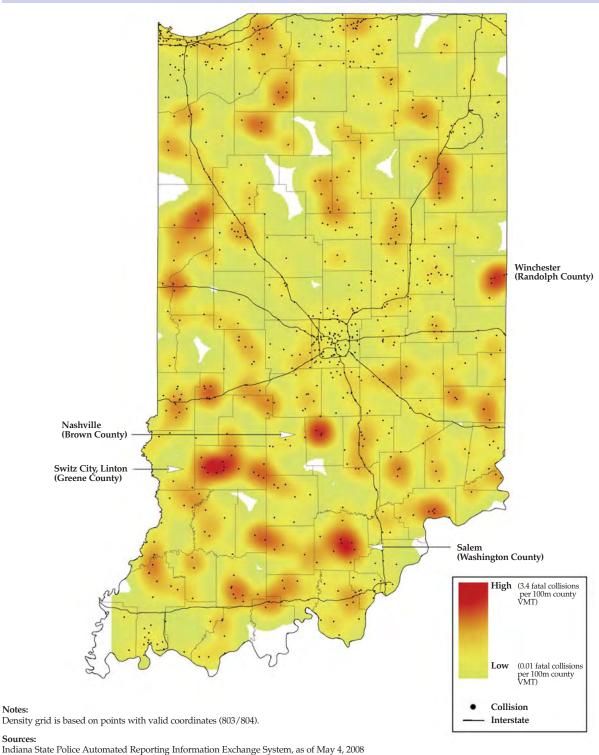
Map 2. Indiana collision concentrations per 100 million county vehicle miles travelled, 2007





➤ When normalized per 100 million county vehicle miles travelled (VMT), the most intense concentrations of fatal collisions were in western Greene, central Washington, eastern Randolph, and northwestern Brown counties.

Map 3. Indiana fatal collision concentrations per 100 million county vehicle miles travelled, 2007



Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Indiana Department of Transportation, 2007 Vehicle Miles Travelled (VMT)

➤ The mean number of total speed-related collisions per county was 201, while the mean number of fatal speed-related collisions per county was two.

Table 91. Indiana speed-related collisions by severity and county, 2007

	Fai	tal	Person	al injury	Property da	amage only		All collision	ıs
	Speed- related collisions	Speed- related as % total fatal injury collisions	Speed- related collisions	Speed- related as % total personal injury collisions	Speed- related collisions	Speed- related as % total property damage collisions	Speed- related collisions	Total collisions	Speed- related collisions per 1,000 total collisions
Indiana	165	20.5%	4,376	11.7%	13,950	8.4%	18,491	205,005	90.2
Mean	2	n/a	48	n/a	152	n/a	201	2,228	n/a
Minimum	0	n/a	1	n/a	9	n/a	10	152	n/a
Maximum	19	n/a	667	n/a	1,841	n/a	2,527	27,965	n/a
Adams	0	0.0%	10	9.3%	37	5.5%	47	784	59.9
Allen	3	14.3%	248	11.3%	787	7.8%	1,038	12,261	84.7
Bartholomew	3	16.7%	36	5.9%	76	4.4%	115	2,346	49.0
Benton	2	50.0%	4	12.1%	15	13.0%	21	152	138.2
Blackford	1	50.0%	4	8.0%	14	4.3%	19	380	50.0
Boone	1	10.0%	36	13.7%	171	10.7%	208	1,874	111.0
Brown	2	50.0%	26	19.7%	38	9.1%	66	555	118.9
Carroll	0	0.0%	23	19.2%	50	8.3%	73	723	101.0
Cass	0	0.0%	21	9.1%	80	6.3%	101	1,507	67.0
Clark	0	0.0%	80	10.0%	182	5.1%	262	4,380	59.8
Clay	1	12.5%	10	7.5%	19	3.0%	30	771	38.9
Clinton	0	0.0%	22	11.5%	70	8.9%	92	981	93.8
Crawford	2	40.0%	13	22.8%	31	9.9%	46	375	122.7
Daviess	1	20.0%	15	10.8%	14	3.8%	30	509	58.9
Dearborn	1	12.5%	50	17.9%	130	7.7%	181	1,979	91.5
Decatur Decatur	2	40.0%	9	8.5%	69	10.6%	80	761	105.1
	3	60.0%							
DeKalb			29	12.9%	133	10.6%	165	1,479	111.6
Delaware	3	14.3%	99	13.1%	320	8.2%	422	4,681	90.2
Dubois	2	25.0%	43	20.2%	73	9.4%	118	996	118.5
Elkhart	15	40.5%	191	16.1%	928	14.3%	1,134	7,726	146.8
Fayette	0	0.0%	11	9.5%	18	3.4%	29	641	45.2
Floyd	2	20.0%	44	8.0%	81	4.0%	127	2,608	48.7
Fountain	0	0.0%	6	8.5%	31	8.5%	37	440	84.1
Franklin	0	0.0%	21	18.1%	56	12.4%	77	575	133.9
Fulton	0	0.0%	16	17.8%	80	15.5%	96	607	158.2
Gibson	0	0.0%	35	22.2%	64	6.9%	99	1,100	90.0
Grant	3	21.4%	50	12.5%	195	10.0%	248	2,372	104.6
Greene	2	13.3%	17	10.8%	42	5.6%	61	919	66.4
Hamilton	5	27.8%	76	7.1%	251	4.4%	332	6,781	49.0
Hancock	1	10.0%	38	11.3%	84	7.0%	123	1,543	79.7
Harrison	3	33.3%	27	13.0%	60	5.6%	90	1,283	70.1
Hendricks	4	25.0%	54	8.5%	212	7.0%	270	3,696	73.1
Henry	0	0.0%	42	15.7%	118	11.7%	160	1,284	124.6
Howard	4	44.4%	36	7.1%	94	4.6%	134	2,548	52.6
Huntington	1	25.0%	19	9.2%	74	7.0%	94	1,265	74.3
ackson	1	16.7%	27	10.1%	57	4.5%	85	1,537	55.3
asper	4	50.0%	45	19.0%	115	11.2%	164	1,274	128.7
ay	0	0.0%	5	4.6%	17	3.0%	22	669	32.9
efferson	0	0.0%	29	15.2%	53	6.1%	82	1,072	76.5
ennings	1	20.0%	14	8.2%	34	5.1%	49	836	58.6
Johnson	3	21.4%	54	8.5%	161	6.9%	218	2,979	73.2

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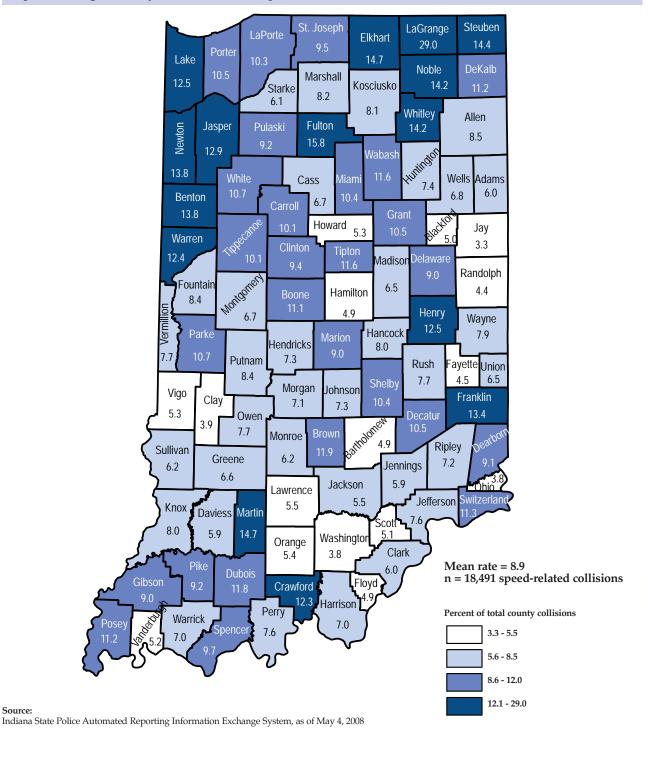
	Fa	tal	Persona	lly injury	Property da	amage only		All collision	ns
	Speed- related collisions	Speed- related as % total fatal injury collisions	Speed- related collisions	Speed- related as % total personal injury collisions	Speed- related collisions	Speed- related as % total property damage collisions	Speed- related collisions	Total collisions	Speed- related collisions per 1,000 total collisions
Knox	1	14.3%	27	12.1%	45	6.6%	73	912	80.0
Kosciusko	3	37.5%	49	11.8%	193	7.5%	245	3,011	81.4
LaGrange	0	0.0%	61	51.3%	242	26.2%	303	1,044	290.2
Lake	12	26.1%	487	15.7%	1,830	11.9%	2,329	18,588	125.3
LaPorte	4	15.4%	82	11.4%	281	9.9%	367	3,574	102.7
Lawrence	0	0.0%	19	6.6%	50	5.2%	69	1,258	54.8
Madison	3	18.8%	64	7.4%	215	6.2%	282	4,361	64.7
Marion	19	26.4%	667	11.8%	1,841	8.3%	2,527	27,965	90.4
Marshall	0	0.0%	29	10.2%	116	7.8%	145	1,773	81.8
Martin	0	0.0%	16	38.1%	24	10.5%	40	273	146.5
Miami	2	28.6%	28	17.2%	84	9.1%	114	1,094	104.2
Monroe	0	0.0%	67	7.4%	184	5.8%	251	4,056	61.9
Montgomery	0	0.0%	22	10.8%	53	5.8%	75	1,125	66.7
Morgan	2	20.0%	34	9.5%	78	6.3%	114	1,614	70.6
Newton	2	40.0%	14	24.1%	44	11.9%	60	434	138.2
Noble	1	50.0%	43	21.0%	174	13.2%	218	1,530	142.5
Ohio	0	0.0%	1	4.2%	9	3.8%	10	265	37.7
Orange	0	0.0%	14	11.8%	20	4.0%	34	627	54.2
O	0	0.0%	10	7.9%		7.8%		595	77.3
Owen	0				36	7.8% 8.1%	46	617	
Parke		0.0%	23	27.1%	43	6.4%	66		107.0
Perry	1	50.0%	12	11.5%	26			510	76.5
Pike	0	0.0%	7	17.5%	10	7.1%	17	184	92.4
Porter	4	18.2%	110	10.3%	418	10.5%	532	5,085	104.6
Posey	0	0.0%	17	21.0%	35	9.2%	52	465	111.8
Pulaski	1	25.0%	10	12.3%	41	8.5%	52	568	91.5
Putnam	2	20.0%	13	9.2%	50	8.1%	65	771	84.3
Randolph	1	16.7%	5	5.5%	21	4.1%	27	615	43.9
Ripley	1	20.0%	18	11.9%	37	5.9%	56	778	72.0
Rush	0	0.0%	10	9.1%	22	7.3%	32	414	77.3
St. Joseph	0	0.0%	164	9.6%	624	9.5%	788	8,264	95.4
Scott	0	0.0%	12	6.9%	18	4.4%	30	588	51.0
Shelby	1	11.1%	29	10.7%	102	10.3%	132	1,267	104.2
Spencer	0	0.0%	19	19.2%	44	8.1%	63	649	97.1
Starke	0	0.0%	17	13.1%	31	4.8%	48	782	61.4
Steuben	0	0.0%	41	23.8%	201	13.4%	242	1,683	143.8
Sullivan	1	25.0%	6	10.3%	11	4.8%	18	290	62.1
Switzerland	1	100.0%	7	14.3%	20	10.2%	28	247	113.4
Tippecanoe	6	30.0%	155	14.4%	597	9.4%	758	7,474	101.4
Tipton	1	33.3%	13	14.1%	32	10.6%	46	398	115.6
Union	0	0.0%	2	5.1%	10	6.9%	12	185	64.9
Vanderburgh	5	35.7%	76	6.8%	213	4.7%	294	5,667	51.9
Vermillion	1	25.0%	14	14.4%	17	5.4%	32	415	77.1
Vigo	5	38.5%	48	6.2%	141	4.9%	194	3,662	53.0
Wabash	1	50.0%	29	15.3%	96	10.7%	126	1,088	115.8
Warren	1	20.0%	12	28.6%	18	8.9%	31	250	124.0
Warrick	1	25.0%	24	12.6%	76	6.1%	101	1,436	70.3
Washington	2	22.2%	12	9.4%	15	2.4%	29	766	37.9
Wayne	1	16.7%	38	8.8%	115	7.7%	154	1,941	79.3
Wells	1	10.0%	16	12.2%	32	5.5%	49	724	67.7
White	0	0.0%	23	16.5%	83	9.8%	106	987	107.4
Whitley	2	20.0%	25	18.7%	98	13.3%	125	879	142.2

Notes: n/a = Percent calculations not applicable to these categories. Percent calculations represent the percent of total county collisions (presented in table 90) in each injury category that are speed-related. Personal injury collisions include collisions with incapacitating, non-incapacitating, and possible injuries.

- ➤ The highest proportions of Indiana speed-related collisions were clustered in the northwestern (Benton, Jasper, Lake, Newton, and Warren) and northeastern (Elkhart, LaGrange, Noble, Steuben, and Whitley) counties of the state.
- ➤ LaGrange (29.0) and Fulton (15.8) counties represented the highest percentage of speed-related collisions, while Jay (3.3), Ohio (3.8), and Washington (3.8) counties represented the lowest percentage.

Map 4. Percentage of county collisions that were speed-related, 2007

Source:

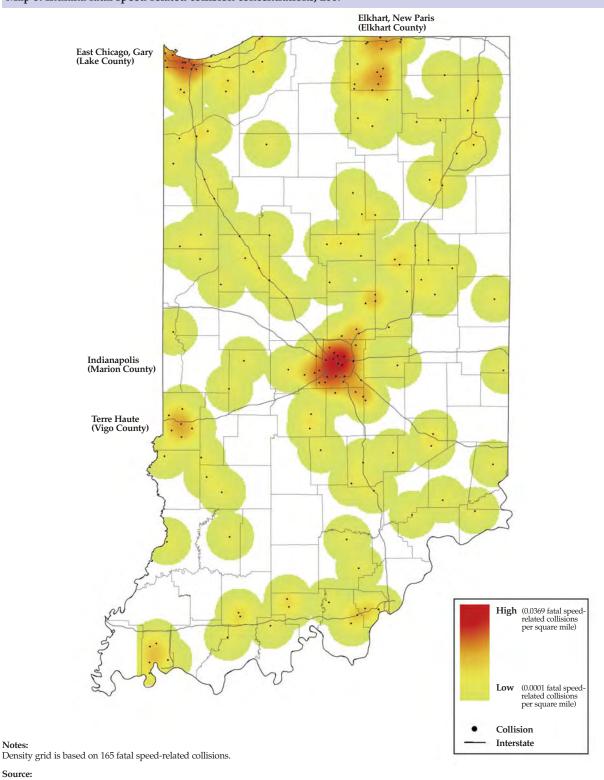


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In 2007, the highest concentrations of fatal speed-related collisions were in Marion and northern Lake counties.

Map 5. Indiana fatal speed-related collision concentrations, 2007



Source:

➤ The mean number of total alcohol-related collisions per county was 108, while the mean number of fatal alcohol-related collisions per county was three.

Table 92. Indiana alcohol-related collisions by severity and county, 2007

	Fa	tal	Persona	al injury	Property d	amage only		All collision	ıs
	Alcohol- related collisions	Alcohol- related as % total fatal injury collisions	Alcohol - related collisions	Alcohol - related as % total personal injury collisions	Alcohol - related collisions	Alcohol - related as % total property damage collisions	Alcohol - related collisions	Total collisions	Alcohol - related collisions per 1,000 total collisions
Indiana	232	28.9%	3,557	9.5%	6,153	3.7%	9,942	205,005	48.5
Mean	3	n/a	39	n/a	67	n/a	108	2,228	n/a
Minimum	0	n/a	5	n/a	3	n/a	10	152	n/a
Maximum	19	n/a	370	n/a	701	n/a	1,087	27,965	n/a
Adams	0	0.0%	12	11.1%	21	3.1%	33	784	42.1
Allen	5	23.8%	189	8.6%	380	3.8%	574	12,261	46.8
Bartholomew	7	38.9%	55	9.0%	58	3.4%	120	2,346	51.2
Benton	2	50.0%	9	27.3%	6	5.2%	17	152	111.8
Blackford	1	50.0%	7	14.0%	10	3.0%	18	380	47.4
Boone	3	30.0%	23	8.7%	37	2.3%	63	1,874	33.6
Brown	1	25.0%	13	9.8%	23	5.5%	37	555	66.7
Carroll	0	0.0%	9	7.5%	33	5.5%	42	723	58.1
Cass	1	16.7%	11	4.8%	51	4.0%	63	1,507	41.8
Clark	2	28.6%	70	8.8%	131	3.7%	203	4,380	46.3
Clay	0	0.0%	9	6.8%	20	3.2%	29	771	37.6
Clinton	0	0.0%	21	11.0%	39	5.0%	60	981	61.2
Crawford	2	40.0%	7	12.3%	15	4.8%	24	375	64.0
Daviess	2	40.0%	18	12.9%	26	7.1%	46	509	90.4
Dearborn	2	25.0%	41	14.7%	68	4.0%	111	1,979	56.1
Decatur	3	60.0%	21	19.8%	23	3.5%	47	761	61.8
DeKalb	1	20.0%	32	14.2%	40	3.2%	73	1,479	49.4
Delaware	5	23.8%	72	9.5%	153	3.9%	230	4,681	49.1
Dubois	3	37.5%	34	16.0%	35	4.5%	72	996	72.3
Elkhart	10	27.0%	88	7.4%	189	2.9%	287	7,726	37.1
Fayette	2	100.0%	18	15.5%	27	5.2%	47	641	73.3
Floyd	5	50.0%	62	11.3%	109	5.3%	176	2,608	67.5
Fountain	2	66.7%	9	12.7%		2.7%		440	47.7
	2 2	28.6%			10		21 36	575	
Franklin Fulton	0	0.0%	23 11	19.8% 12.2%	11	2.4% 2.9%		607	62.6
					15		26		42.8
Gibson	1	12.5%	15	9.5%	34	3.6%	50	1,100	45.5
Grant	3	21.4%	34	8.5%	66	3.4%	103	2,372	43.4
Greene	3	20.0%	28	17.8%	30	4.0%	61	919	66.4
Hamilton	3	16.7%	79	7.4%	163	2.9%	245	6,781	36.1
Hancock	2	20.0%	29	8.6%	48	4.0%	79	1,543	51.2
Harrison	3	33.3%	23	11.1%	47	4.4%	73	1,283	56.9
Hendricks	5	31.3%	46	7.3%	78	2.6%	129	3,696	34.9
Henry	0	0.0%	12	4.5%	29	2.9%	41	1,284	31.9
Howard	2	22.2%	38	7.5%	78	3.8%	118	2,548	46.3
Huntington	1	25.0%	12	5.8%	30	2.8%	43	1,265	34.0
ackson	2	33.3%	32	12.0%	56	4.4%	90	1,537	58.6
asper	1	12.5%	30	12.7%	27	2.6%	58	1,274	45.5
ay	0	0.0%	8	7.3%	11	2.0%	19	669	28.4
Jefferson	0	0.0%	15	7.9%	48	5.5%	63	1,072	58.8
[ennings	3	60.0%	23	13.5%	14	2.1%	40	836	47.8
Johnson	5	35.7%	43	6.7%	88	3.8%	136	2,979	45.7

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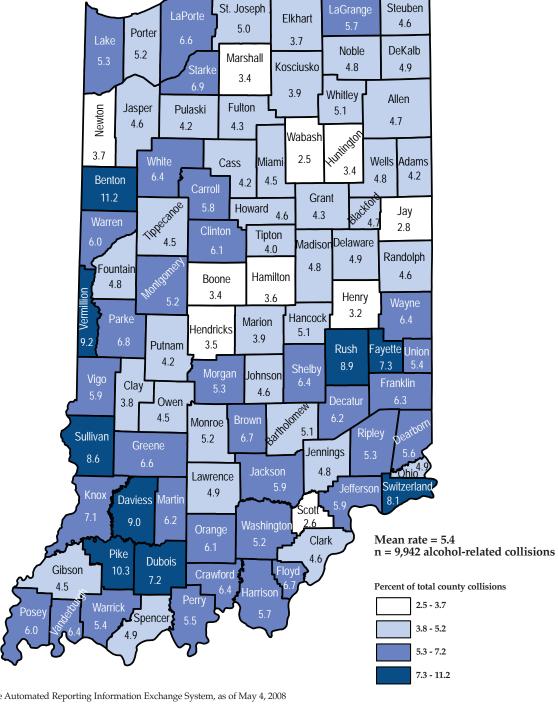
Table 92. (continued)

	Fa	tal	Person	al injury	Property da	nmage only		All collision	ns
	Alcohol- related collisions	Alcohol- related as % total fatal injury collisions	Alcohol - related collisions	Alcohol - related as % total personal injury collisions	Alcohol - related collisions	Alcohol - related as % total property damage collisions	Alcohol - related collisions	Total collisions	Alcohol - related collisions per 1,000 total collisions
Knox	4	57.1%	26	11.6%	35	5.1%	65	912	71.3
Kosciusko	3	37.5%	44	10.6%	69	2.7%	116	3,011	38.5
LaGrange	1	50.0%	28	23.5%	30	3.3%	59	1,044	56.5
Lake	19	41.3%	370	11.9%	601	3.9%	990	18,588	53.3
LaPorte	10	38.5%	85	11.8%	140	5.0%	235	3,574	65.8
Lawrence	2	22.2%	26	9.1%	34	3.5%	62	1,258	49.3
Madison	5	31.3%	66	7.7%	137	3.9%	208	4,361	47.7
Marion	19	26.4%	367	6.5%	701	3.2%	1,087	27,965	38.9
Marshall	1	20.0%	24	8.5%	35	2.4%	60	1,773	33.8
Martin	0	0.0%	5	11.9%	12	5.2%	17	273	62.3
Mami	2	28.6%	15	9.2%	32	3.5%	49	1,094	44.8
Monroe Montgomory	0 2	0.0% 50.0%	79 23	8.8% 11.3%	131 34	4.2% 3.7%	210 59	4,056 1,125	51.8 52.4
Montgomery	2 2	20.0%	39	10.9%		3.6%			
Morgan Newton	1	20.0%	6	10.9%	45 9	2.4%	86 16	1,614 434	53.3 36.9
Noble	0	0.0%	30	14.6%	44	3.3%	74	1,530	48.4
Ohio	0	0.0%	4	16.7%	9	3.8%	13	265	49.1
Orange	0	0.0%	18	15.1%	20	4.0%	38	627	60.6
Orange Owen	1	25.0%	12	9.4%	14	3.0%	27	595	45.4
Parke	1	100.0%	17	20.0%	24	4.5%	42	617	68.1
Perry	0	0.0%	15	14.4%	13	3.2%	28	510	54.9
Pike	0	0.0%	9	22.5%	10	7.1%	19	184	103.3
Porter	4	18.2%	107	10.1%	153	3.8%	264	5,085	51.9
	0	0.0%	6	7.4%	22	5.8%	28	465	60.2
Posey Pulaski	2	50.0%	7	8.6%	15	3.1%	24	568	42.3
Putnam	1	10.0%	7	4.9%	24	3.9%	32	771	41.5
Randolph	1	16.7%	13	14.3%	14	2.7%	28	615	45.5
Ripley	2	40.0%	19	12.6%	20	3.2%	41	778	52.7
Rush	2	66.7%	14	12.7%	21	7.0%	37	414	89.4
St. Joseph	5	35.7%	140	8.2%	271	4.1%	416	8,264	50.3
Scott	2	50.0%	8	4.6%	5	1.2%	15	588	25.5
Shelby	2	22.2%	24	8.9%	55	5.6%	81	1,267	63.9
Spencer	1	25.0%	9	9.1%	22	4.0%	32	649	49.3
Starke	2	33.3%	21	16.2%	31	4.8%	54	782	69.1
Steuben	0	0.0%	28	16.3%	49	3.3%	77	1,683	45.8
Sullivan	1	25.0%	12	20.7%	12	5.3%	25	290	86.2
Switzerland	0	0.0%	7	14.3%	13	6.6%	20	247	81.0
Tippecanoe	7	35.0%	108	10.0%	222	3.5%	337	7,474	45.1
Tipton	0	0.0%	9	9.8%	7	2.3%	16	398	40.2
Union	1	50.0%	6	15.4%	3	2.1%	10	185	54.1
Vanderburgh	5	35.7%	110	9.9%	246	5.4%	361	5,667	63.7
Vermillion	1	25.0%	22	22.7%	15	4.8%	38	415	91.6
Vigo	7	53.8%	77	10.0%	133	4.6%	217	3,662	59.3
Wabash	1	50.0%	9	4.8%	17	1.9%	27	1,088	24.8
Warren	2	40.0%	8	19.0%	5	2.5%	15	250	60.0
Warrick	1	25.0%	31	16.2%	45	3.6%	77	1,436	53.6
Washington	3	33.3%	22	17.2%	15	2.4%	40	766	52.2
Wayne	2	33.3%	48	11.1%	74	4.9%	124	1,941	63.9
Wells	5	50.0%	13	9.9%	17	2.9%	35	724	48.3
White	1	20.0%	17	12.2%	45	5.3%	63	987	63.8
Whitley	3	30.0%	16	11.9%	26	3.5%	45	879	51.2

Notes: n/a = Percent calculations not applicable to these categories. Percent calculations represent the percent of total county collisions (presented in table 90) in each injury category that are alcohol-related. Non-incapacitating collisions include collisions with non-incapacitating and possible injuries.

- ➤ The highest proportions of Indiana alcohol-related collisions were clustered in the western (Benton, Daviess, Dubois, Pike, Sullivan, and Vermillion) counties of the state.
- ➤ Benton (11.2) and Pike (10.3) counties represented the highest percentage of alcohol-related collisions, while Wabash (2.5) and Scott (2.6) counties represented the lowest percentage.

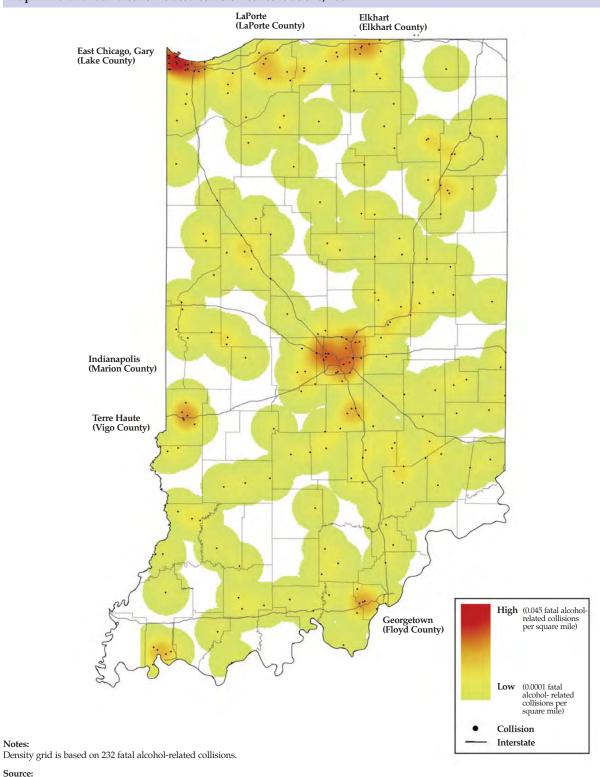
Map 6. Percentage of county collisions that were alcohol-related, 2007





In 2007, fatal alcohol-related collisions were concentrated in northern Lake and Marion counties. Less intense concentrations were evident in northern Elkhart, central Vigo, Floyd, and central LaPorte counties.

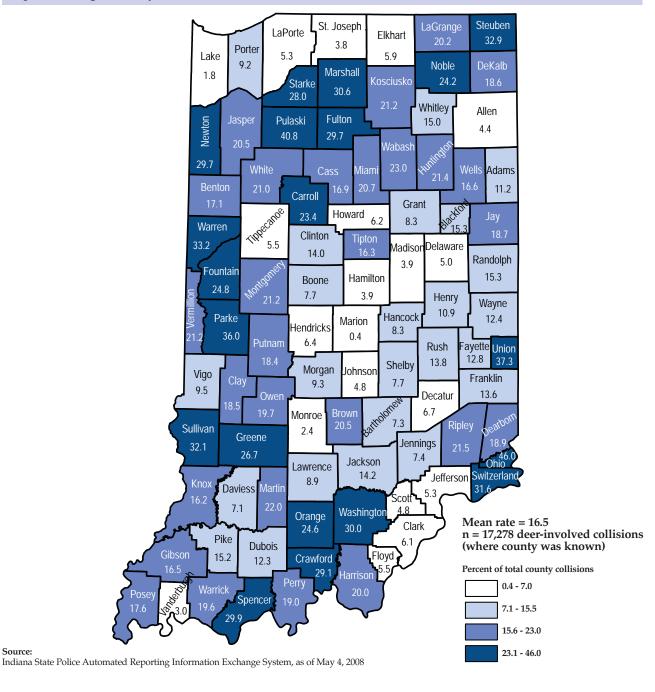
Map 7. Indiana fatal alcohol-related collision concentrations, 2007



Notes:

- ➤ In 2007, 17,280 traffic collisions involving deer occurred in Indiana counties, with a mean number of deer-involved collisions per county of 188.
- Statewide, over 97 percent of deer-involved collisions were property damage only.
- The highest proportions of Indiana deer-involved collisions were clustered in the northern (Fulton, Marshall, Newton, Noble, Pulaski, Starke, and Steuben), western (Fountain, Greene, Parke, Sullivan, and Warren), and southern (Crawford, Orange, Spencer, and Washington) counties of the state.
- ➤ Ohio (46.0) and Pulaski (40.8) counties represented the highest percentage of deer-involved collisions, while Marion (0.4) and Lake (1.8) counties represented the lowest percentage.

Map 8. Percentage of county collisions that involved a deer, 2007





- ➤ In 2007, statewide, the percentage of county *fatal* injuries in which the victim was not wearing the proper restraint was 47.4 percent, compared to the percentage of *non-incapacitating* injuries that were not properly restrained of 11.7 percent.
- ➤ In seven Indiana counties (Benton, Clark, Noble, Perry, Pulaski, Spencer, and Switzerland), 100 percent of all fatalities were unrestrained.

Table 93. Vehicle occupants injured in Indiana traffic collisions by injury status, restraint use, and county, 2007

		Fatal			Incapacitating	5	1	Non-incapacitatir	ıg
	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained
Indiana	825	391	47.4%	3,361	1,121	33.4%	46,557	5,462	11.7%
Mean	9	4	n/a	37	12	n/a	506	59	n/a
Minimum	0	0	n/a	2	0	n/a	29	4	n/a
Maximum	67	39	n/a	423	104	n/a	7,056	683	n/a
Adams	3	2	66.7%	25	10	40.0%	119	23	19.3%
Allen	17	9	52.9%	161	52	32.3%	2,665	226	8.5%
Bartholomew	19	12	63.2%	74	22	29.7%	807	113	14.0%
Benton	4	4	100.0%	4	4	100.0%	41	4	9.8%
Blackford	2	0	0.0%	8	3	37.5%	61	10	16.4%
Boone	12	5	41.7%	20	6	30.0%	333	46	13.8%
Brown	4	2	50.0%	30	15	50.0%	153	43	28.1%
Carroll	0	0	0.0%	10	8	80.0%	134	29	21.6%
Cass	7	2	28.6%	24	7	29.2%	262	34	13.0%
Clark	4	4	100.0%	56	16	28.6%	993	95	9.6%
Clay	8	3	37.5%	32	8	25.0%	152	24	15.8%
Clinton	5	2	40.0%	16	6	37.5%	252	40	15.9%
Crawford	5	3	60.0%	10	5	50.0%	88	21	23.9%
Daviess	7	4	57.1%	18	6	33.3%	191	39	20.4%
Dearborn	9	6	66.7%	46	11	23.9%	359	50	13.9%
Decatur	6	4	66.7%	12	6	50.0%	138	33	23.9%
DeKalb	5	1	20.0%	24	10	41.7%	259	34	13.1%
Delaware	25	9	36.0%	61	10	23.0%	952	119	12.5%
Dubois	8	2		19	7	36.8%	270	39	
	40	16	25.0% 40.0%	104	32	30.8%	1,447	151	14.4% 10.4%
Elkhart									
Fayette	2	1	50.0%	8	2	25.0%	151	26	17.2%
Floyd	10	5	50.0%	44	12	27.3%	689	65	9.4%
Fountain	4	3	75.0%	6	4	66.7%	85	11	12.9%
Franklin	9	4	44.4%	25	8	32.0%	129	23	17.8%
Fulton	2	1	50.0%	16	7	43.8%	105	17	16.2%
Gibson	9	3	33.3%	25	11	44.0%	189	29	15.3%
Grant	13	5	38.5%	30	16	53.3%	479	64	13.4%
Greene	15	9	60.0%	16	9	56.3%	197	39	19.8%
Hamilton	19	4	21.1%	80	18	22.5%	1,403	100	7.1%
Hancock	12	3	25.0%	33	9	27.3%	450	54	12.0%
Harrison	9	1	11.1%	33	9	27.3%	257	37	14.4%
Hendricks	16	9	56.3%	38	10	26.3%	779	74	9.5%
Henry	10	2	20.0%	41	14	34.1%	348	65	18.7%
Howard	11	7	63.6%	64	18	28.1%	650	72	11.1%
Huntington	4	2	50.0%	20	9	45.0%	249	44	17.7%
lackson	6	3	50.0%	33	11	33.3%	309	38	12.3%
asper	6	4	66.7%	29	14	48.3%	288	47	16.3%
lay	2	0	0.0%	17	10	58.8%	148	14	9.5%
Jefferson	8	2	25.0%	29	7	24.1%	222	29	13.1%
Jennings	4	1	25.0%	30	10	33.3%	206	44	21.4%
Johnson	15	3	20.0%	54	16	29.6%	813	84	10.3%
Knox	8	7	87.5%	20	7	35.0%	256	39	15.2%
Kosciusko	10	5	50.0%	46	15	32.6%	532	88	16.5%

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		Fatal			Incapacitating	;	1	Non-incapacitatir	ıg
	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained
LaGrange	1	0	0.0%	11	1	9.1%	167	36	21.6%
Lake	48	31	64.6%	212	67	31.6%	3,887	353	9.1%
LaPorte	23	12	52.2%	73	27	37.0%	866	77	8.9%
Lawrence	11	6	54.5%	24	10	41.7%	391	49	12.5%
Madison	17	9	52.9%	50	18	36.0%	1,155	137	11.9%
Marion	67	39	58.2%	423	104	24.6%	7,056	683	9.7%
Marshall	4	0	0.0%	21	10	47.6%	365	40	11.0%
Martin	3	1	33.3%	9	5	55.6%	41	10	24.4%
Miami	10	7	70.0%	15	7	46.7%	215	25	11.6%
Monroe	4	1	25.0%	59	20	33.9%	1,039	115	11.1%
Montgomery	3	1	33.3%	24	10	41.7%	263	34	12.9%
Morgan	10	4	40.0%	40	13	32.5%	459	63	13.7%
Newton	4	2	50.0%	5	2	40.0%	73	10	13.7%
Noble	2	2	100.0%	40	17	42.5%	210	22	10.5%
Ohio	2	1	50.0%	2	1	50.0%	29	4	13.8%
Orange	2	0	0.0%	17	7	41.2%	154	31	20.1%
Owen	4	3	75.0%	21	9	42.9%	145	35	24.1%
Parke	1	0	0.0%	18	7	38.9%	102	29	28.4%
Perry	2	2	100.0%	15	8	53.3%	128	22	17.2%
Pike	2	0	0.0%	2	1	50.0%	51	14	27.5%
Porter	19	6	31.6%	107	43	40.2%	1,352	147	10.9%
Posey	3	1	33.3%	6	0	0.0%	119	18	15.1%
Pulaski	4	4	100.0%	10	3	30.0%	100	26	26.0%
Putnam	10	2	20.0%	15	4	26.7%	191	21	11.0%
Randolph	6	2	33.3%	3	0	0.0%	118	16	13.6%
Ripley	7	5	71.4%	26	10	38.5%	199	45	22.6%
Rush	3	2	66.7%	15	5	33.3%	133	21	15.8%
St. Joseph	12	6	50.0%	117	35	29.9%	2,040	141	6.9%
Scott	6	0	0.0%	14	5	35.7%	263	30	11.4%
Shelby	8	5	62.5%	30	11	36.7%	327	40	12.2%
Spencer	4	4	100.0%	8	3	37.5%	140	24	17.1%
Starke	7	3	42.9%	12	5	41.7%	184	32	17.4%
Steuben	6	3	50.0%	17	6	35.3%	206	46	22.3%
Sullivan	5	3	60.0%	19	7	36.8%	85	22	25.9%
Switzerland	1	1	100.0%	8	5	62.5%	59	16	27.1%
Tippecanoe	17	6	35.3%	66	28	42.4%	1,272	175	13.8%
Tipton	3	1	33.3%	10	3	30.0%	108	15	13.9%
Union	3	1	33.3%	2	0	0.0%	53	10	18.9%
Vanderburgh	15	6	40.0%	89	25	28.1%	1,399	132	9.4%
Vermillion	5	1	20.0%	16	5	31.3%	118	18	15.3%
Vigo	13	9	69.2%	65	27	41.5%	935	100	10.7%
Wabash	2	1	50.0%	14	4	28.6%	240	26	10.8%
Warren	6	3	50.0%	7	3	42.9%	69	17	24.6%
Warrick	4	2	50.0%	26	7	26.9%	252	43	17.1%
Washington	9	7	77.8%	13	7	53.8%	167	34	20.4%
Wayne	6	1	16.7%	32	12	37.5%	526	87	16.5%
Wells	12	4	33.3%	18	8	44.4%	151	26	17.2%
White	5	0	0.0%	12	7	58.3%	193	33	17.2%
Whitley	10	7	70.0%	12	5	38.3% 41.7%	152	36	23.7%

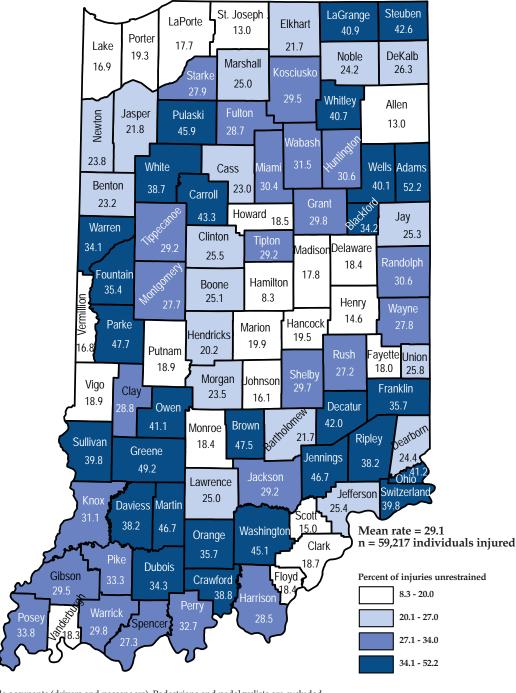
Notes: Non-incapacitating injuries include those injuries reported as non-incapacitating and possible. n/a = Percent calculations not applicable to these categories.

 ${\bf Source:} \\ {\bf Indiana\ State\ Police\ Automated\ Reporting\ Information\ Exchange\ System,\ as\ of\ May\ 4,2008} \\$



Adams (52.2) and Greene (49.2) counties represented the highest percentage of unrestrained injuries, while Hamilton (8.3), Allen (13.0), and St. Joseph (13.0) counties represented the lowest percentage.

Map 9. Percentage of individual injuries by county where victim was not properly restrained, 2007



Notes:

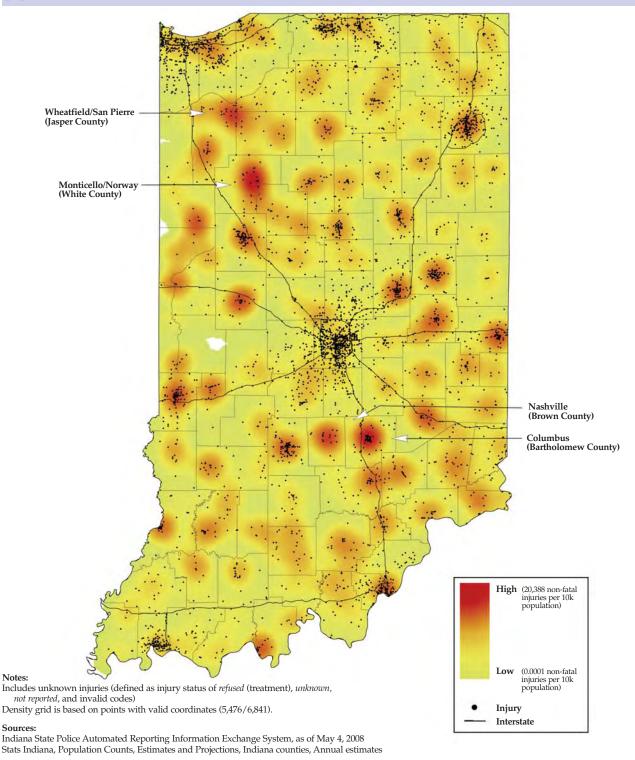
Includes only vehicle occupants (drivers and passengers). Pedestrians and pedalcyclists are excluded.

Injuries depicted include those reported as *fatal*, *incapacitating*, *non-incapacitating*, *possible*, *not reported*, *unknown*, *refused* (treatment), and invalid status codes. Null values are excluded.

Source:

Normalized per 10,000 county population, non-fatal injuries from collisions where the victim was not properly restrained showed the most intense clustering in central White, northeastern Jasper, central Bartholomew, and central Brown counties.

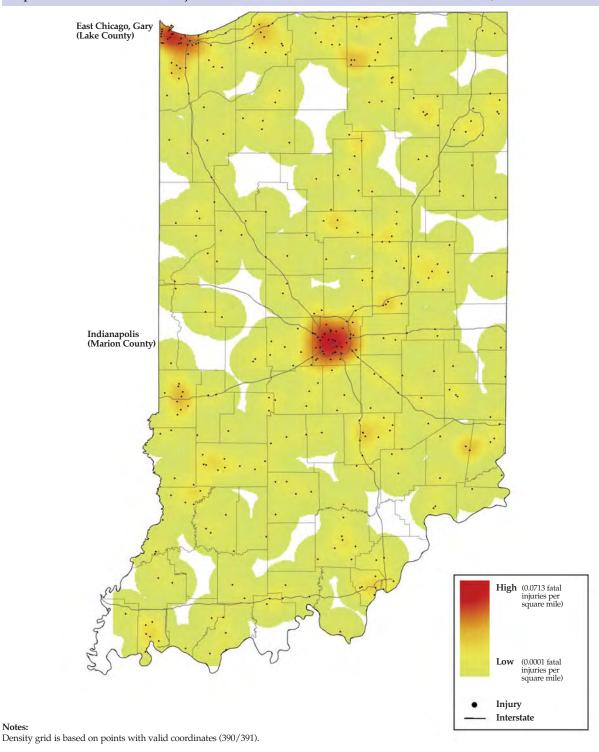
Map 10. Concentrations of non-fatal injuries in Indiana collisions where victim was unrestrained per 10,000 county population, 2007





> Fatal injuries from collisions where the person killed was unrestrained were intensely concentrated in Marion and northern Lake counties in 2007.

Map 11. Concentrations of fatal injuries in Indiana collisions where victim was unrestrained, 2007



Notes:

- ➤ Less than half (41) of Indiana counties experienced a young driver fatality in 2007.
- ➤ In 2007 on average, 1 of every 5.5 fatal injuries, 1 of every 6.8 incapacitating injuries, and 1 of every 1.6 non-incapacitating injuries was a young driver (based on counties with non-zero counts).
- ➤ Elkhart County had the highest number (5) of young drivers in fatal collisions.

Table 94. Young drivers (ages 16-20) involved in collisions by injury severity, Indiana 2007

		Fatal	Inc	apacitating	Non-i	ncapacitating	Unkno	wn injury	Not	injured	
County	Count	% of county fatal injuries	Count	% of county incapacitating injuries	Count	% of county non-incapacitating injuries	Count	% of county unknown injuries	Count	% of county not injured	Total
All counties	68	n/a	361	n/a	6,059	n/a	1,481	n/a	44,551	n/a	52,520
Mean	0.7	n/a	3.9	n/a	65.2	n/a	15.9	n/a	479.0	n/a	565
Minimum	0	n/a	0	n/a	0	n/a	0	n/a	2	n/a	2
Maximum	5	n/a	41	n/a	684	n/a	259	n/a	5,308	n/a	6,093
Adams	1	33.3%	8	30.8%	9	7.0%	1	8.3%	204	21.0%	223
Allen	2	9.5%	12	6.9%	346	12.3%	134	17.4%	2,853	17.7%	3,347
Bartholomew	1	5.3%	10	12.5%	117	14.0%	11	28.2%	554	17.6%	693
Benton	0	0.0%	0	0.0%	7	17.9%	3	15.0%	12	9.0%	22
Blackford	0	0.0%	2	25.0%	13	20.6%	1	20.0%	95	22.2%	111
Boone	2	16.7%	4	19.0%	58	17.1%	2	20.0%	400	16.4%	466
Brown	1	25.0%	4	13.3%	27	17.4%	3	27.3%	93	17.3%	128
Carroll	0	0.0%	3	25.0%	36	25.7%	0	0.0%	133	17.2%	172
Cass	0	0.0%	2	7.7%	38	13.6%	3	15.0%	313	17.5%	356
Clark	0	0.0%	3	4.9%	107	10.4%	19	24.4%	924	15.2%	1,053
Clay	1	12.5%	6	18.8%	28	18.2%	8	21.6%	200	22.1%	243
Clinton	0	0.0%	0	0.0%	54	21.1%	5	15.2%	204	18.1%	263
Crawford	1	20.0%	0	0.0%	17	19.1%	1	7.7%	60	15.9%	79
Daviess	1	14.3%	3	15.0%	27	13.8%	5	41.7%	138	22.0%	174
De Kalb	0	0.0%	2	7.7%	50	18.8%	2	10.0%	344	18.3%	398
Dearborn	0	0.0%	3	6.4%	49	13.4%	3	8.1%	450	17.7%	505
Decatur	0	0.0%	0	0.0%	18	12.4%	0	0.0%	207	20.9%	225
Delaware	2	7.4%	7	10.8%	122	12.1%	98	19.6%	1,062	18.3%	1,291
Dubois	2	25.0%	2	10.5%	51	18.4%	4	26.7%	272	21.7%	331
Elkhart	5	10.6%	11	9.6%	174	11.2%	16	13.3%	1,669	16.2%	1,875
Fayette	0	0.0%	2	25.0%	15	10.1%	15	22.4%	141	17.6%	173
Floyd	1	10.0%	6	12.8%	103	14.4%	42	23.7%	646	19.4%	798
Fountain	1	25.0%	1	12.5%	15	16.3%	2	50.0%	88	18.0%	107
Franklin	0	0.0%	1	3.8%	26	19.7%	2	40.0%	157	24.6%	186
Fulton	0	0.0%	1	5.9%	11	10.0%	7	17.1%	112	17.2%	131
Gibson	1	11.1%	5	19.2%	28	13.9%	6	15.8%	240	17.7%	280
Grant	2	14.3%	1	2.9%	73	14.5%	6	14.3%	524	17.1%	606
Greene	1	6.7%	2	12.5%	37	18.3%	3	21.4%	187	18.5%	230
Hamilton	1	4.5%	13	15.3%	159	11.0%	259	15.9%	1,470	16.6%	1,902
Hancock	3	23.1%	4	11.8%	87	18.7%	16	26.2%	350	17.4%	460
Harrison	0	0.0%	5	14.7%	55	21.2%	3	17.6%	345	23.0%	408
Hendricks	0	0.0%	1	2.2%	109	13.4%	8	14.8%	947	17.7%	1,065
Henry	0	0.0%	6	14.6%	47	13.4%	61	15.3%	186	16.2%	300
Howard	3	27.3%	9	12.9%	110	16.2%	21	25.0%	665	17.7%	808
Huntington	0	0.0%	2	9.1%	29	11.0%	7	46.7%	291	19.8%	329
ackson	2	33.3%	2	5.7%	52	16.1%	3	20.0%	279	15.4%	338
asper	0	0.0%	3	10.3%	51	17.5%	40	17.2%	189	16.1%	283
asper [ay	0	0.0%	3	16.7%	27	17.5%	2	28.6%	139	18.3%	171
efferson	0	0.0%	4	13.3%	35	15.0%	5	25.0%	235	17.1%	279
Jennings	1	20.0%	9	30.0%	30	14.3%	4	26.7%	233	21.2%	279
Johnson	1	6.7%	5	8.9%	111	13.5%	96	21.0%	806	20.6%	1,019

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Table 94. (continued)

		Fatal	Inca	pacitating	Non-ir	ncapacitating	Unkno	wn injury	Not	injured	
County	Count	% of county fatal injuries	Count	% of county incapacitating injuries	Count	% of county non-incapacitating injuries	Count	% of county unknown injuries	Count	% of county not injured	Total
Knox	2	25.0%	4	18.2%	42	15.3%	4	21.1%	231	21.3%	283
Kosciusko	0	0.0%	0	0.0%	82	15.0%	5	33.3%	648	17.0%	735
La Porte	1	3.8%	7	9.0%	104	11.4%	12	16.7%	672	15.2%	796
Lagrange	0	0.0%	2	16.7%	22	12.8%	0	0.0%	208	17.5%	232
Lake	1	1.9%	15	6.3%	358	8.7%	52	13.2%	3,483	13.3%	3,909
Lawrence	1	9.1%	4	16.7%	61	15.3%	5	16.7%	344	23.1%	415
Madison	0	0.0%	3	5.1%	144	12.0%	91	17.5%	861	16.3%	1,099
Marion	4	5.1%	41	8.5%	684	9.2%	56	13.3%	5,308	13.0%	6,093
Marshall	2	33.3%	4	17.4%	57	15.1%	7	13.2%	322	16.6%	392
Martin	0	0.0%	0	0.0%	6	14.6%	1	14.3%	51	17.0%	58
Miami	0	0.0%	3	20.0%	29	12.9%	4	23.5%	212	16.7%	248
Monroe	0	0.0%	3	4.2%	141	12.5%	32	21.9%	1,198	22.1%	1,374
Montgomery	0	0.0%	3	11.5%	46	16.7%	14	17.9%	229	18.0%	292
Morgan	1	10.0%	4	9.3%	81	17.2%	5	17.9%	430	20.2%	521
Newton	1	20.0%	1	16.7%	9	12.2%	3	15.8%	61	13.5%	75
Noble	1	50.0%	2	4.9%	33	14.8%	2	25.0%	297	16.4%	335
Ohio	0	0.0%	0	0.0%	4	13.3%	0	0.0%	56	19.2%	60
Orange	0	0.0%	4	23.5%	26	16.8%	5	14.7%	130	20.2%	165
Owen	0	0.0%	1	4.8%	24	16.2%	0	0.0%	138	20.4%	163
Parke	0	0.0%	2	10.5%	16	15.4%	0	0.0%	108	16.5%	126
Perry	0	0.0%	4	26.7%	24	18.6%	2	40.0%	116	19.0%	146
Pike	0	0.0%	0	0.0%	12	23.1%	2	25.0%	42	23.3%	56
Porter	3	12.5%	11	9.5%	154	10.9%	28	21.1%	1,034	16.3%	1,230
Posey	0	0.0%	2	33.3%	19	15.8%	1	7.1%	140	26.4%	162
Pulaski	0	0.0%	3	30.0%	14	13.7%	2	25.0%	106	18.2%	125
Putnam	0	0.0%	3	18.8%	24	12.2%	3	17.6%	135	15.5%	165
Randolph	1	16.7%	0	0.0%	17	13.8%	1	14.3%	124	18.2%	143
Ripley	0	0.0%	1	3.8%	30	14.9%	2	14.3%	137	16.4%	170
Rush	1	33.3%	0	0.0%	26	19.3%	2	28.6%	75	17.2%	104
Scott	0	0.0%	3	20.0%	46	17.6%	13	28.3%	126	16.6%	188
Shelby	0	0.0%	2	6.3%	61	18.0%	4	17.4%	289	19.0%	356
Spencer	1	25.0%	3	33.3%	22	15.4%	6	17.1%	134	19.3%	166
St Joseph	0	0.0%	9	6.8%	185	8.5%	36	11.6%	1,792	16.1%	2,022
Starke	0	0.0%	1	8.3%	31	16.4%	9	16.4%	116	14.1%	157
Steuben	0	0.0%	0	0.0%	29	13.7%	2	15.4%	303	15.2%	334
Sullivan	0	0.0%	2	10.0%	14	16.5%	1	11.1%	56	19.0%	73
Switzerland	0	0.0%	0	0.0%	5	8.2%	4	26.7%	43	18.0%	52
Tippecanoe	0	0.0%	12	16.2%	181	13.2%	22	22.2%	2,031	19.6%	2,246
Tipton	1	33.3%	2	18.2%	19	16.7%	1	11.1%	91	20.0%	114
Union	0	0.0%	2	100.0%	14	25.9%	0	0.0%	37	23.0%	53
Vanderburgh	2	12.5%	6	5.9%	168	11.5%	19	20.9%	1,471	16.7%	1,666
Vermillion	0	0.0%	2	12.5%	19	16.0%	4	7.8%	75	18.6%	100
Vigo	4	28.6%	5	6.8%	127	12.8%	62	18.6%	797	17.2%	995
Wabash	0	0.0%	1	6.7%	50	20.4%	7	23.3%	259	20.7%	317
Warren	0	0.0%	1	14.3%	10	14.5%	1	16.7%	49	19.2%	61
Warrick	0	0.0%	4	13.3%	40	15.3%	7	41.2%	400	20.8%	451
Washington	2	22.2%	2	15.4%	26	15.5%	1	6.7%	158	18.7%	189
Wayne	0	0.0%	3	8.8%	73	13.1%	2	7.7%	352	15.8%	430
Wells	0	0.0%	4	21.1%	23	14.4%	3	27.3%	194	22.1%	224
White	1	20.0%	0	0.0%	33	16.7%	5	25.0%	219	18.1%	258
Whitley	2	20.0%	3	18.8%	36	23.1%	4	26.7%	246	22.3%	291

Notes:
Excludes records where county is unknown.

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

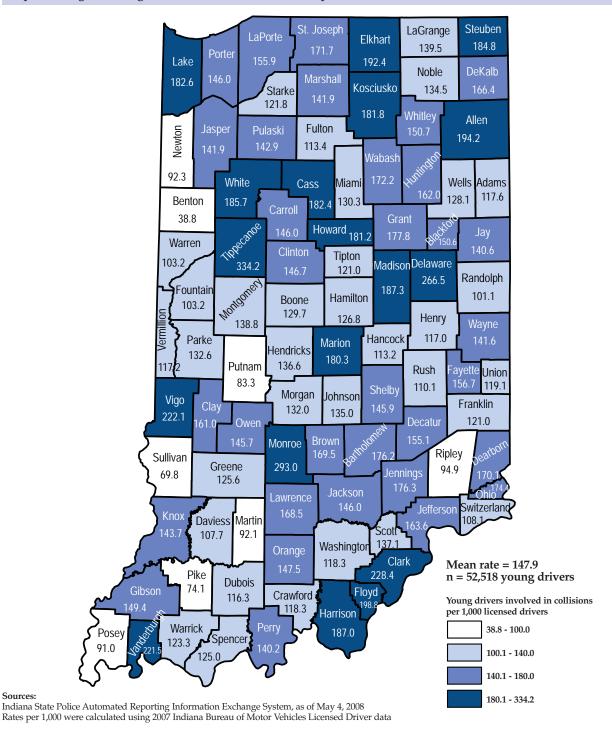
Unknown injuries includes refused (treatment), unknown, not reported, and invalid codes.

Not injured is primarily drivers who were not injured.

- > Young driver collision rates (per 1,000 licensed drivers) vary by county ranging from 38.8 in Benton county to 334.2 in Tippecanoe county.
- Tippecanoe (334.2), Monroe (293.0), and Delaware (266.5) counties represented the highest young driver collision rates, all of which are locations of large public universities.

Map 12. Young drivers (ages 16 to 20) involved in collisions per 1,000 licensed drivers, 2007

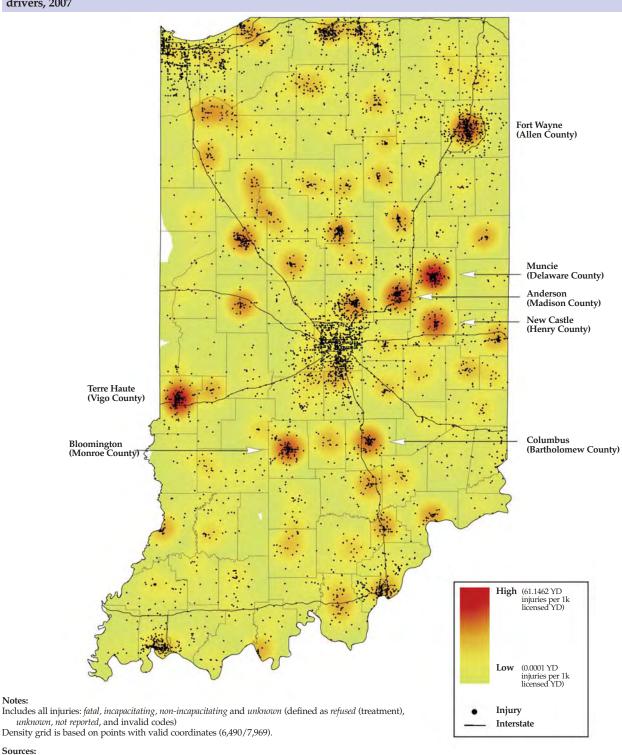
Sources:





➤ When normalized per 1,000 county licensed young drivers (ages 16-20), the highest densities of young driver injuries were in central Vigo, Delaware, Allen, Monroe, Bartholomew, Henry and southern Madison counties.

Map 13. Concentrations of young driver (ages 16-20) injuries in Indiana collisions per 1,000 county licensed young drivers, 2007



Notes:

Indiana State Police Automated Reporting Information Exchange System, as of May 4, 2008 Indiana Bureau of Motor Vehicles, 2007 licensed driver data

- ➤ There were 54 counties that experienced fatal collisions and 80 counties with incapacitating collisions involving motorcycles.
- ➤ In 2007 on average, 1 of every 4.4 fatal collisions and 1 of every 5.1 incapacitating collisions involved a motorcycle (based on counties with non-zero counts).
- ➤ 48 percent of Brown county's and 42.9 percent of Martin county's incapacitating collisions involved a motorcycle.

Table 95. Indiana collisions involving motorcycles by severity and county, 2007

County	Fatal	% of county fatal collisions	Incapacitating	% of county incapacitating collisions	Non- incapacitating	% of county non- incapacitating collisions	Property damage only	%of county property damage only collisions	Total
All counties	117	n/a	525	n/a	1,969	n/a	945	n/a	3,556
Mean	1	n/a	6	n/a	21	n/a	10	n/a	39
Minimum	0	n/a	0	n/a	1	n/a	0	n/a	1
Maximum	14	n/a	40	n/a	192	n/a	99	n/a	345
Adams	0	0.0%	3	15.0%	7	8.0%	3	0.4%	13
Allen	2	9.5%	28	19.4%	118	5.7%	52	0.5%	200
Bartholomew	5	27.8%	14	19.2%	31	5.8%	3	0.2%	53
Benton	0	0.0%	1	50.0%	1	3.2%	0	0.0%	2
Blackford	0	0.0%	1	14.3%	2	4.7%	0	0.0%	3
Boone	1	10.0%	3	17.6%	14	5.7%	9	0.6%	27
Brown	1	25.0%	12	48.0%	32	29.9%	4	1.0%	49
Carroll	0	0.0%	3	33.3%	6	5.4%	5	0.8%	14
Cass	2	33.3%	3	12.5%	15	7.3%	5	0.4%	25
Clark	1	14.3%	6	11.3%	38	5.1%	25	0.7%	70
Clay	0	0.0%	4	21.1%	13	11.4%	7	1.1%	24
Clinton	1	33.3%	1	5.9%	11	6.3%	4	0.5%	17
Crawford	0	0.0%	0	0.0%	6	12.5%	1	0.3%	7
Daviess	1	20.0%	0	0.0%	11	8.9%	2	0.5%	14
De Kalb	1	20.0%	7	31.8%	23	11.3%	12	1.0%	43
Dearborn	2	25.0%	7	17.9%	11	4.6%	6	0.4%	26
Decatur	0	0.0%	1	10.0%	9	9.4%	4	0.6%	14
Delaware	2	9.5%	10	21.7%	33	4.6%	35	0.9%	80
Dubois	1	12.5%	4	25.0%	15	7.6%	8	1.0%	28
Elkhart	6	16.2%	16	16.0%	70	6.4%	36	0.6%	128
Fayette	1	50.0%	0	0.0%	9	8.3%	1	0.2%	11
Floyd	4	40.0%	7	20.6%	22	4.3%	13	0.6%	46
Fountain	0	0.0%	0	0.0%	1	1.6%	0	0.0%	1
Franklin	0	0.0%	1	5.3%	10	10.3%	1	0.2%	12
Fulton	0	0.0%	2	12.5%	4	5.4%	1	0.2%	7
Gibson	1	12.5%	3	13.6%	4	2.9%	7	0.7%	15
Grant	3	21.4%	9	28.1%	32	8.7%	20	1.0%	64
Greene	2	13.3%	3	23.1%	4	2.8%	5	0.7%	14
Hamilton	1	5.6%	18	23.1%	49	4.9%	27	0.5%	95
Hancock	0	0.0%	4	14.3%	14	4.5%	6	0.5%	24
Harrison	2	22.2%	4	13.8%	12	6.7%	5	0.5%	23
Hendricks	3	18.8%	3	7.9%	21	3.5%	21	0.7%	48
	1	11.1%	5	17.9%	14	5.8%	2	0.7 %	22
Henry Howard	1	11.1%	11	18.6%	32	7.1%	18	0.2%	62
Huntington		25.0%	_						
Jackson	1 1	16.7%	3 4	16.7% 13.3%	14 19	7.4% 8.0%	10 12	0.9% 0.9%	28
	2	25.0%							36
Jasper		0.0%	6	23.1% 20.0%	11	5.2%	4	0.4% 0.5%	23
Jay	0		2		8	8.1%	3		13
Jefferson	0	0.0%	3	12.0%	21	12.7%	11	1.3%	35
Jennings	0	0.0%	2	7.1%	9	6.3%	6	0.9%	17
Johnson	3	21.4%	10	21.7%	30	5.1%	12	0.5%	55
Knox	0	0.0%	5	27.8%	14	6.8%	6	0.9%	25
Kosciusko	1	12.5%	4	11.1%	39	10.2%	17	0.7%	61

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Table 95. (continued)

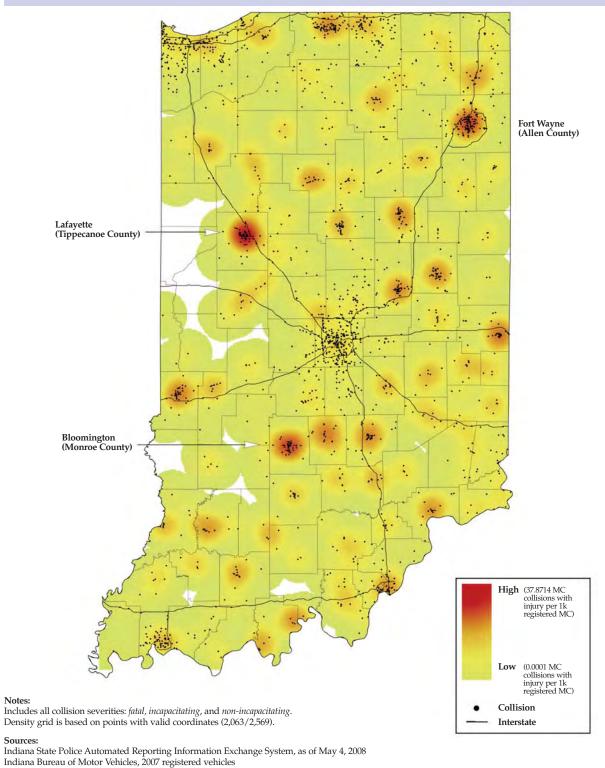
County	Fatal	% of county fatal collisions	Incapacitating	% of county incapacitating collisions	Non- incapacitating	% of county non- incapacitating collisions	Property damage only	% of county property damage only collisions	Total
La Porte	4	15.4%	10	16.9%	39	5.9%	16	0.6%	69
Lagrange	0	0.0%	3	30.0%	10	9.2%	6	0.7%	19
Lake	8	17.4%	29	13.9%	117	4.0%	84	0.5%	238
Lawrence	2	22.2%	4	19.0%	18	6.8%	5	0.5%	29
Madison	3	18.8%	11	21.6%	52	6.4%	31	0.9%	97
Marion	14	19.4%	40	9.7%	192	3.6%	99	0.4%	345
Marshall	0	0.0%	5	26.3%	19	7.2%	4	0.3%	28
Martin	1	50.0%	3	42.9%	5	14.3%	4	1.7%	13
Miami	2	28.6%	3	25.0%	11	7.3%	4	0.4%	20
Monroe	1	33.3%	12	18.5%	46	5.5%	12	0.4%	71
	1		6			7.7%	3		24
Montgomery		25.0%		28.6%	14			0.3%	
Morgan	2	20.0%	12	33.3%	17	5.3%	11	0.9%	42
Newton	2	40.0%	1	16.7%	3	5.8%	1	0.3%	7
Noble	0	0.0%	7	22.6%	15	8.6%	6	0.5%	28
Ohio -	1	50.0%	0	0.0%	2	9.1%	4	1.7%	7
Orange	0	0.0%	4	30.8%	2	1.9%	3	0.6%	9
Owen	1	25.0%	4	23.5%	7	6.4%	2	0.4%	14
Parke	0	0.0%	2	12.5%	6	8.7%	3	0.6%	11
Perry	0	0.0%	5	35.7%	12	13.3%	2	0.5%	19
Pike	1	33.3%	0	0.0%	4	10.5%	0	0.0%	5
Porter	1	4.5%	21	20.2%	56	5.8%	14	0.4%	92
Posey	0	0.0%	0	0.0%	7	9.2%	1	0.3%	8
Pulaski	0	0.0%	1	11.1%	4	5.6%	2	0.4%	7
Putnam	2	20.0%	1	8.3%	8	6.2%	3	0.5%	14
Randolph	0	0.0%	0	0.0%	5	5.7%	2	0.4%	7
Ripley	1	20.0%	1	4.3%	11	8.6%	5	0.8%	18
Rush	0	0.0%	3	23.1%	10	10.3%	1	0.3%	14
Scott	0	0.0%	4	30.8%	8	5.0%	2	0.5%	14
Shelby	2	22.2%	5	18.5%	12	4.9%	7	0.7%	26
Spencer	0	0.0%	0	0.0%	10	10.9%	4	0.7%	14
St Joseph	2	14.3%	21	17.9%	79	5.0%	26	0.4%	128
Starke	0	0.0%	2	16.7%	6	5.1%	4	0.6%	12
Steuben	0	0.0%	1	6.3%	21	13.5%	7	0.5%	29
Sullivan	0	0.0%	0	0.0%	1	2.4%	2	0.9%	3
Switzerland	0	0.0%	1	20.0%	9	20.5%	3	1.5%	13
	2	10.0%	17	27.9%	81	8.0%	39	0.6%	139
l'ippecanoe	0		1						
l'ipton		0.0%		16.7%	4	4.7%	1	0.3%	6
Union	1	50.0%	0	0.0%	5	13.5%	3	2.1%	
Vanderburgh	2	14.3%	15	17.6%	45	4.4%	32	0.7%	94
Vermillion	0	0.0%	2	16.7%	5	5.9%	2	0.6%	9
/igo	0	0.0%	14	20.9%	36	5.1%	16	0.6%	66
Vabash	0	0.0%	4	28.6%	8	4.6%	4	0.4%	16
Varren	0	0.0%	1	20.0%	1	2.7%	0	0.0%	2
Varrick	0	0.0%	7	29.2%	12	7.2%	8	0.6%	27
Vashington	2	22.2%	1	8.3%	16	13.8%	4	0.6%	23
Nayne	2	33.3%	6	20.7%	32	7.9%	10	0.7%	50
Wells	1	10.0%	1	6.7%	15	12.9%	3	0.5%	20
White	0	0.0%	1	9.1%	7	5.5%	3	0.4%	11
Whitley	3	30.0%	0	0.0%	5	4.2%	8	1.1%	16

Notes:Includes collisions where at least one motorcycle or moped was involved. *Non-incapacitating* includes *non-incapacitating* and *possible* injury collisions.

In a small number of collisions, severity is not attributed based on the motorcycle but some other unit.

➤ The greatest densities were evident when normalized per 1,000 registered motorcycles in central Tippecanoe, Monroe, and central Allen counties.

Map 14. Concentrations of motorcycle collisions with injuries in Indiana per 1,000 county registered motorcycles, 2007



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INDIANA OFFICER'S STANDARD CRASH REPORT

INDIANA OFFICER'S STANDARD CRASH REPOR State Form: 23558 (Revised 5/03) Stock 302 Mail to: Indiana State Police, Crash Records Section 100 North Senate Avenue, Indianapolis, IN 46204	T 00100063	Report Original Page of Supplemental Page of Local ID							
Date of Crash Day of Week Actual Local Time County Month Day Year	Township	# Motor # Injured # Dead # Commercial # Dee Vehicles							
Road Crash Occurred On Nearest/Intersecting Road/Mile Marker/Interest	change If not a numbe	it an intersection, Direction Road Interstate County Road Class. US Road Local/City Road State Road Other							
Inside Corporate Limits? City/Town or Nearest City/Town Property? Yes No Private	Other	Crash Latitude Crash Longitude							
Driver #1 Driver #2	Driver #3	Driver #4							
Fill in only one Primary Cause for the crash		Area Information: Fill in one oval per category							
Fill in up to two ovals Fill in one oval per vehicle	for	And information. The infone oval per category							
per vehicle for Driver Vehicle and Environment Contributing Circumstances Contributing Circumstance	es	Hit and Run Light Condition Type of Median							
		Yes Daylight Driveable Dawn/Dusk Curbed One Daylight Curbed							
Primary Cause Vehicle 1 Vehicle 3 Vehicle 4 Vehicle 1 Vehicle 2 Vehicle 2 Vehicle 4 Vehicle 4		Dark (Lighted) Barrier Wall Dark (Not Lighted) None							
Primary Vehicle Vehicle Vehicle Vehicle Vehicle &		Unknown							
Prin Veh		Locality Weather Conditions Type of Roadway							
Driver Contributing Circumstance Vehicle Contributing Circumstance	mstance or Defective	O Cloudy O No Junction Involved							
Alcoholic Beverages Illegal Drugs Prescription Drugs Driver Asleep or Fatigued	ilure or Defective	Rain Sour-Way Intersection Snow T-Intersection							
Driver Asleep or Fatigued O Tire Failure or D	Defective	Sleet/Hail Y-Intersection School /Freezing Rain Circle/Roundabout							
O O Driver Illness O Headlights(s) Del	fective or Not On fective	Zone Fog/Smoke/Smog Five Point or More Yes Severe Cross Wind Interchange							
Unsafe Speed OD Other Lights De OD Steering Failure OD Disregard Signal/Regulatory Sign OD OTHER Lights De OD OTHER Lights De OD OTHER Lights De OTHER Lights De OTHER Lights De	nield Defective	No Blowing Sand/Soil/Snow Ramp							
O O O Cent of Center O O O O Oversize/Overwi	eight Load	Rumble Surface Condition Road Character							
Improper Turning Office Tow Hitch Failur	re ·	Strips Ory Straight/Level Yes Wet Straight/Grade							
Compression Control of the Facility Co		Yes Wet Straight/Grade No Muddy Straight/Hillcrest Snow/Slush Curve/Level							
Unsafe Backing Overcorrecting/Oversteering One Ranger Read Environment Contributing C	ircumstance	Construction Ice Curve/Grade Yes* Loose Material on Road Curve/Hillcrest							
Ran off Road Wrong Way on One Way	ce Condition	○ No (Gravel etc.) ○ Non-Roadway Crash							
	tive	Back-up Water (Standing or Moving) Roadway Surface							
Road Under Coresswing Jackknifting Passenger Distraction Road Under Core Severe Crosswin One Construction Not	nde	*If Yes Asphalt Concrete							
TO CO CO Cell Phone Usage	Marked bscured	Construction Type Gravel Lane Closure Other							
Other Telematics in Use Other Distracted (Explain in	d Roadway	○ X-Over/Lane Shift							
Weather Conditions	noperative/ Obscured	○ Work on Shoulder ○ Intermittent or Moving Work Was this crash a result of ○ Yes aggressive driving? No							
Other (Explain in Narrative) None Other (Explain in Narrative) None Other (Explain in Narrative) None	n Narrative)	Traffic Control Devices							
. O O O O HONO		Officer/Crossing Guard/Flagman Stop Sign * RR Crossing Gate/Flagman Yield Sign							
Total Estimate of all damage in the Crash:		* RR Crossing Flashing Signal Lane Control RR Crossing Sign No Passing Zone							
Under \$1000 \$2501-\$5000 \$10,001-\$25,000 \$50,001-\$10 \$1001-\$2500 \$5001-\$10,000 \$25,001-\$50,000 Over \$100,0		* Traffic Control Signal Other (Explain * Flashing Signal in Narrative)							
		○ None							
Other Property Damage (Include Carginame of Object State Sta	0)	*Traffic Control Device Operational? Yes No							
(1) Property O No	4.								
(2) State Yes Owner's Name and Address Property No	(2) State Yes Owner's Name and Address								
Witness/Other Participant	Non-Moto	· ·							
Witness # (Last Name, First Name, MI)	Non-Motoris								
Other Participant Address etc.	Pedestrian Pedalcyclist	On designated non-motorists lane Normal Not in roadway							
Phone # Location at Time of Crash	Other Cited? Yes	Normal Had Been Drinking Handicapped III Asleep/Fatigued Drugs/Medication Ormal Not in roadway On shoulder On roadway On roadway Against traffic Crossing at intersection							
	Direction No	Asleep/Fatigued Against traffic Crossing at intersection							
○ Witness # (Last Name, First Name, MI) ○ Other Participant	Stroot/Uichway	Unknown Crossing not at intersection							
Phone # Location at Time of Crash	Traffic Control? Yes No	If yes, was traffic control Yes operational? No Standing Working Getting in or out of a vehicle Getting off or on a school bus Other (Explain in Narrative)							

Type of Rear End Same Direction Sideswipe Right Angle Deaching Crash Hood on Occasion Director Sideswipe Left Turn Other Rear of Rear							0631			Γ	f					Pag	je	of
Narrative:	Type of Crash	O Head On	Opposite I	Direction Sideswi		○ R	ight Angle	3	Ot!	her /						Turn		
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nvestigating Officer (printed) ID No. Agency Reviewing Officer	Assisting Officer			ID No.	Agen	су						Date	of Re					
	nvestigating Off	icer (printed)		ID No.	Agen	icy						Revi	ewing	Offi	cer	•		

UNIT	INFORMA	NOITA					1 1881	11 33 131 56 13		 						Pag	e	of
Loc	al ID									000631	Γ					Т		
Dr#	Driver	s Nam	e (Last, F	irst, MI)					0010	Safety Equip	ment Use	d	Saf	ety Equ	inmen	el Eie	ction/	rapped
Add	Dr# Driver's Name (Last, First, MI) Address (Street, City, State, Zip)						No restraint	○ Helmet ○ Airbag	7	0	Yes Yes		0	Not Eje	ected or Trapped y Ejected			
	•					Date Mor	nth Day	Year	Age	○ Harness (Only) ○ Lap + Harness	(No Re: Airbag Belt Re	+ estraint		No Not Applica	able	00		d In Under
Driv	er's Licens	se #				Lic Type	; C	DL Class	Lic State	Child Restraint (Nature	of Mos	st Sev	ere Inju	ry Lo	cation of		wn Severe Injury
0000000	Apparent Physical Status Normal Had Been Drinking Handicapped III Asleep/Fatigued Drugs/Medication Unknown Glasses/Contact Lenses Employer's Vehicle Only Outside Rearview Mirror State-Owned Vehicles Only Daylight Driving PP Chauffeurs-Taxi Only Automatic Transmission Special Restrictions Employment Only Probation DWI Motorcycle Only To/From Employment None Gender Restrictions PP Chauffeurs-Taxi Only Automatic Transmission Special Restrictions Special Restrictions Employment Only Probation HTV None To/From Employment None Gender Test Given Type Given Alcohol Results Drug				Driver Injury Status Fatal Injury Non-Fatal Injury Incapacitating Non Incapacitating Possible Injury Unknown Refused	Seve O Inter	rnal or Burn ere Burn asion or Bleed ere Blee ture/Dis tusion/B aplaint of e Visible er (Expla	n ding eding (slocatio Bruise of Pain le	on		C Elbo	k d k ulder/L ow/Low omen/l Upper e/Lowe	Pelvis Leg r Leg/Foot					
0	Male Female	000	Alcohol+D	rug	○ Blood○ Urine○ Breath○ SFST	Certi	est • 🗕	_ 0	Positive Negative	If Cited? Infraction Misdemeanor	IC Code	111 13	iai iaiiv					
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# Oc	cupants	Lí	c Year	Licens	se#		Lic	cense Sta	ife	Undercarriage Trailer None Unknown	000	000	ieal (Und Trail Non Unk	ercarria ler e			Rear
Ĺ	Registered Owner's Name (Last, First, MI) Same as Driver Personal (Farm, Company) Ambulance* Common and Contract Carriers) Highway Department Address (Street, City, State, Zip) Remains the company of the common and Contract Carriers of the comm							Run? Yes No Fire? Yes No										
Trl#) Same as Driver	Vehicle Type Passenger Car/Ste Pickup Van Sport Utility Vehic Truck (Single Unit Truck (Truiler (not Tractor/One Semi Tractor/Opuble Tractor/Triple Trail	cle t 2 axle, 6 t t 3 or more semi) Trailer ailers	ires) (OOO BU SC Fa Co Ur	otor Hoi otorcycl is/Seats is/Seats thool Bu rm Vehi imbinati inknown	ne/Reci e 9-15 Pe 15+ Pe	y-No Trai reational ersons in rsons ind icle not classi	Vehicle Cluding Cluding	e g the driver the driver			
Trl# Licer	nse #	te Lic \		-	d Owner's (Street, C			i, MI) (Same as Driver	Pre-Crash Vehicle Ac Going Straight Backing Changing Lanes Overtaking/Passin Turning Right	9 O I	Making I Merging Starting Driving I Crossing	U Turr I in Tra Left of I the N	ffic Center	0 A	nattende voiding I ntering T eaving T	d Movi Object raffic l	.ane
Veh V	/ear Make		ommerci	al Vehic	le: Carrio	r's Name	Λ has e	ddress		Direction of Travel	O North South	1 0	East West		ortheast		Southe Southw	
VGIII	Type of Primary/Secondary Roadway One Way Traffic																	
	HAZMAT Proper Shipping Name: HAZMAT Proper Shipping Name: Another Motor Vehicle Pedestrian Bicycle Animal Other than Deer Mailbox Mailbox																	
Vehi Gro	CC# State DO1# Inpact Attenuator/Crash Cushion Overhead Sign Post Tree																	
_	MAT 🔘	Yes	HAZMA Release Cargo	r	es HAZ	MAT 4-Di			Narrative) I Člass #	Orn a Non-Collisio Overturn/Rollover Fire/Explosion Immersion	00	lackknife Cargo/Ec Off Road	e quipme			0		om vehicle

NON-DRIVER INJURED INFORMATION	11111		
Local ID		Page	of
Injured Pre-crash Location: Veh# Peda	alcyclist O Pedestrian Other (Explain in Narrative)	Safety Equipment Used Safety Ejection/	Trapped
Name (Last, First, MI) Address, etc.	in Narrative)	O Lan Belt Only Effective? Not Fiecte	ed or Trapped
		Harness (Only) Yes Partially E	
		Child Restraint	n
<u> </u>		O Helmet O Pinned Un	nder
		Airbag Airbag + Belt Unknown (No Restraint) Unknown	
Date Month Day Year Age Victim	Injury Status Nature of Most Severe Injury		Type Given
Non Eat	atal Injury Severed Minor Burn		O Blood O Urine
derider O Iviale O Perifale O Orikilowii O Ir	ncapacitating	C Eye C Neck C Drug	O Breath
Position in or on Vehicle N	Ion Minor Bleeding Incapacitating Severe Bleeding (Arterial)		○ SFST
	ossible Injury O Fracture/Dislocation	○ Elbow/Lower Arm	O PBT
	Jnknown Contusion/Bruise Complaint of Pain	O Hip/Linner Lea	O Positive
EMS No	O. None Visible Other (Explain	Knee/Lower Leg/Foot Certified	O Negative
	in Narrative)	Entire Body Pending	O Pending
Injured Pre-crash Location: Veh# Peda	alcyclist O Pedestrian Other (Explain in Narrative)	Safety Equipment Used Safety Ejection/	Trapped
Name (Last, First, MI) Address, etc.	in Narrative)	○ No restraint Equipment Effective? ○ Not Ejecte	od or Transad
reamo (Last, Frist, 1911) Addition, Etc.		Harness (Only) Yes Partially E	
		Child Restraint No Ejected N/A Trapped In	
		O Helmet Prinner	d Under
•		Airbag Airbag + Belt Unknown Unknown	own
Date Month Day Year Age Victim I	Injury Status Nature of Most Severe Injury		Type Given
or Birth OF	atal Injury Severed Minor Burn	O Hood O Food O None	○ Blood
	tal Injury O Internal O Severe Burn	Eye Neck Drug	Urine Breath
Position in or on Vehicle N	Ion	Chest Back Alcohol+Drug	○ SFST
	ossible Injury O Fracture/Dislocation	Flhow/Lower Arm	○ PBT
	Inknown Contusion/Bruise Complaint of Pain	C Approprietal Control	ts Drug ○ Positive
		☐ Hip/Upper Leg	
EMS No	. 1 3 30 75	Knee/Lower Leg/Foot Certified	Negative
EMS No	Other (Explain in Narrative)	Centire Pody	NegativePending
EMS No	Other (Explain in Narrative)	Entire Body Test • Compared to the proof of the pr	O Pending
Injured Pre-crash Location: Veh# Peda	Other (Explain in Narrative)	Entire Body Safety Equipment Used Safety Ejection/	O Pending Trapped
EMS No	Other (Explain in Narrative)	Safety Equipment Used Safety Ejection/ No restraint Lap Belt Only Harness (Only) Yes Partially Fi	Pending Trapped ed or Trapped
Injured Pre-crash Location: Veh# Peda	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment Effective? Lap Belt Only Lap + Harness Lap Safety Ejection/ Yes Partially Ejected Par	Pending Trapped ed or Trapped ejected
Injured Pre-crash Location: Veh# Peda	Other (Explain in Narrative)	Safety Equipment Used Safety Ejection/T No restraint Lap Belt Only Harness (Only) Lap + Harness Child Restraint Child Restraint Helmet Helmet Test • —— Pending Test • —— Pending Test • —— Pending Pending Test • —— Pending Test • —	Pending Trapped ed or Trapped ejected n
Injured Pre-crash Location: Veh# Peda	Other (Explain in Narrative)	Test	Pending Trapped ed or Trapped ejected n
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age Victim	Other (Explain in Narrative) Pedestrian Other (Explain in Narrative)	Test	Pending Trapped ed or Trapped ejected n d Under own
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age Victim I of Birth	Other (Explain in Narrative) Pedestrian Other (Explain in Narrative) Other (Explain in Narrative) Injury Status Nature of Most Severe Injury atal Injury Severed Minor Burn	Safety Equipment Used Safety Ejection / Test Pending Pen	Pending Trapped ed or Trapped ijected n d Under own Type Given Blood
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age Victim I of Birth	Other (Explain in Narrative) alcyclist Pedestrian Other (Explain in Narrative) Injury Status at Injury at Injury Internal Severe Burn capacitating Abrasion	Safety Equipment Used Safety Fending Safety Fending Safety Fending Safety S	Pending Trapped ed or Trapped ejected n d Under own Type Given Slood Urine
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age of Birth	Other (Explain in Narrative)	Safety Equipment Used Safety Fending Safety Fending Safety Fending Safety S	Pending Trapped ed or Trapped ejected n d Under own Type Given Blood Urine Breath SFST
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age of Birth Female Unknown Position in or on Vehicle Position in Or on Vehic	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment	Pending Trapped ed or Trapped gjected n d Under own Type Given Blood Urine Breath SFST PBT
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age Offerth Gender Male Female Unknown Position in or on Vehicle P UNROWN	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment	Pending Trapped ed or Trapped ejected n d Under own Type Given Blood Urine Breath SFST PBT ts] Drug
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age OF Birth Sender Male Female Unknown Ir Non-Fate Non-Fate OF N	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment Safety Safety	Pending Trapped ad or Trapped gjected n d Under own Type Given Blood Urine Breath SFST PBT ts Drug Positive
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age of Birth Female Unknown Position in or on Vehicle Non-Fate Of Residue Of R	Other (Explain in Narrative) alcyclist Pedestrian Other (Explain in Narrative) Injury Status Status Injury Status Injury Severed Minor Burn Stal Injury Severed Minor Burn Severe Bleeding Incapacitating On Minor Bleeding Severe Bleeding (Arterial) Contusion/Bruise Complaint of Pain	Safety Equipment Used Safety Equipment Safety Equipment Safety Equipment Safety Safe	Pending Trapped ed or Trapped ejected n d Under own Type Given Blood Urine Breath SFST PBT ts] Drug
Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age of Birth Gender Male Female Unknown Position in or on Vehicle POUR REMS No.	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment Safety Equipment Safety Equipment Safety Equipment Safety S	Pending Trapped ed or Trapped ejected n d Under own Type Given Blood Urine Breath SFST PBT ts] Drug Positive Negative Pending
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Injured Pre-crash Location: Veh# Peda Name (Last, First, MI) Address, etc. Date Month Day Year Age of Birth Gender Male Female Unknown Position in or on Vehicle POUR REMS No.	Other (Explain in Narrative)	Safety Equipment Used Safety Equipment	Pending Trapped ad or Trapped gjected n d Under own Type Given Blood Urine Breath SFST PBT ts Drug Positive Negative Pending Trapped ad or Trapped
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GLOSSARY

Aggressive Driving

A collision is defined as involving aggressive driving when the driver of a motor vehicle was engaged in at least two of the following actions: (1) driving at an unsafe speed; (2) failing to yield right of way; (3) disregarding a regulatory signal/sign; (4) improper passing; (5) improper turning; (6) improper lane usage; or (7) following too closely.

Alcohol Involvement/Alcohol-related

National Highway Traffic Safety Administration (NHTSA) defines a fatal crash as alcohol-related or alcohol-involved if at least one driver or nonoccupant (such as a pedestrian or pedalcyclist) involved in the crash is determined to have had a Blood Alcohol Concentration (BAC) of .01 gram per deciliter (g/dl) or higher. NHTSA defines a nonfatal crash as alcohol-related or alcohol-involved if police indicate on the police accident report that there is evidence of alcohol present. The code does not necessarily mean that a driver or nonoccupant was tested for alcohol.

The term "alcohol-related" or "alcohol-involved" does not indicate that a crash or fatality was caused by the presence of alcohol.

Indiana defines a crash as alcohol-related or alcohol-involved if any of the following are true: (1) *Alcoholic beverages* is listed as the primary factor of the collision; (2) *Alcoholic beverages* is listed as a contributing circumstance in the collision; (3) any vehicle driver or non-motorist (pedestrian, pedalcyclist) involved in the collision had a BAC test result greater than zero; (4) the collision report lists the apparent physical condition of any vehicle driver or non-motorist involved as *had been drinking*; or (5) a vehicle driver is issued an Operating While Intoxicated (OWI) citation.

Automated Reporting Information Exchange System (ARIES)

Formerly the Vehicle Crash Reporting System (VCRS). The computer data information system in which all local and state law enforcement officers enter the information from the *Indiana Officer's Standard Crash Report*. This data system provides the data found in this report as well as the *Indiana Traffic Fact Sheets*.

Blood Alcohol Concentration

The BAC is measured as a percentage by weight of alcohol in the blood (grams/deciliter). A positive BAC level (.01 g/dl and higher) indicates that alcohol was consumed by the person tested; a BAC level of .01 to .07 g/dl indicates that the person was impaired; a BAC level of .08 g/dl or more indicates that the person was intoxicated.

Bus

Large motor vehicles used to carry nine or more passengers, including school buses, inter-city buses, and transit buses.

Cited/Citation

When a person involved in a collision is arrested (traffic or criminal) for a violation relating to the motor vehicle crash. The document produced is a citation.

Combination Vehicle

A truck consisting primarily of a transport device which is a single-unit truck or truck tractor together with one or more attached trailers.

Commercial Vehicle

- A Truck: A vehicle equipped for carrying property and having a Gross Vehicle Weight Rating (GVWR) or Gross Combination Weight Rating (GCWR) over 10,000 pounds.
- 2) A Bus: A motor vehicle designed to transport 9 or more occupants.
- 3) Any Vehicle: Displaying a hazardous materials placard.

Contributing Circumstance

Actions of the driver, apparent environmental conditions or apparent vehicle conditions which contributed to the collision.

Collision/Crash

An event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway or while the vehicle is still in motion after running off the trafficway.

Crash Severity

- Fatal Crash. A police-reported crash involving a motor vehicle in transport on a trafficway in which at least one person dies within 30 days of the crash.
- 2. Injury Crash. A police-reported crash involving a motor vehicle in transport on a trafficway in which no one died but a least one person was reported to have: (1) an incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.
- 3. Property Damage Only Crash. A police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries. Indiana statute states the estimated property damage must be \$1000 or more. Note: All collisions reported as property damage collisions, regardless of estimated damage costs, are reported in the 2007 Indiana Crash Fact Book.

Glossary, continued

Dark-Lighted

The time between dusk and dawn, and when there are lights designed and installed to illuminate the roadway. This does not include lighting from storefronts, houses, etc.

Dark-Not lighted

The time between dusk and dawn, and when there are no lights designed or installed to illuminate the roadway.

Day

From 6 a.m. to 5:59 p.m.

Disregarding traffic signal

A collision where one or more drivers disregarded a traffic signal or flashing signal at a road intersection (excludes interstates).

Driver

An occupant of a vehicle who is in physical control of a motor vehicle in transport, or for an out-of-control vehicle, an occupant who was in control until control was lost.

Eiection

Refers to occupants being totally or partially thrown from the vehicle as a result of an impact or rollover.

Fatal Injury

Any injury that results in death within a 30-day period after the crash occurred.

Fixed /Immoveable Object

Stationary structures or substantial vegetation attached to the terrain. Examples include guardrail, bridge railing or abutments, trees, utility poles, ditches, culverts and buildings.

General Contributing Factor(s)

The factors which the investigating officer believes to have contributed to the collision's occurrence – one of these may or may not have been the primary factor. Each collision may have two driver contributing factors, one environmental, and one vehicle factor.

Gross Combination Weight Rating (GCWR)

The value specified by the manufacturer as the loaded weight of a combination (articulated) motor vehicle. In absence of a value specified by the manufacturer, GCWR will be determined by adding the GVWR of the power unit and the total weight of the towed unit and any load thereon.

Gross Vehicle Weight Rating (GVWR)

The maximum rated capacity of a vehicle, including the weight of the base vehicle, all added equipment, driver and passengers, and all cargo loaded into or on the vehicle. Actual weight may be less than or greater than GVWR.

Harmful Event

The event during a crash for a particular vehicle that is judged to have produced the greatest personal injury or property damage.

Hazardous Materials

Any substance or material which has been determined by the US Department of Transportation, or other authorizing entity, to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Any motor vehicle transporting quantities of hazardous materials in quantities above the thresholds established by the USDOT, or other authorized entity, is required to display a hazardous materials placard.

Hazardous Materials Placard

A sign that must be affixed to any motor vehicle transporting quantities of hazardous materials in quantities above the thresholds established by the USDOT, or other authorized entity. This placard identifies the hazard class division number, 4-digit hazardous material identification number or name of the hazardous material being transported.

ICJI

Indiana Criminal Justice Institute

Incapacitating Injury

A non-fatal injury that prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred. Hospitalization is usually required. Examples are-- severe lacerations, broken limbs, skull fracture, crushed chest, internal injuries, etc.

Intersection

An area of roadway which is (1) at a crossing or connection of two or more roadways not classified as a driveway and (2) the area of the roadway measured less than 33 feet from the apex of two roadways at the curb or boundary line. Types of intersections noted on the *Indiana Crash Report* are 1) T-intersections, 2) Y-intersections, 3) Four-way intersection, 4) Interchange, 5) Five point or more, 6) Ramp and 7) Traffic circle/roundabout.

ISF

Indiana State Police

Jackknife

Jackknife can occur at any time during the crash sequence. Jackknifing is generally restricted to truck tractors pulling a trailing unit in which the trailing unit and the pulling vehicle rotate with respect to each other.



Glossary, continued

Junction

Area formed by the connection of two roadways, including intersections, interchange areas, and entrance/exit ramps.

Lane control

Visible lane markings such as hash marks or lines that separate lanes of travel.

Large Trucks

Trucks over 10,000 pounds gross vehicle weight rating, including single unit trucks and truck tractors.

Light Trucks

Trucks of 10,000 pounds gross vehicle weight rating or less, including pickups, vans, truck-based station wagons, and sport utility vehicles.

Motorcycle

A two- or three-wheeled motor vehicle designed to transport one or two people. This category can include motor scooters, minibikes, and mopeds, etc.; however, the Indiana reporting system separates the two categories.

Motor Vehicle in Transport

A motor vehicle in motion on the trafficway or any other motor vehicle on the roadway, including stalled, disabled, or abandoned vehicles.

Night

From 6 p.m. to 5:59 a.m.

Non-Incapacitating Injury

An injury, other than a fatal or incapacitating injury, which is evident to the officer at the scene of the crash and may require medical treatment, although hospitalization is usually not required. Examples are abrasions, minor bleeding and lacerations, etc.

Nonoccupant/Nonmotorist

Any person who is not an occupant of a motor vehicle in transport and includes the following: (1) Pedestrians; (2) Pedalcyclists; (3) Occupants of parked motor vehicles; (4) Others such as joggers, skateboard riders, people riding on animals, and persons riding in animal-drawn conveyances.

Not injured

Any blank value in the injury status code field of the *Indiana Crash Report*. These are generally drivers of vehicles involved in property damage only collisions.

Occupant

Any person who is in or upon a motor vehicle in transport. Includes the driver, passengers, and persons riding on the exterior of a motor vehicle.

Passenger

Any occupant of a motor vehicle who is not a driver.

Passenger Car

Motor vehicles used primarily for carrying passengers, including convertibles, sedans, and station wagons.

Pedalcyclist

A person on a vehicle that is powered solely by pedals.

Pedestrian

Any person not in or upon a motor vehicle or other vehicle.

Pedestrian Collision

A collision in which a pedestrian was involved or "pedestrian action" was listed as a contributing factor to the collision. NOTE: Sometimes a collision had a contributing factor of "pedestrian action" where there was not information regarding a pedestrian individual – these collisions were counted as pedestrian collisions.

Pickup Truck

A motor vehicle designed to carry ten persons or less, with an exposed bed.

Possible Injury

Any injury reported or claimed which is not visible. Example: the complaint of back or neck pain.

Primary Factor

The single factor which the investigating officer believes to be the main or primary factor which contributed to the collision's occurrence. Each collision may have only one primary factor.

Property Damage Only Collision

A police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries but at least one vehicle or property was damaged.

Restraint Use

The occupant's use of available vehicle restraints including lap belt, shoulder belt, automatic belt, or child restraint (child safety seat, booster seat).

Roadway

That part of a trafficway designed, improved, and ordinarily used for motor vehicle travel.

Rollover

Rollover is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Includes rollovers occurring as a first harmful event or subsequent event.

Glossary, continued

Rural

Any area outside of the incorporated limits of a city.

Seating Position

The location of the occupants in the vehicle. More than one can be assigned the same seat position; however, this is allowed only when a person is sitting on someone's lap.

Semi-trailer

A trailer, other than a pole trailer, designed for carrying property and so constructed that part of its weight rest upon or is carried by the power unit.

Single-Unit Truck

A medium or heavy truck in which the engine, cab, drive train, and cargo area are all on one chassis. (Can have 2 axles and 6 tires on the ground, or 3 or more axles).

Speed-related

A collision is identified as "speed-related" if any one of the following conditions are met: (1) *Unsafe speed* or *Speed too fast for weather conditions* is listed as the primary or contributing factor of the collision; (2) a vehicle driver is issued a speeding citation.

Sport Utility Vehicle (SUV)

A multi-purpose motor vehicle designed for carrying less than 10 persons, which is constructed on a truck chassis or with special features for occasional off-road operation, other than a pickup truck. These vehicles are generally four-wheel-drive (4x4) and have increased ground clearance, and a gross vehicle weight rating (GVWR) of 10,000 pounds or less.

Tractor (Semi)

A motor vehicle consisting of a single power unit device designed primarily for pulling semi-trailers.

Traffic Circle/Roundabout

An intersection of roads where vehicles must travel around a circle to continue on the same road or to connect to an intersecting road.

Traffic control signal

Includes the red/green/yellow signal and/or a flashing signal.

Trafficway

Any road, street, or highway open to the public as a matter of right or custom for moving persons or property from one place to another.

Trapped

Persons who are restrained in the vehicle by damaged vehicle components as a result of a crash, and who have to be freed from the vehicle.

Unit

Denotes a motor vehicle, pedestrian, pedalcyclist, or other entity involved in the collision.

Unknown injury

Injuries reported on the *Indiana Crash Report* as 1) *refused* (treatment), 2) *Unknown*, 3) *Not reported*, and 4) invalid codes.

Urhan

Any area inside of the incorporated limits of a city.

Van

A motor vehicle consisting primarily of a transport device that has a gross vehicle weight rating of 10,000 pounds or less and is basically a "box on wheels" that is identifiable by its enclosed passenger and/or cargo area, step-up floor, and relatively short (or nonexistent) hood. Examples are: passenger vans, cargo or delivery vans, and van-based mini-motor homes.

Vehicle Miles Travelled

The annual vehicle distance travelled in miles.

Weekday

From 6 a.m. Monday to 5:59 p.m. Friday.

Weekend

From 6 p.m. Friday to 5:59 a.m. Monday.

Work Zone

An area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs and arrow boards mounted on the vehicles in a mobile maintenance activity) that mark the beginning and end of a construction, maintenance or utility work activity.

It extends from the first warning sign, signal or flashing lights to the END ROAD WORK sign or the last traffic control device pertinent for that work activity.

Work zones also include roadway sections where there is ongoing, moving (mobile) work activity such as lane line painting or roadside mowing only if the beginning of the ongoing, moving (mobile) work activity is designated by warning signs or signals.

Young Driver

A driver of a motor vehicle whose age is under 25 or a portion of those under age 25 (i.e., ages 15 to 20).



APPENDIX A: Methods for producing economic costs of traffic collisions in Indiana

For the purposes of *Indiana Crash Facts, economic costs* represent the monetary and non-monetary impacts produced by injuries and property damage in traffic collisions. These costs are calculated by taking existing estimates of costs, broken down into various impact categories, by the incidence of traffic injuries and property damage to vehicles in collisions. The general methodology used here follows that in economic cost reports produced by the National Highway Traffic Safety Administration (NHTSA). Several intermediate procedures were performed on the data to arrive at final cost estimates.

1. Injury classifications

Cost estimates are based on the *Maximum Abbreviated Injury Scale* (MAIS), a medical assessment of the most severe injury incurred. The MAIS scale ranges from MAIS 0 (no injury), to MAIS 6 (fatality), with incremental levels representing increasing levels of bodily damage (i.e., decreasing probabilities of survival). Indiana crash reports, however, use the KABCO (K=fatal; A=incapacitating; B=non-incapacitating; C=possible; O=not injured) system of injury classification, in which an officer with no medical training can make a general assessment of the injury severity to individuals involved in the collision. As such, Indiana injury data classifications must be converted to the MAIS system to obtain the cost estimates.

Data taken from the National Automotive Sampling System (NASS) from 1982 to 1986 were used to create this injury "translator". These data encompass a representative sample of crashes in the United States and provide individual-level information on individuals involved; from it, KABCO injuries can be proportionally distributed into MAIS categories. Data were taken from this time period because it represents the most recent data that contains both KABCO and MAIS designations of injury at the individual level. Note that the injury translator can apportion fatalities (K) to MAIS designations, but the data in *Indiana Crash Facts* does not do this for ease of interpretation.

2. Cost estimates and price deflation

Economic cost estimates were obtained from NHTSA economic cost reports. The data are in year 2000 US dollars and accordingly must be adjusted for the effects of the time value of money. Price deflators were obtained from the Bureau of Labor statistics and were applied as follows:

a. Medical care and emergency services

Consumer Price Index (CPI) - Medical care (Midwest region). Bureau of Labor Statistics. http://www.bls.gov/cpi_dr.htm

b. Market productivity, household productivity, travel delay

Productivity Index - Output per hour of all persons, business sector (annual). Bureau of Labor Statistics. http://www.bls.gov/schedule/archives/prod_nr.htm

c. Insurance administration, legal costs, property damage

Consumer Price Index - Services less medical care services (Midwest region). Bureau of Labor Statistics. http://www.bls.gov/cpi/cpi_dr.htm

d. Workplace costs

Employment Cost Index - Total compensation, all civilian workers, (Q4, not seasonally adjusted). Bureau of Labor Statistics. http://www.bls.gov/ect/. Note that 2000 data was not available for this series; 2001 data used as a proxy.

Additionally, a regional price adjustment to costs was made using 2000 and 2007 CPI – all items between the US average and Midwest average.

Once costs were adjusted to current economic conditions, the values were multiplied by the incidence of injuries and vehicles that sustained property damage only (i.e., no injured occupants) to arrive at total cost estimates.

3. Comparing data to Indiana Crash Facts 2006

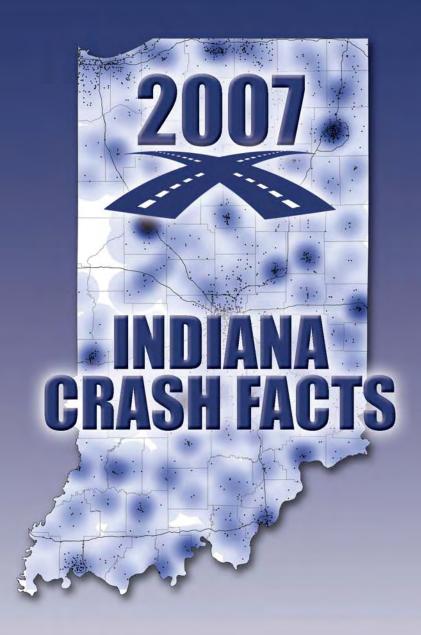
Data for this fact book use a different methodology than that from the previous year's *Indiana Crash Facts 2006*, so direct comparisons of data are not valid. Most notably, data in this fact book include individuals who were not injured and sustained unknown injury types. These individuals are included because cases exist where an individual produces an economic cost because of a misclassification of injury severity. This fact book includes crash costs for historical data (2003-2006) for these purposes.

¹Blincoe, L., Seay. A., Zaloshnja, E., Miller, T., Romano, E., Luchter, S., & R. Spicer. (May 2002). *The economic impact of motor vehicle crashes,* 2000. (DOT HS809 446) National Highway Traffic Safety Administration, Washington D.C.

²Association for the Advancement of Automotive Medicine. http://www.carcrash.org

³http://www.nhtsa-tsis.net/projects/NHTSA/NHTSA_NASS.htm

⁴National Automotive Sampling System, 1982-1986; *Ejection Mitigation Using Advanced Glazing: A Status Report, November 1995,* NHTSA ⁵Blincoe et al, 2002.



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







