

AUGUST 2016 • ISSUE 16-C13

IN 2015:

- In 2015, **86 fatal alcohol**impaired collisions occurred in the state (11 percent of all fatal collisions).
- Alcohol-impaired fatal collisions decreased 15 percent from 2014 to 2015.
- In 2015, 92 fatalities (a 15 percent decrease from 2014) and 1,970 non-fatal injuries were linked to collisions with at least one alcohol-impaired driver or non-motorist.
- In 2015, 55 percent of all alcohol-impaired collisions occurred from midnight until 4am.
- Impaired drivers and their passengers represented roughly three of every four fatalities and seven of every ten injuries in 2015 alcohol-impaired collisions.
- Among all age groups, drivers aged 21 to 24 have the highest rates of alcohol-impairment in collisions.
- On average from 2005 through 2014, the Indiana State Police ARIES data have undercounted fatal alcoholimpaired collisions and fatalities by 27 percent in comparison to NHTSA's FARS estimates.



Alcohol-impaired driving (see *Definition*) in the United States in 2014 (latest data available) resulted in 9,967 deaths, or 31 percent of all motor vehicle traffic fatalities (NHTSA, 2015). This fact sheet presents information on alcohol-impaired traffic collisions in Indiana from 2011 to 2015. It examines different dimensions of alcohol-impaired collisions, the incidence of alcohol testing, the BAC test results for involved drivers, and other attributes of alcohol-impaired collisions, injuries, and fatalities reported in the Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2016. A brief comparison of ARIES and the NHTSA Fatality Analysis Reporting System (FARS) counts of alcoholimpaired collisions and fatalities from 2005 through 2014 is also presented at the end of this fact sheet.

IA TRA

V FA

11

ALCOHOL-IMPAIRED COLLISIONS, DEATHS, AND INJURIES

From 2011 to 2015, the overall number of alcohol-impaired collisions in Indiana decreased 1 percent annually, with a 5 percent drop between 2014 and 2015. During 2015, there were 86 fatal alcohol-impaired collisions in the state, the lowest number over this five-year period, and represented 11 percent of all fatal collisions (Table 1). The numbers of non-fatal alcohol-impaired injury collisions decreased slightly during the 2011-2015 period, with injury collisions linked to impaired driving increasing about 2 percent from 2014 to 2015.¹

Table 1. Indiana traffic collisions, by severity and alcohol impairment, 2011-2015

Collisions by coverity		Co	Annual rate of change				
comstons, by seventy	2011	2012	2013	2014	2015	2014-15	2011-15
Alcohol-impaired	4,961	5,198	4,797	4,592	4,828	5.1%	-0.7%
Fatal	138	167	122	101	86	-14.9%	-11.2%
Injury	1,445	1,528	1,406	1,299	1,319	1.5%	-2.3%
Property damage only	3,378	3,503	3,269	3,192	3,423	7.2%	0.3%
Non-impaired	183,495	183,985	188,439	201,160	211,484	5.1%	3.6%
Fatal	538	553	588	604	670	10.9%	5.6%
Injury	31,343	32,610	31,446	32,557	33,115	1.7%	1.4%
Property damage only	151,614	150,822	156,405	167,999	177,699	5.8%	4.0%
Percent alcohol-impaired	2.6%	2.7%	2.5%	2.2%	2.2%	0.0%	-4.0%
Fatal	20.4%	23.2%	17.2%	14.3%	11.4%	-20.6%	-13.6%
Injury	4.4%	4.5%	4.3%	3.8%	3.8%	-0.2%	-3.4%
Property damage only	2.2%	2.3%	2.0%	1.9%	1.9%	1.4%	-3.5%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016. Notes:

1) Impaired collisions involve at least one driver or non-motorist with a BAC of 0.08 g/dL or greater.

2) Injury collisions include those with at least one incapacitating or non-incapacitating injury.

¹When considering the reported changes in counts and rates of 2015 alcohol-impaired crashes and fatalities, it is important to note that these numbers are likely to change once BAC results reported after the March 17, 2016 extract are analyzed. For example, in 2015, approximately 62 percent of drivers involved in fatal collisions were reported in ARIES to have been tested, while of the 1,151 drivers involved in fatal collisions only 40 percent had BAC results reported in ARIES.

In 2015, there were 92 fatalities (a 15 percent decrease from 2014) and 1,970 non-fatal injuries (a 4 percent increase from 2014) linked to alcohol-impaired collisions in Indiana (Table 2). The total number of individuals involved in alcohol-impaired collisions decreased less than 1 percent annually from 2011 to 2015, while fatalities decreased about 11 percent annually. Eleven percent of total fatalities were in collisions classified as

alcohol-impaired in 2015. In comparison, fatalities and injuries linked to non-impaired collisions increased by 5 percent and 2 percent, respectively, during this five-year period. Thus, relative to non-impaired collisions, there seems to have been real declines in deaths and injuries linked to impaired collisions from 2011 to 2015.

Table 2. Individuals involved in Indiana collisions by collision alcohol-impairment and personal injury group, 2011-2015

Individuala hyvinium atatus		C	Annual rate of change				
individuals, by injury status	2011	2012	2013	2014	2015	2014-15	2011-15
Alcohol-impaired collisions	7,205	7,393	6,946	6,592	7,064	7.2%	-0.5%
Fatal	145	177	134	108	92	-14.8%	-10.8%
Injury	2,099	2,152	2,086	1,892	1,970	4.1%	-1.6%
Not injured	4,961	5,064	4,726	4,592	5,002	8.9%	0.2%
Non-impaired collisions	296,803	298,999	303,357	324,364	343,948	6.0%	3.8%
Fatal	606	604	650	639	729	14.1%	4.7%
Injury	45,132	47,006	45,448	46,666	49,449	6.0%	2.3%
Not injured	251,065	251,389	257,259	277,059	293,770	6.0%	4.0%
Total	304,008	306,392	310,303	330,956	351,012	6.1%	3.7%
% in impaired collisions							
Fatalities	19.3%	22.7%	17.1%	14.5%	11.2%		
Injuries	4.4%	4.4%	4.4%	3.9%	3.8%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

Impaired collisions involve at least one driver or non-motorist with a BAC of 0.08 g/dL.
 Injury includes incapacitating, non-incapacitating, and other injuries.



TIMES, DAYS, AND PLACES

The incidence of alcohol-impaired collisions in 2015 followed a weekly pattern in which alcohol-impairment increased on the weekends (Figure 1). Considering all collisions occurring on Saturdays, 4 percent were alcohol-impaired, compared to one percent of collisions occurring on Mondays. A similar pattern is visible when considering the proportion of annual collisions classified as alcohol-impaired. For example, of all alcohol-impaired collisions in 2014, 44 percent occurred on Saturdays and Sundays.

The incidence of alcohol-impaired collisions relative to all collisions varies by time of day (Figure 2). While the largest numbers of collisions occur between 3pm and 6pm, only about one percent of these collisions are classified as alcohol-impaired. From midnight until 4am, 55 percent of alcohol-impaired collisions occurred. From midnight until 1am, 10 percent of all collisions were linked to alcohol.

Figure 1. Percentage of Indiana collisions classified as alcohol-impaired, by weekday, 2015



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Figure 2. Total and alcohol-impaired Indiana collisions, by time of day, 2015



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Comparing road classes, fatal crashes involving an impaired driver were most common on local/city roads and county roads. In 2015, about 13 percent of all fatal collisions on local/city roads involved an impaired driver, while about 18 percent of collisions on county roads involved impaired drivers (Figure 3). Generally, the percentages of Indiana fatal collisions

classified as alcohol impaired have declined since 2012 for most of the road classes. In addition, alcohol-impaired fatal collisions were most common in exurban areas (15 percent of collisions involved an alcoholimpaired driver), followed by suburban areas (14 percent) (Table 3).



Figure 3. Percent of Indiana fatal collisions classified as alcohol-impaired, by road class, 2011-2015

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

1) Collisions in which at least one driver had a BAC of 0.08 or more and that resulted in at least one fatality.

2) Excludes collisions occurring on unknown/unreported road class.

Table 3. Percent of collisions classified as alcohol-impaired, by census locale, 2011-2015									
Collision type/locale	2011	2012	2013	2014	2015				
Fatal									
Urban	17.7%	27.1%	17.2%	14.0%	10.5%				
Suburban	18.5%	19.2%	18.1%	17.3%	13.9%				
Exurban	25.5%	27.6%	14.2%	13.7%	15.3%				
Rural	24.8%	19.1%	18.2%	14.5%	10.5%				
Injury									
Urban	4.0%	4.0%	3.6%	3.3%	3.2%				
Suburban	5.4%	5.6%	5.5%	4.9%	5.4%				
Exurban	5.7%	5.9%	6.1%	5.4%	4.7%				
Rural	5.4%	5.7%	5.9%	5.0%	5.8%				

Table 2	Demonst of collision	alocified as alcohy	1 immed by	compare locale 2011 201E
Table 5.	referent of contisions	s classified as alcond	n-impaired, by	census locale, 2011-2015

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

1) Collisions in which at least one driver had a BAC of 0.08 or more and that resulted in at least one fatality or one injury.

2) Excludes property damage collisions.



ALCOHOL AND DRUG TESTING RATES

Indiana Code 9-30-7-3a states in part that a "law enforcement officer shall offer a portable breath test or chemical test to any person who the officer has reason to believe operated a vehicle that was involved in a fatal accident or an accident involving *serious bodily injury*." Elsewhere, serious bodily injury is defined in IC 35-31.5-2-292 as "bodily injury that creates a substantial risk of death or that causes: (1) serious permanent disfigurement; (2) unconsciousness; (3) extreme pain; (4) permanent or protracted loss or impairment of the function of a bodily member or organ; or (5) loss of a fetus." However, ARIES personal injury classifications for drivers do not include an exactly equivalent category, so it is difficult to precisely identify collisions resulting in "serious

bodily injury." The closest category in 2015 is "incapacitating (transported from scene)." Therefore, testing rates below are measured only for drivers in fatal collisions.

From 2011 to 2015, on average about two-thirds of drivers involved in fatal collisions were reported to have been tested for alcohol and/or drugs (Figure 4). However, the test rate has dropped from 73 percent in 2011 to 62 percent in 2015. Generally, *surviving* drivers are tested at higher rates than drivers who suffered fatal injury, and males were tested at higher rates than females, especially in 2014 and 2015. In 2015, nearly three of four surviving male drivers were tested while about two of three surviving female drivers were tested.

Figure 4. Counts of drivers and alcohol and/or drug test rates for drivers involved in Indiana fatal collisions, by gender and injury outcome, 2011-2015



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

1) Test rate is the percent of drivers given a drug and/or alcohol test, among all involved drivers.

2) Excludes drivers with unknown gender.

BLOOD ALCOHOL CONTENT (BAC), AGE, AND GENDER

Figure 5 shows the 2015 counts and proportions of drivers with reported BAC results in all Indiana collisions, based on age and BAC level. The first age category reflects drivers under 21 years old, for whom any positive BAC level is illegal; 52 percent of these underage drinking drivers had positive (non-zero) BAC levels (calculated from Figure 5). About 78 percent of drivers aged 21 to 24 years had non-zero BAC levels. In terms

of legal impairment (i.e., 0.08 BAC or more), the youngest and oldest driver age categories had the lowest rates (38 and 30 percent, respectively) in comparison to the middle age groups. For example, more than two-thirds of drivers aged 21 to 24 years and roughly 60 percent of drivers between 25 and 55 years of age had BACs of 0.08 or greater in 2015. Another way of viewing the reported BAC results is that if a collision-involved driver is found to have been drinking at all (i.e., non-zero BAC), their reported BAC was much more likely to be in excess of the legal impairment floor (i.e., 0.08 g/dL and above).



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Note: Excludes cases with unknown age or unreported BAC or BAC more than 0.59 g/dL.



From 2011 to 2015, rates of alcohol-impaired drivers per 100,000 licensed drivers varied across age and gender categories (Table 4). Certain gender-age categories exhibited comparatively higher impairment rates than others. Based on non-age weighted rates, males consistently reflected a greater risk of being legally impaired in collisions than females; in each of the five years, males were about three times more likely to be impaired than females in all collisions (calculated from Table 4). The age groups most at risk of alcohol-impairment in collisions were 21 to 24 years and

25 to 34 years. However, considering all collisions, the per capita driver impairment rates have been generally decreasing since 2012 among most of the age groups. Nonetheless, alcohol impairment in fatal collisions was also highest among male drivers aged 21 to 24 and 25 to 34 years. The male-female difference in the rate of driver impairment in fatal collisions was higher than for non-fatal collisions: on average over the five years, male driver impairment in fatal collisions was about seven times greater than for females (calculated from Table 4).

Age group Alcohol-impaired drivers in collisio All drivers	20 Male ons 165.6	011 Female	20 Male)12 Fomalo	20)13	20)14	20)15	
Age group Alcohol-impaired drivers in collisio All drivers	Male ons 165.6	Female	Male	Fomalo						-	
Alcohol-impaired drivers in collision All drivers	ons 165.6			remate	Male	Female	Male	Female	Male	Female	
All drivers	165.6	Alcohol-impaired drivers in collisions									
		55.5	172.4	60.1	160.2	52.6	151.9	48.8	155.7	54.4	
15-20	188.5	47.4	164.4	60.0	146.5	47.1	143.5	36.0	114.5	39.9	
21-24	441.1	160.2	438.8	159.7	420.7	130.6	399.2	131.0	429.3	133.4	
25-34	258.4	93.2	295.7	104.2	274.4	100.5	258.3	90.8	259.8	94.7	
35-44	173.6	67.5	194.3	80.2	185.1	65.9	170.6	64.5	170.9	72.6	
45-54	140.6	54.1	142.2	55.7	139.5	45.9	129.9	44.8	142.9	58.1	
55-64	82.3	20.5	82.8	20.0	71.9	20.6	73.9	16.6	80.4	23.6	
65-74	39.0	5.3	37.6	5.0	30.1	6.0	31.4	9.0	37.4	8.1	
75 and older	10.1	0.0	16.7	0.7	7.7	6.4	13.4	0.0	15.7	0.6	
Alcohol-impaired drivers in fatal c	ollisions										
All drivers	5.6	0.7	7.0	0.7	4.7	0.8	3.9	0.6	3.2	0.6	
15-20	4.5	0.6	6.7	0.0	2.3	1.2	2.3	0.0	1.7	0.6	
21-24	11.5	2.0	14.2	2.5	13.6	3.2	5.5	1.3	6.8	0.6	
25-34	7.7	1.8	11.8	1.4	8.7	1.3	7.1	1.3	4.7	2.3	
35-44	8.3	1.1	9.1	1.4	6.3	1.1	4.4	1.3	4.7	0.5	
45-54	5.7	0.0	6.4	0.5	3.0	0.2	4.8	0.7	2.8	0.2	
55-64	3.3	0.3	2.4	0.0	2.1	0.3	2.3	0.0	2.3	0.2	
65-74	0.5	0.0	2.3	0.0	1.3	0.0	1.2	0.0	0.4	0.0	
75 and older	0.0	0.0	1.6	0.0	0.0	0.6	0.0	0.0	1.5	0.0	
				Low						High	

Table 4. Rates of alcohol-impaired Indiana drivers per 100,000 licensed drivers, by age group and gender, 2011-2015

Sources: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016; Indiana Bureau of Motor Vehicles, as of April 20, 2016.

Notes:

1) Excludes drivers with unknown age or age under 15 years.

2) Conditional formatting applies to a single year across both gender categories and is calculated for each impaired driving collision type presented (all collisions and fatal collisions).

3) Due to changes in Indiana BMV-reported licensing counts and ARIES-reported BAC results, rates cannot be compared directly to previous years' exhibits.

4) Excludes cases with reported BAC greater than 0.59 g/dL.

INCIDENCE OF ALCOHOL-IMPAIRED INJURIES AND FATALITIES

Typically, most individuals injured or killed in Indiana collisions involving at least one impaired driver are comprised of the impaired driver and/or those traveling with that driver, as shown for the year 2015 in Figure 6.

In terms of the 92 persons killed in alcohol-impaired collisions in 2015, roughly three of four fatalities were the impaired driver (53 killed or 58 percent) and/or those drivers' passengers (18 killed or 19 percent). The remaining 21 killed (23 percent) were the unimpaired drivers and their passengers or non-motorists. The pattern of non-fatal injuries in alcohol-impaired collisions in 2015 was similar.



Figure 6. Individuals killed or injured in collisions involving alcohol-impairment, 2015

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

1) n = 1,981 persons with *fatal* or any injury status in alcohol-impaired collisions.

2) Non-motorists include two unimpaired animal-drawn vehicle operators and one impaired animal-drawn vehicle operator.



Alcohol-impaired fatalities and injuries in Indiana varied by month in 2014 (Figure 7). The month of April in late spring had the highest monthly count of fatalities (12) from collisions involving alcohol-impaired drivers. The highest rate of fatalities from alcohol-impaired fatal collisions was also in April, with next highest rates of alcohol-impaired drivers in

January, February, and March. Somewhat surprisingly, the lowest rate of alcohol-impaired drivers in fatal collisions was in the month of June. The highest count of non-fatal injuries from collisions involving alcohol-impaired drivers was in May 2015. The highest rate (9 percent) was in March.



Figure 7. Fatalities and injuries in Indiana collisions involving an alcohol-impaired driver, 2015

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

VEHICLES IN ALCOHOL-IMPAIRED COLLISIONS

The incidence of alcohol-impaired collisions with injuries and fatalities involving one or more units operated by an impaired driver varied by vehicle type across the 2011 to 2015 period (Table 5). From 2014 to 2015, the numbers of persons within collision-involved vehicles driven by alcohol-impaired drivers increased 6 percent. There was an 18 percent decrease in the number of persons on motorcycles operated by alcoholimpaired persons from 2014 to 2015. However, overall it is motorcycles most likely to be operated by alcohol-impaired individuals, followed by pickup trucks.

Table 5. Individuals in Indiana collisions involving alcohol-impaired drivers, by vehicle type, 2011-2015

		Co	Annual ra	te of change			
	2011	2012	2013	2014	2015	2014-15	2011-15
Individuals in vehicles:							
Operated by alcohol-impaired driver	5,259	5,504	5,095	4,834	5,110	5.7%	-0.7%
Passenger car	3,187	3,333	3,251	3,042	3,388	11.4%	1.5%
Sport utility vehicle	674	710	610	612	628	2.6%	-1.8%
Pickup truck	985	1,008	876	877	808	-7.9%	-4.8%
Van	213	211	186	143	154	7.7%	-7.8%
Motorcycle	200	242	172	160	132	-17.5%	-9.9%
Individuals killed in vehicles:							
Operated by alcohol-impaired driver	129	152	115	92	70	-23.9%	-14.2%
Passenger car	57	66	64	42	38	-9.5%	-9.6%
Pickup truck	16	23	23	20	14	-30.0%	-3.3%
Motorcycle	39	41	15	15	10	-33.3%	-28.8%
Sport utility vehicle	15	17	10	13	8	-38.5%	-14.5%
Van	2	5	3	2	0	-100.0%	-100.0%
Unit impairment rate all collisions, by type of unit							
Motorcycle	5.2%	5.4%	4.5%	4.3%	3.8%		
Pickup truck	2.4%	2.7%	2.3%	2.2%	2.0%		
Passenger car	1.8%	1.8%	1.7%	1.5%	1.5%		
Sport utility vehicle	1.6%	1.7%	1.4%	1.3%	1.4%		
Van	1.1%	1.1%	1.1%	0.9%	0.9%		

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016

Notes:

Motorcycles are defined as vehicles reported as *motorcycle, moped, class A and B motor driven cycles,* and *motorized bicycle* riders.
 Excludes *non-motorists* and *other vehicles* not listed (e.g., *large trucks*).



ARIES UNDERCOUNTS OF ALCOHOL-IMPAIRED COLLISIONS AND FATALITIES

In closing, it should be noted that while ARIES data generally offer accurate and reliable counts of collisions and casualties from those collisions each year, the ARIES counts of collisions with one or more alcoholimpaired operators involved, and the fatalities and injuries linked to impaired driving, are regularly undercounted in comparision with the NHTSA Fatality Analysis Reporting System (FARS). The differences between ARIES and FARS for the ten-years from 2005 through 2014 are shown in Table 6. For example, measured as a percentage of total FARS fatal alcohol-impaired collisions, ARIES data has ranged from a low of 16 percent less than FARS (in 2008) to 47 percent less than FARS in 2014 (latest year FARS data are available). Roughly the same percentages of ARIES undercounts are reflected in the respective numbers of fatalities in alcohol-impaired collisions. Reasons for these differences include the use of imputation models by NHTSA when state data about alcohol-involvement are missing and slow or no updating of missing values in ARIES data from year-to-year.

	I	Fatal alcohol-im	paired collision	s	Fatalities in alcohol-impaired collisions					
	Colli	sions	ARIES difference from FARS		Fatal	ities	ARIES difference from FARS			
Year	FARS	ARIES	Count	as % FARS	FARS	ARIES	Count	as % FARS		
2005	230	179	-51	-22.2%	254	199	-55	-21.7%		
2006	226	183	-43	-19.0%	245	198	-47	-19.2%		
2007	204	169	-35	-17.2%	224	186	-38	-17.0%		
2008	185	156	-29	-15.7%	206	173	-33	-16.0%		
2009	192	120	-72	-37.5%	207	127	-80	-38.6%		
2010	186	130	-56	-30.1%	194	135	-59	-30.4%		
2011	195	138	-57	-29.2%	207	145	-62	-30.0%		
2012	217	167	-50	-23.0%	230	177	-53	-23.0%		
2013	182	122	-60	-33.0%	199	134	-65	-32.7%		
2014	192	101	-91	-47.4%	205	108	-97	-47.3%		

Table 6. Comparison of FARS and ARIES reported alcohol-impaired fatal collisions and fatalities, 2005-1014

Sources: Indiana State Police Automated Reporting Information Exchange System, as of March 17, 2016; Fatality Analysis Reporting System (FARS) data encyclopedia, http://www-fars.nhtsa.dot.gov/ accessed July 2, 2016

Notes:

1) Collisions in which at least one driver had a BAC of 0.08 or more and that resulted in at least one fatality

2) 2014 is latest year of FARS data.

DEFINITIONS

- *Alcohol-impaired* The National Highway Traffic Safety Administration (NHTSA) defines drivers as alcohol-impaired "when their blood alcohol concentration (BAC) is 0.08 grams per deciliter (g/dL) or higher [and] any fatal crash involving a driver with a BAC of 0.08 or higher is considered to be an alcohol-impaired-driving crash, and fatalities occurring in those crashes are considered to be alcohol-impaired-driving fatalities" (NHTSA DOT HS 812 102, 2014, p. 1). Indiana drivers meeting this criterion should have at least received a Class C misdemeanor pursuant to IC 9-30-5-1. Drivers with BAC = 0.15 g/dL or greater should have received a Class A misdemeanor pursuant to IC 9-30-5-1. If the driver had a passenger under the age of 18 in the vehicle, a Class D felony could have been imposed. This fact sheet does not explicitly consider these cases but does include them in summary statistics.
- *Census locale Urban* is defined as Census 2010 Urban Areas, *suburban* as areas within 2.5 miles of urban boundaries, *exurban* as areas within 2.5 miles of suburban boundaries, and *rural* as areas beyond exurban boundaries (i.e., everything else).

REFERENCES

National Highway Traffic Safety Administration (NHTSA). (2015). Alcohol-impaired driving, *Traffic Safety Facts*, 2014 Data, DOT HS 812 231 (December), National Center for Statistics and Analysis.

DATA SOURCES

Indiana State Police, Automated Reporting Information Exchange System (ARIES), current as of March 17, 2016.

Indiana Bureau of Motor Vehicles (BMV) licensing data, current as of April 20, 2016.



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

This publication is one of a series of publications that form the analytical foundation of traffic safety program planning and design in the state of Indiana. Funding for these publications is provided by ICJI and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the PPI website (www.policyinstitute.iu.edu), the ICJI website (www.in.gov/cji/), or you may contact the PPI at 317-261-3000.





Traffic Safety Project

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 collaborates each year with the Indiana Criminal Justice Institute to analyze vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the tenth year of this partnership. Research findings are summarized in a series of publications on various aspects of traffic collisions, including alcohol-related crashes, commercial vehicles, dangerous driving, child passenger safety, motorcycles, occupant protection, and drivers. An additional publication provides detailed information on county and municipality data. These publications serve as the analytical foundation of traffic safety program planning and design in Indiana.

Indiana collision data are obtained from Indiana Crash Reports, as completed by law enforcement officers. Crash reports for all Indiana collisions are entered electronically through ARIES. Collisions trends as reported in these publications incorporate the effects of changes to data elements on the Crash Report, agency-specific enforcement policy changes, re-engineered roadways, driver safety education programs, and other unspecified effects. A collision produces three levels of data: collision, unit (vehicles), and individual. For this reason, readers should pay particular attention to the wording of statements about the data to avoid misinterpretations. If you have questions regarding trends or unexpected results, please contact the Indiana Criminal Justice Institute, Traffic Safety Division for more information.

The Indiana Criminal Justice Institute

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

The Governor's Council on Impaired & Dangerous Driving

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

Indiana University Public Policy Institute

The IU Public Policy Institute delivers unbiased research and data-driven, objective, expert analysis to help public, private and nonprofit sectors make important decisions that directly impact quality of life in Indiana. Using the knowledge and expertise of our staff and faculty, we provide research and analysis that is free of political and ideological bias. A multidisciplinary institute within the Indiana University School of Public and Environmental Affairs (SPEA), our efforts also support the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

The National Highway Traffic Safety Administration (NHTSA)

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