A publication of the Indiana University Public Policy Institute



INDIANA CRASH FACTS 2019

MOTORCYCLES SEAT BELT USE PEDESTRIANS YOUNG DRIVERS

ALCOHOL-IMPAIRED

CHILD PASSENGER SAFETY

SPEEDING

INTRODUCTION AND ACKNOWLEDGEMENTS

Designing and implementing effective traffic safety policies requires datadriven analysis of traffic collisions. To help in the policy-making process, the Indiana University Public Policy Institute (PPI) collaborates with the Indiana Criminal Justice Institute (ICJI) to analyze crash data from the Automated Reporting Information Exchange System (ARIES) database maintained by the Indiana State Police. Research findings are summarized in a series of annual publications on various aspects of traffic collisions, including alcohol-impaired crashes, children, motorcycles, dangerous driving, occupant protection, and non-motorists. Portions of the content of those reports and in this 2019 Indiana 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 all local and state law enforcement officers, contains more than 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 drivers, passengers, pedestrians, pedalcyclists, and animal-drawn vehicle occupants 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.

PPI would like to thank ICJI, NHTSA, the Federal Highway Administration (FHWA), the Indiana State Police, and LexisNexis Risk Solutions for their continued support and guidance throughout the process of creating these reports. PPI also appreciates the assistance 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 traveled data.

Funding for these publications is provided by ICJI and NHTSA. An electronic copy of the traffic safety fact sheets, county profile book and this document can be accessed via the PPI traffic safety website (https://trafficsafety.iupui.edu/), the ICJI traffic safety website (https://www.in.gov/cji/), or you may contact the IU Public Policy Institute at 317-278-1305.

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NOTES:

Data discrepancies may exist between the 2019 Indiana traffic safety reports and previous traffic safety publications due to updates to the Indiana State Police ARIES data that have occurred since the original publication dates.

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PROBLEM IDENTIFICATION, 2019

Each year, the Traffic Safety Division of the Indiana Criminal Justice Institute (ICJI) develops a set of benchmarks to assess the state of traffic safety in Indiana as part of its Highway Safety Plan (HSP). These benchmarks correspond to priority program areas established by the National Highway Traffic Safety Administration (NHTSA) and target fatal and injury collisions as they relate to overall injuries, impaired driving, seat belt use, young drivers, motorcycle safety, dangerous driving, child passenger safety, and non-motorist injuries in collisions. Within each area, ICJI establishes specific annual goals and performance measures that relate to collisions and their impact on Indiana. ICJI also works closely with the Indiana Department of Transportation (INDOT) to ensure there is consistency in goal setting between the HSP—which approaches traffic

safety from a policy and law enforcement perspective—and INDOT's Strategic Highway Safety Plan, which approaches traffic safety from an engineering and transportation planning perspective.

Goal setting by the Indiana Criminal Justice Institute

ICJI develops a set of specific short- and long-term goals every year to be included in the HSP that are both consistent with NHTSA's priority program areas and that address each of Indiana's traffic safety problem areas. This section presents a set of baseline measures utilizing the most recent Indiana crash data—as well as historical data—maintained by the Indiana State Police in the Automated Reporting and Information Exchange System (ARIES).

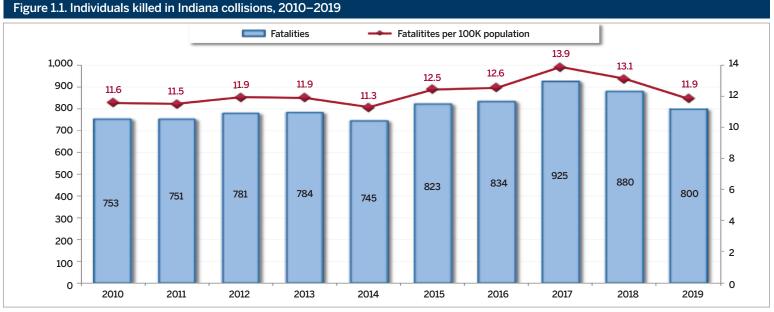
NOTE: Subsequent sections include a general discussion of goals identified in the FY 2021 Indiana Highway Safety Plan. The Indiana University Public Policy Institute uses ARIES crash data to produce a series of six traffic safety fact sheets. These publications, along with this Crash Fact Book and the 2019 Indiana County Profile Book, were produced using the collision database current as of March 17, 2020. Discrepancies between figures presented in previous-year publications are due to updates to the ARIES collision database since the original publication date. For more details on specific goals, please refer to the ICJI FY 2021 Indiana Highway Safety Plan.

GOAL: Reducing fatalities and serious bodily injuries

The severity of a traffic collision is often influenced by many factors, including seat belt use, the speed at which vehicles are traveling, objects with which the vehicles collide, driver impairment and other dangerous driving behaviors, and emergency response times. Crashes in rural areas are more likely to result in fatalities largely due to these circumstances. For example, rural collisions are more likely to occur at higher speeds, with fixed objects that increase the force of impact, and involve greater distance and longer travel times for emergency responders.

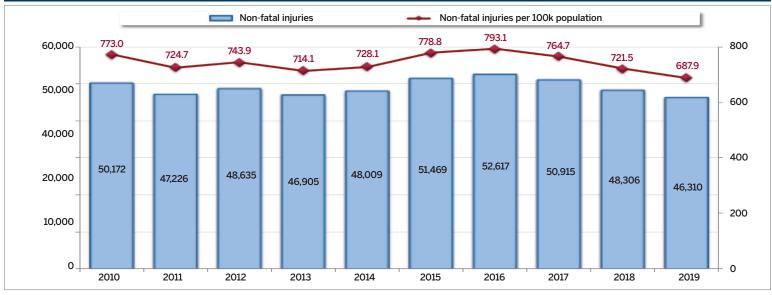
In Indiana, traffic fatality rates have risen in recent years, after reaching a low of 11 per 100,000 of the state's population in 2014 (Figure 1.1). The 2019 Indiana fatality rate per 100k dropped slightly to 12, after reaching a 10-year high of nearly 14 per 100,000 in 2017. There were 880 traffic deaths in 2019, down from 880 the previous year.

The number of non-fatal injuries in collisions fell from 48,306 in 2018 to 46,310 in 2019, reaching a five-year low (Figure 1.2). The rate of non-fatal traffic injuries per 100,000 people also decreased to a ten-year low of 688 in 2019.



Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 13, 2020

Figure 1.2. Individuals suffering non-fatal injuries in Indiana collisions, 2010–2019



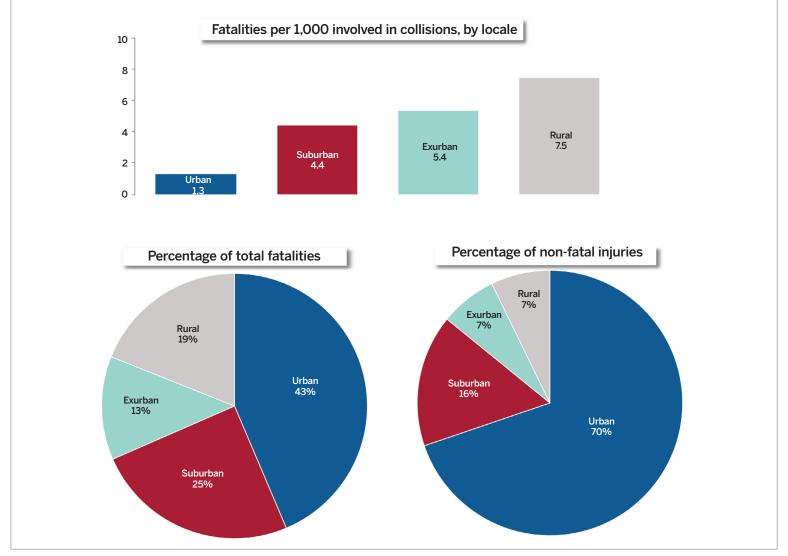
Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 17, 2020

Note: Non-fatal injuries include those reported as incapacitating, non-incapacitating, possible, and refused (treatment).

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Fatalities are more likely to happen than less severe traffic injuries in nonurban areas. In 2019, consistent with previous years, about 32 percent of all traffic fatalities occurred in exurban and rural areas, compared to 14 percent of non-fatal injuries (Figure 1.3). The exurban and rural rates of fatalities per 1,000 people involved in collisions were 5.4 and 7.5, respectively, compared to 1.3 per 1,000 in urban areas.

Figure 1.3. Fatality rates and geographic distribution of fatalities and non-fatal injuries in Indiana collisions, by Census locale, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

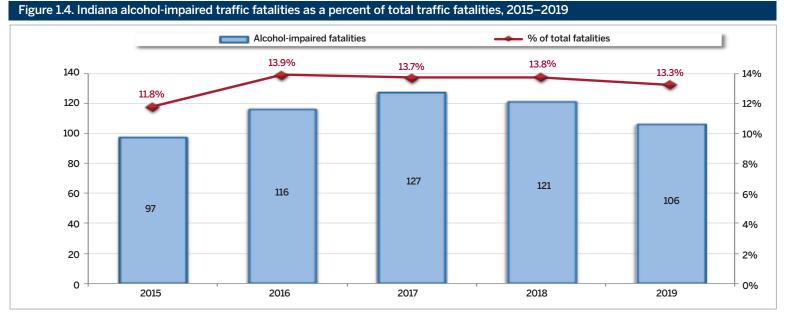
1) Non-fatal injuries include those reported as incapacitating, non-incapacitating, possible, not reported, and unknown.

2) Excludes fatalities and injuries where locale could not be determined.

GOAL: Reducing impaired driving

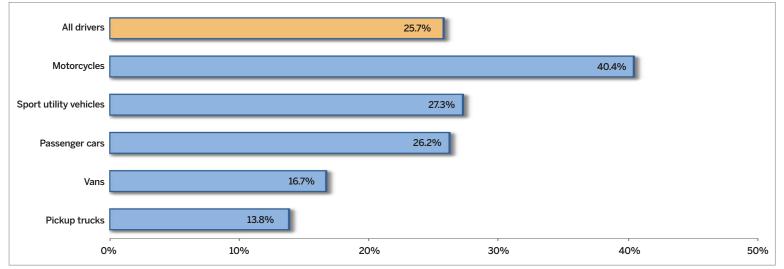
According to available blood alcohol content (BAC) test results reported in ARIES, 106 people died in alcohol-impaired driving crashes in 2019. The percentage of Indiana traffic fatalities that involved an impaired driver (13 percent) dropped from nearly 14 percent in 2018 (Figure 1.4). According to the most recent data available from the NHTSA's Fatality Analysis Reporting System, 26 percent of all 2018 Indiana traffic fatalities involved an alcohol-impaired driver (DOT HS 812 864).

Rates of driver alcohol impairment vary by vehicle type. Figure 1.5 shows that, among drivers in 2019 fatal crashes who had BAC test results reported in ARIES, motorcycle operators (40 percent) and sport utility vehicle drivers (27 percent) had the highest percentages of impaired driving across all vehicle types. Twenty-six percent of all drivers in fatal collisions in Indiana were legally impaired.



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Figure 1.5. Percentage of drivers involved in fatal collisions with reported BAC results who were legally impaired, by vehicle type, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes:

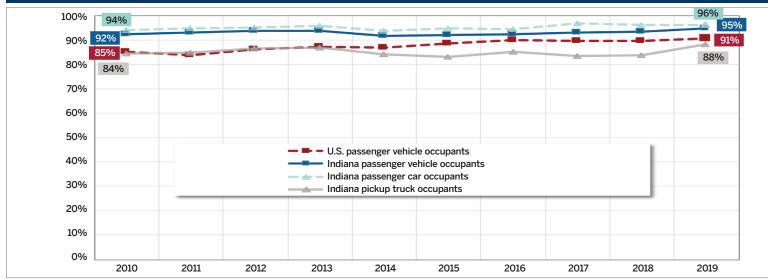
1) Includes only passenger vehicles (passenger cars, pickup trucks, sport utility vehicles, and vans) and motorcycles. Non-motorists and other vehicle types are excluded.

- 2) Motorcycles include motorcycles, motor driven cycles Class A, mopeds, motorized bicycles, and motor driven cycles Class B
- 3) Drivers in fatal collisions with no reported BAC results are excluded.

GOAL: Increasing seat belt use

Between 2010 and 2019, Indiana's observational rate of seat belt use among passenger vehicle occupants remained consistent at 93 percent on average, a rate that was 2 percentage points higher than the most recently reported national rate (Figure 1.6). According to observational surveys in Indiana, seat belt use rates in pickup trucks continually lag behind rates for passenger cars. However, they have increased during the past decade from 84 to 88 percent between 2010 and 2019. Seat belt use among people involved in collisions varies by injury severity and census locale. Overall, occupants involved in collisions in 2019 in densely populated urban (91 percent) and suburban areas (91 percent) were more likely to be buckled up compared to people in rural areas (Figure 1.7). Restraint use is also consistently much lower among those killed in collisions across all locales. Among passenger vehicle occupants, 42 percent of people killed in urban areas were wearing seat belts, 52 percent in exurban areas, 45 percent in suburban and rural areas.

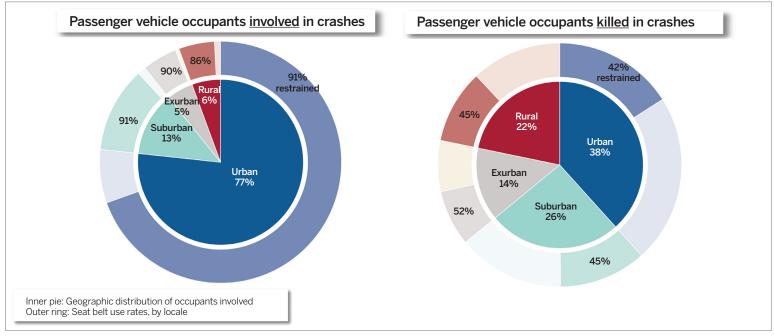




Sources: Indiana - Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, Center for Road Safety, Purdue University, 2019 U.S. - DOT HS 812 875, December 2019

Note: Car and pickup truck restraint use rates are specific to Indiana only.

Figure 1.7. Seat belt use among passenger vehicle occupants in Indiana collisions, by injury status and Census locale, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes

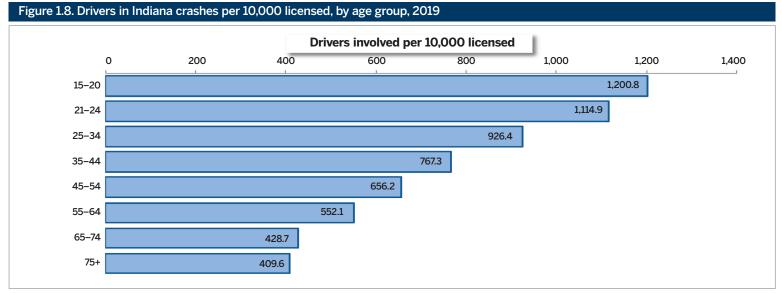
1) Passenger vehicles include vehicles reported as a passenger car, pickup truck, van, or sport utility vehicle.

2) Excludes cases where locale could not be determined.

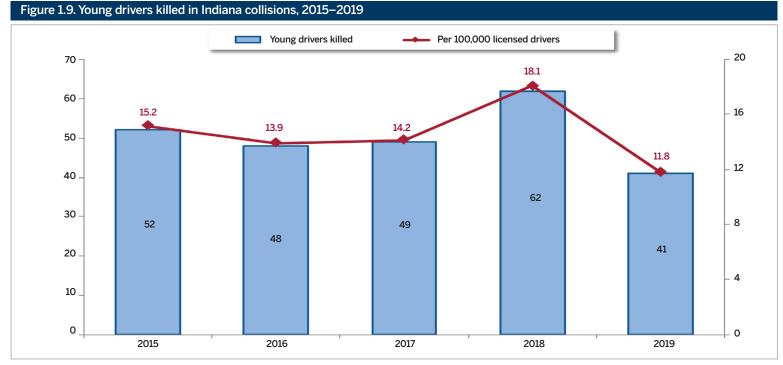
GOAL: Reducing young driver involvement in fatal crashes

In 2019, consistent with previous years, collision involvement rates were higher among young drivers, ages 15 to 20, than any other age group (Figure 1.8). Crash rates are lowest among drivers 75 years and older (410 per 10,000 licensed), but are nearly three times higher for young drivers (1,201 per 10,000 licensed). Research shows part of this dramatic difference is due to aggressive driving and a lack of experience among young drivers.

The overall number of young drivers involved in collisions dropped between 2018 and 2019, from 42,279 to 41,806, respectively. During this same time, the number of young drivers killed in collisions reached a fiveyear low, decreasing from 62 in 2018 to 41 in 2019 (Figure 1.9).



Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020; Indiana Bureau of Motor Vehicles, as of April 3, 2020 Note: Drivers with unknown or invalid age are excluded.



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Young drivers include drivers ages 15 to 20 years old.

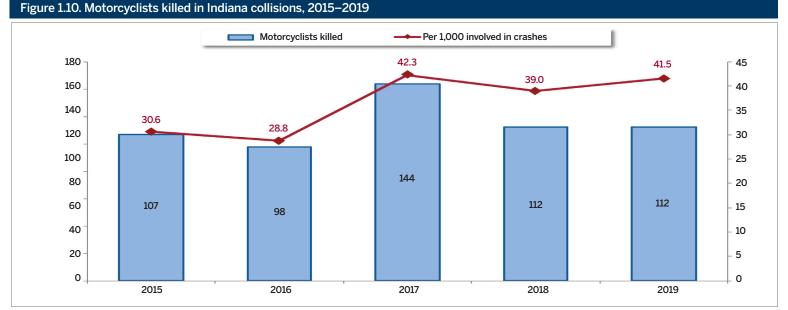
2) Non-motorists are excluded.

GOAL: Reducing motorcyclist fatalities and unhelmeted fatalities

The number of motorcyclist fatalities in Indiana remained the same—112 between 2018 and 2019 (Figure 1.10). Meanwhile, the rate of motorcyclists involved in crashes increased slightly to 41.5 per 1,000 in 2019 after reaching a five-year high (42.3 per 1,000) in 2017 and falling to 39.0 per

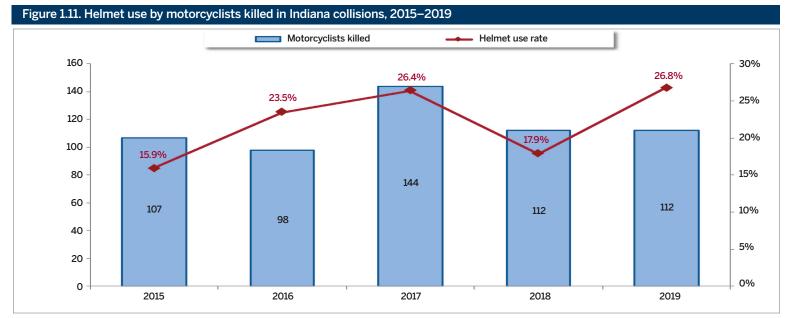
1,000 in 2018.

In Indiana, only operators and passengers younger than 18 and operators with a motorcycle learner's permit are required to wear a helmet. In 2019, 35 percent of motorcyclists involved in collisions were wearing helmets (not shown). Among motorcyclists killed in crashes in 2019, 27 percent



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Motorcyclists include operators and passengers of motorcycles, motor driven cycles Class A, mopeds, motorized bicycles, and motor driven cycles Class B.



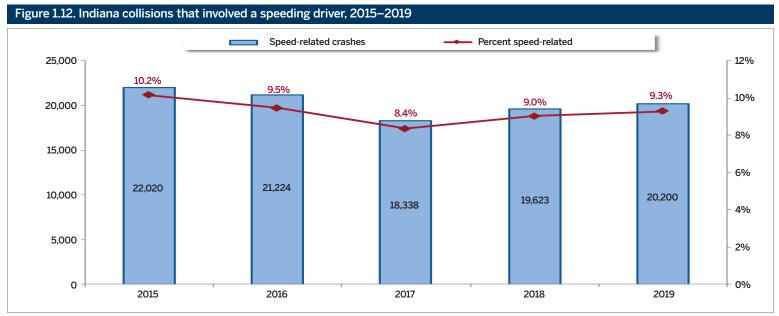
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Motorcyclists include operators and passengers of motorcycles, motor driven cycles Class A, mopeds, motorized bicycles, and motor driven cycles Class B.

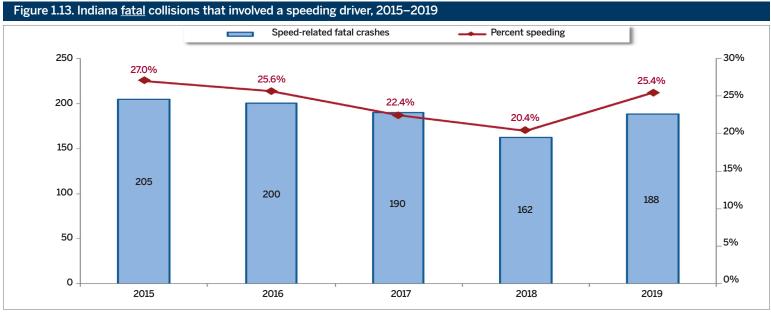
GOAL: Reducing drivers speeding in crashes

After decreasing for three consecutive years, the number of Indiana collisions that involved a speeding driver jumped to 19,623 in 2018 and 20,200 in 2019 (Figure 1.12). Among fatal collisions, the number that

involved a speeding driver fell from 190 in 2017 to 162 in 2018—marking a five-year low in speed-related fatal crashes—and rose to 188 in 2019. Meanwhile, 9 percent of the state's collisions in 2019 involved a speeding driver compared to 25 percent of the state's fatal collisions (Figures 1.12 and 1.13).



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020



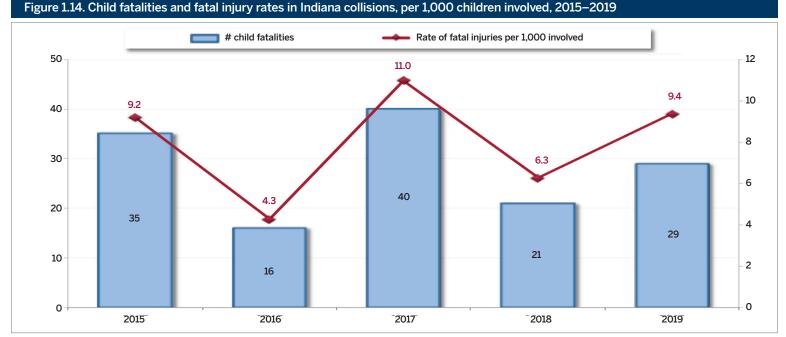
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

GOAL: Reducing fatalities and serious injuries among children

The total number of children killed in crashes increased from 21 in 2018 to 29 in 2019. (Figure 1.14). The rate of fatal injuries per 1,000 children involved in crashes also increased between 2018 and 2019. However, the number of child fatalities in 2019 are lower than 2015 (35) and the five-year high in 2017 (40).

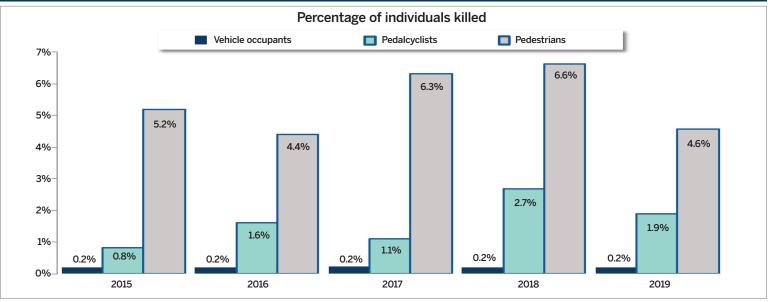
GOAL: Reducing fatalities among non-motorists

In 2019, non-motorists—pedestrians and pedalcyclists—represented less than 1 percent of people involved in traffic collisions. However, they made up 11 percent of Indiana's total traffic fatalities (not shown). The number of pedestrian and pedalcyclist fatalities in collisions both reached a five-year high in 2018, and fell in 2019. The percentage of pedestrians killed in Indiana crashes declined from 7 percent in 2018 to 5 percent in 2019 (Figure 1.15). The percentage of pedalcyclists who died in crashes also decreased from 3 percent to 2 percent in that same time period.



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Figure 1.15. Fatalities in Indiana collisions as a percent of all involved, by person type, 2015–2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Animal-drawn vehicle operators are excluded.



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COUNTY COMPARISONS BY SUBJECT AREA, 2019

Understanding the spatial distribution of traffic collisions and injuries can assist officials in developing policies and targeting resources to address the many variables that may impact the geography of crashes. A variety of factors may influence the number and nature of traffic collisions that occur in a given area, including the size and makeup of the population, the number of registered vehicles and licensed drivers, the number of vehicle miles traveled (VMT), and, perhaps most importantly, human behaviors and social norms that may contribute to the likelihood of particular types of crashes occurring in regions throughout the state. The following tables and choropleth maps show various collision and injury rates in Indiana counties in 2019.

Note: Choropleth maps show counties grouped by quartiles.

Collision severity and injuries

In 2019, 217,396 collisions occurred in Indiana, 739 of which were fatal. Counties averaged 2,363 collisions that same year, with an average of 8 fatal crashes (Table 2.1). Marion County ranked highest in the total number of collisions (37,726), and Benton County ranked highest in the percentage of all collisions that were fatal (3.3). The mean county rate of collisions per 100 million VMT was 228, and the median rate was 223 (Map 2.1). Ohio (432), Tippecanoe (405), Brown (391), and Monroe (346) counties had the highest rates of collisions per 100M VMT.

The total number of individuals involved in 2019 Indiana collisions was 350,646. Across all counties, there was an average of 3,811 people in crashes (Table 2.2). Marion County had the largest number of individuals involved (66,277) and the largest number of traffic fatalities (106). The median county traffic fatality rate per 100,000 people was 14 (Map 2.2), with Benton County having the highest rate per 100,000 (69) and Blackford, Ohio, Pike, and Warren counties having the lowest (0).

Speed-related collisions

Speed-related collisions accounted for 9 percent of all Indiana collisions in 2019, and 25 percent of all fatal collisions (Table 2.3). The average number of speed-related collisions per county was 220. Jay County (2 percent) had the lowest percentage of speed-related collisions, and Tipton (17.5 percent) and Newton (17.2 percent) counties had the highest percentages of collisions that were speed-related. The median county percent of speed-related collisions was 8.6, and many counties with the highest percentages of speed-related collisions were clustered in the northern third of the state (Map 2.3).

Alcohol collisions

Indiana collisions that involved an alcohol-impaired driver accounted for 2 percent of all Indiana collisions in 2019, and 14 percent of all fatal collisions (Table 2.4). The average number of alcohol-impaired collisions per county was 43, and the average number of fatal alcohol-impaired collisions per county was 1. The mean rate of alcohol-impaired drivers in county collisions per 10,000 licensed drivers was 8. Allen and LaPorte (17 per 10,000) and Sullivan (14 per 10,000) counties had the highest rates of

alcohol-impaired drivers in collisions, Ohio (2 per 10,000) and Greene (3 per 10,000) counties had the lowest rates of alcohol-impaired drivers in collisions (Map 2.4).

Deer collisions

More than 16,000 Indiana collisions in 2019 involved deer. Counties with the highest percentage of deer-involved collisions were clustered in areas outside of central Indiana in predominantly rural areas (Map 2.5). The mean percentage of deer-related collisions was 17 percent. Pulaski County (48) and Warren County (43 percent) had the highest percentages of deer-involved collisions, while the urban counties of Marion (0.3 percent) and Lake (2 percent) had the lowest percentages of collisions that involved deer.

Work zone collisions

There were 5,459 work zone collisions in Indiana in 2019 (Map 2.6). The mean county rate of work zone collisions per 1,000 total collisions was 20, and the median rate was 14. Given that work zone locations are constantly changing throughout the state, counties with the highest work zone collision rates tend to vary from year to year. In 2019, Madison (93), Decatur (92), Jackson (85), and Bartholomew (82) counties had the highest rates of work zone collisions per 1,000 collisions.

Restraint use

Fifty-five percent of all passenger vehicle (passenger cars, pickup trucks, sport utility vehicles, and vans) occupants killed in Indiana collisions were unrestrained in 2019, while only 8 percent of individuals suffering non-incapacitating injuries were unrestrained (Table 2.5). The median county percent of unrestrained passenger vehicle occupants injured in collisions was 16 (Map 2.7). Union (45) and Crawford (38) counties had the highest rates of unrestrained occupants injured in collisions. More generally, urban and suburban counties in central and northern Indiana had lower percentages of unrestrained injuries.

Young drivers

In 2019, 41,804 young drivers (ages 15 to 20) were involved in collisions (12 percent of all drivers involved). That same year, 41 young drivers were involved in 2019 fatal collisions (Table 2.6). Union County (25 percent) had the highest percentage of young drivers in collisions. The mean county rate of young driver involvement in collisions was 103 per 1,000 licensed young drivers, and the median county rate was 99. Counties that are the locations of large universities (Delaware, Monroe, Vanderburgh, Tippecanoe, Vigo, and Marion) were among the highest 12 rates of young driver involvement in collisions (Map 2.8), continuing a pattern observed year to year over the past decade.

Motorcyclists involved in collisions

In 2019, 2,698 motorcyclists were involved in collisions, and 112 motorcyclists were killed in collisions (Table 2.7). Four percent of collisions

in Indiana counties involved one or more motorcycles. The highest rates of motorcyclists involved in collisions occurred in the southern Indiana counties of Brown (39 per 1,000), Crawford (28 per 1,000), and Switzerland (24 per 1,000) (Map 2.9).

Hit-and-run collisions

Drivers in collisions resulting in injury or death are expected to remain or immediately return to the scene to provide proper identification (IC 9-26-1-1); otherwise, the crash is considered a hit-and-run. Hit-andrun collisions accounted for 13 percent or 28,122 of the 217,396 collisions in Indiana in 2019. The average county percent of hit-and-run collisions was 8, and the median county percent was 7 (Map 2.10). The urban counties of Allen (20.6 percent), St. Joseph (19.6 percent), Marion (19.5 percent), Lake (18.7 percent), and Vigo (18.4 percent) counties had the highest hit-and-run collision rates in 2019.

County ranks

Table 2.8 shows Indiana counties ranked by six collision metrics:

- Fatalities per 100K population
- · Percentage of speed-related collisions
- · Percentage of alcohol-impaired collisions
- Motorcyclists per 1,000 individuals involved in collisions
- · Percentage of unrestrained passenger vehicle injuries in collisions
- Young drivers in collisions per 1,000 licensed drivers.

An average score of these six metrics was also calculated to provide an indication of a county's overall traffic safety environment. However, a number of factors not accounted for here—such as different population compositions, road types, driving conditions, crash reporting practices, etc.—may influence collision rankings, so readers should be mindful of these differences when viewing county ranks.

Table 2.1. Indiana collisions, by severity and county, 2019

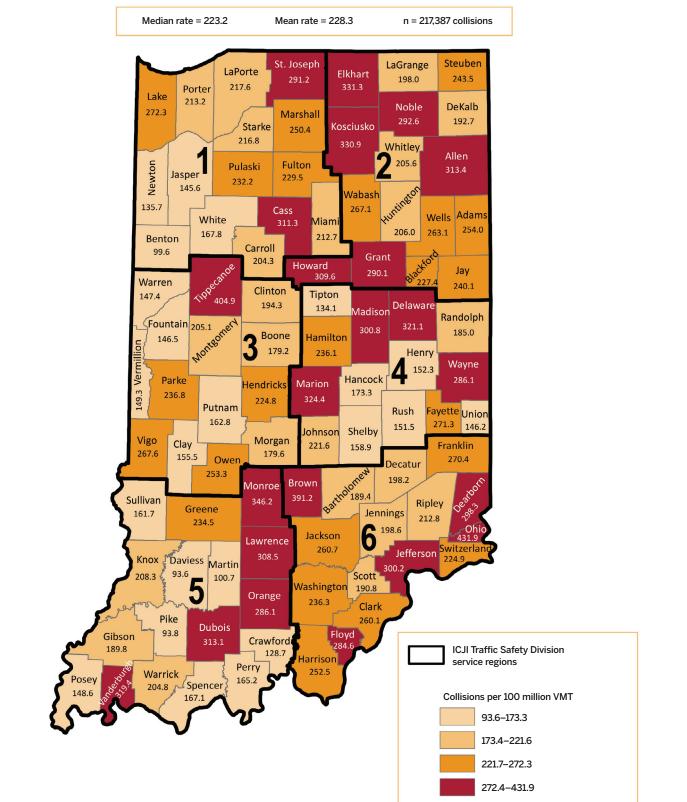
Total collision:CountCountAll counties217,387Mean2,363Median1,021Minimum111Maximum37,726Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534Carroll551	nty rank N/A N/A N/A N/A N/A 57 3 24 90 84 23	Count 739 8 6 0 101 7 36 9 5 0	Fatal As % county total 0.3 0.6 0.5 0.0 3.3 0.9 0.3 0.4	County rank (on %) N/A N/A N/A N/A 13 63	Non-fa	tal injury As % county total 14.3 13.8 14 7.3 28.0	Count 185,454 2,016 876 92 31,822	damage only As % county total 85.3 85.6 86 69.6
All counties217,387Mean2,363Median1,021Minimum111Maximum37,726Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534	N/A N/A N/A N/A N/A 57 3 24 90 84 23	739 8 6 0 101 7 36 9 5	total 0.3 0.6 0.5 0.0 3.3 0.9 0.3 0.4	(on %) N/A N/A N/A N/A 13	31,194 339 133 18 5,803	total 14.3 13.8 14 7.3 28.0	185,454 2,016 876 92	total 85.3 85.6 86
Mean2,363Median1,021Minimum111Maximum37,726Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534	N/A N/A N/A S7 3 24 90 84 23	8 6 0 101 7 36 9 5	0.6 0.5 0.0 3.3 0.9 0.3 0.4	N/A N/A N/A N/A 13	339 133 18 5,803	13.8 14 7.3 28.0	2,016 876 92	85.6 86
Median1,021Minimum111Maximum37,726Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534	N/A N/A N/A 57 3 24 90 84 23	6 0 101 7 36 9 5	0.5 0.0 3.3 0.9 0.3 0.4	N/A N/A N/A 13	133 18 5,803	14 7.3 28.0	876 92	86
Minimum111Maximum37,726Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534	N/A N/A 57 3 24 90 84 23	0 101 7 36 9 5	0.0 3.3 0.9 0.3 0.4	N/A N/A 13	18 5,803	7.3 28.0	92	
Maximum37.726Adams763Allen13.976Bartholomew2.085Benton153Blackford283Boone2.238Brown534	N/A 57 3 24 90 84 23	101 7 36 9 5	3.3 0.9 0.3 0.4	N/A 13	5,803	28.0		69.6
Adams763Allen13,976Bartholomew2,085Benton153Blackford283Boone2,238Brown534	57 3 24 90 84 23	7 36 9 5	0.9 0.3 0.4	13			31,822	
Allen 13,976 Bartholomew 2,085 Benton 153 Blackford 283 Boone 2,238 Brown 534	3 24 90 84 23	36 9 5	0.3 0.4		84			91.9
Bartholomew2,085Benton153Blackford283Boone2,238Brown534	24 90 84 23	9 5	0.4	63		11.0	672	88.1
Benton 153 Blackford 283 Boone 2,238 Brown 534	90 84 23	5			2,192	15.7	11,748	84.1
Blackford283Boone2,238Brown534	84 23			48	520	24.9	1,556	74.6
Boone 2,238 Brown 534	23	0	3.3	1	18	11.8	130	85.0
Brown 534			0.0	89	28	9.9	255	90.1
Brown 534		4	0.2	76	258	11.5	1,976	88.3
	69	4	0.7	27	77	14.4	453	84.8
	67	4	0.7	29	70	12.7	477	86.6
Cass 1,301	36	3	0.2	68	162	12.5	1,136	87.3
Clark 4,218	12	9	0.2	71	557	13.2	3,652	86.6
Clay 668	60	6	0.9	15	101	15.1	561	84.0
Clinton 1,041	46	3	0.3	60	101	11.0	924	88.8
Crawford 279	85	2	0.7	30	31	11.0	246	88.2
Daviess 339	83	8	2.4	4	95	28.0	236	69.6
Dearborn 1,842	26	9	0.5	45	214	11.6	1,619	87.9
	53		0.3	45 54	110	12.2	789	87.5
		3						
DeKalb 1,360	34	2	0.1	81	138	10.1	1,220	89.7
Delaware 4,091	13	17	0.4	50	569	13.9	3,505	85.7
Dubois 1,505	32	1	0.1	88	162	10.8	1,342	89.2
Elkhart 6,979	8	27	0.4	52	777	11.1	6,175	88.5
Fayette 501	72	5	1.0	12	71	14.2	425	84.8
Floyd 2,800	18	5	0.2	77	358	12.8	2,437	87.0
Fountain 402	78	1	0.2	65	32	8.0	369	91.8
Franklin 607	64	2	0.3	55	64	10.5	541	89.1
Fulton 625	62	4	0.6	34	58	9.3	563	90.1
Gibson 1,114	41	3	0.3	61	172	15.4	939	84.3
Grant 2,355	21	10	0.4	49	229	9.7	2,116	89.9
Greene 861	54	6	0.7	31	127	14.8	728	84.6
Hamilton 8,538	5	12	0.1	82	993	11.6	7,533	88.2
Hancock 1,971	25	11	0.6	39	312	15.8	1,648	83.6
Harrison 1,186	40	9	0.8	24	178	15.0	999	84.2
Hendricks 4,503	10	16	0.4	53	583	12.9	3,904	86.7
Henry 1,070	42	6	0.6	38	192	17.9	872	81.5
Howard 2,380	20	12	0.5	43	371	15.6	1,997	83.9
Huntington 1,308	35	7	0.5	41	195	14.9	1,106	84.6
Jackson 1,824	27	14	0.8	22	201	11.0	1,609	88.2
Jasper 1,261	38	5	0.4	51	152	12.1	1,104	87.5
Jay 560	66	7	1.3	8	69	12.3	484	86.4
Jefferson 916	52	5	0.5	40	122	13.3	789	86.1
Jennings 674	59	7	1.0	10	98	14.5	569	84.4
Johnson 3,812	15	6	0.2	80	617	16.2	3,189	83.7
Knox 1,046	45	7	0.7	32	159	15.2	880	84.1
Kosciusko 2,795	19	9	0.3	56	399	14.3	2,387	85.4
LaGrange 1,001	47	5	0.5	44	90	9.0	906	90.5
Lake 17,821	2	43	0.2	66	2,596	14.6	15,182	85.2
LaPorte 3,766	16	11	0.3	58	563	14.9	3,192	84.8
Lawrence 1,375	33	9	0.7	33	173	12.6	1,193	86.8
Madison 4,271	11	11	0.3	64	542	12.7	3,718	87.1

Table 2.1. Indiana collisions, by severity and county, 2019 (continued)

	Table 2.1. Indiana collisions, by severity and county, 2019 (continued)										
	Total	collisions		Fatal		Non-fa	tal injury	Property damage only			
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total		
Marion	37,726	1	101	0.3	62	5,803	15.4	31,822	84.4		
Marshall	1,562	31	9	0.6	36	193	12.4	1,360	87.1		
Martin	129	91	4	3.1	3	26	20.2	99	76.7		
Miami	1,066	43	6	0.6	37	154	14.4	906	85.0		
Monroe	3,852	14	5	0.1	84	652	16.9	3,195	82.9		
Montgomery	1,052	44	5	0.5	46	161	15.3	886	84.2		
Morgan	1,782	28	4	0.2	69	249	14.0	1,529	85.8		
Newton	360	81	6	1.7	5	50	13.9	304	84.4		
Noble	1,291	37	10	0.8	19	159	12.3	1,122	86.9		
Ohio	186	88	0	0.0	89	21	11.3	165	88.7		
Orange	520	70	4	0.8	21	68	13.1	448	86.2		
Owen	503	71	1	0.2	74	65	12.9	437	86.9		
Parke	459	74	5	1.1	9	57	12.4	397	86.5		
Perry	410	77	3	0.7	28	56	13.7	351	85.6		
Pike	186	88	0	0.0	89	46	24.7	140	75.3		
Porter	5,243	9	7	0.1	83	873	16.7	4,363	83.2		
Posey	565	65	1	0.2	78	62	11.0	502	88.8		
Pulaski	439	76	7	1.6	6	61	13.9	371	84.5		
Putnam	960	49	8	0.8	17	143	14.9	809	84.3		
Randolph	489	73	5	1.0	11	51	10.4	433	88.5		
Ripley	775	56	6	0.8	20	120	15.5	649	83.7		
Rush	344	82	1	0.3	59	53	15.4	290	84.3		
St. Joseph	8,670	4	26	0.3	57	1,287	14.8	7,357	84.9		
Scott	681	58	4	0.6	35	107	15.7	570	83.7		
Shelby	1,215	39	10	0.8	18	226	18.6	979	80.6		
Spencer	616	63	9	1.5	7	88	14.3	519	84.3		
Starke	538	68	1	0.2	75	51	9.5	486	90.3		
Steuben	1,640	30	14	0.9	16	119	7.3	1,507	91.9		
Sullivan	442	75	2	0.5	47	60	13.6	380	86.0		
Switzerland	220	87	7	3.2	2	25	11.4	188	85.5		
Tippecanoe	7,022	7	14	0.2	73	1,047	14.9	5,961	84.9		
Tipton	394	79	3	0.8	23	88	22.3	303	76.9		
Union	111	92	1	0.9	14	18	16.2	92	82.9		
Vanderburgh	7,144	6	9	0.1	85	1,317	18.4	5,818	81.4		
Vermillion	377	80	2	0.5	42	63	16.7	312	82.8		
Vigo	3,397	17	8	0.2	67	475	14.0	2,914	85.8		
Wabash	933	50	7	0.8	26	116	12.4	810	86.8		
Warren	233	86	0	0.0	89	20	8.6	213	91.4		
Warrick	1,699	29	3	0.2	79	230	13.5	1,466	86.3		
Washington	664	61	5	0.8	25	103	15.5	556	83.7		
Wayne	2,337	22	5	0.2	70	320	13.7	2,012	86.1		
Wells	797	55	1	0.1	86	82	10.3	714	89.6		
White	924	51	1	0.1	87	97	10.5	826	89.4		
Whitley	983	48	2	0.2	72	139	14.1	842	85.7		
Unknown	9	N/A	0	N/A	N/A	0	N/A	9	N/A		

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Non-fatal injury collisions include collisions with incapacitating, non-incapacitating and possible injuries.



Map 2.1. Traffic collisions per 100M vehicle miles traveled, by county and ICJI Traffic Safety Division service region, 2019

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 Indiana Department of Transportation, county-level VMT (2018), current as of March 30, 2020

Table 2.2. Individuals involved in Indiana collisions, by injury status and county, 2019

	Total indivi	duals involved		Fatal		Incap	pacitating	Non-incapacitating		No injury	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total	Count	As % county total
All counties	350,641	N/A	800	0.2	N/A	19,837	5.7	26,473	7.5	303,531	86.6
Mean	3,811	N/A	9	0.5	N/A	216	7.5	288	6.6	3,299	85.4
Median	1,470	N/A	6	0.3	N/A	106	7.3	98	6.5	1,272	85.9
Minimum	156	N/A	0	0.0	N/A	14	1.0	5	1.8	133	70.4
Maximum	66,277	N/A	106	2.9	N/A	2,138	18.8	6,226	12.7	57,807	90.7
Adams	1,134	57	11	1.0	9	60	5.3	113	10.0	950	83.8
Allen	22,377	3	38	0.2	64	1,215	5.4	2,071	9.3	19,053	85.1
Bartholomew	3,644	21	10	0.3	51	314	8.6	440	12.1	2,880	79.0
Benton	207	90	6	2.9	1	17	8.2	14	6.8	170	82.1
Blackford	369	84	0	0.0	89	21	5.7	15	4.1	333	90.2
Boone	3,555	22	4	0.1	79	218	6.1	169	4.8	3,164	89.0
Brown	690	72	5	0.7	15	54	7.8	52 53	7.5	579	83.9
Carroll	718	70	4	0.6	26	62	8.6		7.4	599	83.4
Cass Clark	1,896 6,963	35 11	3	0.2 0.1	67 76	146 439	7.7 6.3	116 389	6.1	1,631 6,126	86.0 88.0
Clay	1,020	60	9 7	0.1	76 17	439 89	6.3 8.7	52	5.6 5.1	872	85.5
Clinton	1,514	46	3	0.7	17 59	89 113	8.7 7.5	52 85	5.6	1,313	86.7
Crawford	326	46 85	2	0.2	59 22	28	7.5 8.6	85 17	5.6	279	85.6
Daviess	538	79	11	2.0	3	101	18.8	47	8.7	379	70.4
Dearborn	2,802	27	9	0.3	46	203	7.2	109	3.9	2,481	88.5
Decatur	1,352	51	3	0.2	40 55	71	5.3	78	5.8	1,200	88.8
DeKalb	1,938	34	2	0.2	80	95	4.9	99	5.1	1,742	89.9
Delaware	6,522	14	18	0.3	50	314	4.8	550	8.4	5,640	86.5
Dubois	2,226	30	10	0.0	88	107	4.8	138	6.2	1,980	88.9
Elkhart	11,306	7	27	0.2	53	741	6.6	473	4.2	10,065	89.0
Fayette	777	66	5	0.6	18	48	6.2	57	7.3	667	85.8
Floyd	4,721	18	6	0.1	77	245	5.2	282	6.0	4,188	88.7
Fountain	509	81	1	0.2	60	22	4.3	29	5.7	457	89.8
Franklin	798	63	2	0.3	52	63	7.9	26	3.3	707	88.6
Fulton	792	64	4	0.5	34	59	7.4	28	3.5	701	88.5
Gibson	1,722	40	3	0.2	63	135	7.8	135	7.8	1,449	84.1
Grant	3,475	24	11	0.3	47	195	5.6	170	4.9	3,099	89.2
Greene	1,134	57	6	0.5	27	99	8.7	85	7.5	944	83.2
Hamilton	14,997	4	14	0.1	81	646	4.3	1,001	6.7	13,336	88.9
Hancock	3,336	25	12	0.4	43	301	9.0	190	5.7	2,833	84.9
Harrison	1,748	39	9	0.5	32	166	9.5	131	7.5	1,442	82.5
Hendricks	7,570	10	18	0.2	54	420	5.5	402	5.3	6,730	88.9
Henry	1,691	42	6	0.4	44	182	10.8	121	7.2	1,382	81.7
Howard	4,032	20	12	0.3	48	262	6.5	260	6.4	3,498	86.8
Huntington	1,823	36	7	0.4	39	130	7.1	155	8.5	1,531	84.0
Jackson	2,727	28	17	0.6	20	148	5.4	149	5.5	2,413	88.5
Jasper	1,720	41	5	0.3	49	105	6.1	101	5.9	1,509	87.7
Jay	769	67	7	0.9	11	42	5.5	63	8.2	657	85.4
Jefferson	1,406	48	6	0.4	38	116	8.3	76	5.4	1,208	85.9
Jennings	1,040	59	10	1.0	10	68	6.5	74	7.1	888	85.4
Johnson	6,737	13	6	0.1	82	497	7.4	375	5.6	5,859	87.0
Knox	1,542	45	8	0.5	29	125	8.1	109	7.1	1,300	84.3
Kosciusko	4,190	19	9	0.2	56	44	1.1	532	12.7	3,605	86.0
LaGrange	1,386	49	5	0.4	42	30	2.2	108	7.8	1,243	89.7
Lake	29,828	2	47	0.2	68	1,996	6.7	1,834	6.1	25,951	87.0
LaPorte	5,652	16	11	0.2	61	316	5.6	529	9.4	4,796	84.9
Lawrence	2,094	33	9	0.4	37	111	5.3	155	7.4	1,819	86.9
Madison	6,777	12	11	0.2	65	510	7.5	310	4.6	5,946	87.7 ued on next page

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INDIANA TRAFFIC SAFETY FACTS

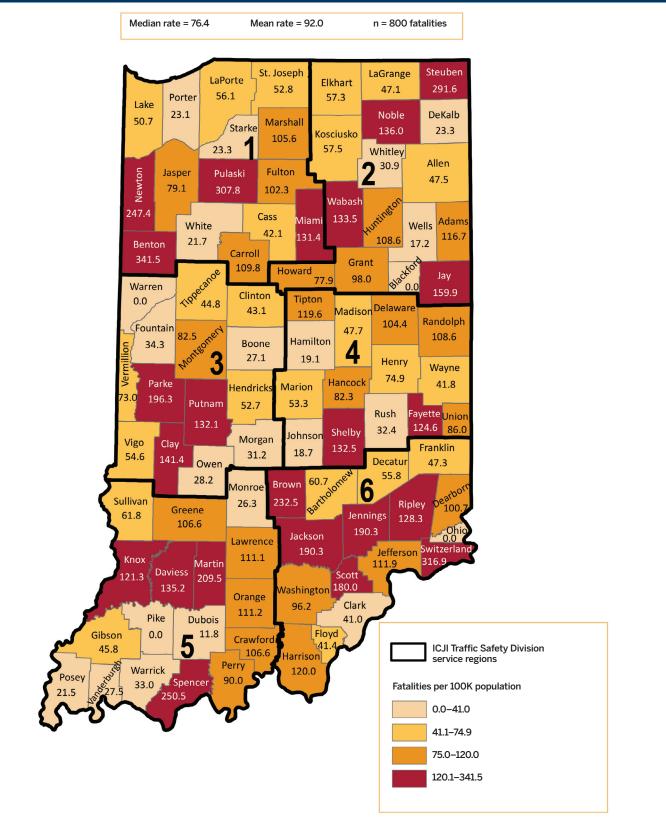
Table 2.2. Individuals involved in Indiana collisions, by injury status and county, 2019 (continued)

	Total individuals involved		Fatal			Incap	acitating	Non-inc	apacitating	Other/no injury	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total	Count	As % county total
Marion	66,277	1	106	0.2	66	2,138	3.2	6,226	9.4	57,807	87.2
Marshall	2,197	31	10	0.5	36	149	6.8	145	6.6	1,893	86.2
Martin	196	91	4	2.0	4	27	13.8	16	8.2	149	76.0
Miami	1,556	44	8	0.5	33	147	9.4	97	6.2	1,304	83.8
Monroe	6,077	15	5	0.1	84	366	6.0	613	10.1	5,093	83.8
Montgomery	1,569	43	6	0.4	41	149	9.5	99	6.3	1,315	83.8
Morgan	2,911	26	4	0.1	74	227	7.8	166	5.7	2,514	86.4
Newton	475	83	6	1.3	6	55	11.6	20	4.2	394	82.9
Noble	1,773	38	13	0.7	13	120	6.8	115	6.5	1,525	86.0
Ohio	228	89	0	0.0	89	18	7.9	15	6.6	195	85.5
Orange	695	71	4	0.6	25	63	9.1	34	4.9	594	85.5
Owen	725	69	1	0.1	72	42	5.8	60	8.3	622	85.8
Parke	584	75	6	1.0	8	68	11.6	24	4.1	486	83.2
Perry	606	74	3	0.5	35	46	7.6	46	7.6	511	84.3
Pike	264	88	0	0.0	89	36	13.6	24	9.1	204	77.3
Porter	8,643	9	7	0.1	85	595	6.9	668	7.7	7,373	85.3
Posey	788	65	1	0.1	78	35	4.4	58	7.4	694	88.1
Pulaski	541	78	7	1.3	5	44	8.1	36	6.7	454	83.9
Putnam	1,376	50	8	0.6	24	139	10.1	91	6.6	1,138	82.7
Randolph	682	73	5	0.7	14	58	8.5	24	3.5	595	87.2
Ripley	1,145	55	7	0.6	23	122	10.7	66	5.8	950	83.0
Rush	491	82	1	0.2	57	57	11.6	31	6.3	402	81.9
St. Joseph	13,894	5	28	0.2	58	859	6.2	1,015	7.3	11,992	86.3
Scott	1,139	56	8	0.7	16	103	9.0	74	6.5	954	83.8
Shelby	1,786	37	11	0.6	21	202	11.3	128	7.2	1,445	80.9
Spencer	829	62	9	1.1	7	62	7.5	64	7.7	694	83.7
Starke	726	68	1	0.1	73	51	7.0	28	3.9	646	89.0
Steuben	2,166	32	17	0.8	12	112	5.2	73	3.4	1,964	90.7
Sullivan	569	77	2	0.4	45	61	10.7	33	5.8	473	83.1
Switzerland	288	86	7	2.4	2	18	6.3	16	5.6	247	85.8
Tippecanoe	11,149	8	15	0.1	75	10	1.0	1,264	11.3	9,753	87.5
Tipton	579	76	3	0.5	30	88	15.2	52	9.0	436	75.3
Union	156	92	1	0.6	19	14	9.0	8	5.1	133	85.3
Vanderburgh	12,920	6	9	0.0	87	781	6.0	1,258	9.7	10,872	84.1
Vermillion	522	80	2	0.4	40	72	13.8	36	6.9	412	78.9
Vigo	5,313	17	10	0.2	62	416	7.8	267	5.0	4,620	87.0
Wabash	1,352	51	7	0.5	31	98	7.2	71	5.3	1,176	87.0
Warren	283	87	0	0.0	89	23	8.1	5	1.8	255	90.1
Warrick	2,697	29	4	0.0	69	35	1.3	293	10.9	2,365	87.7
Washington	2,097	61	4 5	0.1	28	35 81	1.5 8.5	293 98	10.9	2,305	80.7
Wayne	3,538	23	5	0.5	70	194	5.5	248	7.0	3,091	87.4
Wells	1,165	23 54	5	0.1	83	194 64	5.5 5.5			3,091 1,041	87.4 89.4
White	1,165	54 53		0.1	83 86	64 80		59 64	5.1	1,041 1,160	
			1				6.1 × 1		4.9		88.9 86.2
Whitley	1,425	47	2	0.1	71	116	8.1	78	5.5	1,229	86.2
Unknown	5	N/A	0	N/A	N/A	0	N/A	0	N/A	5	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Non-incapacitating injuries include those reported as non-incapacitating, possible, not reported, refused, and unknown injuries.

Map 2.2. Traffic fatalities per 100k population, by county and ICJI Traffic Safety Division service region, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Table 2.3. Indiana speed-related collisions, by severity and county, 2019

	All collisions Fatal					Non-fatal injury Property damage only			
		All collisions			ratai	INON-Ta		Property	
	Speed-related collisions	Speed-related as % of total collisions	County rank (on %)	Count	Speed-related as % of total fatal collisions	Count	Speed-related as % of total non-fatal injury collisions	Count	Speed-related as % of total property damage collisions
All counties	20,200	9.3	N/A	188	25.4	4,086	13.1	15,926	8.6
Mean	220	8.8	N/A	2	20.3	44	14.4	173	7.9
Median	99	8.6	N/A	1	16.7	22	14	76	7.7
Minimum	5	2.1	N/A	0	0.0	1	2.9	4	2.1
Maximum	3,273	17.5	N/A	26	100.0	717	27.5	2,530	16.2
Adams	73	9.6	36	20	28.6	16	19.0	55	8.2
Allen	1,378	9.9	32	14	38.9	239	10.9	1,125	9.6
Bartholomew	204	9.8	33	4	44.4	58	10.5	142	9.1
Benton	10	6.5	64	0	0.0	3	16.7	7	5.4
Blackford	10	4.2	86	0	0.0	4	14.3	8	3.1
Boone	191	8.5	47	1	25.0	35	13.6	155	7.8
Brown	60	11.2	25	1	25.0	15	19.5	44	9.7
Carroll	61		25	1	25.0	15	21.4	44	9.4
		11.1							5.8
Cass	88	6.8	59	1	33.3	21	13.0	66	
Clark	236	5.6	78	2	22.2	73	13.1	161	4.4
Clay	51	7.6	53	1	16.7	7	6.9	43	7.7
Clinton	107	10.3	30	0	0.0	12	10.5	95	10.3
Crawford	26	9.3	39	0	0.0	8	25.8	18	7.3
Daviess	31	9.1	42	3	37.5	7	7.4	21	8.9
Dearborn	126	6.8	57	0	0.0	26	12.1	100	6.2
Decatur	105	11.6	19	1	33.3	16	14.5	88	11.2
DeKalb	175	12.9	13	1	50.0	38	27.5	136	11.1
Delaware	380	9.3	41	2	11.8	74	13.0	304	8.7
Dubois	99	6.6	63	0	0.0	22	13.6	77	5.7
Elkhart	809	11.6	22	5	18.5	109	14.0	695	11.3
Fayette	26	5.2	81	1	20.0	4	5.6	21	4.9
Floyd	114	4.1	88	2	40.0	20	5.6	92	3.8
Fountain	27	6.7	61	0	0.0	2	6.3	25	6.8
Franklin	63	10.4	29	1	50.0	14	21.9	48	8.9
Fulton	49	7.8	51	0	0.0	8	13.8	41	7.3
Gibson	108	9.7	34	0	0.0	26	15.1	82	8.7
Grant	305	13.0	12	1	10.0	37	16.2	267	12.6
Greene	50	5.8	76	1	16.7	13	10.2	36	4.9
Hamilton	500	5.9	74	3	25.0	87	8.8	410	5.4
Hancock	134	6.8	58	3	27.3	30	9.6	101	6.1
Harrison	62	5.2	80	0	0.0	18	10.1	44	4.4
Hendricks	284	6.3	68	4	25.0	49	8.4	231	5.9
Henry	96	9.0	44	2	33.3	25	13.0	69	7.9
Howard	152	6.4	66	3	25.0	31	8.4	118	5.9
Huntington	177	13.5	10	3	42.9	25	12.8	149	13.5
Jackson	165	9.0	43	2	14.3	23	11.4	140	8.7
Jasper	164	13.0	11	3	60.0	24	15.8	137	12.4
Jay	12	2.1	92	0	0.0	2	2.9	10	2.1
Jefferson	53	5.8	77	2	40.0	15	12.3	36	4.6
Jennings	41	6.1	73	1	14.3	12	12.2	28	4.9
Johnson	204	5.4	79	1	16.7	44	7.1	159	5.0
Knox	92	8.8	45	1	14.3	25	15.7	66	7.5
Kosciusko	171	6.1	72	0	0.0	31	7.8	140	5.9
LaGrange	142	14.2	9	0	0.0	24	26.7	118	13.0
Lake	2,699	15.1	6	25	58.1	544	21.0	2,130	14.0
LaPorte	448	11.9	17	23	18.2	77	13.7	369	14.0
Lawrence	80	5.8	75	2	22.2	22	12.7	56	4.7
Madison	264	6.2	75	4	36.4	54	10.0	206	5.5
	204	0.2	/1	4	30.4	04	10.0	200	0.0

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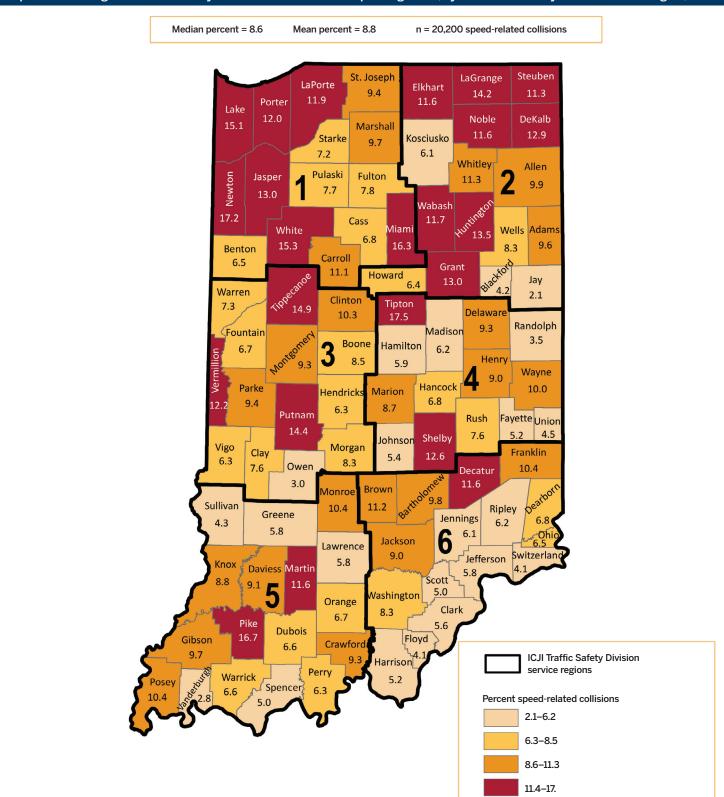
Table 2.3. Indiana speed-related collisions, by severity and county, 2019 (continued)

		All collisions			Fatal	Non-f	atal injury	Property damage only	
	Speed-related collisions	Speed-related as % of total collisions	County rank (on %)	Count	Speed-related as % of total fatal collisions	Count	Speed-related as % of total non-fatal injury collisions	Count	Speed-related as % of total property damage collisions
Marion	3,273	8.7	46	26	25.7	717	12.4	2,530	8.0
Marshall	151	9.7	35	1	11.1	26	13.5	124	9.1
Martin	15	11.6	20	0	0.0	7	26.9	8	8.1
Miami	174	16.3	4	3	50.0	29	18.8	142	15.7
Monroe	402	10.4	28	0	0.0	99	15.2	303	9.5
Montgomery	98	9.3	40	0	0.0	24	14.9	74	8.4
Morgan	148	8.3	48	0	0.0	31	12.4	117	7.7
Newton	62	17.2	2	1	16.7	12	24.0	49	16.1
Noble	150	11.6	21	3	30.0	23	14.5	124	11.1
Ohio	12	6.5	65	0	0.0	3	14.3	9	5.5
Orange	35	6.7	60	2	50.0	10	14.7	23	5.1
Owen	15	3.0	90	0	0.0	4	6.2	11	2.5
Parke	43	9.4	38	1	0.0	8	14.0	34	8.6
Perry	26	6.3	67	0	0.0	10	17.9	16	4.6
Pike	31	16.7	3	0	0.0	9	19.6	22	15.7
Porter	629	12.0	16	1	14.3	141	16.2	487	11.2
Posey	59	10.4	27	0	0.0	13	21.0	46	9.2
Pulaski	34	7.7	52	2	0.0	14	23.0	18	4.9
Putnam	138	14.4	8	4	50.0	35	24.5	99	12.2
Randolph	17	3.5	89	0	0.0	2	3.9	15	3.5
Ripley	48	6.2	70	2	33.3	17	14.2	29	4.5
Rush	26	7.6	54	0	0.0	7	13.2	19	6.6
St. Joseph	814	9.4	37	7	26.9	157	12.2	650	8.8
Scott	34	5.0	83	3	75.0	6	5.6	25	4.4
Shelby	153	12.6	14	0	0.0	30	13.3	123	12.6
Spencer	31	5.0	82	0	0.0	9	10.2	22	4.2
Starke	39	7.2	56	1	100.0	11	21.6	27	5.6
Steuben	186	11.3	23	4	28.6	26	21.8	156	10.4
Sullivan	19	4.3	85	0	0.0	6	10.0	13	3.4
Switzerland	9	4.1	87	1	14.3	4	16.0	4	2.1
Tippecanoe	1,047	14.9	7	5	35.7	189	18.1	853	14.3
Tipton	69	17.5	1	0	0.0	20	22.7	49	16.2
Union	5	4.5	84	0	0.0	1	5.6	4	4.3
Vanderburgh	200	2.8	91	2	22.2	61	4.6	137	2.4
Vermillion	46	12.2	15	1	50.0	15	23.8	30	9.6
Vigo	213	6.3	69	4	50.0	39	8.2	170	5.8
Wabash	109	11.7	18	2	28.6	24	20.7	83	10.2
Warren	17	7.3	55	0	0.0	4	20.0	13	6.1
Warrick	112	6.6	62	1	33.3	27	11.7	84	5.7
Washington	55	8.3	49	2	40.0	18	17.5	35	6.3
Wayne	234	10.0	31	3	60.0	54	16.9	177	8.8
Wells	66	8.3	50	0	0.0	17	20.7	49	6.9
White	141	15.3	5	0	0.0	19	19.6	122	14.8
Whitley	111	11.3	24	0	0.0	24	17.3	87	10.3
Unknown	0	N/A	N/A	0	N/A	0	N/A	0	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

Percent calculations represent the percent of total county collisions (presented in Table 2.1) in each injury category that are speed-related.
Non-fatal injury collisions include collisions with incapacitating, non-incapacitating, and possible injuries.
A collision is identified 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 contributing factor of the collision; (2) a vehicle driver is issued a speeding citation.



Map 2.3. Percentage of Indiana county collisions that involved a speeding driver, by ICJI Traffic Safety Division service region, 2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Table 2.4. Indiana collisions involving an alcohol-impaired driver, by severity and county, 2019

		Total	•	Fatal		atal injury	Property damage		
		Iotai		ralai	NOT-I		Рюре		
County	Count	Alcohol-impaired as % of total collisions	Count	Alcohol-impaired as % of total fatal collisions	Count	Alcohol-impaired as % of total non-fatal injury collisions	Count	Alcohol-impaired as % of total property damage collisions	
All counties	3,926	1.8	104	14.1	1,014	3.3	2,808	1.5	
Mean	43	2.1	1	8.5	11	3.8	31	1.7	
Median	20	1.9	0	0.0	5	3.5	16	1.6	
Minimum	1	0.5	0	0.0	0	0.0	1	0.5	
Maximum	437	6.5	20	41.7	138	11.2	286	5.7	
Adams	14	1.8	0	0.0	2	2.4	12	1.8	
Allen	437	3.1	13	36.1	138	6.3	286	2.4	
Bartholomew	47	2.3	1	11.1	18	3.5	28	1.8	
Benton	4	2.6	0	0.0	0	0.0	4	3.1	
Blackford	4	1.4	0	N/A	1	3.6	3	1.2	
Boone	42	1.9	1	25.0	10	3.9	31	1.6	
Brown	9	1.7	0	0.0	4	5.2	5	1.1	
Carroll	6	1.1	0	0.0	2	2.9	4	0.8	
Cass	19	1.5	0	0.0	2	1.2	17	1.5	
Clark	60	1.4	0	0.0	13	2.3	47	1.3	
Clay Clinton	9	1.3 2.1	0	0.0 0.0	2 2	2.0 1.8	7 20	1.2 2.2	
Crawford	4	1.4	0	0.0	2	3.2	20	1.2	
Daviess	15	4.4	0	0.0	8	5.2 8.4	3 7	3.0	
Dearborn	33	4.4 1.8	0	0.0	° 5	2.3	28	1.7	
Decatur	9	1.0	0	0.0	2	2.3	20	0.9	
DeKalb	25	1.8	0	0.0	4	2.9	21	1.7	
Delaware	72	1.8	1	5.9	13	2.3	58	1.7	
Dubois	19	1.3	0	0.0	6	3.7	13	1.0	
Elkhart	142	2.0	3	11.1	24	3.1	115	1.9	
Fayette	12	2.4	0	0.0	2	2.8	10	2.4	
Floyd	38	1.4	2	40.0	7	2.0	29	1.2	
Fountain	10	2.5	0	0.0	1	3.1	9	2.4	
Franklin	8	1.3	0	0.0	4	6.3	4	0.7	
Fulton	7	1.1	0	0.0	1	1.7	6	1.1	
Gibson	17	1.5	0	0.0	4	2.3	13	1.4	
Grant	28	1.2	1	10.0	8	3.5	19	0.9	
Greene	6	0.7	0	0.0	2	1.6	4	0.5	
Hamilton	155	1.8	5	41.7	37	3.7	113	1.5	
Hancock	33	1.7	2	18.2	8	2.6	23	1.4	
Harrison	27	2.3	0	0.0	7	3.9	20	2.0	
Hendricks	69	1.5	2	12.5	15	2.6	52	1.3	
Henry	24	2.2	0	0.0	8	4.2	16	1.8	
Howard	55	2.3	2	16.7	13	3.5	40	2.0	
Huntington	29	2.2	1	14.3	8	4.1	20	1.8	
Jackson	41	2.2	1	7.1	8	4.0	32	2.0	
Jasper	27	2.1	0	0.0	5	3.3	22	2.0	
Jay	7	1.3	0	0.0	1	1.4	6	1.2	
Jefferson	27	2.9	2	40.0	5	4.1	20	2.5	
Jennings	13	1.9	0	0.0	2	2.0	11	1.9	
Johnson	66	1.7	0	0.0	13	2.1	53	1.7	
Knox	30	2.9	0	0.0	9	5.7	21	2.4	
Kosciusko	44	1.6	3	33.3	9	2.3	32	1.3	
LaGrange	19	1.9	0	0.0	6	6.7	13	1.4	
Lake	308	1.7	14	32.6	73	2.8	221	1.5	
LaPorte	130	3.5	2	18.2	31	5.5	97	3.0	
Lawrence	20	1.5	0	0.0	4	2.3	16	1.3	
Madison	82	1.9	1	9.1	17	3.1	64	1.7	

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	Total			Fatal	Non-	fatal injury	Property damage		
County	Count	Alcohol-impaired as % of total collisions	Count	Alcohol-impaired as % of total fatal collisions	Count	Alcohol-impaired as % of total non-fatal injury collisions	Count	Alcohol-impaired as % of total property damage collisions	
Marion	391	1.0	20	19.8	102	1.8	269	0.8	
Marshall	33	2.1	2	22.2	11	5.7	20	1.5	
Martin	3	2.3	1	0.0	1	3.8	1	1.0	
Miami	20	1.9	2	33.3	3	1.9	15	1.7	
Monroe	64	1.7	1	20.0	17	2.6	46	1.4	
Montgomery	14	1.3	1	20.0	4	2.5	9	1.0	
Morgan	38	2.1	0	0.0	12	4.8	26	1.7	
Newton	14	3.9	1	16.7	5	10.0	8	2.6	
Noble	37	2.9	3	30.0	8	5.0	26	2.3	
Ohio	1	0.5	0	N/A	0	0.0	1	0.6	
Orange	7	1.3	1	25.0	0	0.0	6	1.3	
Owen	12	2.4	0	0.0	2	3.1	10	2.3	
Parke	9	2.0	0	0.0	3	5.3	6	1.5	
Perry	13	3.2	1	33.3	6	10.7	6	1.7	
Pike	12	6.5	0	0.0	4	8.7	8	5.7	
Porter	147	2.8	1	14.3	43	4.9	103	2.4	
Posey	13	2.3	0	0.0	2	3.2	11	2.2	
Pulaski	9	2.1	0	0.0	3	4.9	6	1.6	
Putnam	26	2.7	2	25.0	5	3.5	19	2.3	
Randolph	11	2.2	2	40.0	4	7.8	5	1.2	
Ripley	7	0.9	0	0.0	2	1.7	5	0.8	
Rush	6	1.7	0	0.0	3	5.7	3	1.0	
St. Joseph	109	1.3	2	7.7	19	1.5	88	1.2	
Scott	18	2.6	0	0.0	4	3.7	14	2.5	
Shelby	30	2.5	0	0.0	9	4.0	21	2.1	
Spencer	12	1.9	0	0.0	3	3.4	9	1.7	
Starke	7	1.3	0	0.0	1	2.0	6	1.2	
Steuben	23	1.4	2	14.3	3	2.5	18	1.2	
Sullivan	19	4.3	0	0.0	3	5.0	16	4.2	
Switzerland	5	2.3	1	14.3	1	4.0	3	1.6	
Tippecanoe	139	2.0	2	14.3	46	4.4	91	1.5	
Tipton	13	3.3	0	0.0	6	6.8	7	2.3	
Union	5	4.5	0	0.0	1	5.6	4	4.3	
Vanderburgh	88 9	1.2	1	11.1	32	2.4	55	0.9	
Vermillion		2.4	0	0.0	4	6.3	5	1.6	
Vigo	61	1.8	0	0.0	18	3.8	43	1.5	
Wabash	23 4	2.5 1.7	1 0	14.3 N/A	13 1	11.2 5.0	9 3	1.1 1.4	
Warren Warrick	4 35	2.1	0	N/A 0.0	1 12	5.0	3 23	1.4 1.6	
	35 12	2.1 1.8	0	0.0	12	5.2 1.9		1.6	
Washington Wayne	36	1.8	0	0.0	12	3.8	10 24	1.8	
Wells	36 17	2.1	0	0.0	12	3.8 8.5	24 10	1.2	
Wells	1/	2.1	0	0.0	/	ö.ö	10	1.4	

Table 2.4. Indiana collisions involving an alcohol-impaired driver, by severity and county, 2019 (continued)

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

2.1

3.2

N/A

Notes:

White Whitley

Unknown

1) Percentage calculations represent the percent of total county collisions (presented in Table 2.1) in each injury category that are alcohol-impaired.

0

0

0

0.0

0.0

N/A

3

9

0

3.1

6.5

N/A

16

22

0

1.9

2.6

N/A

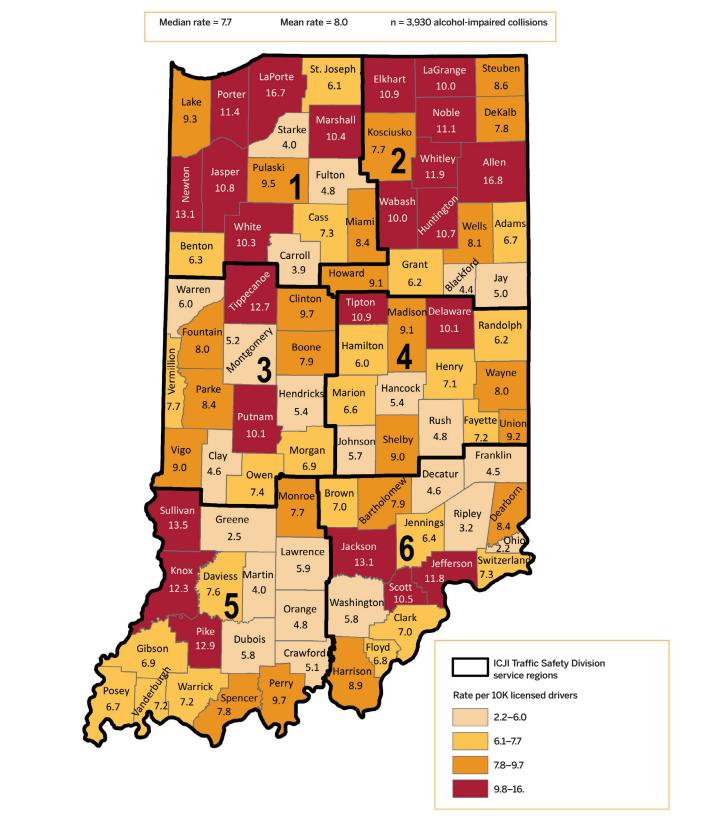
2) Includes collisions where at least one alcohol-impaired driver was involved.

19

31

0

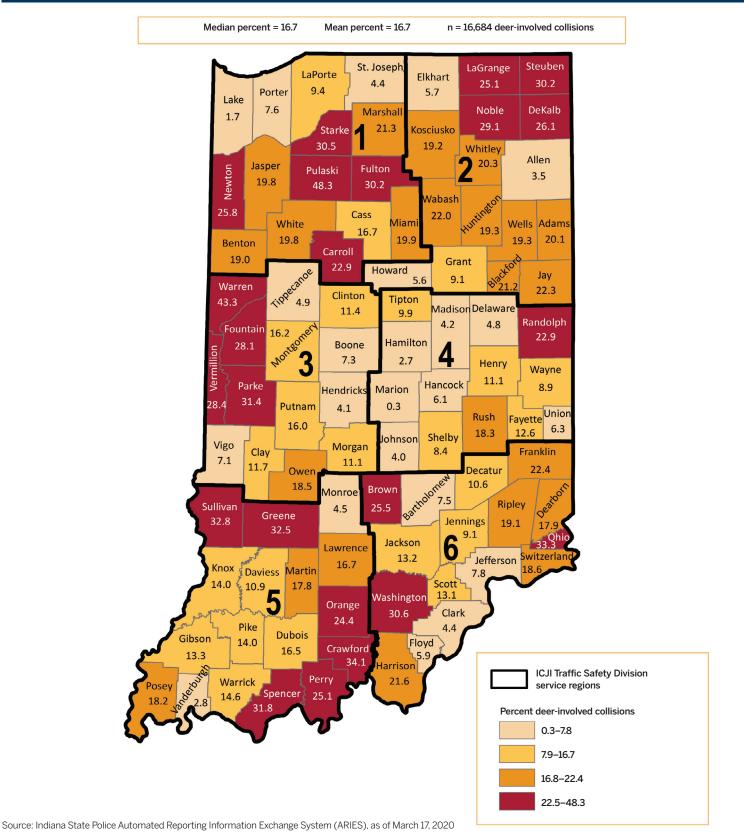
Non-fatal injury includes incapacitating, non-incapacitating, and possible injury collisions.
 A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL.



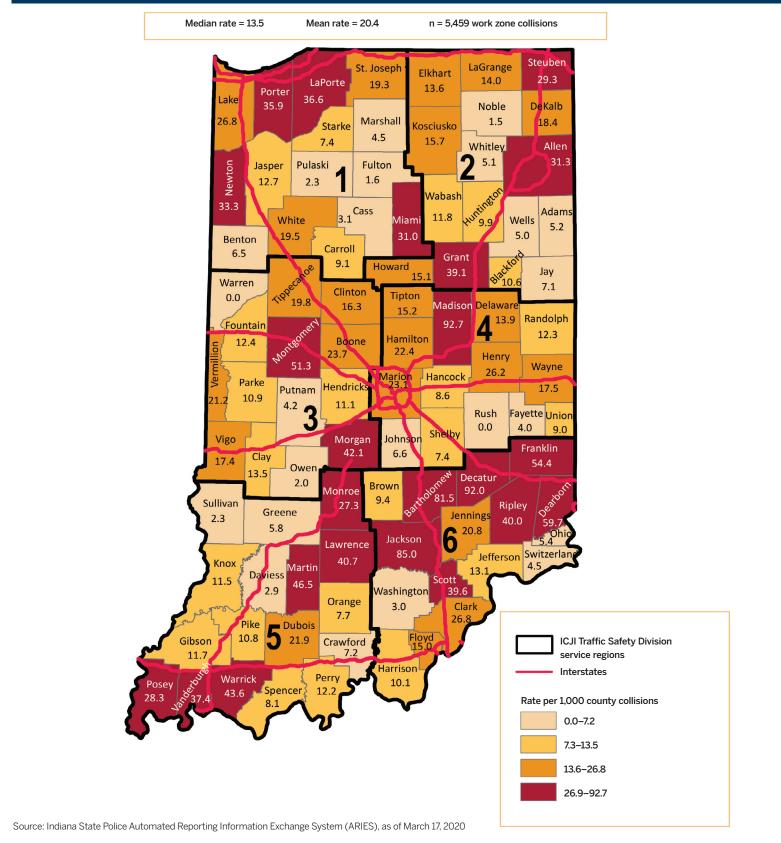
Map 2.4. Indiana alcohol-impaired collisions per 10,000 licensed drivers, by county, and ICJI Traffic Safety Division service region, 2019

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 202 and June 15, 2020 (impaired driving data); Indiana Bureau of Motor Vehicles, as of April 3, 2020

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Map 2.5. Percentage of county collisions that involved deer, by ICJI Traffic Safety Division service region, 2019



Map 2.6. Work zone collisions per 1,000 total county collisions, by ICJI Traffic Safety Division service region, 2019

27

Table 2.5. Passenger vehicle occupants injured in Indiana collisions, by injury status, restraint use, and county, 2019

	Fatal				Incapacitating		Non-incapacitating			
	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	
All counties	565	308	54.5	17,068	2,528	14.8	23,997	2,022	8.4	
Mean	6	4	47.8	186	27	19.7	261	22	12.0	
Median	5	3	50.0	89	16	18	85	10	11	
Minimum	0	0	0.0	11	1	0.0	4	0	0.0	
Maximum	61	40	100.0	1,876	316	54.5	5,639	655	37.5	
Adams	10	8	80.0	38	7	18.4	86	9	10.5	
Allen	19	11	57.9	1,026	146	14.2	1,897	142	7.5	
Bartholomew	8	5	62.5	277	46	16.6	404	41	10.1	
Benton	5	2	40.0	12	4	33.3	14	2	14.3	
Blackford	0	N/A	N/A	18	3	16.7	14	1	7.1	
Boone	4	3	75.0	189	37	19.6	154	19	12.3	
Brown	4	3	75.0	43	14	32.6	44	10	22.7	
Carroll	3	0	0.0	49	9	18.4	46	3	6.5	
Cass	3	2	66.7	128	19	14.8	101	9	8.9	
Clark	7	5	71.4	395	67	17.0	356	23	6.5	
Clay	6	2	33.3	70	27	38.6	47	16	34.0	
Clinton	2	0	0.0	90	17	18.9	70	10	14.3	
Crawford	1	0	0.0	17	8	47.1	14	4	28.6	
Daviess	11	2	18.2	87	37	42.5	45	14	31.1	
Dearborn	6	2	33.3	172	31	18.0	99	19	19.2	
Decatur	3	1	33.3	61	9	14.8	67	10	14.9	
DeKalb	1	0	0.0	82	4	4.9	85	7	8.2	
Delaware	14	8	57.1	282	21	7.4	493	28	5.7	
Dubois	1	0	0.0	93	15	16.1	124	14	11.3	
Elkhart	16	9	56.3	642	54	8.4	423	22	5.2	
Fayette	2	1	50.0	47	9	19.1	38	11	28.9	
Floyd	6	2	33.3	218	19	8.7	262	6	2.3	
Fountain	1	0	0.0	18	7	38.9	25	2	8.0	
Franklin	2	2	100.0	45	11	24.4	22	2	9.1	
Fulton	3	2	66.7	45	13	28.9	26	7 12	26.9	
Gibson Grant	3	1 5	33.3 55.6	117 163	29 27	24.8 16.6	123 144	22	9.8 15.3	
	6	5	55.6 83.3	88	14	15.9	78	17	21.8	
Greene Hamilton	9	5	55.6	558	14 57	10.2	937	28	3.0	
Hancock	7	3	42.9	274	30	10.2	937 171	8	4.7	
Harrison	6	4	66.7	154	27	17.5	125	17	13.6	
Hendricks	13	8	61.5	387	70	18.1	379	50	13.0	
Henry	4	3	75.0	164	33	20.1	113	14	12.4	
Howard	9	5	55.6	217	62	28.6	239	39	16.3	
Huntington	6	4	66.7	106	16	15.1	146	4	2.7	
Jackson	11	6	54.5	131	37	28.2	134	33	24.6	
Jasper	5	2	40.0	89	11	12.4	93	10	10.8	
Jay	6	3	50.0	31	9	29.0	58	9	15.5	
Jefferson	5	4	80.0	94	20	21.3	73	12	16.4	
Jennings	8	4	50.0	51	7	13.7	71	10	14.1	
Johnson	3	3	100.0	437	49	11.2	338	34	10.1	
Knox	5	2	40.0	106	11	10.4	94	10	10.6	
Kosciusko	5	1	20.0	34	11	32.4	480	24	5.0	
LaGrange	2	0	0.0	21	5	23.8	95	12	12.6	
Lake	33	14	42.4	1,772	184	10.4	1,679	62	3.7	
LaPorte	8	4	50.0	275	31	11.3	481	16	3.3	
Lawrence	8	5	62.5	89	16	18.0	143	18	12.6	
Madison		1	50.0	433			285	23	8.1	
Madison	2	1	50.0	433	68	15.7	285	23	8.1	

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Marion		Fatal								
Marion		Fatal			Incapacitating		Non-incapacitating			
Marion	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	
	61	40	65.6	1,876	316	16.8	5,639	655	11.6	
Marshall	9	4	44.4	126	20	15.9	131	9	6.9	
Martin	3	2	0.0	18	1	5.6	14	1	7.1	
Miami	8	4	50.0	122	26	21.3	92	16	17.4	
Monroe	2	1	50.0	303	65	21.5	542	45	8.3	
Montgomery	5	4	80.0	128	12	9.4	91	7	7.7	
Morgan	4	3	75.0	197	27	13.7	152	11	7.2	
Newton	5	4	80.0	45	6	13.3	18	3	16.7	
Noble	10	6	60.0	103	31	30.1	107	27	25.2	
Ohio	0	N/A	N/A	16	2	0.0	14	2	14.3	
Orange	3	3	100.0	55	20	36.4	31	10	32.3	
Owen	0	N/A	N/A	34	12	35.3	54	8	14.8	
Parke	3	1	0.0	55	16	29.1	22	4	18.2	
Perry	2	1	50.0	36	10	27.8	40	5	12.5	
Pike	0	N/A	N/A	27	8	29.6	20	2	10.0	
Porter	4	3	75.0	521	33	6.3	606	28	4.6	
Posey	1	0	0.0	29	5	17.2	46	5	10.9	
Pulaski	4	3	75.0	34	7	20.6	32	3	9.4	
Putnam	6	5	83.3	119	35	29.4	83	15	18.1	
Randolph	4	4	100.0	52	10	19.2	22	6	27.3	
Ripley	7	3	42.9	103	21	20.4	61	5	8.2	
Rush	1	1	100.0	54	9	16.7	26	4	15.4	
St. Joseph	21	10	47.6	718	79	11.0	924	45	4.9	
Scott	7	6	85.7	88	13	14.8	70	6	8.6	
Shelby	10	4	40.0	173	25	14.5	114	14	12.3	
Spencer	6	4	66.7	56	11	19.6	58	7	12.1	
Starke	1	0	0.0	48	10	20.8	25	1	4.0	
Steuben	13	7	53.8	93	17	18.3	62	3	4.8	
Sullivan	1	0	0.0	52	19	36.5	28	3	10.7	
Switzerland	6	4	0.0	16	4	25.0	13	0	0.0	
Tippecanoe	11	4	36.4	91	17	18.7	1,120	50	4.5	
Tipton	2	0	0.0	85	9	10.6	44	1	2.3	
Union	1	0	0.0	11	6	54.5	8	3	37.5	
Vanderburgh	5	1	20.0	669	31	4.6	1,174	26	2.2	
Vermillion	1	0	0.0	66	13	19.7	28	5	17.9	
Vigo	8	3	37.5	345	43	12.5	243	12	4.9	
Wabash	4	1	25.0	78	14	17.9	62	9	14.5	
Warren	0	N/A	N/A	18	7	38.9	4	0	0.0	
Warrick	4	3	75.0	27	4	14.8	278	19	6.8	
Washington	4	3	75.0	68	11	14.0	84	6	7.1	
Wayne	3	2	66.7	162	14	8.6	202	12	5.9	
Wells	1	0	0.0	55	14	21.8	55	6	10.9	
White	1	1	100.0	64	6	9.4	54	2	3.7	
Whitley	2	1	50.0	97	13	13.4	54 69	6	8.7	

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

Non-incapacitating injuries include those reported as non-incapacitating, possible, not reported, refused, and unknown injuries.
 Includes only vehicle occupants (drivers and passengers). Pedestrians, pedalcyclists and animal-drawn vehicle operators are excluded.
 Total counts include vehicle occupants identified as restrained, unrestrained, and unknown restraint usage.

Map 2.7. Percentage of unrestrained injured passenger vehicle occupants in Indiana collisions, by county and ICJI Traffic Safety Divsion service region, 2019

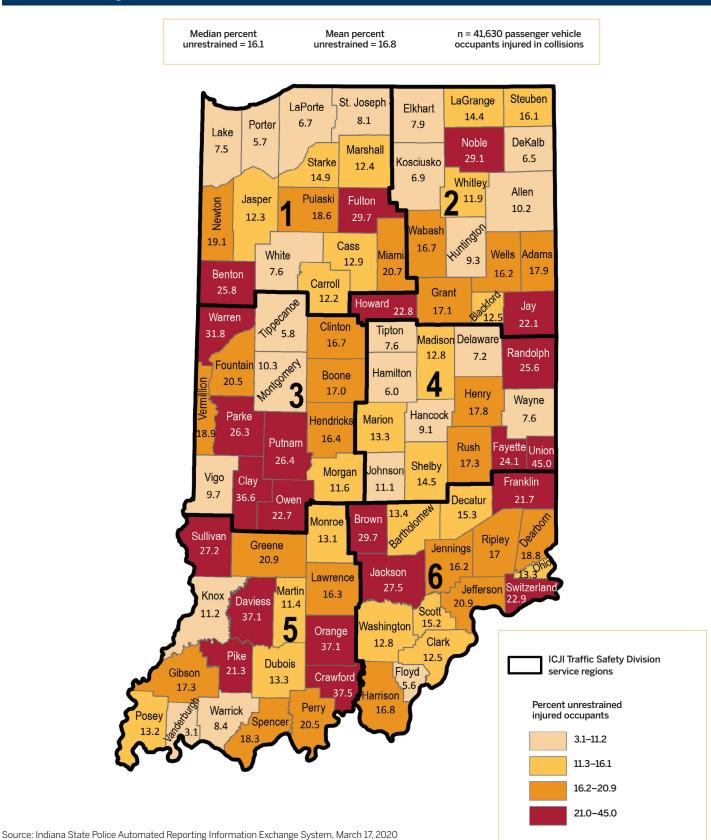


Table 2.6. Young drivers (ages 15-20) involved in Indiana collisions, by injury status and county, 2019

						Young drive	ers in collisions				
		1	Total		Fatal	-	acitating	Non-inc	apacitating	Other	/no injury
County	All drivers in collisions	Count	As % of total drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions
All counties	336,653	41,804	12.4	41	0.1	1,483	3.5	2,582	6.2	37,698	90.2
Mean	3,659	454	13.9	0	0.2	16	5.0	28	6.0	410	88.8
Median	1,409	202	13.8	0	0.0	11	4.4	12	5.9	178	89.7
Minimum	148	23	9.7	0	0.0	1	0.0	1	1.4	21	78.0
Maximum	63,876	6,172	20.3	6	3.1	130	15.5	483	10.9	5,553	97.3
Adams	1,050	147	14.0	0	0.0	2	1.4	8	5.4	137	93.2
Allen	21,357	2,894	13.6	0	0.0	90	3.1	189	6.5	2,615	90.4
Bartholomew	3,404	389	11.4	2	0.5	26	6.7	34	8.7	327	84.1
Benton	199	32	16.1	1	3.1	1	3.1	2	6.3	28	87.5
Blackford	355	44	12.4	0	0.0	1	2.3	2	4.5	41	93.2
Boone	3,434	409	11.9	0	0.0	18	4.4	18	4.4	373	91.2
Brown	658	107	16.3	0	0.0	2	1.9	6	5.6	99	92.5
Carroll	683	114	16.7	1	0.9	8	7.0	12	10.5	93	81.6
Cass	1,802	222	12.3	0	0.0	12	5.4	11	5.0	199	89.6
Clark	6,698	753	11.2	1	0.1	28	3.7	34	4.5	690	91.6
Clay	983	121	12.3	1	0.8	7	5.8	4	3.3	109	90.1
Clinton	1,441	214	14.9	0	0.0	9	4.2	9	4.2	196	91.6
Crawford	315	38	12.1	0	0.0	3	7.9	2	5.3	33	86.8
Daviess	486	84	17.3	0	0.0	13	15.5	4	4.8	67	79.8
Dearborn	2,712	359	13.2	1	0.3	19	5.3	19	5.3	320	89.1
Decatur	1,322	189	14.3	0	0.0	12	6.3	8	4.2	169	89.4
DeKalb	1,874	279	14.9	0	0.0	15	5.4	10	3.6	254	91.0
Delaware	6,250	922	14.8	1	0.1	31	3.4	56	6.1	834	90.5
Dubois	2,159	350	16.2	0	0.0	12	3.4	18	5.1	320	91.4
Elkhart	10,884	1,396	12.8	1	0.1	44	3.2	47	3.4	1,304	93.4
Fayette	745	121	16.2	0	0.0	6	5.0	6	5.0	109	90.1
Floyd	4,565	584	12.8	0	0.0	14	2.4	34	5.8	536	91.8
Fountain	491	74	15.1	0	0.0	1	1.4	1	1.4	72	97.3
Franklin	778	134	17.2	0	0.0	6	4.5	4	3.0	124	92.5
Fulton	769	111	14.4	0	0.0	12	10.8	5	4.5	94	84.7
Gibson	1,648	235	14.3	1	0.4	12	5.1	17	7.2	205	87.2
Grant	3,361	407	12.1	0	0.0	12	2.9	21	5.2	374	91.9
Greene	1,076	157	14.6	0	0.0	8	5.1	12	7.6	137	87.3
Hamilton	14,642	2,038	13.9	0	0.0	45	2.2	131	6.4	1,862	91.4
Hancock	3,210 1,651	425 223	13.2 13.5	1 1	0.2 0.4	20 13	4.7 5.8	23 19	5.4 8.5	381 190	89.6 85.2
Harrison	7,382	1,097	13.5 14.9	0	0.4	15 44	5.8 4.0	19 47	8.5 4.3	190	85.2 91.7
Hendricks		206	14.9	0		18	-	16		1,008	91.7 83.5
Henry Howard	1,588 3,891	587	13.0 15.1	0	0.0 0.0	18 24	8.7 4.1	16 26	7.8 4.4	537	83.5 91.5
Huntington	1,744	258	14.8	0	0.0	19	7.4	20	10.5	212	82.2
Jackson	2,647	356	14.8	0	0.0	19	5.1	9	2.5	329	92.4
Jasper	1,674	251	15.0	0	0.0	13	6.8	20	8.0	214	85.3
Jay	728	94	12.9	0	0.0	7	7.4	6	6.4	81	86.2
Jefferson	1,333	167	12.5	0	0.0	8	4.8	10	6.0	149	89.2
Jennings	1,000	155	15.5	1	0.6	3	4.8	10	7.1	149	90.3
Johnson	6,510	882	13.5	1	0.0	39	4.4	40	4.5	802	90.9
Knox	1,461	211	14.4	0	0.0	11	5.2	40	1.9	196	92.9
Kosciusko	4,013	555	13.8	1	0.0	3	0.5	56	1.5	495	89.2
LaGrange	1,320	190	14.4	0	0.2	1	0.5	15	7.9	174	91.6
Lake	28,601	2,872	10.0	4	0.0	106	3.7	132	4.6	2,630	91.6
LaPorte	5,412	590	10.0	4	0.0	18	3.1	49	8.3	523	88.6
Lawrence	2,000	269	13.5	0	0.0	18	4.1	49 27	10.0	231	85.9
Madison	6,551	742	13.5	2	0.0	32	4.1	27	3.1	685	92.3
	0,001	/42	11.3	۷	0.3	52	4.0	20	J.1	000	JL.J

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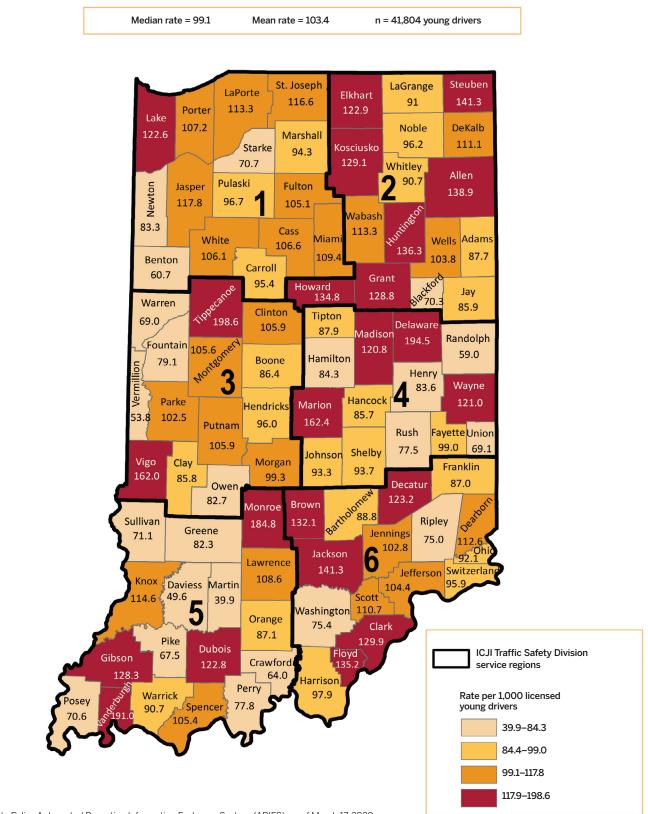
Table 2.6. Young drivers (ages 15-20) involved in Indiana collisions, by injury status and county, 2019 (continued)

				Young drivers in collisions											
					-+-!			No. in a		Other/no injury					
			īotal	1	atal	Incap	acitating	Non-Inc	capacitating	Other	/no injury				
County	All drivers in collisions	Count	As % of total drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions				
Marion	63,876	6,172	9.7	6	0.1	130	2.1	483	7.8	5,553	90.0				
Marshall	2,115	261	12.3	0	0.0	12	4.6	18	6.9	231	88.5				
Martin	178	23	12.9	0	0.0	0	0.0	2	8.7	21	91.3				
Miami	1,464	200	13.7	0	0.0	11	5.5	13	6.5	176	88.0				
Monroe	5,750	988	17.2	0	0.0	32	3.2	70	7.1	886	89.7				
Montgomery	1,494	218	14.6	0	0.0	13	6.0	17	7.8	188	86.2				
Morgan	2,796	428	15.3	1	0.2	16	3.7	24	5.6	387	90.4				
Newton	449	66	14.7	1	1.5	4	6.1	4	6.1	57	86.4				
Noble	1,709	261	15.3	0	0.0	13	5.0	14	5.4	234	89.7				
Ohio	218	28	12.8	0	0.0	1	3.6	3	10.7	24	85.7				
Orange	675	99	14.7	1	1.0	9	9.1	4	4.0	85	85.9				
Owen	700	97	13.9	0	0.0	3	3.1	6	6.2	88	90.7				
Parke	545	71	13.0	0	0.0	9	12.7	5	7.0	57	80.3				
Perry	567	79	13.9	0	0.0	3	3.8	5	6.3	71	89.9				
Pike	255	46	18.0	0	0.0	5	10.9	5	10.9	36	78.3				
Porter	8,257	1,058	12.8	0	0.0	46	4.3	63	6.0	949	89.7				
Posey	764	102	13.4	0	0.0	6	5.9	7	6.9	89	87.3				
Pulaski	517	68	13.2	1	1.5	6	8.8	4	5.9	57	83.8				
Putnam	1,299	203	15.6	0	0.0	12	5.9	12	5.9	179	88.2				
Randolph	658	82	12.5	1	1.2	3	3.7	2	2.4	76	92.7				
Ripley	1,093	143	13.1	0	0.0	14	9.8	12	8.4	117	81.8				
Rush	457	73	16.0	0	0.0	6	8.2	2	2.7	65	89.0				
St. Joseph	13,233	1,450	11.0	2	0.1	41	2.8	78	5.4	1,329	91.7				
Scott	1,074	134	12.5	0	0.0	4	3.0	5	3.7	125	93.3				
Shelby	1,684	236	14.0	1	0.4	23	9.7	22	9.3	190	80.5				
Spencer	798	130	16.3	0	0.0	4	3.1	11	8.5	115	88.5				
Starke	705	87	12.3	0	0.0	4	4.6	5	5.7	78	89.7				
Steuben	2,098	239	11.4	1	0.4	7	2.9	6	2.5	225	94.1				
Sullivan	537	82	15.3	0	0.0	9	11.0	5	6.1	68	82.9				
Switzerland	275	44	16.0	0	0.0	1	2.3	1	2.3	42	95.5				
Tippecanoe	10,727	1,576	14.7	1	0.1	6	0.4	130	8.2	1,439	91.3				
Tipton	545	81	14.9	0	0.0	5	6.2	4	4.9	72	88.9				
Union	148	30	20.3	0	0.0	2	6.7	2	6.7	26	86.7				
Vanderburgh	12,341	1,505	12.2	2	0.1	43	2.9	118	7.8	1,342	89.2				
Vermillion	496	50	10.1	0	0.0	7	14.0	4	8.0	39	78.0				
Vigo	5,061	750	14.8	2	0.3	29	3.9	29	3.9	690	92.0				
Wabash	1,299	198	15.2	0	0.0	8	4.0	6	3.0	184	92.9				
Warren	276	35	12.7	0	0.0	3	8.6	1	2.9	31	88.6				
Warrick	2,617	379	14.5	0	0.0	6	1.6	32	8.4	341	90.0				
Washington	881	118	13.4	0	0.0	10	8.5	10	8.5	98	83.1				
Wayne	3,400	351	10.3	0	0.0	16	4.6	21	6.0	314	89.5				
Wells	1,125	174	15.5	0	0.0	6	3.4	8	4.6	160	92.0				
White	1,263	150	11.9	0	0.0	5	3.3	12	8.0	133	88.7				
Whitley	1,377	185	13.4	0	0.0	9	4.9	13	7.0	163	88.1				
Unknown	5	2	N/A	0	N/A	0	N/A	0	N/A	2	N/A				

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Young drivers are defined as drivers in collisions between the ages of 15 and 20 years old.

Map 2.8. Young drivers (ages 15-20) involved in collisions per 1,000 licensed young drivers, by county and ICJI Traffic Safety Division service region, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Table 2.7. Motorcyclists involved in Indiana collisions, by injury status and county, 2019

	Total indivi	duals involved		Fatal	Incap	acitating	Non- ind	apacitating	No	injury
	Count	County rank	Count	As % county total	Count	As % county total	Count	As % county total	Count	As % county total
All counties	2,698	N/A	112	4.2	1,173	43.5	645	23.9	768	28.5
Mean	29	N/A	1	4.0	13	47.4	7	19.9	8	27.6
Median	16	N/A	0	0.0	7	46.8	3	18.2	5	26.9
Minimum	2	N/A	0	0.0	0	0.0	0	0.0	0	0.0
Maximum	342	N/A	17	33.3	87	100.0	149	85.7	89	71.4
Adams	8	69	1	12.5	6	75.0	0	0.0	1	12.5
Allen	154	2	13	8.4	72	46.8	28	18.2	41	26.6
Bartholomew	28	27	0	0.0	13	46.4	9	32.1	6	21.4
Benton	3	88	1	33.3	2	66.7	0	0.0	0	0.0
Blackford	2	91	0	0.0	0	0.0	1	50.0	1	50.0
Boone	30	24	0	0.0	10	33.3	4	13.3	16	53.3
Brown	27	28	1	3.7	10	37.0	6	22.2	10	37.0
Carroll	5	82	0	0.0	2	40.0	1	20.0	2	40.0
Cass	13	53	0	0.0	5	38.5	6	46.2	2	15.4
Clark	44	15	0	0.0	19	43.2	7	15.9	18	40.9
Clay	14	48	0	0.0	10	71.4	0	0.0	4	28.6
Clinton	24	30	0	0.0	9	37.5	2	8.3	13	54.2
Crawford	9	66	0	0.0	6	66.7	2	22.2	1	11.1
Daviess	7	72	0	0.0	3	42.9	1	14.3	3	42.9
Dearborn	30	24	1	3.3	22	73.3	3	10.0	4	13.3
Decatur	12	57	0	0.0	4	33.3	3	25.0	5	41.7
DeKalb	15	47	1	6.7	4	26.7	4	26.7	6	40.0
Delaware	37	20	2	5.4	16	43.2	7	18.9	12	32.4
Dubois	21	36	0	0.0	10	47.6	7	33.3	4	19.0
Elkhart	83	6	7	8.4	37	44.6	12	14.5	27	32.5
Fayette	14	48	2	14.3	0	0.0	12	85.7	0	0.0
Floyd	29	26	0	0.0	14	48.3	6	20.7	9	31.0
Fountain	2	91	0	0.0	1	50.0	0	0.0	1	50.0
Franklin	19	39	0	0.0	14	73.7	3	15.8	2	10.5
Fulton	9	66	1	11.1	6	66.7	1	11.1	1	11.1
Gibson	16	45	0	0.0	5	31.3	4	25.0	7	43.8
Grant	38	18	0	0.0	22	57.9	10	26.3	6	15.8
Greene	9	66	0	0.0	4	44.4	2	22.2	3	33.3
Hamilton	71	9	2	2.8	37	52.1	15	21.1	17	23.9
Hancock	32	23	2	6.3	19	59.4	3	9.4	8	25.0
Harrison	17	43	2	11.8	7	41.2	3	17.6	5	29.4
Hendricks	46	14	3	6.5	14	30.4	3	6.5	26	56.5
Henry	13	53	2	15.4	6	46.2	1	7.7	4	30.8
Howard	55	12	2	3.6	25	45.5	10	18.2	18	32.7
Huntington	18	41	0	0.0	9	50.0	4	22.2	5	27.8
Jackson	23	32	1	4.3	7	30.4	5	21.7	10	43.5
Jasper	7	72	0	0.0	3	42.9	2	28.6	2	28.6
Jay	10	64	1	10.0	5	50.0	2	20.0	2	20.0
Jefferson	14 12	48 57	1 0	7.1 0.0	10 7	71.4 58.3	1 0	7.1 0.0	2 5	14.3 41.7
Jennings	55	57	2	3.6	29	58.3 52.7	9	0.0 16.4	15	41.7 27.3
Johnson Knox	55 16	45	2	3.6 12.5	29 7	52.7 43.8	9	16.4 12.5	15 5	27.3 31.3
Knox Kosciusko	16 37			2.7		43.8 16.2		40.5		31.3 40.5
	37 11	20 60	1	0.0	6	16.2 36.4	15 3	40.5 27.3	15	40.5 36.4
LaGrange Lake	11	60	6	3.9	4 64	36.4 41.8	3 28	27.3 18.3	4 55	36.4 35.9
Lake LaPorte	153 38	3 18	6 1	3.9 2.6	64 17	41.8 44.7	28 11	18.3 28.9	9	35.9 23.7
Lawrence	38 21	18 36	0	2.0 0.0	17	44.7 61.9	2	28.9 9.5	6	28.6
Lawience	79	36 7	7	0.0 8.9	13 37	61.9 46.8	2 7	9.5 8.9	28	28.6 35.4

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Table 2.7. Motorcyclists involved in Indiana collisions, by injury status and county, 2019 (continued)

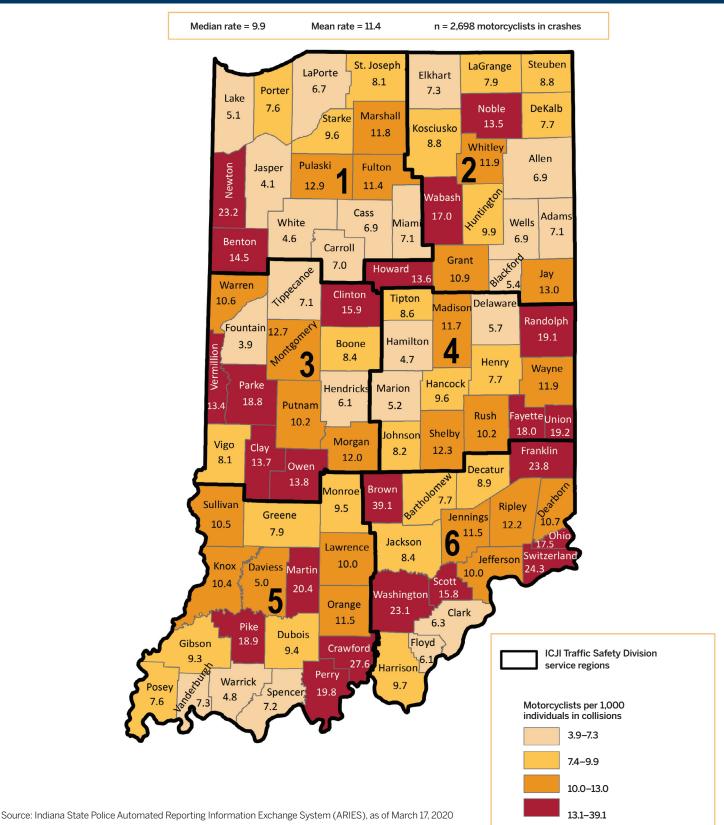
	Total indivi	duals involved		Fatal	Incap	pacitating	Non- ind	capacitating	No	injury
	Count	County rank	Count	As % county total	Count	As % county total	Count	As % county total	Count	As % county total
Marion	342	1	17	5.0	87	25.4	149	43.6	89	26.0
Marshall	26	29	0	0.0	15	57.7	6	23.1	5	19.2
Martin	4	86	0	0.0	4	100.0	0	0.0	0	0.0
Miami	11	60	0	0.0	7	63.6	1	9.1	3	27.3
Monroe	58	11	1	1.7	25	43.1	17	29.3	15	25.9
Montgomery	20	38	0	0.0	12	60.0	3	15.0	5	25.0
Morgan	35	22	0	0.0	19	54.3	8	22.9	8	22.9
Newton	11	60	1	9.1	7	63.6	0	0.0	3	27.3
Noble	24	30	0	0.0	13	54.2	6	25.0	5	20.8
Ohio	4	86	0	0.0	2	50.0	1	25.0	1	25.0
Orange	8	69	1	12.5	4	50.0	1	12.5	2	25.0
Owen	10	64	1	10.0	5	50.0	0	0.0	4	40.0
Parke	11	60	1	9.1	5	45.5	0	0.0	5	45.5
Perry	12	57	0	0.0	6	50.0	3	25.0	3	25.0
Pike	5	82	0	0.0	4	0.0	0	0.0	1	0.0
Porter	66	10	2	3.0	31	47.0	18	27.3	15	22.7
Posey	6	78	0	0.0	1	16.7	2	33.3	3	50.0
Pulaski	7	72	0	0.0	5	71.4	0	0.0	2	28.6
Putnam	14	48	1	7.1	8	57.1	1	7.1	4	28.6
Randolph	13	53	1	7.7	5	38.5	1	7.7	6	46.2
Ripley	14	48	0	0.0	9	64.3	2	14.3	3	21.4
Rush	5	82	0	0.0	1	20.0	2	40.0	2	40.0
St. Joseph	112	4	2	1.8	61	54.5	20	17.9	29	25.9
Scott	18	41	0	0.0	10	55.6	3	16.7	5	27.8
Shelby	22	34	0	0.0	11	50.0	5	22.7	6	27.3
Spencer	6	78	1	16.7	3	50.0	0	0.0	2	33.3
Starke	7	72	0	0.0	1	14.3	1	14.3	5	71.4
Steuben	19	39	3	15.8	8	42.1	3	15.8	5	26.3
Sullivan	6	78	0	0.0	3	50.0	2	33.3	1	16.7
Switzerland	7	72	1	14.3	2	28.6	3	42.9	1	14.3
Tippecanoe	79	7	4	5.1	15	19.0	42	53.2	18	22.8
Tipton	5	82	0	0.0	1	20.0	3	60.0	1	20.0
Union	3	88	0	0.0	3	100.0	0	0.0	0	0.0
Vanderburgh	94	5	2	2.1	43	45.7	25	26.6	24	25.5
Vermillion	7	72	1	14.3	2	28.6	3	42.9	1	14.3
Vigo	43	16	1	2.3	24	55.8	5	11.6	13	30.2
Wabash	23	32	3	13.0	8	34.8	6	26.1	6	26.1
Warren	3	88	0	0.0	3	100.0	0	0.0	0	0.0
Warrick	13	53	0	0.0	3	23.1	6	46.2	4	30.8
Washington	22	34	1	4.5	9	40.9	8	36.4	4	18.2
Wayne	42	17	2	4.8	13	31.0	20	47.6	7	16.7
Wells	8	69	0	0.0	6	75.0	0	0.0	2	25.0
White	6	78	0	0.0	5	83.3	0	0.0	1	16.7
Whitley	17	43	0	0.0	12	70.6	2	11.8	3	17.6
Unknown	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

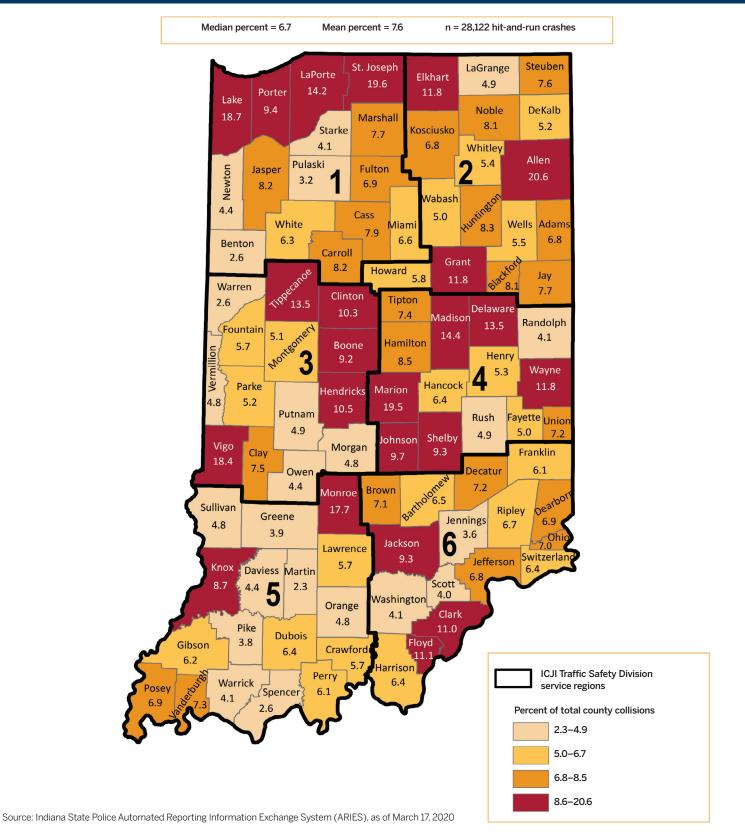
Non-incapacitating injuries include those reported as non-incapacitating, possible, not reported, refused, and unknown injuries.
 Motorcyclists include operators and passengers on motorcycles, class A and class B motor-driven cycles, and motorized bicycles.





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Map 2.10. Percentage of county collisions that involved a hit-and-run driver, by ICJI Traffic Safety Division service region, 2019



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Table 2.8. County ranks by collision metric, 2019

		Low			High		
		LOW	0.00		1 light		
County	Fatalities per 100K population	Speed-related collisions as % of total collisions	Alcohol-impaired collisions as % of total collisions	n metric Motorcycle collisions as % of total collisions	Unrestrained passenger vehicle injuries as % total injuries	Young drivers as % of total drivers in collisions	Average score of six metrics
Adams	15	36	52	75	33	63	46
Allen	57	32	10	77	73	9	43
Bartholomew	51	33	29	67	53	61	49
Benton	1	64	17	18	14		34
Blackford	89	86	73	85	63	83	80
Boone	74	47	49	58	38	66	55
Brown	13	25	62	1	8	13	21
Carroll	32	26	87	76	66	53	56
Cass	66	59	69	79	59	35	61
Clark	69	78	72	81	62	14	63
Clay	17	53	76	20	5	68	40
Clinton	62	30	37	16	41	37	37
Crawford	34	39	71	2	2	87	39
Daviess	14	42	3	24	4	91	30
Dearborn	37	57	56	39	30	29	41
Decatur	53	19	89	54	48	18	47
DeKalb	79	13	51	65	87	30	54
Delaware	40	41	57	84	84	2	52
Dubois	88	63	81	52	56	20	60
Elkhart	47	22	42	70	79	19	47
Fayette	24	81	21	13	16	47	34
Floyd	68		75	82	91	11	69
Fountain	72	61	18		27	75	58
Franklin	64	29	79	4	21	65	44
Fulton	29	51		37	7	41	42
Gibson	63	34	68	53	35	17	45
Grant	39	12	85	38	37	16	38
Greene	35	76	91	63	23	74	60
Hamilton	82	74	53	89	88	70	76
Hancock	43	58	63	50	76	69	59
Harrison	22	80	27	48	40	48	44
Hendricks	55	68	67	83	43	51	61
Henry	50	44	32	66	34	71	50
Howard	45	66	25	21	18	12	31
Huntington	33	10	33	47	75	10	35
Jackson	8	43	31	59	10	8	27
Jasper	44	11	34	91	65	24	45
Jay	11	92	83	25	20	67	50
Jefferson	36	77	11	46	23	42	39
Jennings	9	73	46	35	46	44	42
Johnson	85	79	59	60	71	56	68
Knox	23	45	12	42	70	26	37
Kosciusko	52	72	65	55	85	15	57
LaGrange	49	9	48	64	52	58	47
	59		60	87	52 83	21	53
Lake		17		87	83 86		
LaPorte	58		6			28	46
Lawrence	30	75	70	45	44	33	50
Madison	65	71	47	34	61	23	50

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Table 2.8. County ranks by collision metric, 2019 (continued)

		Low			High		
			Collisio	n metric			
County	Fatalities per 100K population	Speed-related collisions as % of total collisions	Alcohol-impaired collisions as % of total collisions	Motorcycle collisions as % of total collisions	Unrestrained passenger vehicle injuries as % total injuries	Young drivers as % of total drivers in collisions	Average score of six metrics
Marion	54	46	88	86	54	5	56
Narshall	25	35	38	33	64	54	42
<i>l</i> lartin	7	20	24	7	69	92	37
liami	21	4	50	74	25	32	34
lonroe	87	28	64	51	58	4	49
lontgomery	41	40	78	27	72	39	50
lorgan	76	48	36	30	68	46	51
ewton	6	2		5	28	72	20
oble	16	21	13	22	9	50	22
hio	89	65	92	14	55	57	62
range	27	60	77	36	3	64	45
wen	78	90	23	19	19	73	50
arke	10	38	44	12	13	45	27
erry	41	67	8		26	76	38
ike	89	3	1	11	22		35
orter	83	16	14	68	90	34	51
osey	84	27	26	69	57	82	58
ulaski	3	52	41	26	31	49	34
utnam	26	8	15	44	12	38	24
andolph	28	89	30	10	15	89	44
pley	18	70	90	29	39	79	54
ush	73	54	58	43	35	77	57
t. Joseph	56	37	82	62	78	25	57
cott	12	83	16	17	49	31	35
nelby	19	14	19	28	51	55	31
bencer	5	82	45	72	32	40	46
tarke	80	56	80	49	50	81	66
teuben	4	23	74	56	47	7	35
ullivan	60	85	4	41	11	80	47
witzerland	2	87	28	3	17	52	32
ppecanoe	67	7	43	73	89	1	47
ppecanoe	31		-45	57	80	62	40
nion	46	84	2	9	1	84	38
anderburgh	77	91	84	71	92	3	70
ermillion	48	15	22	23	29	90	38
	61	69	55	61	74	90	54
go							
abash	20 89	18 55	20 61	15 40	41	27 85	24 56
arren	71				6 77	59	
arrick		62	39	88			66
ashington	38	49	54	6	60	78	48
/ayne	70	31	66	32	81	22	50
/ells	86	50	35	78	45	43	56
/hite	81	5	40	90	82	36	56
/hitley	75	24	9	31	67	60	44

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020; ; Indiana Bureau of Motor Vehicles, as of April 3, 2020; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 12, 2020

Notes:
1) A collision is identified 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 contributing factor of the collision; (2) a vehicle driver is issued a speeding citation.
2) A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test

A consider the considered alcohormination when any vehicle driver involved has a BAC test.
 Motorcyclists include operators and passengers on motorcycles, class A and class B motor-driven cycles, and motorized bicycles.
 Young drivers are drivers ages 15 to 20.
 Ties received the same rank.
 Color scale depicts rankings from high (1) to low (92) for each individual collision metric.



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COLLISIONS, 2019

This section summarizes single-year (2018 to 2019) and five-year (2015 to 2019) collision trends in Indiana. In 2019, 217,396 traffic crashes occurred in Indiana, a slight increase of just 0.1 percent from the previous year (Table 3.1).

Fatal collisions declined 7 percent during this time frame, from 795 in 2018 to 739 in 2019. Collisions with non-fatal injuries also decreased 4 percent between 2018 and 2019, falling from 32,411 to 31,194.

Over the five-year time period, the number of both fatal and non-fatal collisions reached five-year lows in 2019. Non-fatal collisions declined by 3 percent annually between 2015 and 2019, while fatal collisions fell at an annual rate of 1 percent. The rate of fatal collisions also decreased during this time period, reaching a five-year low of 3.4 fatal collisions per 1,000 crashes in 2019 (Figure 3.1).

Non-motorists

Overall, the number and rate of crashes involving both pedestrians and pedalcyclists reached five-year lows in 2019.

The number of collisions involving pedestrians declined 5 percent from 1,653 in 2018 to 1,573 in 2019. The rate of pedestrian-involved crashes per 1,000 collisions also dropped during this time, from 7.6 per 1,000 collisions to 7.2.

Crashes involving pedalcyclists declined 10 percent from 820 in 2018 to 741 in 2019, while the rate of collisions involving pedalcyclists fell from 3.8 per 1,000 collisions to 3.4 (Figure 3.2). Since 2015, the number of collisions involving pedalcyclists has decreased by 22 percent.

Month, day, and time

The largest number of collisions per month in 2019 occurred in the late fall and winter—specifically October, November, and January. However, the highest number of monthly fatal crashes occurred in late summer and early fall months, from July through October. These monthly trends were similar to 2018 collision numbers, although 2019 saw less fatal collisions in the winter months of December and January and the spring months of March through May (Table 3.2).

In 2019, collisions were most common on weekdays from 3–5:59 p.m., with the highest number occurring on Fridays. The highest proportion of fatal crashes happened on Fridays and Sundays from midnight to 2:59 a.m. (Table 3.3).

On average, monthly counts of daytime collisions are higher than nighttime collisions. There were 12,296 daytime crashes on average each month in 2019, compared to 5,616 nighttime collisions (Figure 3.3). However, monthly average fatal crashes were slightly higher at night (29) than during the day (28). The highest number of daytime fatal collisions were in February and July, while the highest number of fatal nighttime collisions occurred in May and October. In contrast, the lowest number of daytime fatal collisions happened in the spring between March and May, while nighttime fatal collisions were lowest in the winter between November and January (Figure 3.4).

In 2019, hit-and-runs were the most prevalent collision circumstance recorded, making up 13 percent of all crashes. This was followed by speed-related crashes (9 percent of all collisions), distracted driving of any kind (5 percent), aggressive driving (3 percent), and alcohol-impaired crashes (2 percent) (Table 3.4). Speed-related collisions had the largest difference in seasonality, representing an average of 21 percent of all collisions from May

through September. In 2019, speed-related collisions made up 25 percent of all fatal collisions while alcohol-impaired collisions accounted for 14 percent of all fatal crashes (not shown in table).

With regard to time of day, the highest proportion of hit-and-run and alcohol-impaired-related crashes occurred from midnight–5:59 a.m. across all days of the week, particularly on Saturdays and Sundays (Table 3.5). Distracted collisions of any kind were highest during the afternoon period from noon–5:59 p.m. across all days of the week.

Primary factor

In 2019, driver-related factors accounted for 86 percent of all collisions and 96 percent of fatal collisions (calculated from Table 3.6). Driver unsafe actions represented the largest number of all collisions, accounting for 65 percent of total collisions. Among unsafe actions by drivers, following too closely and failure to yield right of way accounted for the most collisions.

The following driver factors had fatal collision rates that were above the average rate for all crashes (3.4 fatal collisions per 1,000 collisions):

- Driver influenced by pedestrian action: 73.3
- Driver left of center: 25.9
- Wrong way on a one-way road: 25.6
- Unsafe speed: 15.6
- Driver illness: 15.2
- Drive ran off the road: 9.6
- Overcorrecting or oversteering: 7.0
- Disregarding signal or sign: 6.1

Overall rates of fatal injury collisions were higher among primary factors attributed to driver actions (3.8 fatal collisions per 1,000) than those with primary factors attributed to vehicles (1.3) or the environment (0.8). (Table 3.6).

Although unsafe driver actions made up the majority of both fatal and nonfatal collisions, they were more likely to be a primary factor in non-fatal collisions (65 percent). Similarly, vehicle factors were more likely to be a factor in non-fatal collisions (11 percent) than fatal ones (3 percent). In contrast, driver loss of control was much more likely to be a primary factor in fatal collisions (26 percent), than non-fatal ones (9 percent) (Figure 3.5).

Census locale and road class

Fatal collisions were more likely to happen in non-urban areas. In 2019, collisions in suburban, exurban, and rural areas accounted for 27 percent of all collisions, but represented more than half of all fatal collisions (56 percent) (Figure 3.6). In rural areas, 9 out of every 1,000 collisions involved a death, a rate that was four times higher than the rate in urban areas (2.1 per 1,000). Accordingly, fatal injury collisions are less likely to happen on local or city roads than other types of roads. Rates of fatal injury collisions were highest on county roads, state roads, and U.S. routes (Figure 3.7).

Road parameters and manner of collisions

When observing collisions by junction type, 67 percent of all crashes and 75 percent of all fatal crashes happened in locations with no junction (calculated from table). However, collisions at railroad crossings had the highest fatal collision rate of all road parameter types, with 21.1 fatal collisions for every 1,000 crashes. Collisions on curved roads had a higher fatal collision rate per 1,000 collisions (6.1) in 2019 than those on a straight

road (3.0), while collisions on gravel roads had a higher fatal collision rate than those on asphalt and concrete roads (Table 3.7).

Rear-end crashes accounted for the largest proportion (24 percent) of all crashes. Manners of collisions that resulted in a higher than average fatal collision rate per 1,000 crashes included head-on collisions (21.1), running off the road (8.1), and collisions with objects in the road (6.3) (Table 3.8).

Traffic control type and environmental conditions

Slightly over half (54 percent) of all collisions involved the presence of some type of traffic control measure, such as a stop sign or no passing zone.

The following traffic controls had fatal collision rates that were higher than the average rate of 6.5 fatal collisions per 1,000 collisions:

- Other regulatory signs or markings: 17.2
- Railroad crossings: 16.9
- No passing zones: 5.5
- Lane control: 4.7

Sixty-six percent of fatal collisions happened during daylight, while crashes on roads that were dark and not lighted had the highest rate of fatal collisions (6.5 per 1,000 collisions). Environmental conditions that included fog/smoke/smog (11.1) as well as loose material on the road (10.6) had the highest rates of fatal collisions per 1,000 collisions (Table 3.10).

Work zone collisions

Between 2018 and 2019, the number of work zone collisions increased from 5,249 to 5,459 (Figure 3.8). In 2019, the fatal collision rate for work zones (4.6) was higher than for non-work zone collisions (3.4). Sixty-one percent of all work zone collisions occurred in areas with lane closure, while the highest fatal collision rate per 1,000 was associated with intermittent or moving work (7.7) (Table 3.11).

In 2019, work zone collision rates per 1,000 total collisions were highest in suburban areas (37.4), yet fatal collision rates were highest in rural areas (16.2) (Figure 3.9). Both work zone collision rates and fatal collision rates were highest on interstates (92.1 collisions and 7.4 fatal collisions per 1,000) and lowest on county roads (4.5 collisions and 0 fatal collisions per 1,000) (Figure 3.10).

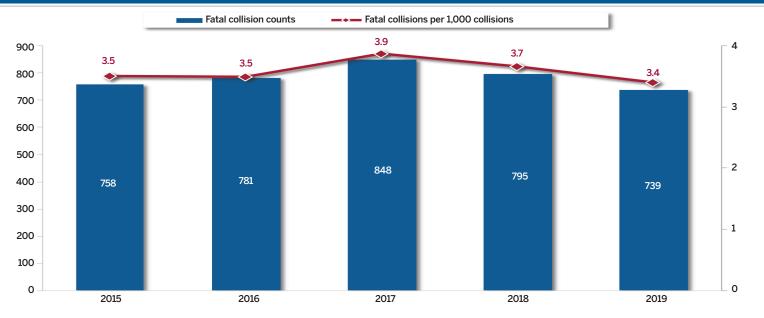
While 75 percent of work zone collisions in 2019 occurred during daylight, fatal work zone collision rates were highest during dark (not lighted) hours (13.8 fatal collisions per 1,000 work zone collisions). The weather condition with the highest fatal injury rate in work zone collisions was fog/smoke/smog (47.6 per 1,000 collisions) (Table 3.12). Lane control collisions (2,538) represented the largest number of work zone collisions that were related to a traffic control measure, but the highest rate of fatal injury in work zones happened when a regulatory sign or other marking was present (33.3 per 1,000 collisions) (Table 3.13).

Table 3.1. Indiana traffic collisions by collision severity, 2015–2019

						Annual rate	e of change
	2015	2016	2017	2018	2019	2018–19	2015–19
All collisions	216,531	223,961	219,314	217,264	217,396	0.1%	0.1%
Fatal	758	781	848	795	739	-7.0%	-0.6%
Non-fatal	34,466	35,337	34,224	32,411	31,194	-3.8%	-2.5%
Property damage only	181,307	187,843	184,242	184,058	185,463	0.8%	0.6%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Figure 3.1. Indiana fatal traffic collisions, 2015–2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

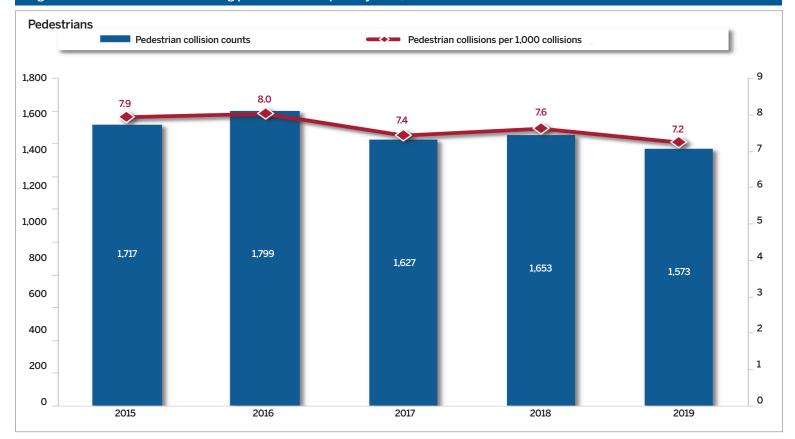
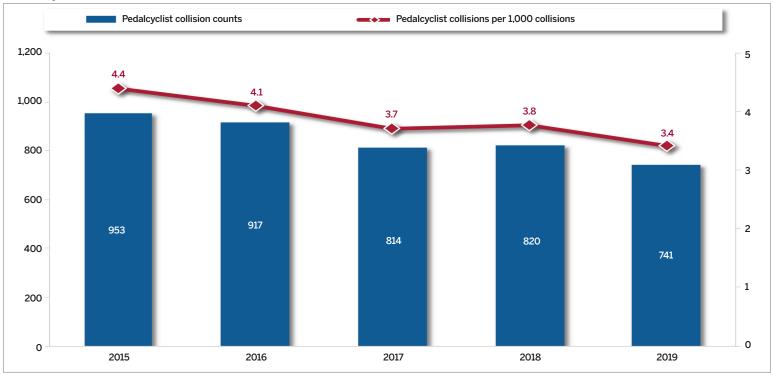


Figure 3.2. Indiana collisions involving pedestrians and pedalcyclists, 2015–2019

Pedalcyclists



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

		Total collisions			Fatal collisions		% Change	(2018–19)
Month	2018	2019	Change	2018	2019	Change	Fatal	Total
Jan	20,787	19,457	-1,330	52	44	-8	-6.4%	-15.4%
Feb	16,179	16,977	798	62	64	2	4.9%	3.2%
Mar	16,980	15,959	-1,021	65	45	-20	-6.0%	-30.8%
Apr	15,775	16,387	612	53	52	-1	3.9%	-1.9%
May	18,421	18,315	-106	73	63	-10	-0.6%	-13.7%
Jun	17,286	17,676	390	59	61	2	2.3%	3.4%
Jul	17,270	17,640	370	75	77	2	2.1%	2.7%
Aug	17,860	18,083	223	75	70	-5	1.2%	-6.7%
Sep	17,750	17,511	-239	72	74	2	-1.3%	2.8%
Oct	20,311	20,128	-183	78	71	-7	-0.9%	-9.0%
Nov	20,151	20,506	355	56	60	4	1.8%	7.1%
Dec	18,494	18,757	263	75	58	-17	1.4%	-22.7%
	217,264	217,396	132	795	739	-56	0.1%	-7.0%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Table 3.3. Indiana traffic collisions, by day of the week and time of day, 2019

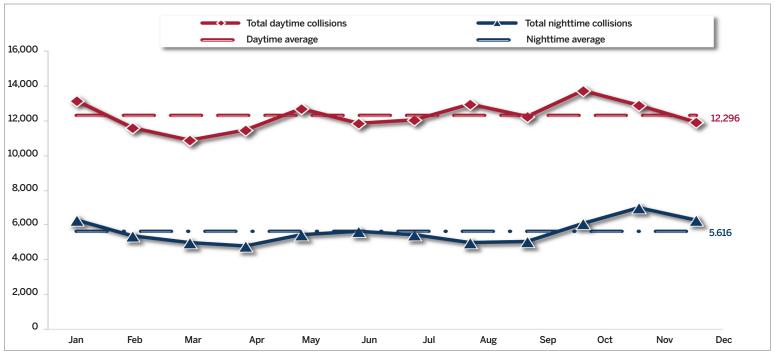
	Time of day												
Day of the week	Midnight–2:59 a.m.	3–5:59 a.m.	6–8:59 a.m.	9–11:59 a.m.	Noon-2:59 p.m.	3–5:59 p.m.	6–8:59 p.m.	9–11:59 p.m.	All hours				
Total collisions	8,807	9,946	28,074	27,774	39,074	52,632	31,315	17,319	214,941				
Sunday	2,054	1,497	1,453	2,844	4,958	4,855	3,963	2,306	23,930				
Monday	935	1,360	4,961	4,101	5,692	8,591	4,447	2,105	32,192				
Tuesday	1,022	1,428	5,279	4,300	5,559	8,588	4,302	2,211	32,689				
Wednesday	923	1,336	4,992	3,881	5,303	7,858	4,250	2,084	30,627				
Thursday	958	1,364	4,634	3,848	5,395	8,255	4,482	2,373	31,309				
Friday	1,140	1,447	4,682	4,501	6,323	9,045	5,267	3,092	35,497				
Saturday	1,775	1,514	2,073	4,299	5,844	5,440	4,604	3,148	28,697				
Fatal collisions	68	56	70	67	91	112	122	98	684				
Sunday	23	14	7	8	17	18	12	9	108				
Monday	5	8	11	5	13	15	23	18	98				
Tuesday	4	6	9	11	18	20	17	14	99				
Wednesday	3	8	12	14	11	11	17	10	86				
Thursday	7	2	9	5	12	14	18	14	81				
Friday	12	9	10	9	9	21	16	14	100				
Saturday	14	9	12	15	11	13	19	19	112				
% Fatal	0.8%	0.6%	0.2%	0.2%	0.2%	0.2%	0.4%	0.6%	0.3%				
Sunday	1.1%	0.9%	0.5%	0.3%	0.3%	0.4%	0.3%	0.4%	0.5%				
Monday	0.5%	0.6%	0.2%	0.1%	0.2%	0.2%	0.5%	0.9%	0.3%				
Tuesday	0.4%	0.4%	0.2%	0.3%	0.3%	0.2%	0.4%	0.6%	0.3%				
Wednesday	0.3%	0.6%	0.2%	0.4%	0.2%	0.1%	0.4%	0.5%	0.3%				
Thursday	0.7%	0.1%	0.2%	0.1%	0.2%	0.2%	0.4%	0.6%	0.3%				
Friday	1.1%	0.6%	0.2%	0.2%	0.1%	0.2%	0.3%	0.5%	0.3%				
Saturday	0.8%	0.6%	0.6%	0.3%	0.2%	0.2%	0.4%	0.6%	0.4%				
		Low	<	<		>	> +	ligh					

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Data limited to collisions where day and time were reported.

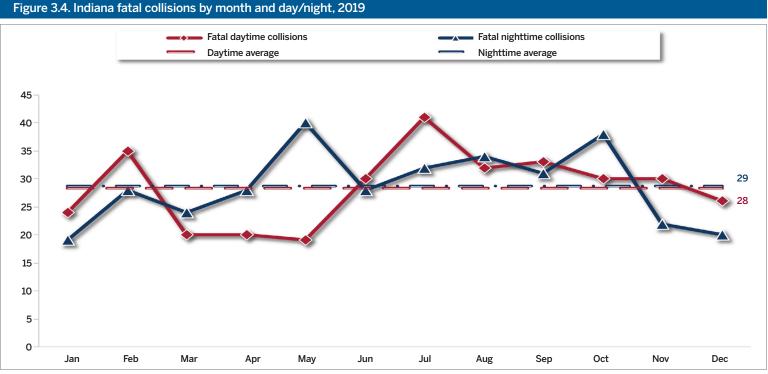
INDIANA TRAFFIC SAFETY FACTS

Figure 3.3. Indiana traffic collisions by month and day/night, 2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Day is defined as 6 a.m.-5:59 p.m. Night is defined as 6 p.m.-5:59 a.m.



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Day is defined as 6 a.m.-5:59 p.m. Night is defined as 6 p.m.-5:59 a.m.

lable :	3.4. Collis	ions by n	ns by month and collision circumstances, 2019												
		Alcohol-i	mpaired	Aggressi	ve driving	Speed-	related	Disrega	rd signal	Hit-an	ıd-run	Distracted	l, any type	Distracted,	cell phone
Month	Total	Count	As % month total	Count	As % month total	Count	As % month total	Count	As % month total	Count	As % month total	Count	As % month total	Count	As % month total
Jan	19,457	310	1.6	724	3.7	4,418	22.7	324	1.7	2,394	12.3	664	3.4	79	0.4
Feb	16,977	303	1.8	621	3.7	3,198	18.8	256	1.5	2,068	12.2	582	3.4	73	0.4
Mar	15,959	343	2.1	524	3.3	1,208	7.6	344	2.2	2,202	13.8	786	4.9	109	0.7
Apr	16,387	317	1.9	527	3.2	1,086	6.6	320	2.0	2,262	13.8	855	5.2	98	0.6
May	18,315	347	1.9	605	3.3	1,065	5.8	340	1.9	2,333	12.7	1,007	5.5	116	0.6
Jun	17,676	322	1.8	568	3.2	1,098	6.2	318	1.8	2,369	13.4	915	5.2	128	0.7
Jul	17,640	309	1.8	579	3.3	973	5.5	342	1.9	2,433	13.8	977	5.5	114	0.6
Aug	18,083	331	1.8	572	3.2	1,007	5.6	338	1.9	2,421	13.4	974	5.4	100	0.6
Sep	17,511	313	1.8	542	3.1	938	5.4	336	1.9	2,415	13.8	939	5.4	129	0.7
Oct	20,128	334	1.7	639	3.2	1,316	6.5	349	1.7	2,436	12.1	1,002	5.0	126	0.6
Nov	20,506	332	1.6	629	3.1	1,943	9.5	310	1.5	2,369	11.6	763	3.7	98	0.5
Dec	18,757	365	1.9	656	3.5	1,950	10.4	323	1.7	2,420	12.9	836	4.5	95	0.5
Total	217,396	3,926	1.8	7,186	3.3	20,200	9.3	3,900	1.8	28,122	12.9	10,300	4.7	1,265	0.6
				Low	<		<		>		>	High			

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes: 1) Color comparisons are applied within collision-type categories. 2) Counts of different collision circumstances will not sum to the total number of collisions. 3) See glossary for definitions of alcohol-impaired, aggressive driving, speed-related, disregard signal, hit-and-run, distracted (any type), and distracted, cell phone collisions.

INDIANA TRAFFIC SAFETY FACTS

\sim rapie 3.3. indiana trarne completis, by day, nour, and completic constances, Σ	Table 3.5. Indiana traffic collisions, by day	hour, and collision circumstances, 2019
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		All collisions	Alcohol	-impaired	Aggress	ive driving	Speed	I-related	Disrega	ard signal	Hit-a	nd-run	Distracte	d, any type		cted, cell one
Day	Time	Total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total
	Midnight-5:59 a.m.	3,551	434	12.2	112	3.2	537	15.1	46	1.3	1,053	29.7	127	3.6	35	1.0
~	6–11:59 a.m.	4,297	57	1.3	144	3.4	605	14.1	118	2.7	616	14.3	192	4.5	26	0.6
Sun	Noon-5:59 p.m.	9,813	107	1.1	403	4.1	1,594	16.2	191	1.9	1,215	12.4	498	5.1	45	0.5
	6 p.m.–11:59 p.m.	6,269	244	3.9	206	3.3	867	13.8	100	1.6	1,116	17.8	228	3.6	40	0.6
	Midnight-5:59 a.m.	2,295	102	4.4	85	3.7	376	16.4	26	1.1	423	18.4	60	2.6	14	0.6
	6–11:59 a.m.	9,062	22	0.2	277	3.1	937	10.3	212	2.3	910	10.0	404	4.5	44	0.5
Mon	Noon-5:59 p.m.	14,283	103	0.7	518	3.6	1,202	8.4	247	1.7	1,622	11.4	701	4.9	75	0.5
	6 p.m.–11:59 p.m.	6,552	150	2.3	240	3.7	826	12.6	105	1.6	943	14.4	286	4.4	38	0.6
	Midnight-5:59 a.m.	2,450	81	3.3	70	2.9	357	14.6	27	1.1	423	17.3	82	3.3	10	0.4
-	6–11:59 a.m.	9,579	26	0.3	311	3.2	962	10.0	211	2.2	898	9.4	430	4.5	36	0.4
Tue	Noon-5:59 p.m.	14,147	91	0.6	468	3.3	912	6.4	230	1.6	1,610	11.4	818	5.8	79	0.6
	6 p.m.–11:59 p.m.	6,513	175	2.7	191	2.9	618	9.5	124	1.9	959	14.7	273	4.2	45	0.7
	Midnight-5:59 a.m.	2,259	106	4.7	71	3.1	330	14.6	29	1.3	383	17.0	54	2.4	9	0.4
	6–11:59 a.m.	8,873	19	0.2	272	3.1	737	8.3	180	2.0	859	9.7	420	4.7	48	0.5
Wed	Noon-5:59 p.m.	13,161	71	0.5	439	3.3	663	5.0	229	1.7	1,446	11.0	716	5.4	72	0.5
	6 p.m.–11:59 p.m.	6,334	177	2.8	195	3.1	423	6.7	115	1.8	933	14.7	316	5.0	47	0.7
	Midnight–5:59 a.m.	2,322	133	5.7	58	2.5	235	10.1	19	0.8	425	18.3	89	3.8	19	0.8
	6–11:59 a.m.	8,482	35	0.4	223	2.6	511	6.0	179	2.1	830	9.8	406	4.8	39	0.5
Thu	Noon-5:59 p.m.	13,650	71	0.5	479	3.5	645	4.7	254	1.9	1,456	10.7	712	5.2	70	0.5
	6 p.m.–11:59 p.m.	6,855	206	3.0	223	3.3	606	8.8	139	2.0	1,067	15.6	330	4.8	54	0.8
	Midnight-5:59 a.m.	2,587	152	5.9	83	3.2	320	12.4	31	1.2	509	19.7	71	2.7	17	0.7
	6–11:59 a.m.	9,183	40	0.4	275	3.0	809	8.8	175	1.9	908	9.9	417	4.5	48	0.5
Fri	Noon-5:59 p.m.	15,368	144	0.9	469	3.1	633	4.1	228	1.5	1,716	11.2	867	5.6	90	0.6
	6 p.m.–11:59 p.m.	8,359	272	3.3	265	3.2	546	6.5	161	1.9	1,320	15.8	403	4.8	56	0.7
	Midnight-5:59 a.m.	3,289	349	10.6	105	3.2	478	14.5	41	1.2	892	27.1	120	3.6	37	1.1
<u> </u>	6–11:59 a.m.	6,372	56	0.9	194	3.0	763	12.0	144	2.3	762	12.0	297	4.7	32	0.5
Sat	Noon-5:59 p.m.	11,284	142	1.3	411	3.6	1,253	11.1	198	1.8	1,426	12.6	546	4.8	55	0.5
	6 p.m.–11:59 p.m.	7,752	327	4.2	307	4.0	945	12.2	141	1.8	1,334	17.2	329	4.2	69	0.9
Sun	(Total)	23,930	842	3.5	865	3.6	3,603	15.1	455	1.9	4,000	16.7	1,045	4.4	146	0.6
Mon	(Total)	32,192	377	1.2	1,120	3.5	3,341	10.4	590	1.8	3,898	12.1	1,451	4.5	171	0.5
Tue	(Total)	32,689	373	1.1	1,040	3.2	2,849	8.7	592	1.8	3,890	11.9	1,603	4.9	170	0.5
Wed	(Total)	30,627	373	1.2	977	3.2	2,153	7.0	553	1.8	3,621	11.8	1,506	4.9	176	0.6
Thu	(Total)	31,309	445	1.4	983	3.1	1,997	6.4	591	1.9	3,778	12.1	1,537	4.9	182	0.6
Fri	(Total)	35,497	608	1.7	1,092	3.1	2,308	6.5	595	1.7	4,453	12.5	1,758	5.0	211	0.6
Sat	(Total)	28,697	874	3.0	1,017	3.5	3,439	12.0	524	1.8	4,414	15.4	1,292	4.5	193	0.7
		214,941	3,892	1.8	7,094	3.3	19,690	9.2	3,900	1.8	28,054	13.1	10,192	4.7	1,249	0.6
	1		5,002		.,				3,000						_,9	
				Low		<	<			>	>		High			

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

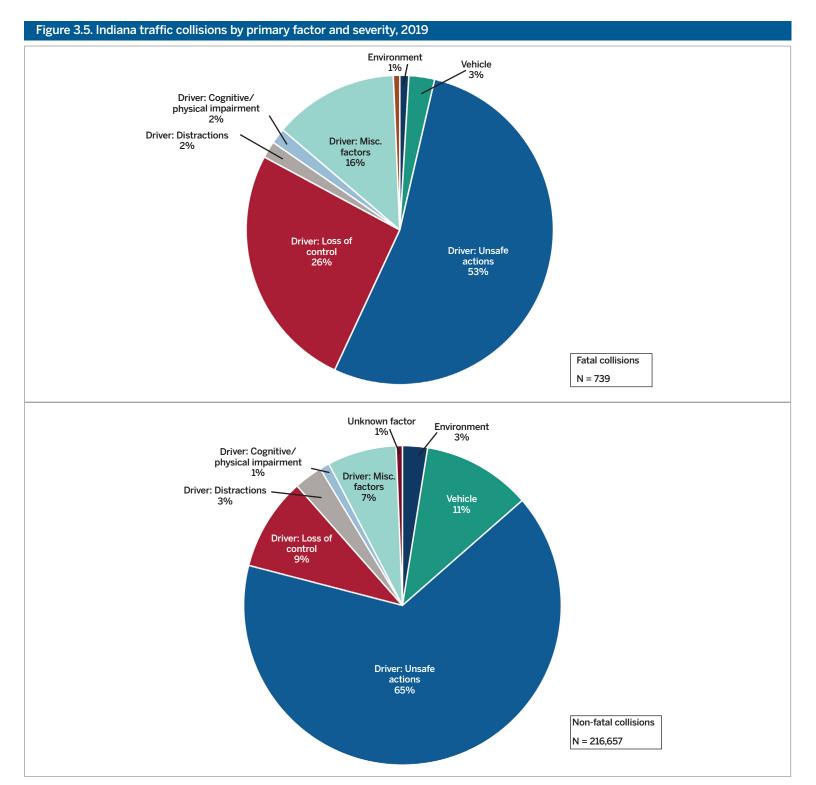
Notes:

Notes:
1) Total daily counts exclude collisions with invalid time reported.
2) Color comparisons are applied within collision-type categories.
3) Counts of different collisions circumstances will not sum to the total number of collisions.
4) See glossary for definitions of alcohol-impaired, aggressive driving, speed-related, disregard signal, hit-and-run, distracted (any type), and distracted, cell phone collisions.

Table 3.6. Indiana collisions by primary factor and collision severity, 2019

		Collisions,	, by severity		Fatal collisions
Primary factor	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions
Driver: Unsafe actions	142,162	394	21,095	120,673	2.8
Following too closely	37,494	27	5,228	32,239	0.7
Failure to yield right of way	34,575	99	7,743	26,733	2.9
Unsafe backing	19,644	6	256	19,382	0.3
Unsafe lane movement	11,026	19	973	10,034	1.7
Speed too fast for weather conditions	8,843	20	1,231	7,592	2.3
Disregard signal/Reg sign	7,548	46	2,542	4,960	6.1
Improper turning	8,010	2	512	7,496	0.2
Improper lane usage	5,176	11	384	4,781	2.1
Unsafe speed	4,225	66	1,122	3,037	15.6
Left of center	3,284	85	851	2,348	25.9
Improper passing	2,103	7	195	1,901	3.3
Wrong way on one way	234	6	58	170	25.6
Driver: Loss of control	20,595	191	4,402	16,002	9.3
Ran off road	17,748	171	3,841	13,736	9.6
Overcorrecting/oversteering	2,847	20	561	2,266	7.0
Driver: Distractions	6,261	13	998	5,250	2.1
Unspecified distraction	5,778	12	910	4,856	2.1
Cell phone/other electronic device	483	1	88	394	2.1
Driver: Cognitive/physical impairment	2,170	12	709	1,449	5.5
Driver asleep or fatigued	1,444	1	358	1,085	0.7
Driver illness	726	11	351	364	15.2
Driver: Miscellaneous factors	15,326	97	2,251	12,978	6.3
Other (unspecified)	14,685	50	1,796	12,839	3.4
Influenced by pedestrian action	641	47	455	139	73.3
Driver factors (all)	186,514	707	29,455	156,352	3.8
Environmental factors	23,968	20	1,057	22,891	0.8
Vehicle factors	5,513	7	608	4,898	1.3
Unknown	1,401	5	74	1,322	3.6
All collisions	217,396	739	31,194	185,463	3.4

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

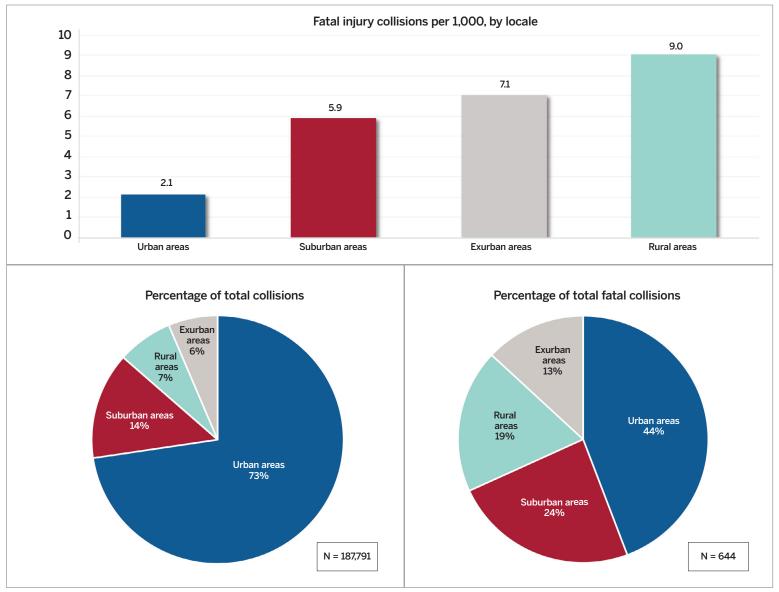


Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

See Table 3.6 for definitions of factor categories related to driver actions.
 Limited to collisions for which the primary factor is known.





Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Includes only collisions where valid locale was identified.

2) Fatal injury collision rate is calculated per 1,000 total collisions in each locale.

3) See glossary for census locale definitions.

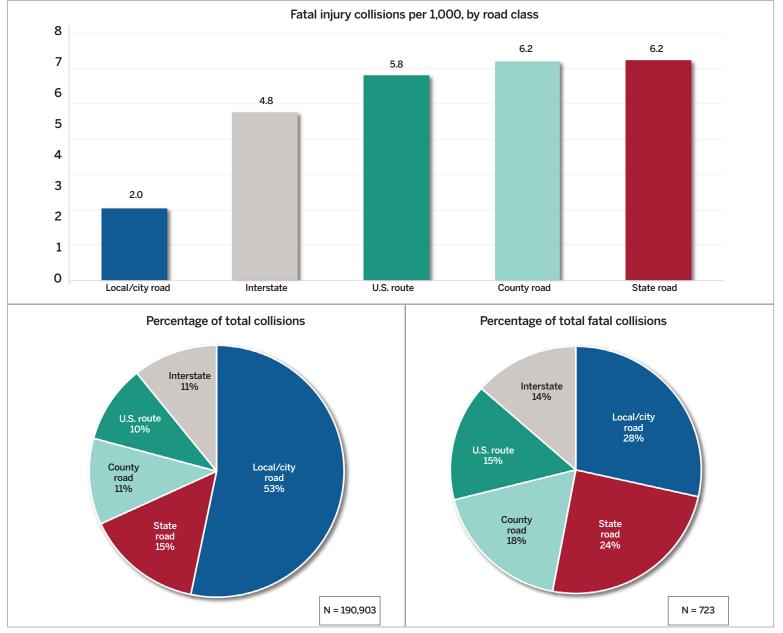


Figure 3.7. Fatal injury collision rates and distribution of collisions, by road class, 2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Excludes unknown road class.

Table 3.7. Indiana traffic collisions by severity and road parameters, 2019

		Collisions	s, by severity		Fatal collisions
	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions
Total collisions	217,396	739	31,194	185,463	3.4
By junction type					
No junction involved	145,314	556	18,057	126,701	3.8
Four-way intersection	41,866	110	8,756	33,000	2.6
T-intersection	21,459	53	3,248	18,158	2.5
Ramp	3,596	9	453	3,134	2.5
Traffic circle/roundabout	2,215	1	152	2,062	0.5
Interchange	1,435	2	260	1,173	1.4
Y-intersection	645	0	117	528	0.0
Five point or more	420	0	87	333	0.0
Railroad crossings	380	8	55	317	21.1
Trail crossings	23	0	8	15	0.0
Unknown	43	0	1	42	0.0
By road character					
Straight	188,680	559	27,313	160,808	3.0
Level	161,366	447	23,362	137,557	2.8
Graded	21,580	85	3,064	18,431	3.9
Hillcrest	5,734	27	887	4,820	4.7
Curve	20,004	122	3,338	16,544	6.1
Level	12,924	79	2,089	10,756	6.1
Graded	4,744	33	1,039	4,744	7.0
Hillcrest	1,264	10	210	1,044	7.9
Non-roadway crash	5,956	3	211	5,742	0.5
Unknown	2,756	55	332	2,369	20.0
Roadway surface type					
Asphalt	190,532	651	27,705	162,176	3.4
Concrete	23,319	69	3,219	20,031	3.0
Gravel	2,360	13	176	2,171	5.5
Other	908	6	89	813	6.6
Unknown	277	0	5	272	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total collisions in each type of road parameter.

Table 3.8. Indiana traffic collisions by severity and manner of collision, 2019

		Collisions	, by severity		Fatal collisions
Manner of collision	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions
Total collisions	217,396	739	31,194	185,463	3.4
Rear end	51,950	85	7,799	44,066	1.6
Ran off road	30,996	252	6,375	24,369	8.1
Right angle	26,886	114	7,154	19,618	4.2
Same direction sideswipe	22,454	12	1,268	21,174	0.5
Backing	19,824	2	272	19,550	0.1
Collision with deer	15,381	4	250	15,127	0.3
Left turn	11,512	28	2,373	9,111	2.4
Head on	4,461	94	1,554	2,813	21.1
Opposite direction sideswipe	4,575	12	523	4,040	2.6
Right turn	3,063	1	279	2,783	0.3
Collision with object in road	2,835	18	270	2,547	6.3
Left/right turn	2,402	0	288	2,114	0.0
Non-collision	1,310	19	342	949	14.5
Collision with animal (other)	1,423	2	56	1,365	1.4
Rear to rear	396	0	30	366	0.0
Other collisions manner	15,817	88	2,255	13,474	5.6
Unknown	2,111	8	106	1,997	3.8

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total collisions by each manner of collision.

Table 3.9. Indiana collisions, by severity and traffic control type, 2019

		Collision	s, by severity		Fatal collisions	
Traffic control type	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions	
Total collisions	217,396	739	31,194	185,463	3.4	
Lane control	51,393	242	7,590	43,561	4.7	
Traffic control signal	39,193	66	7,434	31,693	1.7	
Stop sign	21,146	62	4,245	16,839	2.9	
Yield sign	1,991	2	254	1,735	1.0	
No passing zone	1,448	8	273	1,167	5.5	
Other regulatory sign/marking	757	13	167	577	17.2	
Roundabout intersection	642	1	48	593	1.6	
Flashing signal	291	1	55	235	3.4	
Person directing traffic	166	0	34	132	0.0	
Railroad crossing	177	3	17	157	16.9	
Other	576	5	64	507	8.7	
None	96,624	280	10,661	85,683	2.9	
Unknown	2,992	56	352	2,584	18.7	

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

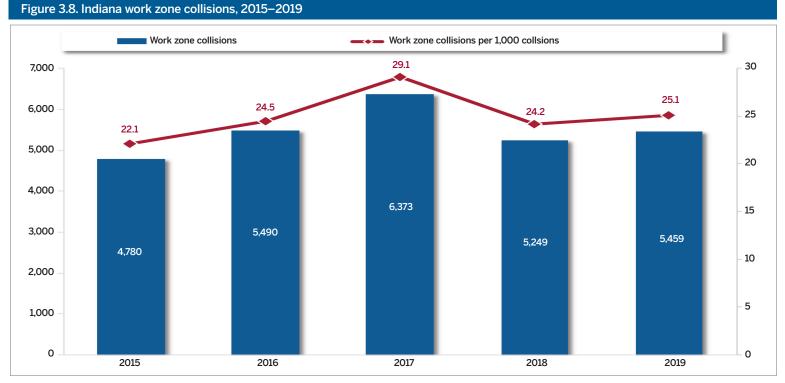
Note: Fatal collision rate is calculated per 1,000 total collisions in each traffic control type.

Table 3.10. Indiana traffic collisions by severity and environmental conditions, 2019

		Collision	s, by severity		Fatal collisions
	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions
All collisions	217,396	739	31,194	185,463	3.4
By light conditions					
Daylight	143,318	371	21,232	121,715	2.6
Dark (not lighted)	31,343	205	3,948	27,190	6.5
Dark (lighted)	30,422	117	4,581	25,724	3.8
Dawn/dusk	10,789	43	1,409	9,337	4.0
Unknown	1,524	3	24	1,497	2.0
By weather conditions					
Clear	140,198	500	20,672	119,026	3.6
Cloudy	39,609	145	5,516	33,948	3.7
Rain	21,861	56	3,281	18,524	2.6
Snow	8,891	15	922	7,954	1.7
Sleet/hail/freezing rain	2,338	5	338	1,995	2.1
Blowing sand/soil/snow	2,450	4	230	2,216	1.6
Fog/smoke/smog	1,078	12	170	896	11.1
Severe cross wind	466	1	63	402	2.1
Unknown	505	1	2	502	2.0
By road surface conditions					
Dry	162,428	596	23,817	138,015	3.7
Wet	34,499	94	5,152	29,253	2.7
Snow/slush	10,689	17	1,041	9,631	1.6
lce	7,864	24	972	6,868	3.1
Water (standing or moving)	812	2	112	698	2.5
Loose material on road	470	5	80	385	10.6
Muddy	130	0	16	114	0.0
Unknown	504	1	4	499	2.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total collisions in each environmental condition category.



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

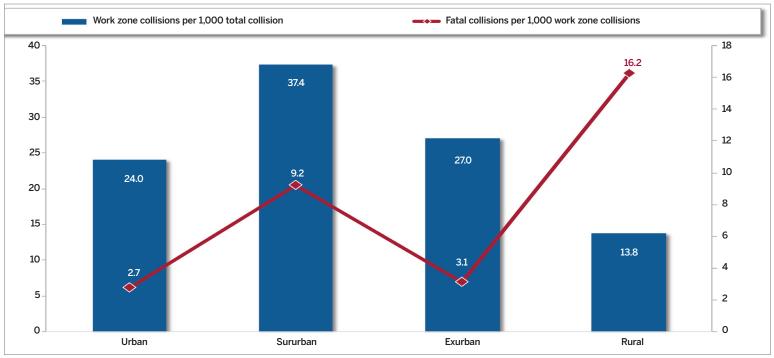
Table 3.11. Indiana collisions in work zones, by severity and construction type, 2019

		Collisions, by severity						
	Total	Fatal	Non-fatal	Property damage	1,000 work zone collisions			
All collisions	217,396	739	31,194	185,463	3.4			
All construction types	5,459	25	805	4,629	4.6			
Not in construction zone	211,937	714	30,389	180,834	3.4			
Construction zone type								
Lane closure	3,314	14	509	2,791	4.2			
Work on shoulder	843	2	122	719	2.4			
Cross over/lane shift	644	4	82	558	6.2			
Intermittent or moving work	647	5	90	552	7.7			
Unknown	211,948	714	30,391	180,843	3.4			

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total collisions in each construction zone type.

Figure 3.9. Indiana work zone collisions, by census locale, 2019



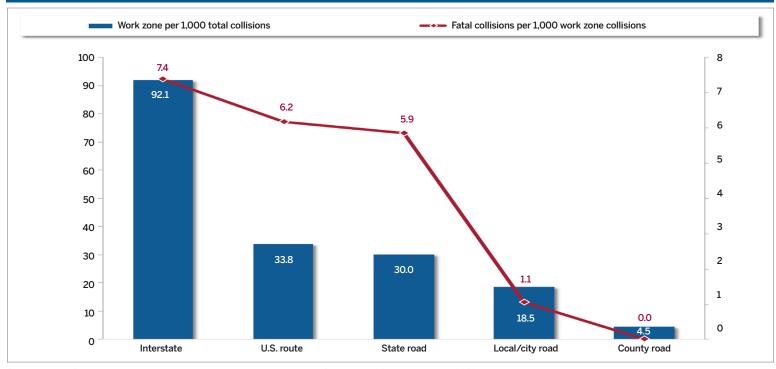
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Includes only collisions with valid locale reported

2) See glossary for census locale definitions

Figure 3.10. Indiana work zone collisions by road class, 2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Includes only collisions with valid road class reported

Table 3.12. Indiana work zone collisions by severity and environmental conditions, 2019

		Work zone coll	isions, by severity		Fatal collisions
	Total	Fatal	Non-fatal	Property damage	per 1,000 work zone collisions
All work zone collisions	5,459	25	805	4,629	4.6
By light conditions					
Daylight	4,091	15	581	3,495	3.7
Dark (lighted)	557	1	114	442	1.8
Dark (not lighted)	579	8	80	491	13.8
Dawn/dusk	221	0	29	192	0.0
Unknown	11	1	1	9	90.9
By weather conditions					
Clear	3,958	18	614	3,326	4.5
Cloudy	904	6	105	793	6.6
Rain	509	0	72	437	0.0
Snow	31	0	3	28	0.0
Fog/smoke/smog	21	1	4	16	47.6
Sleet/hail/freezing rain	14	0	3	11	0.0
Blowing sand/soil/snow	13	0	3	10	0.0
Severe cross wind	8	0	1	7	0.0
Unknown	1	0	0	1	0.0
By road surface conditions					
Dry	4,615	22	678	3,915	4.8
Wet	705	2	107	596	2.8
Ice	40	0	7	33	0.0
Loose material on road	29	1	4	24	34.5
Snow/slush	41	0	6	35	0.0
Water (standing or moving)	23	0	3	20	0.0
Muddy	4	0	0	4	0.0
Unknown	2	0	0	2	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total work zone collisions in each environmental condition category.

Table 3.13. Indiana work zone collisions by severity and traffic control type, 2019

		Work zone coll	isions, by severity		Fatal collisions	
	Total	Fatal	Fatal Non-fatal		per 1,000 work zone collisions	
All work zone collisions	5,459	25	805	4,629	4.6	
Traffic control type						
Lane control	2,178	12	319	1,847	5.5	
Traffic control signal	1,040	0	182	858	0.0	
Stop sign	248	1	43	204	4.0	
Other regulatory sign/marking	120	4	29	87	33.3	
Yield sign	46	0	8	38	0.0	
Person directing traffic	56	0	9	47	0.0	
No passing zone	23	0	7	16	0.0	
Flashing signal/overhead beacon	7	0	1	6	0.0	
Railroad crossing	2	0	0	2	0.0	
Roundabout intersection	8	0	0	8	0.0	
Other	62	0	7	55	0.0	
None	1,186	2	149	1,035	1.7	
Unknown	483	6	51	426	12.4	

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Fatal collision rate is calculated per 1,000 total work zone collisions in each traffic control type category.



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MOTORCYCLES, 2019

Between 2015 and 2019, the number of Indiana traffic collisions involving motorcycles declined (Figure 4.1). In each of those years, there were more multi-vehicle (MV) than single-vehicle (SV) motorcycle collisions. Between 2018 and 2019, the number and proportion of fatal collisions for multi-vehicle and single-vehicle motorcycle collisions increased, from 4 percent of fatal MV and 3 percent of fatal SV in 2018 to 5 percent and 4 percent in 2019.

Total motorcyclists involved in collisions decreased from 2015 to 2019, at an annual rate of decline of 6 percent (Table 4.1). From 2018 to 2019, the number of motorcyclists killed remained the same at 112 fatalities. At the same time, the count of motorcyclists with non-fatal injuries declined by 6 percent, from 1,932 to 1,818. Over 70 percent of motorcycle riders involved in collisions were either injured (67 percent) or killed (4 percent). As shown in Figure 4.2, motorcycle collisions accounted for 14 percent of overall traffic fatalities in 2019.

Time, day of week, and month

In 2019, the counts of collisions involving motorcycles were highest in the afternoon and early evening hours, peaking at 5 p.m. The proportion of motorcycle collisions that resulted in fatal and incapacitating injuries was highest in the early morning hours, with the highest proportion occurring at 1 a.m. (Figure 4.3). When considering day of week and time that collisions occurred, the likelihood of motorcycle collisions peaked during evening hours and declined during morning hours. The number of motorcycle collisions was highest on Saturdays and Sundays (Table 4.2).

Between 2015 and 2019, Indiana collisions were typically most frequent in the winter months of November to January. In contrast, motorcycle collisions during this five-year period were generally highest in the spring and summer months of May through September (Table 4.3). In 2019, motorcycle collisions continued to follow this seasonal trend, with the highest number occurring in August. At the same time, rates of fatal and incapacitating injuries from motorcycle collisions were highest in May (Figure 4.4).

Vehicle type

When reviewing motorcycle collisions based on vehicle type, 75 percent of operators or passengers involved in collisions in 2019 were on motorcycles, with the remainder on other two-/three-wheeled vehicles (calculated from Table 4.4). Crashes involving class A motor-driven cycles increased between 2018 and 2019, while all other vehicle types saw a decrease during this time period. Fatalities on motorcycles remained similar between 2018 and 2019, with 92 and 93 fatalities, respectively.

Alcohol-impairment

In 2019, motorcycle operators involved in crashes were more likely to be impaired than passenger vehicle drivers involved in crashes (Table 4.5). In terms of blood alcohol content (BAC) results that were reported in 2019, 59 percent of motorcycle operators in single vehicle collisions and 35 percent in multi-vehicle crashes had a BAC of 0.08 g/dL or more.

Helmet use

Among motorcyclists involved in Indiana collisions, helmet use is associated with lower fatality and injury rates (Figure 4.5). Roughly 35 percent of collision-involved motorcyclists were wearing helmets in 2019, with operators (35 percent) more likely to wear helmets than passengers (27 percent) (Not shown in table). Among motorcyclists killed or experiencing incapacitating injuries, 49 percent were not wearing helmets. From 2015 to 2019, male motorcyclists had higher rates of helmet use than their female counterparts (Table 4.6). In 2019, 31 percent of female motorcyclists involved in crashes were wearing helmets. Among females who sustained fatal or incapacitating injuries, only 29 percent wore helmets. Males in the

35 to 44 years age group had the lowest rate of helmet use of all males, with only 25 percent wearing a helmet in a collision in 2019.

Census locale

In 2019, motorcyclists involved in collisions in suburban areas (40 percent) were more likely to be wearing helmets than in exurban (35 percent), urban (33 percent), and rural areas (30 percent). (Figure 4.6). Helmet usage also is consistently much lower among those killed in collisions across all locales. Among motorcyclists, 35 percent of motorcyclists killed in suburban areas were wearing helmets, compared to 28 percent in urban areas, 18 percent in exurban areas, and 10 percent in rural areas.

Collision characteristics

Motorcycle collision injury rates differ depending on light, weather, and road conditions that were present at the time of the crash (Table 4.7). Motorcycle collisions occurred predominately during clear weather conditions, on straight/level roads, on roads not involving intersections, and on local/city roads. The probability of fatal motorcycle collisions was greatest in dark (not lighted) light conditions (10 percent), dawn/ dusk light conditions (8 percent), on interstates (7 percent), and on straight (non-level) roads (6 percent). While 31 percent of all collisions involving motorcycles occurred in non-daylight light conditions, they accounted for 51 percent of all fatal motorcycle collisions (Figure 4.7).

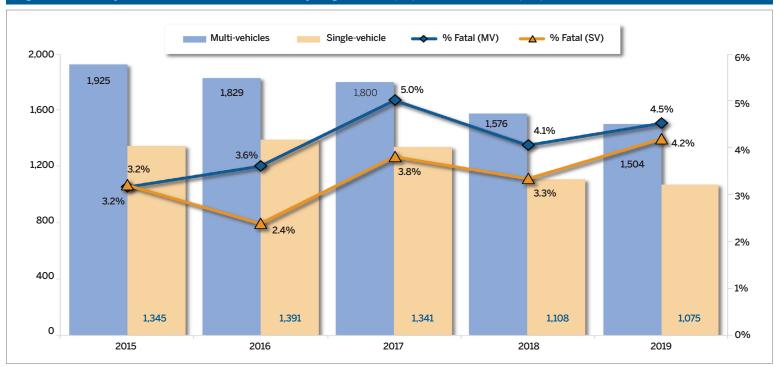


Figure 4.1. Motorcycle-involved collisions in Indiana by single vehicle (SV) and multi-vehicle (MV) involvement, 2015–2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Table 4.1. Motorcyclists involved in Indiana collisions by injury status, 2015–2019

All motorcyclists	2015	2016	2017	2018	2019	Annual rate	e of change
All motorcyclists	2015	2016	2017	2018	2019	2018–19	2015–19
All motorcyclists	3,499	3,407	3,403	2,875	2,698	-6.2%	-6.3%
Fatal	107	98	144	112	112	0.0%	1.1%
Non-fatal injuries	2,417	2,326	2,288	1,932	1,818	-5.9%	-6.9%
Not injured	975	983	971	831	768	-7.6%	-5.8%
Fatality and injury rates							
% fatal	3.1%	2.9%	4.2%	3.9%	4.2%		
% non-fatal injuries	69.1%	68.3%	67.2%	67.2%	67.4%		

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Motorcyclists include operators and passengers on motorcycles, class A and class B motor-driven cycles, mopeds, motorized bicycles.

2) Non-fatal injuries include individuals with at least one incapacitating, non-incapacitating, or other injury.

3) Not injured includes ALL individuals involved in collisions reported as NULL values in the injury status code field. Reporting officers are instructed to include all drivers in ARIES, but to include passengers in the crash report only if an injury occurs; therefore, not injured counts of passengers should be interpreted with caution.

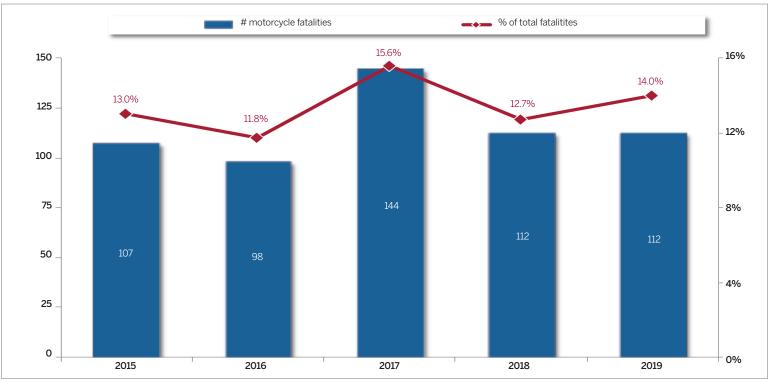


Figure 4.2. Motorcycle fatalities as a percent of total traffic fatalities, 2015–2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

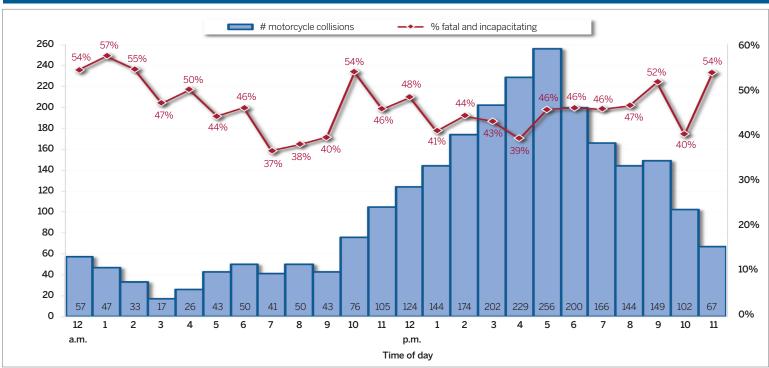


Figure 4.3. Motorcycle collisions in Indiana by hour of the day, 2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Excludes collisions where hour or injury status was unknown or not reported.

ime	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% Motorcycle by hour
12a.m.	2.7%	0.5%	0.4%	0.7%	2.3%	1.0%	1.9%	1.5%
1a.m.	1.4%	1.0%	0.7%	1.5%	1.7%	3.3%	2.2%	1.7%
2a.m.	1.2%	3.0%	1.8%	1.6%	0.7%	1.0%	1.0%	1.4%
3a.m.	0.8%	1.1%	0.3%	0.4%	0.0%	0.9%	0.7%	0.7%
4a.m.	0.7%	1.2%	1.4%	0.8%	0.8%	0.5%	0.9%	0.9%
5a.m.	0.5%	0.4%	1.0%	1.1%	1.0%	1.7%	0.8%	1.0%
6a.m.	0.2%	0.7%	1.1%	0.6%	0.6%	0.8%	0.2%	0.7%
7a.m.	0.0%	0.3%	0.2%	0.4%	0.3%	0.6%	0.5%	0.4%
8a.m.	0.9%	0.4%	0.3%	0.4%	0.8%	0.4%	1.0%	0.5%
9a.m.	0.8%	0.3%	0.4%	0.6%	0.4%	0.7%	0.6%	0.5%
10a.m.	1.0%	0.7%	0.6%	0.8%	0.9%	0.9%	1.2%	0.9%
11a.m.	0.9%	0.7%	0.8%	0.7%	1.0%	0.8%	1.9%	1.0%
12p.m.	1.0%	0.6%	0.6%	1.3%	0.8%	0.9%	1.6%	1.0%
1p.m.	1.5%	0.7%	0.5%	0.7%	1.1%	1.4%	2.2%	1.2%
2p.m.	1.9%	0.9%	1.0%	1.0%	1.0%	1.2%	1.9%	1.2%
3p.m.	2.0%	1.1%	0.7%	0.8%	0.9%	1.1%	2.2%	1.2%
4p.m.	1.9%	0.9%	1.2%	1.3%	1.1%	1.1%	2.3%	1.3%
5p.m.	2.4%	1.2%	0.9%	1.4%	1.7%	1.2%	2.1%	1.5%
6p.m.	2.5%	1.2%	1.2%	1.2%	1.1%	1.5%	2.0%	1.5%
7p.m.	1.8%	1.4%	1.4%	2.0%	1.6%	1.9%	1.6%	1.7%
8p.m.	1.8%	1.7%	1.4%	1.8%	1.5%	1.6%	2.7%	1.8%
9p.m.	1.9%	1.6%	2.2%	2.7%	1.6%	2.3%	2.6%	2.1%
10p.m.	1.6%	1.2%	1.8%	2.9%	1.1%	2.0%	1.5%	1.7%
11p.m.	1.5%	1.0%	2.1%	1.0%	0.7%	1.3%	2.5%	1.5%
Motorcycle by day	1.6%	0.9%	0.9%	1.1%	1.0%	1.2%	1.8%	1.2%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

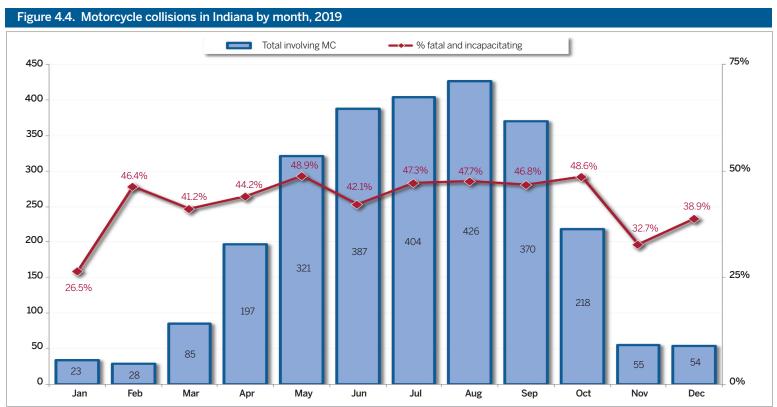
Notes: 1) Includes collisions where valid time was reported. 2) Color scale applies to all days/times.

Month			Total collisions				Ν	lotorcycle collisio	ons	
Month	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Jan	19,694	19,376	17,277	20,787	19,457	31	55	48	27	34
Feb	19,785	17,785	14,574	16,179	16,977	22	80	115	49	28
Mar	16,438	16,387	16,970	16,980	15,959	125	149	115	74	85
Apr	15,368	17,534	17,027	15,775	16,387	245	298	299	172	197
May	17,366	18,057	19,457	18,421	18,315	403	363	364	442	321
Jun	17,147	17,889	19,009	17,286	17,676	368	417	506	391	387
Jul	17,311	17,692	17,156	17,270	17,640	520	466	462	432	404
Aug	17,110	19,340	17,726	17,860	18,083	542	437	421	397	426
Sep	17,706	18,639	17,961	17,750	17,511	443	442	414	368	370
Oct	19,239	19,487	19,999	20,311	20,128	327	318	265	218	218
Nov	20,483	20,528	20,081	20,151	20,506	150	159	82	73	55
Dec	18,884	21,247	22,077	18,494	18,757	94	36	50	41	54
Total	216,531	223,961	219,314	217,264	217,396	3,270	3,220	3,141	2,684	2,579
High	Nov	Dec	Dec	Jan	Nov	Aug	Jul	Jun	May	Aug
Low	Apr	Mar	Feb	Apr	Mar	Feb	Dec	Jan	Jan	Feb
		Low		<		>		High		

Table 4.3. Total and motorcycle collisions by month, 2015–2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Color-scales are illustrated to show months from low to high for the entire 5-year period, 2015–2019.



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Table 4.4. Motorcyclists involved in Indiana collisions by type of motorized vehicle, 2018–2019

		· · · ·		
Unit type/Injury group		individuals	Percent change 2018–2019	2019 injury rate, by unit type
	2018	2019		
All motorcyclists	2,875	2,698	-6.2%	
Motorcycle	2,097	2,032	-3.1%	100%
Fatal	92	93	1.1%	4.6%
Injury	1,399	1,351	-3.4%	66.5%
Not injured	606	588	-3.0%	28.9%
Motor driven cycle class A	243	257	5.8%	100%
Fatal	8	9	12.5%	3.5%
Injury	157	176	12.1%	68.5%
Not injured	78	72	-7.7%	28.0%
Motor driven cycle class B	426	348	-18.3%	100%
Fatal	11	8	-27.3%	2.3%
Injury	310	253	-18.4%	72.7%
Not injured	105	87	-17.1%	25.0%
Motorized bicycle	90	56	-37.8%	100%
Fatalq	1	1	0.0%	1.8%
Injury	50	34	-32.0%	60.7%
Not injured	39	21	-46.2%	37.5%
Moped	19	5	-73.7%	100%
Fatal	0	1	100.0%	20.0%
Injury	16	4	-75.0%	80.0%
Not injured	3	0	-100.0%	0.0%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Motorcyclists include operators and passengers of motorcycles, class A and B motor driven cycles, mopeds, and motorized bicycles.

2) See Glossary for unit type definitions. ARIES includes motorized bicycle and moped as unit types.

3) Injury includes incapacitating, non-incapacitating, other, unknown, '+', not reported, and refused.

	collision and vehicle type, 2019							
	Collision type	Vehicles involved	BAC range	Fatal	Non-fatal	All operators	All operators, impaired as percent of:	
							Reported results	All
			Total operators	45	554	599		
			0 g0 g/dL/dL	6	9	15		
		Motorcycles	0.01-0.07	0	7	7	58.5%	5.2%
			0.8-0.14	3	6	9		

15

517

45

94

201

3,923

536

12

1

5

4

514

347

52

58

168

18,285

18,910

4,467 204 22

546

266

50

103

230

4,114

609

36 2

11

9

551

549

57

73

199

18,623

19,501

51.3%

34.5%

31.0%

7.0%

3.3%

1.4%

4,763

7

29

296

62

5

9

29

191

73

24

1

6

5

37

591

202

5

15

31

338

Not reported Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

0.15 & above

Not reported

0 g/dL

0.01-0.07

0.8-0.14

0 g/dL

0.01-0.07

0.8-0.14

0 g/dL

0.01-0.07

0.8-0.14

0.15 & above

0.15 & above

Not reported

Total operators

0.15 & above Not reported

Total operators

Total operators

Notes:

Multi-vehicle

Single-vehicle

1) BAC range in grams per deciliter (g/dL). 0.08 or greater is legally impaired.

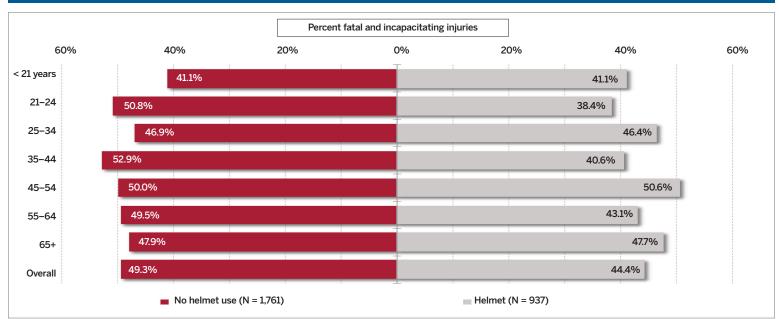
Passenger vehicles

Motorcycles

Passenger vehicles

Includes only the operators of motorcycles and passenger vehicles (passenger car, pickup truck, sport utility vehicle, van).
 Reported results include only those records in ARIES that have a BAC result (i.e., excludes NULL values).

Figure 4.5. Fatal and incapacitating injuries as percent of total motorcyclists involved in Indiana collisions, by helmet use and age group, 2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Excludes cases with unknown age or helmet use.

Table 4.6. Helmet use among motorcyclists involved in Indiana collisions, by age group and gender, 2015–2019

	2	2015		2016		2017		018	2019	
Age group	Male	Female								
15–20	42.3%	45.5%	50.0%	24.2%	52.8%	36.4%	53.6%	32.6%	60.9%	30.0%
21-24	46.6%	37.8%	48.0%	24.3%	47.2%	23.5%	54.3%	25.0%	51.4%	19.2%
25-34	34.6%	21.9%	30.9%	21.9%	34.0%	27.8%	33.1%	22.6%	38.0%	28.8%
35-44	24.5%	19.3%	25.8%	27.0%	27.9%	22.7%	26.0%	18.1%	25.0%	28.6%
45-54	24.1%	24.2%	21.0%	22.9%	22.8%	18.5%	19.9%	20.9%	28.9%	30.0%
55-64	34.8%	44.4%	32.1%	38.7%	29.7%	46.4%	27.1%	30.8%	26.4%	43.2%
65+	40.4%	41.7%	44.1%	43.3%	51.3%	60.0%	39.3%	40.0%	42.0%	50.0%
All ages	32.7%	28.3%	32.3%	28.0%	33.3%	29.0%	31.7%	24.7%	35.1%	31.0%

Motorcyclists experiencing fatal or incapacating injuries

		0	1 0		1		1		1	
	20	015	20	016	20	017	20	018	20	019
Age group	Male	Female								
15-20	38.3%	40.0%	52.7%	23.5%	49.4%	38.5%	45.8%	27.8%	59.7%	40.0%
21-24	46.7%	28.6%	51.5%	20.8%	44.6%	20.0%	44.4%	25.0%	44.0%	21.4%
25-34	29.7%	18.5%	27.4%	27.3%	37.1%	30.6%	31.6%	20.9%	37.1%	33.3%
35-44	21.7%	14.3%	24.7%	20.4%	24.7%	17.2%	18.2%	17.6%	20.6%	21.6%
45-54	21.7%	19.4%	20.1%	18.0%	22.2%	19.1%	16.3%	14.0%	30.0%	26.3%
55-64	34.6%	50.0%	30.5%	34.9%	28.4%	48.6%	23.0%	43.5%	24.3%	34.8%
65+	42.9%	40.0%	40.2%	35.0%	46.5%	66.7%	36.0%	30.8%	42.7%	37.5%
All ages	30.2%	24.1%	30.5%	24.9%	31.9%	28.9%	26.7%	22.4%	32.7%	28.9%
	-1								1	
		Low		<		>		High		

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Data limited to drivers with valid gender and age reported.

2) Excludes drivers under 15 years old.

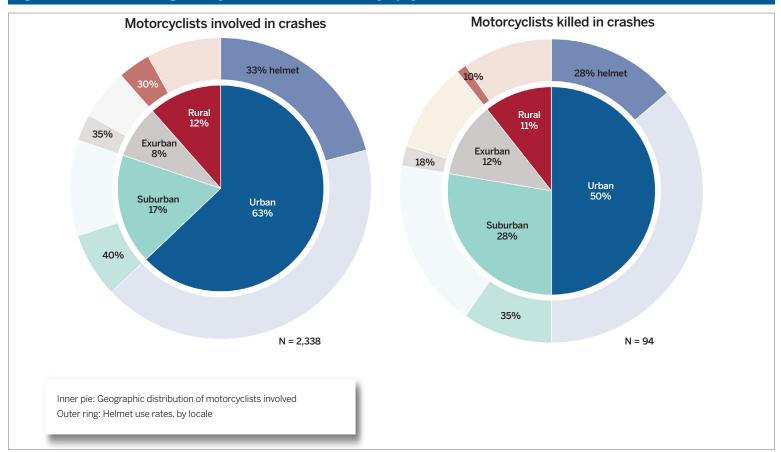


Figure 4.6 Helmet use among motorcyclists in Indiana collisions, by injury status and census locale, 2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Note: Excludes cases where locale could not be determined.

Table 4.7. Characteristics of Indiana motorcycle collisions by severity of collision, 2019 Count of collisions Probability of collision severity Characteristics Fatal Non-fatal Property damage Total Fatal Non-fatal Light conditions 112 1,605 853 2,570 Daylight 55 1,126 600 1,781 3.1% 63.2% Dark (lighted) 17 211 122 350 4.9% 60.3% Dark (not lighted) 30 191 94 315 9.5% 60.6% Dawn/dusk 10 77 37 124 62.1% 8.1% Weather conditions 113 1,607 856 2,576 99 4.5% Clear 1.366 712 2.177 62.7% 11 302 59.9% Cloudy or poor visibility 181 110 3.6% Extreme weather 3 60 34 97 3.1% 61.9% 113 **Road junctions** 1.607 859 2.579 No junction involved 78 1,007 557 1,642 4.8% 61.3% Intersections 32 561 286 879 3.6% 63.8% 3 39 58 5.2% 67.2% Interchange/ramp 16 1,585 852 2,544 Road character 107 Straight (level) 65 1,068 636 1,769 3.7% 60.4% Curves 24 320 112 456 5.3% 70.2% 18 Straight (non-level) 193 81 292 6.2% 66.1% 0 Non-roadway 4 23 27 0.0% 14.8% Road class 112 1,566 761 2.439 Local/city 45 792 427 1,264 3.6% 62.7% State road 21 310 127 458 4.6% 67.7% U.S. route 13 130 216 6.0% 60.2% 73 County road 24 253 103 380 6.3% 66.6% Interstate 9 81 31 121 7.4% 66.9%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Excludes collisions where characteristic was unknown or not reported.

2) Selected characteristics are re-grouped from collision characteristics reported in ARIES, as shown below.

a) Weather conditions:

Cloudy or 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.

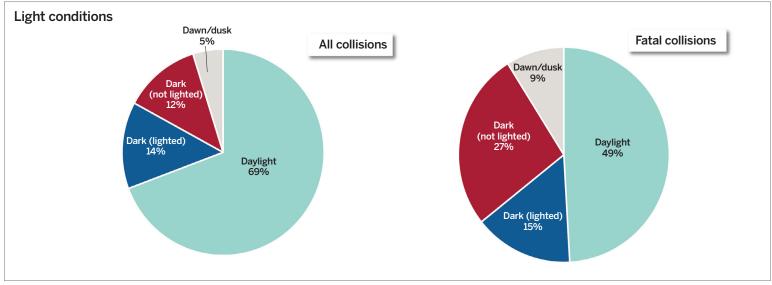
b) Road junctions:

Intersectionsincludes five point or more, four-way intersection, T-intersection, traffic circle/roundabout, trail crossing, RR crossing, and Y-intersection. Interchange/ramp includes interchange and ramp.

c) Road character:

Curves includes curve/grade, curve/hillcrest, and curve/level. Straight (non-level) includes straight/grade and straight/hillcrest.

Figure 4.7. Characteristics of Indiana motorcycle collisions by light conditions, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020





ALCOHOL, 2019

General trends

In 2019, 106 people died in collisions that involved one or more drivers who were legally impaired by alcohol (i.e., BAC at or above 0.08 g/dL) (Figure 5.1). Of the 3,926 alcohol-impaired collisions that year, 104 claimed at least one life (Table 5.1). From 2015 to 2019, the number of people killed in crashes with impaired drivers dropped 5 percent annually. The number of fatal collisions involving an alcohol-impaired driver fell nearly 4 percent annually. Three out of every 4 people killed in alcohol-impaired collisions in 2019 were male (Figure 5.2).

Blood alcohol and drug testing rates

Indiana law requires police officers offer a portable breath or chemical test to anyone they believe was driving a vehicle involved in an accident that caused a fatality or serious bodily injury. About 63 percent of drivers involved in fatal collisions in 2019 were reportedly tested for alcohol and/or drugs, compared to only 9 percent of drivers in crashes that involved incapacitating injuries (Table 5.2). Testing rates were generally higher for drivers ages 64 and younger. Of drivers involved in fatal collisions, those between 15 and 20 years old had the highest rate of testing (67 percent), while drivers 75 years and older had the lowest rate (40 percent). Among all drivers tested, 42 percent had BAC results in the ARIES database (calculated from Table 5.3).

Testing rates for driver alcohol-impairment also varied by the severity of driver injuries. From 2015 to 2019, test rates varied significantly by whether the driver survived the crash or died (Table 5.3). Generally, surviving drivers were tested more often than those who suffered a fatal injury. In 2019, close to three-quarters of surviving drivers were tested, compared to just over half of those who died. The data shows a significant difference in test results between these two groups, as well. Among drivers with reported BAC results, those who survived had far lower impairment rates (10 percent) than those who were killed (41 percent).

Rates of positive drug test results were higher than alcohol impairment for both drivers in a crash who survived and those who were killed. Being alcohol impaired and drug positive are not mutually exclusive—drivers can be one or the other or both.

Driver impairment by age and gender

The number of all drivers involved in fatal collisions in 2019 dropped about 6 percent from 2018. However, the number of impaired drivers in fatal collisions increased slightly by 6 percent during that time (Table 5.4). Representation of impaired drivers was disproportionately high in some age groups. In 2019, the largest proportion of impaired drivers in fatal

collisions was the 25- to 34-year-old age group (20 percent), and this same group made up 23 percent of all drivers in fatal collisions.

Male drivers are far more likely than female drivers to have been involved in fatal collisions, accounting for 3 out of every 4 drivers in fatal crashes in 2019 (Figure 5.3). Among drivers in fatal collisions, 23 percent of male drivers and 16 percent of female drivers were impaired.

Driver license status

The Indiana BMV license status of drivers involved in crashes differs between impaired and non-impaired drivers. From 2015 to 2019, 77 percent of impaired drivers in collisions had valid driver's licenses compared to nearly 94 percent of non-impaired drivers (Figure 5.4). Drivers who were identified as being habitual traffic violators, unlicensed, or driving with a suspended license accounted for one quarter of impaired drivers in fatal collisions during the same five-year period.

Impaired driving by month, day of week, and time of day

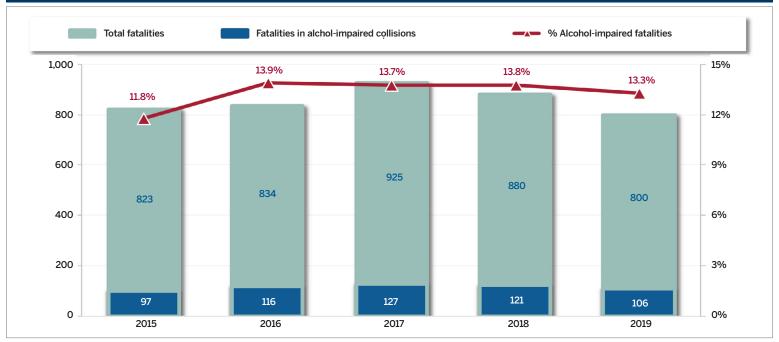
Trends emerge when looking at how alcohol-impaired fatalities and injuries in Indiana vary by month, day of week, and time of day. Between 2015 and 2019, the months of May, June, July, and September had the highest counts of fatalities from alcohol-impaired collisions (Figure 5.5). The highest percentage of monthly drunk driving fatalities was in May. The highest percentage of non-fatal injuries in alcohol-involved crashes occurred in March.

In 2019, hourly rates of crashes involving serious injuries and impaired driving followed similar patterns. Fatal and incapacitating injuries happened most often between midnight and 4 a.m., particularly during weekends (Figure 5.6). The highest percentage of hourly fatal and incapacitating injuries happened most often between the hours of midnight and 4 a.m., particularly during weekends. The highest hourly rates of alcohol-impaired crashes (16 percent) as well as fatal and incapacitating injuries (13 percent) occurred on Sundays between 3–4 a.m.

Impaired driving by locale and road type

The distribution of fatal collisions varies by census locale (Figure 5.7). There was a higher proportion of fatal crashes in non-urban areas than in urban areas. However, the highest rate of fatal crashes involving an alcohol-impaired driver was in urban areas, with 15 percent linked to impairment. In 2019, the highest proportion of fatal collisions (29 percent) and fatal collisions that involved an impaired driver (17 percent) was on local/city roads (Figure 5.8).

Figure 5.1. Indiana traffic fatalities, by alcohol impairment, 2015–2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data) Notes:

1) Alcohol-impaired fatalities occurred in collisions that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater. 2) 2018 and 2019 alcohol-impaired counts are current as of the June 15, 2020 ARIES data extract.

Table 5.1. Indiana collisions and injuries involving alcohol-impaired drivers, 2015–2019

						Annual rate	e of change
	2015	2016	2017	2018	2019	2018–19	2015–19
Collisions involving an alcohol-impaired driver							
Total collisions	4,792	4,847	4,572	4,059	3,926	-3.3%	-4.9%
Fatal	90	100	113	98	104	6.1%	3.7%
Injury	1,320	1,416	1,267	1,072	1,014	-5.4%	-6.4%
Property damage	3,382	3,331	3,192	2,889	2,808	-2.8%	-4.5%
Individuals in collisions involving an alcohol-imp	aired driver						
Total individuals	7,018	7,238	6,677	5,886	5,701	-3.1%	-5.1%
Fatal	97	116	127	121	106	-12.4%	2.2%
Injured	1,974	2,171	1,854	1,602	1,516	-5.4%	-6.4%
Not injured	4,947	4,951	4,696	4,163	4,079	-2.0%	-4.7%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Note: Individuals injured includes incapacitating, non-incapacitating, possible, refused, and unknown injury status categories.

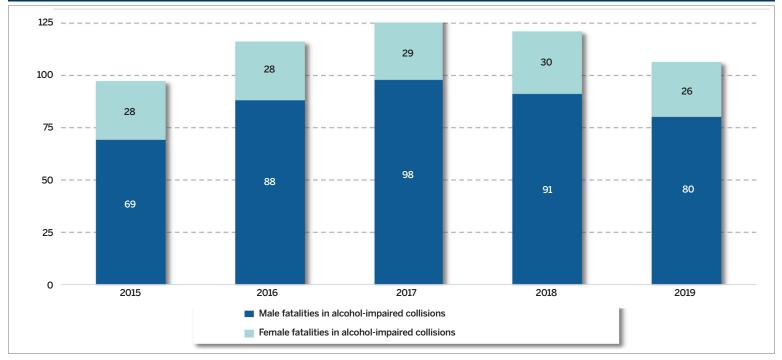


Figure 5.2. Indiana fatalities in collisions involving an alcohol-impaired driver, by gender, 2015–2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data) Note: Alcohol-impaired fatalities occurred in collisions that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater.

Table 5.2. Drivers in Indiana collisions who were tested for alcohol or other substances, by age and collision severity, 2019

			Count o	f drivers		
		Fatal collisions			Incapacitating collisio	ns
Driver age	Tested	Total	Tested as % total	Tested	Total	Tested as % total
15–20	62	92	67.4%	204	2,967	6.9%
21–24	66	99	66.7%	303	2,496	12.1%
25–34	145	235	61.7%	678	5,474	12.4%
35–44	127	198	64.1%	495	4,388	11.3%
45-54	125	189	66.1%	343	3,729	9.2%
55-64	115	171	67.3%	275	3,565	7.7%
65–74	56	102	54.9%	102	2,014	5.1%
75+	31	77	40.3%	40	1,287	3.1%
All ages	727	1,163	62.5%	2,440	25,920	9.4%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

1) Tested includes drivers for which ARIES indicates an alcohol, drug, or alcohol/drug test was given.

2) Excludes ages under 15 and over 109 years and cases with unknown or non-reported age.

Notes:

Table 5.3. Drivers involved in Indiana fatal collisions, by substance test given and reported results, 2015–2019

		Su	rvived collis	ion			Ki	lled in collisi	on	
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Drivers in fatal collisions	612	626	664	665	610	542	575	632	571	554
By test type given										
Alcohol and/or drug	438	439	493	452	444	279	271	338	287	284
None	3	0	3	5	13	7	6	5	9	13
Refused	1	2	1	2	0	0	0	0	0	0
Not reported	170	185	167	206	153	256	298	289	275	257
Tested, as % all	71.6%	70.1%	74.2%	68.0%	72.8%	51.5%	47.1%	53.5%	50.3%	51.3%
By BAC test result										
Alcohol-impaired	36	34	32	30	32	55	68	83	70	75
Not impaired	291	308	297	307	278	117	111	122	136	106
No result reported	285	284	335	328	301	370	396	427	365	374
By drug test result										
Positive	53	67	53	75	56	73	85	107	98	102
Negative	187	182	165	197	177	100	97	97	113	96
Pending	26	21	28	9	21	26	15	22	8	6
No result reported	346	356	418	384	356	343	378	406	352	349
Alcohol-impaired, as % tested	8.2%	7.7%	6.5%	6.6%	7.2%	19.7%	25.1%	24.6%	24.4%	26.4%
Drug-positive, as % tested	12.1%	15.3%	10.8%	16.6%	12.6%	26.2%	31.4%	31.7%	34.1%	35.9%
Alcohol-impaired, as % of drivers with reported results	11.0%	9.9%	9.7%	8.9%	10.3%	32.0%	38.0%	40.5%	34.0%	41.4%
Drug-positive, as % drivers with reported results	22.1%	26.9%	24.3%	27.6%	24.0%	42.2%	46.7%	52.5%	46.4%	51.5%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes:

1) Alcohol-impaired: BAC of 0.08 g/dL or higher.

Drug-positive: Reported as positive under drug test results in ARIES. ARIES does not currently specify drug type(s).
 Alcohol-impaired and drug-positive are not mutually exclusive (i.e., drivers can be one or the other or both).

Table 5.4. Drivers in Indiana fatal collisions by alcohol impairment and driver age, 2015–2019

		Co	unt of drivers inv	olved		Annual rat	e of change	% of total
Driver age	2015	2016	2017	2018	2019	2018–19	2015–19	2019
All drivers	1,151	1,200	1,291	1,234	1,163	-5.8%	0.3%	100%
15–20	116	110	123	126	92	-27.0%	-5.6%	7.9%
21–24	103	135	109	91	99	8.8%	-1.0%	8.5%
25–34	218	232	241	240	235	-2.1%	1.9%	20.2%
35–44	197	188	211	204	198	-2.9%	0.1%	17.0%
45–54	191	187	243	204	189	-7.4%	-0.3%	16.3%
55–64	177	181	186	184	171	-7.1%	-0.9%	14.7%
65–74	81	91	101	117	102	-12.8%	5.9%	8.8%
75+	68	76	77	68	77	13.2%	3.2%	6.6%
mpaired drivers	91	102	115	100	106	6.0%	3.9%	100%
15–20	4	8	3	5	3	-40.0%	-6.9%	2.8%
21–24	14	27	18	8	17	112.5%	5.0%	16.0%
25–34	27	23	37	38	24	-36.8%	-2.9%	22.6%
35–44	19	18	27	20	21	5.0%	2.5%	19.8%
45–54	13	15	17	17	23	35.3%	15.3%	21.7%
55–64	11	10	9	9	11	22.2%	0.0%	10.4%
65–74	1	1	4	1	7	600.0%	62.7%	6.6%
75+	2	0	0	2	0	-100%	-100%	0.0%
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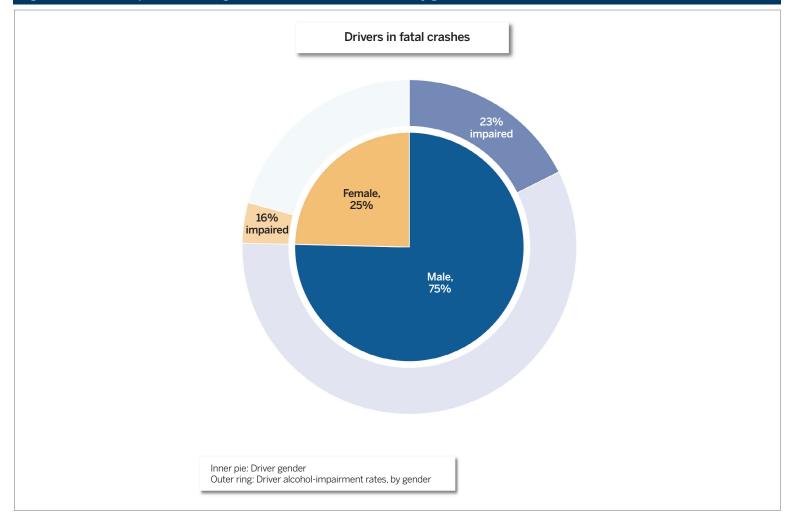
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data) Notes:

1) Impaired drivers are those with BAC of 0.08 g/dL or greater reported in ARIES.

2) Excludes ages under 15 and over 109 years and cases with unknown or non-reported age.

INDIANA TRAFFIC SAFETY FACTS

Figure 5.3. Alcohol impairment among drivers in Indiana fatal collisions, by gender, 2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes:

1) Alcohol-impaired includes drivers with a reported BAC of 0.08 g/dL or higher.

2) Limited to drivers tested for blood alcohol content with valid BAC results reported.

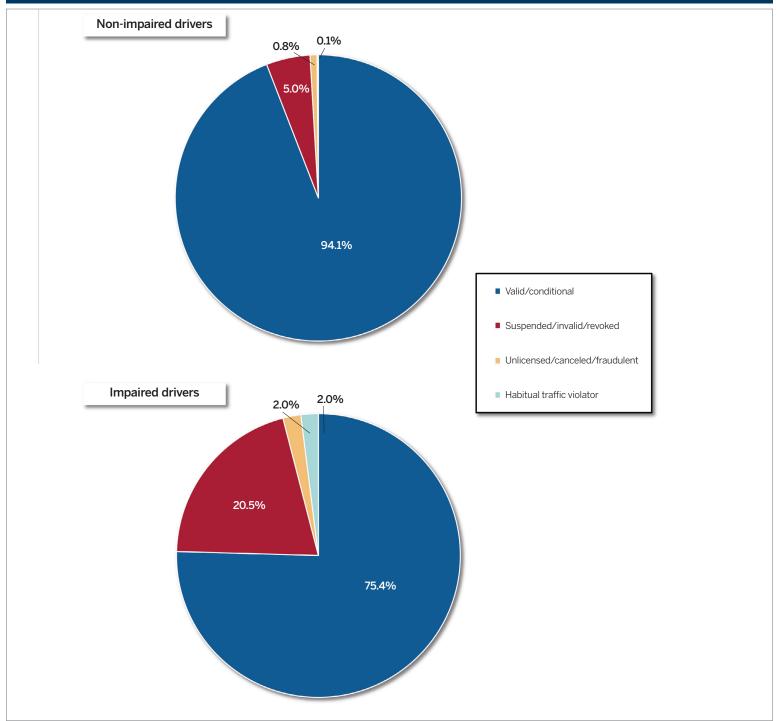


Figure 5.4. BMV license status of Indiana collision-involved drivers, by alcohol impairment, 2015–2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data) Note: Includes only drivers in ARIES who were matched to Indiana BMV licensing data (e.g., out-of-state drivers or persons without a driver's license would be excluded).

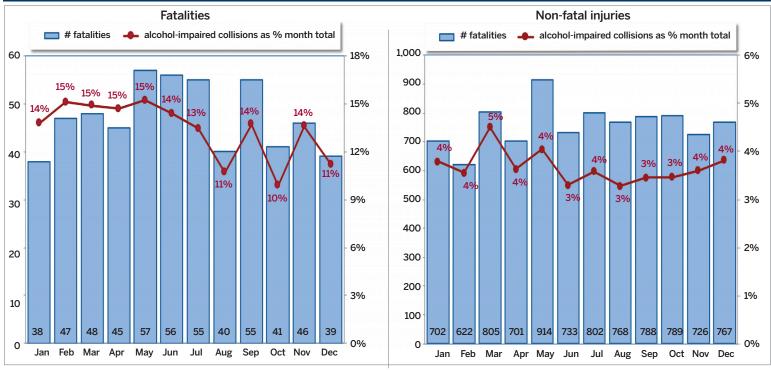
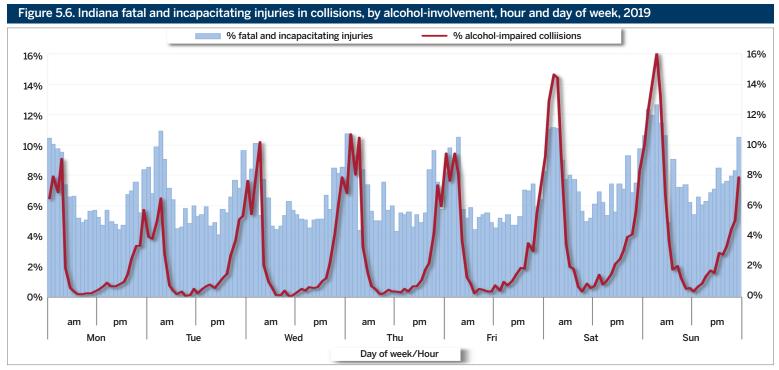


Figure 5.5. Fatalities and injuries in Indiana collisions involving an alcohol-impaired driver, by month, 2015–2019

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes: Non-fatal injuries include incapacitating, non-incapacitating, possible, refused treatment, and unknown injury status categories.



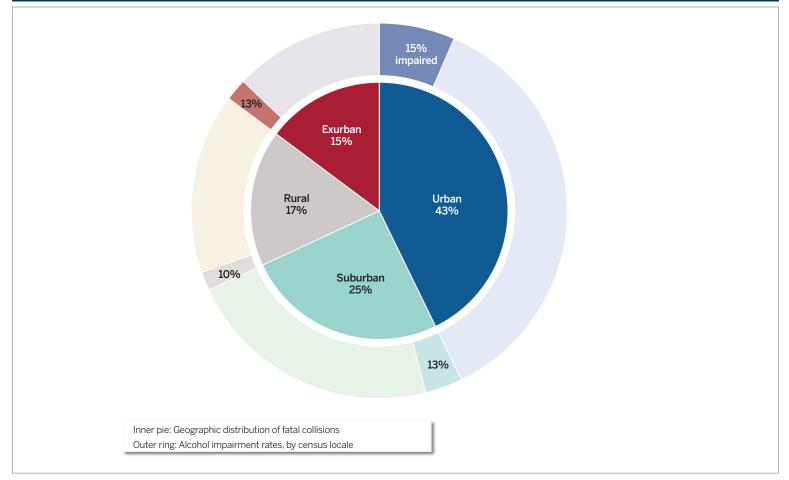
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes:

1) Fatal/incapacitating injury rate is the percentage of all hourly injuries in collisions reported as fatal or incapacitating.

2) Alcohol-impaired collision rate is the percentage of all hourly collisions that involved one or more alcohol-impaired drivers.

Figure 5.7. Indiana fatal collisions and percent alcohol-impaired, by census locale, 2015–2019



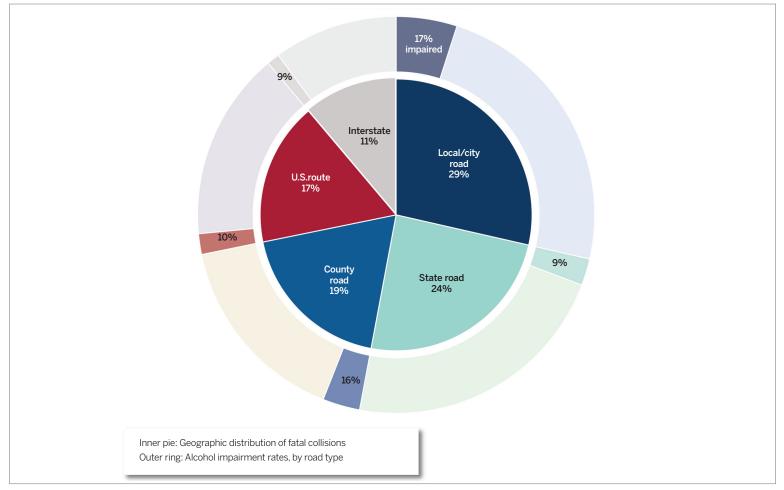
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

Notes:

2) Excludes cases where locale could not be determined.

INDIANA TRAFFIC SAFETY FACTS

Figure 5.8. Indiana fatal collisions and percent alcohol-impaired, by road type, 2015–2019



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data) Note: Includes collisions where valid road class was reported.



helovville Indianapolis Levrence Score Generates SPEED reenvood Ibus Cleverdale Bargersville estimi Martiaitsville 44 Franklin Generates Hope Hope

SPEED, 2019

A collision is defined as speed-related in Indiana ARIES data if either "unsafe speed" or "speed too fast for weather conditions" is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation. In 2019, 20,200 speed-related collisions occurred in Indiana, 3 percent more than in 2018 (Figure 6.1). Although speed-related collisions have increased from the five-year low of 18,338 in 2017, there were less speed-related collisions in 2019 than in 2015 and 2016.

In 2019, 9 percent of all collisions and 25 percent of fatal collisions were speed-related (Table 6.1). Speed-related fatal collisions increased by 16 percent between 2018 and 2019, from 162 to 188. Sixty percent of all speed-related collisions had 'speed too fast for weather conditions' listed as the primary or contributing factor of the crash. In 2019, the number of fatal collisions where 'speed too fast for weather conditions' was listed reached a five-year low (29). Since 2015, these collisions have declined at an annual rate of 13 percent. Thirty-nine percent of speed-related collisions were related to 'unsafe speed,' while 10 percent were linked to a speed-related citation.

There were 31,354 persons involved in speed-related collisions in 2019, representing 9 percent of individuals involved in all collisions (Table 6.2). Of these individuals, 210 were killed, representing a 15 percent increase from the previous year. Twenty-six percent of all fatalities in Indiana collisions occurred in speed-related crashes. The rate of fatal injuries per 1,000 involved in speed-related collisions increased from a five-year low of 5.9 in 2018 to 6.7 in 2019 (Figure 6.2).

Vehicle type

In 2019, 5.3 percent of vehicles involved in collisions were listed as speeding—a rate higher than in both the 2017 and 2018 (Figure 6.3). Motorcycle operators remained the most likely to have been speeding at the time of collision, representing 11 percent of all motorcycle crashes in 2019. Among all vehicle types, occupants involved in speed-related collisions had a higher injury rate (152 injuries per 1,000 occupants) than occupants in non-speed-related collisions (90 injuries per 1,000). (Figure 6.4). Occupants of motorcycles had the highest rates of injury while speeding (830 per 1,000 occupants) compared to other vehicle types. Occupants in motor homes/ RVs were nearly five times as likely to be injured when the motor home/ RV was listed as speeding (375 injuries per 1,000 occupants).

Age and gender

Between 2015 and 2019, the relative proportion of speed-related crashes to all crashes decreases as driver age increases (Table 6.3). Among all drivers involved in collisions, young males are the most likely to be speeding. In 2019, 12 percent of male drivers and 8 percent of female drivers in the 15- to 20-year old age group were speeding at the time of the collision, representing the highest rates of all age groups. In comparison, only 2 percent of male drivers and 2 percent of female drivers in the 75 and over age group were speeding in collisions.

Alcohol-impaired

Since 2015, the number of legally impaired drivers (with a blood alcohol content of 0.08 g/dL or higher) involved in speed-related collisions fell from 848 in 2015 to a five-year low of 700 in 2019 (Figure 6.5). The proportion of drivers involved in speed-related collisions that were impaired at the time of collision declined from 4.3 percent in 2017 to 3.7 percent in 2019. Drivers who were speeding in a collision were nearly four times as likely to be impaired (3.6 percent) as drivers who were not speeding (1 percent) (Table 6.4). Five percent of drivers aged 21 to 24 and 35 to 44 who were in a speed-related collision were impaired, representing the highest rate of impairment among all age groups.

Restraint use

Between 2015 and 2019, passenger vehicle occupants involved in speedrelated collisions had consistently lower restraint use rates than those who were not involved in speed-related collisions (Figure 6.6). Additionally, the rate of restraint use among individuals involved in speedrelated collisions decreased as the severity of injury increased. In 2019, vehicle occupants who were killed in a speed-related collision were less than half as likely to be restrained as those who sustained a non-fatal injury (40 percent vs 84 percent restraint use rate).

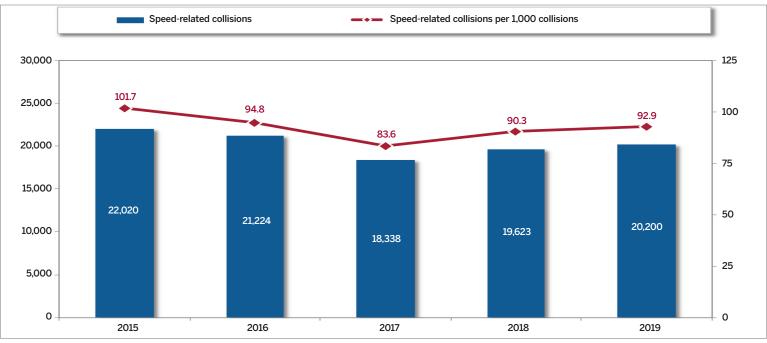
Month and time of day

Between 2015 and 2019, the highest incidence of speed-related collisions occurred in the winter months of December through February (Table 6.5). In 2019, the likelihood of speed involvement in collisions peaked during early morning hours of midnight to 3:59 a.m., declined during late morning and afternoon hours, and then steadily increased from evening into early morning (Table 6.6). However, the probability of speed involvement remained elevated on Sundays, and did not see this same time of day fluctuation observed throughout the rest of the week. The highest probability of speed involvement was on weekends, with 15 percent of all Sunday crashes and 12 percent of all Saturday crashes being linked to speed.

Locale and road class

The distribution of speed-related collisions varies by census locale (Figure 6.7). There was a higher proportion of speed-related crashes in non-urban areas than in urban areas. However, the highest rate of speed-related fatal collisions was in urban areas, with 28 percent being linked to speed. The share of speed-related fatal collisions on state roads, county roads, U.S. routes, and interstates was higher than the share of total collisions on those roads (Figure 6.8). In 2019, the highest proportion of collisions (22 percent) and fatal collisions (37 percent) that were speed-related occurred on interstates.

Figure 6.1. Indiana speed-related collisions, 2015–2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Table 6.1. Indiana collisions, by speed involvement, speed-related criteria, and collision severity, 2015–2019

			Count of collision	S		Annual rate	e of change
Speed involvement criteria / Collision severity	2015	2016	2017	2018	2019	2018–19	2015–19
Total collisions	216,531	223,961	219,314	217,264	217,396	0.1%	0.1%
Fatal	758	781	848	795	739	-7.0%	-0.6%
Non-fatal	34,466	35,337	34,224	32,411	31,194	-3.8%	-2.5%
Property damage	181,307	187,843	184,242	184,058	185,463	0.8%	0.6%
All speed-related collisions	22,020	21,224	18,338	19,623	20,200	2.9%	-2.1%
Fatal	205	200	190	162	188	16.0%	-2.1%
Non-fatal	4,709	4,595	4,237	4,186	4,086	-2.4%	-3.5%
Property damage	17,106	16,429	13,911	15,275	15,926	4.3%	-1.8%
Speed-related as % of total	10.2%	9.5%	8.4%	9.0%	9.3%	2.9%	-2.2%
Fatal	27.0%	25.6%	22.4%	20.4%	25.4%	24.8%	-1.5%
Non-fatal	13.7%	13.0%	12.4%	12.9%	13.1%	1.4%	-1.0%
Property damage	9.4%	8.7%	7.6%	8.3%	8.6%	3.5%	-2.3%
Speed too fast for weather conditions	13,716	12,344	9,820	11,477	12,079	5.2%	-3.1%
Fatal	51	45	31	34	29	-14.7%	-13.2%
Non-fatal	2,227	1,953	1,669	1,865	1,792	-3.9%	-5.3%
Property damage	11,438	10,346	8,120	9,578	10,258	7.1%	-2.7%
Unsafe speed	8,174	8,753	8,377	8,048	7,808	-3.0%	-1.1%
Fatal	157	152	162	130	160	23.1%	0.5%
Non-fatal	2,424	2,602	2,493	2,252	2,223	-1.3%	-2.1%
Property damage	5,593	5,999	5,722	5,666	5,425	-4.3%	-0.8%
Speed-related citation	2,370	1,998	1,750	1,781	2,041	14.6%	-3.7%
Fatal	13	14	10	12	10	-16.7%	-6.3%
Non-fatal	679	627	592	560	512	-8.6%	-6.8%
Property damage	1,678	1,357	1,148	1,209	1,519	25.6%	-2.5%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Speed-related criteria categories are not mutally exclusive. All speed-related collisions may not equal total of individual categories.

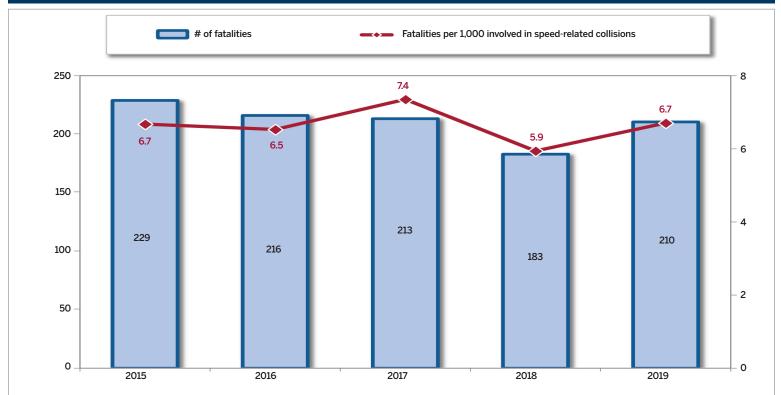
Table 6.2. Individuals involved in Indiana collisions, by speed involvement and injury status	s, 2015–2019
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		(Count of individu	als			Annual rat	e of change
Speed involvement / injury status	2015	2016	2017	2018	2019	% 2019 total	2018–19	2015–19
All individuals	351,321	364,358	358,130	352,405	350,646	100.0%	-0.5%	0.0%
Speed-related	34,364	33,144	28,961	30,831	31,354	100.0%	1.7%	-2.3%
Fatal	229	216	213	183	210	0.7%	14.8%	-2.1%
Non-fatal injury	7,261	6,987	6,432	6,458	6,127	19.5%	-5.1%	-4.2%
Not injured	26,874	25,941	22,316	24,190	25,017	79.8%	3.4%	-1.8%
Not speed-related	316,957	331,214	329,169	321,574	319,292	100.0%	-0.7%	0.2%
Fatal	594	618	712	697	590	0.2%	-15.4%	-0.2%
Non-fatal injury	44,208	45,630	44,483	41,848	40,183	12.6%	-4.0%	-2.4%
Not injured	272,155	284,966	283,974	279,029	278,519	87.2%	-0.2%	0.6%
% Speed-related	9.8%	9.1%	8.1%	8.7%	8.9%	N/A	2.2%	-2.2%
Fatal	27.8%	25.9%	23.0%	20.8%	26.3%	N/A	26.2%	-1.4%
Non-fatal injury	14.1%	13.3%	12.6%	13.4%	13.2%	N/A	-1.0%	-1.6%
Not injured	9.0%	8.3%	7.3%	8.0%	8.2%	N/A	3.3%	-2.1%

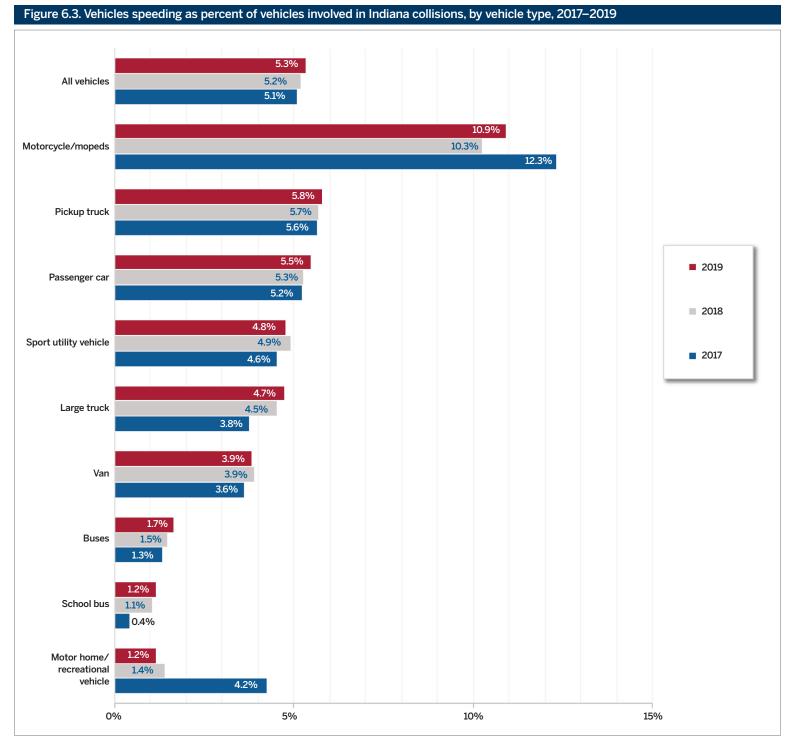
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Not injured status includes individuals involved in collisions reported as null values in the injury status code field. While reporting officers are instructed to enter all drivers in ARIES, passengers are only to be entered in the crash report if an injury occurs; therefore, not injured counts should be interpreted with caution.

Figure 6.2. Indiana traffic fatalities in speed-related collisions, 2015–2019



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Excludes vehicle types of animal-drawn vehicle (non-motor vehicle), farm vehicle, combination vehicle, pedestrian, bicycle, and unknown type.

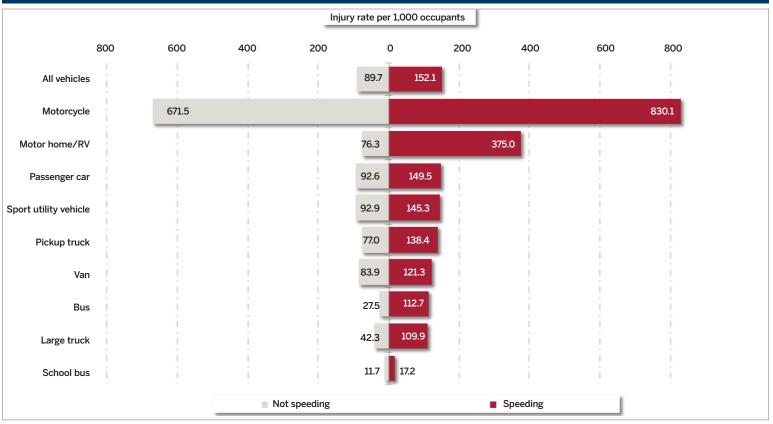


Figure 6.4. Injury rates per 1,000 occupants involved in Indiana collisions, by vehicle unit type and speed involvement, 2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) Injury includes fatal, incapacitating, non-incapacitating, possible, and other injury types.

2) Excludes vehicle types of animal-drawn vehicle (non-motor vehicle), farm vehicle, combination vehicle, pedestrian, bicycle, and unknown.

3) In 2018, no school buses were speeding in collisions.

	2015		2016		2017		2018		2019	
Age group	Male	Female								
15-20	13.0%	8.6%	12.3%	8.5%	11.1%	7.5%	11.2%	8.0%	11.9%	7.9%
21-24	11.2%	7.5%	10.3%	6.9%	9.2%	6.3%	9.8%	6.9%	10.1%	7.1%
25-34	8.7%	5.9%	8.1%	5.3%	6.8%	4.6%	8.1%	5.4%	8.1%	5.2%
35-44	6.2%	4.3%	5.9%	4.0%	5.1%	3.7%	6.1%	3.8%	6.1%	4.1%
45-54	5.1%	3.7%	4.4%	3.1%	3.8%	2.7%	4.4%	3.0%	4.6%	2.9%
55-64	4.0%	2.8%	3.4%	2.3%	3.1%	2.1%	3.4%	2.3%	3.8%	2.5%
65-74	3.3%	1.9%	2.6%	1.9%	2.5%	1.7%	2.5%	1.7%	3.1%	2.0%
75 +	2.5%	1.7%	2.5%	1.6%	2.2%	1.7%	2.2%	1.5%	2.4%	1.5%
II ages	7.3%	5.1%	6.7%	4.7%	5.8%	4.1%	6.4%	4.5%	6.6%	4.5%

Low >

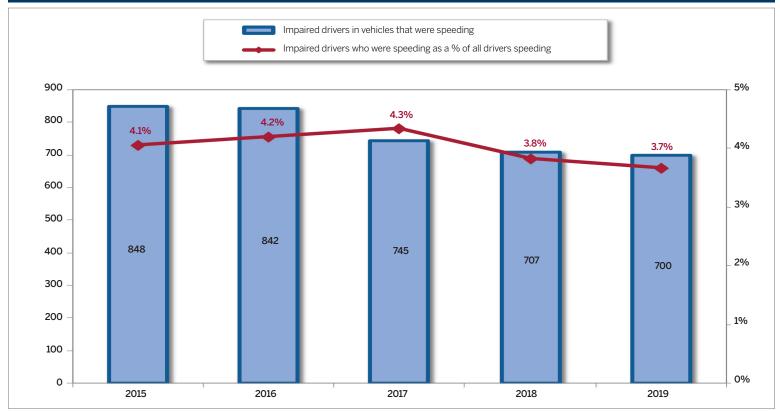
High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

Data limited to drivers with valid gender and age reported.
 Excludes drivers under 15 years old.





Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Alcohol-impaired includes drivers with blood alcohol count (BAC) of 0.08 g/dL or higher.

Table 6.4. Drivers involved in Indiana collisions, by speed involvement, age, and alcohol impairment, 2019

		Not speeding			Speeding	
Age group	Non-impaired	Impaired	% impaired	Non-impaired	Impaired	% impaired
15–20	37,486	153	0.4%	4,126	41	1.0%
21–24	30,214	484	1.6%	2,790	148	5.0%
25-34	65,589	965	1.4%	4,627	223	4.6%
35-44	52,937	668	1.2%	2,800	146	5.0%
45-54	46,408	494	1.1%	1,824	80	4.2%
55–64	42,713	347	0.8%	1,403	44	3.0%
65–74	24,778	107	0.4%	646	15	2.3%
75+	13,526	10	0.1%	270	3	1.1%
otal	313,651	3,228	1.0%	18,486	700	3.6%

<

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Low

Notes:

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

2) Alcohol-impaired includes drivers with blood alcohol count (BAC) of 0.08 g/dL or higher.

High

>

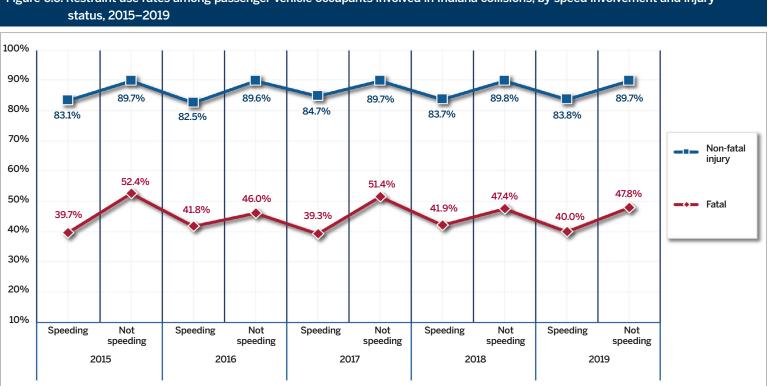


Figure 6.6. Restraint use rates among passenger vehicle occupants involved in Indiana collisions, by speed involvement and injury

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Data limited to drivers and injured vehicle occupants in vehicles where driver was reported to be speeding.

Total collisions Speed-related collisions Month 2015 2016 2017 2018 2019 2015 2016 2017 2018 2019 19,694 19,376 17,277 19,457 2,478 4,350 4,418 Jan Feb 17,785 14,574 16,179 16,977 2,908 1,109 2,366 3,198 16,438 16,387 16,980 15,959 1,925 1,864 1.402 1.208 16,970 1,682 Mar 15,775 1,086 Apr 17,534 17,027 16,387 1,541 1,127 1,074 17,366 18,057 1102 1,055 1,065 May 18.421 18.315 1 215 17.147 17,889 19,009 17.286 17.676 1,125 1.098 1.273 Jun 17,311 17,692 17,156 17,270 17,640 1,153 1,042 Jul 18,083 1,014 17,110 19.340 1,061 17,726 17.860 1.303 Aug 17,706 18,639 17,961 17,750 17,511 1,124 1,155 1,041 1,056 Sep Oct 19,239 19,487 19,999 1.173 1.135 1,373 1,225 1,316 Nov 1,552 1,225 1,193 1,944 1,943 3,660 18,884 18,494 18,757 Dec 21.247 22,077 1.549 3.974 1.688 1.950 Total 216.531 223.961 219.314 217.264 217.396 22.020 21.224 18.338 19.623 20.200 High Nov Dec Dec Jan Nov Feb Dec Dec Jan Jan Feb Mar Jun Sep Low Apr Mar Apr Apr Jun Aug Low High

Table 6.5. Total and speed-related traffic collisions, by month, 2015–2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Color-scales are illustrated to show months from low to high for each category for the entire 5-year period, 2015–2019.

<

ime	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% Speed-relate by hour
12a.m.	14.9%	17.0%	17.8%	14.6%	13.4%	10.3%	12.4%	14.2%
1a.m.	15.0%	16.2%	11.4%	17.1%	10.4%	14.5%	16.5%	14.7%
2a.m.	15.8%	19.8%	12.9%	15.2%	12.8%	14.8%	14.9%	15.1%
3a.m.	15.6%	17.0%	18.8%	16.7%	10.5%	13.1%	14.0%	15.1%
4a.m.	13.9%	16.9%	14.2%	14.4%	9.1%	10.9%	13.8%	13.3%
5a.m.	15.4%	14.4%	12.6%	12.8%	7.5%	12.2%	16.3%	12.8%
6a.m.	14.1%	12.0%	10.8%	10.4%	5.8%	10.0%	13.4%	10.5%
7a.m.	14.8%	8.9%	9.6%	8.9%	6.3%	8.2%	14.9%	9.0%
8a.m.	15.0%	10.5%	11.1%	8.8%	6.6%	10.1%	14.8%	10.3%
9a.m.	13.3%	13.0%	13.1%	8.5%	6.3%	11.1%	15.5%	11.5%
10a.m.	13.6%	11.7%	8.7%	7.6%	5.1%	9.4%	10.2%	9.4%
11a.m.	14.3%	7.3%	7.0%	5.5%	5.8%	5.1%	8.5%	7.4%
12p.m.	16.1%	7.2%	5.6%	5.6%	3.9%	3.4%	11.2%	7.5%
1p.m.	16.7%	6.9%	5.5%	4.5%	4.5%	4.0%	11.4%	7.6%
2p.m.	17.2%	7.4%	6.5%	5.5%	4.9%	3.7%	11.2%	7.7%
3p.m.	15.0%	8.1%	7.1%	5.4%	5.4%	4.6%	11.7%	7.5%
4p.m.	16.8%	9.2%	6.5%	4.4%	4.3%	4.2%	10.5%	7.3%
5p.m.	15.5%	10.4%	6.8%	5.0%	5.0%	4.4%	10.6%	7.6%
6p.m.	12.5%	10.2%	7.1%	5.1%	5.8%	4.6%	11.1%	7.8%
7p.m.	13.3%	11.6%	8.4%	6.2%	7.9%	5.6%	11.2%	9.1%
8p.m.	13.9%	12.6%	8.8%	7.0%	8.6%	7.0%	13.4%	10.2%
9p.m.	14.1%	14.3%	10.1%	7.3%	11.3%	7.1%	12.4%	10.9%
10p.m.	15.8%	16.6%	13.6%	8.9%	12.6%	8.6%	12.8%	12.5%
11p.m.	15.5%	16.0%	15.4%	9.1%	12.5%	9.6%	13.2%	12.9%
Speed-related by day	15.1%	10.4%	8.7%	7.0%	6.4%	6.5%	12.0%	9.2%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:
 Includes collisions where valid time was reported.
 Color scale applies to all days/times.

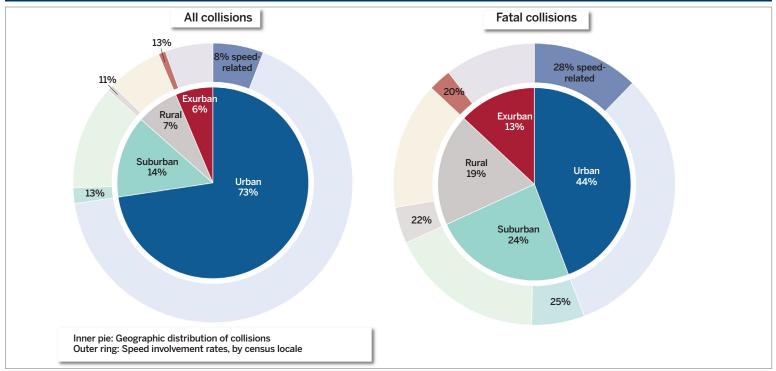


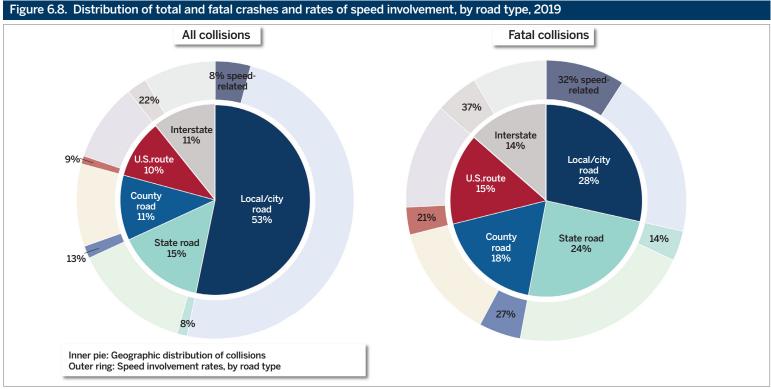
Figure 6.7. Distribution of total and fatal crashes and rates of speed involvement, by census locale, 2019

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Notes:

1) See glossary for census locale definitions.

Excludes cases where locale could not be determined.



Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 17, 2020

Note: Includes collisions where valid road class was reported.



DATA SOURCES

Data in this publication come from the following sources:

- Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of March 17, 2020
- Indiana Bureau of Motor Vehicles, current as of April 3, 2020
- Indiana Department of Transportation, county-level VMT (2018), current as of March 30, 2020
- U.S. Census Bureau, Annual Estimates of the Resident Population by Single-Year of Age and Sex for the United States and States (2018), provided by the Indiana Business Research Center, Indiana University
- U.S. Census Bureau, Population Estimates for Indiana Counties, 2015–2019, provided by the Indiana Business Research Center, Indiana University, current as of August 13, 2020, accessed at http://www.stats.indiana.edu/population/popTotals/2019_cntyest.asp

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Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, Center for Road Safety, Purdue University, 2019

National Center for Statistics and Analysis, National Highway Traffic Safety Administration, Seat Belt Use in 2019–Overall Results, DOT HS 812 875, December 2019.

National Highway Traffic Safety Administration (NHTSA). (December 2019). Alcohol-impaired driving, *Traffic Safety Facts*, 2018 Data, DOT HS 812 864, National Center for Statistics and Analysis.



INDIANA STANDARD CRASH REPORT AND GLOSSARY

INDIANA OFFICER'S STANDARD CRASH REPORT

INDIANA OFFICER'S STANDARD CRASH REPORT Electronic Version						Page		of			
Date of Crash Day of Week Actual Loc Road Crash Occurred On		e County		ship # Motor # Injured Vehicles Direction		# Injured	# Dead	# Commercial # D Vehicles Road Classification		# Deer	
		5	5	number of feet from							
Inside Corporate Limits?	Inside Corporate Limits? City/Town or Nearest City/Town			Propert	y?	Crash Lat	itude	Cra	ish Longi	tude	
Driver #1	Driver #1 Driver #2			Driver #3 Driver #4							
Primary Cause Vahiele 1 Vahiele 2 Vahiele 4	Primary Cause Vehicle 1 Vehicle 2	4	•			Area Info	mation				
Primary C. Vehicle 2_ Vehicle 2_ Vehicle 4_ Vehicle 4_		Vehicle 4		Hit and Run							
Driver Contributing Circumstances	iting Circumstan		School Zone								
Prescription Drugs		Brake Failure o Tire Failure or I		Rumble Strips							
Driver Illness	88888	Headlight(s) De Other Lights De	fective or Not On fective	Locality							
Failure to Yield	Failure to Yield					Light Condition					
Ləft of Center	Left of Center					- I Weather Conditions					
Improper Turning	Tow Hitch Failu Other	re	Surface Condition								
Following Too Closely	None ntributing Circur	nstances	Type of Median								
Image: Construction of the second s	Glare Roadway Surfa		Type of Roadway Junction								
Pedestrian's Action					Road Character						
Image: Solution Image		Severe Crossw Obstruction No	inds	s Baadway Sudicas							
Cell Phone Usage		Lane Marking C	Obscured								
		Animal/Object i									
	Utility Work										
		None		Traffic Control Device Operational?							
Total Estimate of all damage in the Crash: Was this crash the res							sult of aggressive driving?				
Other Property Damage (1) State Pro	perty Damage (1) State Property Owner's Name and Address										
Other Property Damage (2) State Pro	Damage (2) State Property Owner's Name and Address										
Witness/Other		Non-Motorist									
Witness # Name Other Participant		(Last Name, First N	First Name, MI)								
Address etc.	Non-Motorist Type	/pe Non-Motorist Action									
Phone# Location at Time o	Apparent Physical	Condition									
Witness # Name Other Participant		Cited?	Direction								
Address etc.	Street/Highway										
Phone#Location at Time o	Traffic C	Control?	lf	yes, was t	raffic co	ntrol op	eration	al?			

Local ID					Page	of
Type of Crash						
Time Notified	Time Arrived	Other Loca	ation of Investigati	on		
Assisting Officer		1	ID No.	Agency	Investigation Complete?	Photos Taken?
Assisting Officer		ID No.	Agency	Date of Report		
Investigating Officer			ID No.	Agency	Reviewing Officer	

Narrative

UNIT INFORMATION			D			
Local ID			Page	of		
Driver's Name (Last, First, MI)		Safety Equipment Used				
Address (Street, City, State, Zip)	Safety Equipment Effective?					
		Ejection/Trapped				
Date of Birth Age	EMS No. Immed Attn Driver Injury Status					
Driver's License # Lic Type	CDL Class Lie State	Nature of Most Severe Injury				
Apparent Physical Status Restrictions		Location of Most Severe Injury				
Had Been Drinking Handicapped III Asleep/Fatigued Drugs/Medication Unknown Had Been Drinking Daylight Driving Daylight Driving Daylight Driving Special Controls Employment Only Motorcycle Only To/From Employment Nor	ployer's Vehicle Only te-Owned Vehicles Chauffeurs Taxi Only wer Steering acial Restrictions bation DVI bation HTO 18	If Cited? IC Code Infraction Mis demeanor Felony	55			
Test Given NONE Blood Urine Breath Alcohol Results Certified PBT Test Pending	SFST PBT Drug Results					
Veh# Color Vehicle Year Make Model	Style	Initial Impact Area				
# Occupants Lic Year License #	License State	Undercarriage		Rear		
# Axles Speed Limit Insured By F	Phone Number	None Unknown				
Vehicle Identification# Registered Owner's Name (Last, First, MI) Address (Street, City, State, Zip)	Areas Damaged (Multiples) Undercarriage Trailer None Unknown Vehicle Use	Front	Rear			
Towed? To Reason By		F D A				
Lic State Lic Year Registered Owner's Name (Last, First, M	II) 🔲 Same as Driver	Emergency Run?	Fire?	NO		
License# Address (Street, City, State, Zip)		Vehicle Type				
Veh Year Make		Pre-Crash Vehicle Action				
Lic State Lic Year Registered Owner's Name (Last, First, M	II) 🔲 Same as Driver	Direction of Travel				
License# Address (Street, City, State, Zip)		Direction of travel				
Veh Year Make Commercial Vehicle: Carrier's Name and Ac	ddress	Type of Primary/Secondary R One Way Traffic	Two Way Traffic			
		One Lane Two Lanes Multi-Lanes (3 or more)	Two Lanes Multi-Lane Divided (3 or more) Multi-Lane Undivided 2 way left Multi-Lane Undivided 3 or mor			
HAZMAT Proper Shipping Name: State D	Event Collision With					
US DOT# ICC# CMV	Inspection If Yes					
Gross Vehicle Weight Rating Cargo Body Type						
HAZMAT Placard HAZMAT Release of Cargo HAZMAT 4 Digit ID#	Hazzard Class #					

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-impaired

he National Highway Traffic Safety Administration (NHTSA) defines drivers as being alcohol-impaired when they test for a blood alcohol concentration (BAC) of at least 0.08 grams per deciliter (g/dL). Any fatal crash involving a driver at that BAC level is categorized as an alcohol impaired-driving crash, thus any fatalities that happen in a crash that meets that criterion is deemed an alcohol-impaired fatality (NHTSA DOT HS 812 864, 2019, p. 1). By law, drivers in Indiana who have a BAC of at least 0.08 g/dL should receive—at minimum—a Class C misdemeanor (IC9-30-5-1). Indiana Code also says that drivers with BAC of at least 0.15 g/dL should receive a Class A misdemeanor (IC9-30-5-1). If the driver had a passenger under the age of 18 in the vehicle, they could face a Class D felony. This fact sheet does not explicitly consider these cases but does include them in summary statistics.

Attributable/Attributablity

A vehicle and/or driver is considered attributable in a collision when linked by the reporting officer to the primary factor or cause of the collisions.

Blood Alcohol Concentration

The BAC is measured as a percentage by weight of alcohol in the blood (grams/deciliter). A positive BAC level (0.01 g/dL and higher) indicates that alcohol was consumed by the person tested; a BAC level of 0.08 g/dL or more indicates that the person was legally impaired.

Bus

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

Census-based 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).

Cited/Citation

When a person involved in a collision is charged with a violation (traffic or criminal) 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

1. *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. Bus: A motor vehicle designed to transport nine or more occupants.
- 3. Any Vehicle: Displaying a hazardous materials placard.

Contributing Circumstance

Actions of the driver, apparent environmental conditions, or apparent vehicle conditions that 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.

Collision/Crash Severity

- 1. *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 non-incapacitating injury; or (3) a possible, not visible injury.
- 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 \$1,000 or more.

Dark (Lighted)

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

Day

From 6:00a to 5:59p.

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.

Ejection

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 Object

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

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.

Hazardous Materials

Any substance or material which has been determined by the U.S. 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 hazardous materials in quantities above the thresholds established by the USDOT, or other authorized entity. This placard identifies the hazard class division number, four-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. The most recent ARIES upgrade added a clarification to reporting officers on the definition of incapacitating injuries criteria to include *transported from scene for treatment*.

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 points or more; 6) Ramp; and 7) Traffic circle/roundabout.

ISP

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.

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.

Licensed Drivers

The annual count of licensed drivers in a given location (e.g., county, state, nation).

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

The category *motorcycle* includes the following:

- 1. *Motorcycle:* A motor vehicle that: (1) has a seat or saddle for the use of the rider; (2) is designed to travel on no more than three wheels on the ground; and (3) satisfies the operational and equipment specifications described in 49 CFR 571 and IC 9-19. The term does not include a farm tractor or a motor driven cycle.
- Motor Driven Cycle—Class A: A motor vehicle that: (1) has a seat or saddle for the use of the rider; (2) is designed to travel on no more than three wheels on the ground; and (3) complies with applicable motor vehicle equipment requirements under IC 9-19 and 49 CFR 571; (4) has an engine that produces no more than five-brake horsepower; and (5) is registered as a Motor Driven Cycle - Class A. The term does not include an electric personal assistive mobility device.
- Motor Driven Cycle—Class B: A motor vehicle that: (1) has a seat or saddle for the use of the rider; (2) is designed to travel on no more than three wheels on the ground; (3) complies with applicable motor vehicle equipment requirements under IC 9-19 and 49 CFR 571; (4) has a cylinder capacity not exceeding 50 cubic centimeters; and (5) is registered as a Motor Driven Cycle - Class B. The term does not include an electric personal assistive mobility device.
- 4. ARIES includes two other *unit type* categories not defined by Indiana law (*motorized bicycle* and *moped*) that are also included in *motorcycles*.

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 6:00p to 5:59a.

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.

Non-motorist

Any person who is not an occupant of a motor vehicle in transport and includes the following: (1) pedestrians, (2) pedalcyclists, and (3) persons riding in animal-drawn vehicles.

Not Injured

Not injured status includes individuals involved in collisions reported as null values in the injury status code field. While reporting officers are instructed to enter all drivers in ARIES, passengers are only to be entered in the crash report if an injury occurs; therefore, not injured counts should be interpreted with caution.

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.

Odds

Odds are calculated as the ratio of the count of an incident occurring to the count of the incident not occurring. For example, in 100 crashes, if there are 24 involving serious bodily injury, the odds of a serious bodily injury (SBI) collision = 24/76 = .32).

Odds ratio

The ratio of the odds of an event occurring in one group to the odds of it occurring in another group. For example, if the odds of SBI for motorcycle riders and passenger car occupants is .21 and .01, respectively, the OR of motorcyclists compared to car occupants = .21/.01 = 19.2 (i.e., motorcyclists are 19.2 times more likely to experience an SBI than are car occupants).

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.

Passenger Vehicles

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

Pedalcyclist

A person on a bicycle or vehicle that is powered solely by pedals.

Pedestrian

Any person walking or not in or upon a motor vehicle or other vehicle.

Pickup Truck

A motor vehicle designed to carry ten or fewer people, with an exposed bed.

Possible Injury

Any injury reported or claimed which is not visible. Example: the complaint of back or neck pain (normally included in non-incapacitating injury category).

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.

Driver: Unsafe actions include primary factors of following too closely, failure to yield right of way, unsafe backing, disregard signal/reg sign, improper turning, speed too fast for weather conditions, unsafe lane movement, improper lane usage, unsafe speed, left of center, improper passing and wrong way on one way.

Driver: Loss of control include primary factors of ran off road right, ran off road left and overcorrecting/oversteering.

Driver: Distraction include primary factors of driver distracted (explained in narrative), cell phone usage, other telematics in use and passenger distraction.

Driver: Cognitive impairment includes primary factors of driver asleep or fatigued, driver illness, alcoholic beverages, prescription drugs, and illegal drugs.

Environmental includes primary factors of animal on roadway, roadway surface condition, view obstructed, other (explained in narrative)-environment, obstruction not marked, severe crosswinds, traffic control problem, holes/ruts in surface, glare, lane marking obscured, road under construction and shoulder defective.

Vehicle-related includes primary factors of brake failure or defective, other (explained in narrative)-vehicle, tire failure or defective, insecure/leaky load, steering failure, accelerator failure or defective, engine failure or defective, oversize/overweight load, headlight defective or not on, tow hitch failure and other lights defective.

All other include primary factors of other (explained in narrative)driver, pedestrian action, not a factor-driver, not a factor-vehicle, violation of license restriction and not a factor-environment.

Unknown include primary factors of unknown and invalid.

Property Damage 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.

Registered Vehicles

The annual count of registered vehicles in a given location (e.g., county, state, nation).

Relative Risk

A measure of the risk of injury determined by comparing the likelihood of an injury in collisions involving certain circumstances with the likelihood of an injury in collisions not involving those circumstances (e.g., the likelihood of a fatal injury when a collision involves speeding versus when it does not). If 2 percent of collisions involving speeding result in a fatality and one percent of collisions not involving speeding result in a fatality, the relative risk of a fatality when speed is involved equals two (2 percent/1 percent); that is, collisions that involve speeding are two times more likely to result in a fatality than those that do not. Relative risk is often used to measure the risk of a fatal injury but can be used to measure the risk of any type of injury.

Restraint Use

The occupant's use of available vehicle restraints including lap belt, shoulder belt, or automatic belt.

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.

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 two axles and six tires on the ground, or three or more axles).

Speed-related

A collision is identified 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 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 fewer than ten 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.

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.

Unsafe Backing

Backing increases the risk for crash because it is much more difficult to see obstacles behind you and requires more space to maneuver. Common unsafe backing actions include: *Improper body position, speed too fast, failure to yield and determine the path of travel is clear, failure to look back during the whole maneuver until the vehicle is completely stopped, and incorrect steering.*

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 Traveled

The annual vehicle distance traveled in miles (VMT).

Weekday

From 6:00 a.m. Monday to 5:59 p.m. Friday.

Weekend

From 6:00 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 between the ages of 15 and 20 years old.

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An electronic copy of this document can be accessed via the PPI traffic safety projectwebsite (https://trafficsafety.iupui.edu), the ICJI traffic safety website www.in.gov/cji/), or by contacting the Indiana University Public Policy Institute at 317-278-1305.



