



INDIANA UNIVERSITY

PUBLIC POLICY INSTITUTE

An Indiana Traffic Safety Facts publication

INDIANA CRASH FACTS 2019

BICYCLISTS

SEAT BELT USE

MOTORCYCLES

PEDESTRIANS YOU

YOUNG DRIVERS

CHILD PASSENGER SAFETY

ALCOHOL-IMPAIRED

SPEEDING

INTRODUCTION AND ACKNOWLEDGEMENTS

Designing and implementing effective traffic safety policies requires data-driven analysis of traffic collisions. To help in the policy-making process, the Indiana University Public Policy Institute (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.

Authors:

Rachel Thelin, Senior Policy AnalystPolicy Institute Katie Rukes, Program Analyst Jamie Palmer, Senior Policy Analyst

Assisted by:

Susan Hill Design

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

POSSER AGRADIO

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).

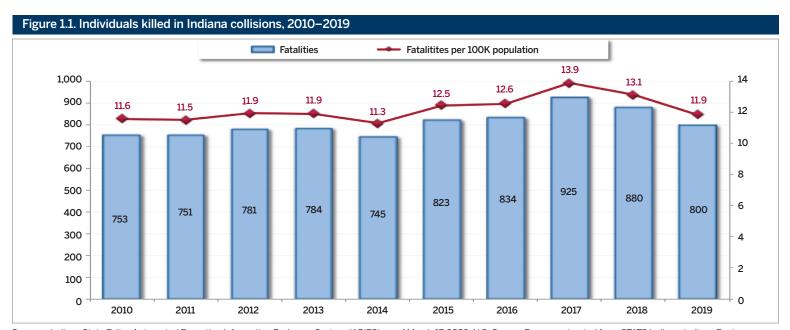
NOTE: Subsequent sections include a general discussion of goals identified in the FY 2021 Indiana Highway Safety Plan. The Indiana University Public Policy Institute uses ARIES crash data to produce a series of six traffic safety fact sheets. These publications, along with this Crash Fact Book and the 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

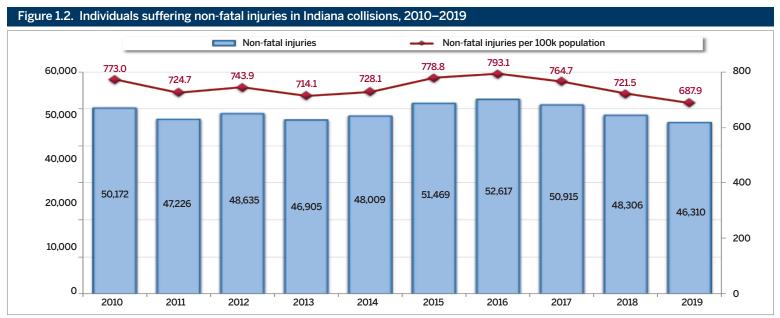
The severity of a traffic collision is often influenced by many factors, including seat belt use, the speed at which vehicles are traveling, objects with which the vehicles collide, driver impairment and other dangerous driving behaviors, and emergency response times. Crashes in rural areas are more 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

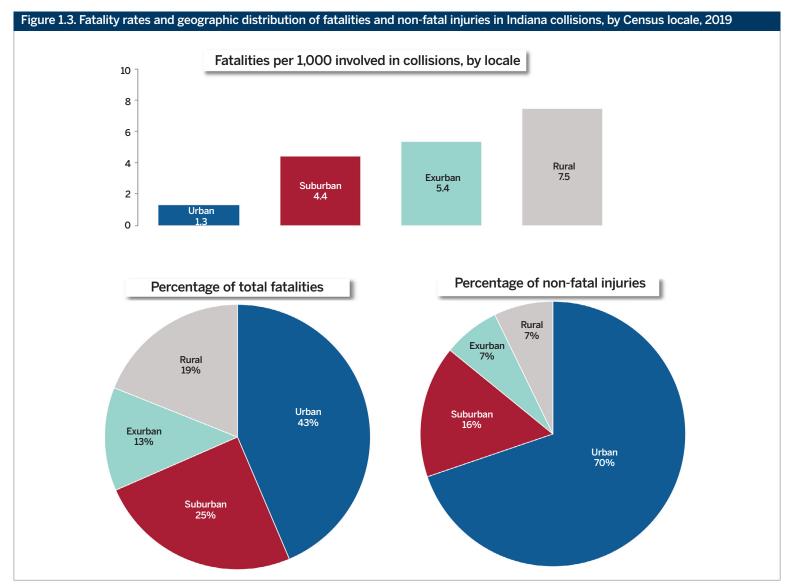


Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 17, 2020

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

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.



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

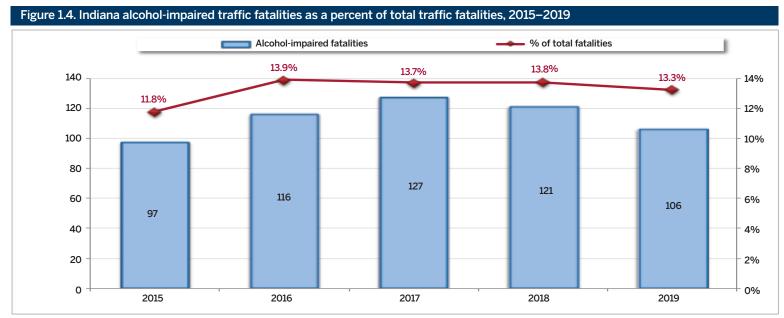
1) Non-fatal injuries include those reported as incapacitating, non-incapacitating, possible, not reported, and unknown.

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

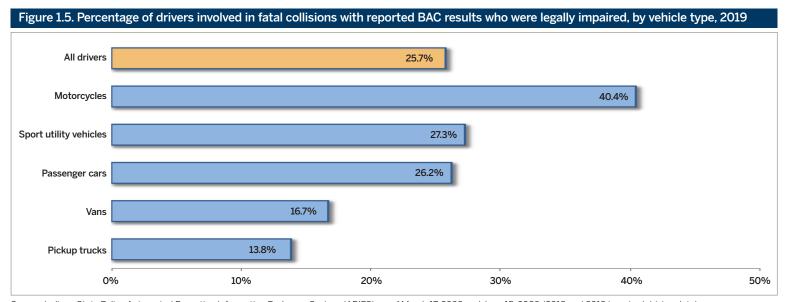
GOAL: Reducing impaired driving

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)



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)

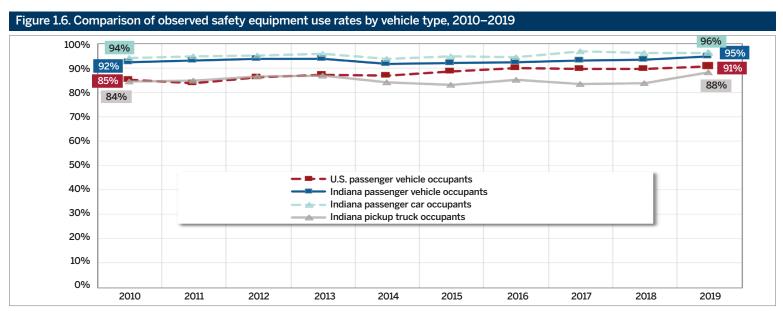
Notes:

- 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

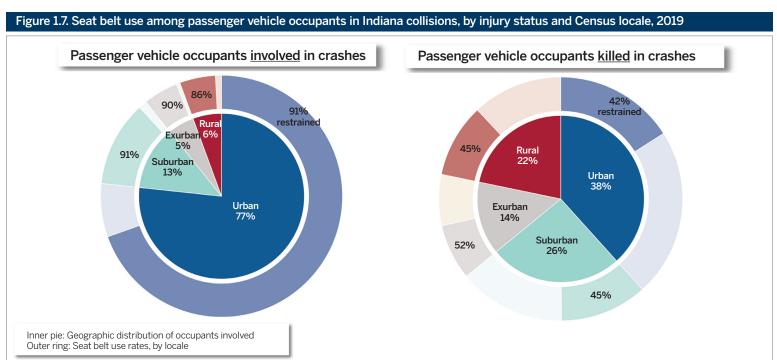
Between 2010 and 2019, Indiana's observational rate of seat belt use among passenger vehicle occupants remained consistent at 93 percent on average, a rate that was 2 percentage points higher than the most recently reported national rate (Figure 1.6). According to observational surveys in Indiana, seat 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.



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

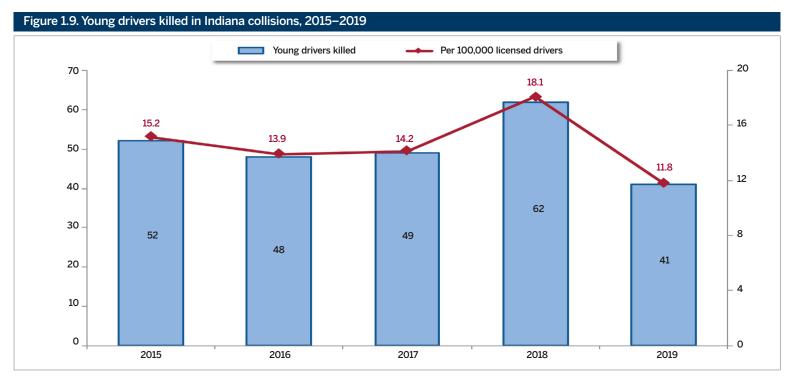
In 2019, consistent with previous years, collision involvement rates were higher among young drivers, ages 15 to 20, than any other age group (Figure 1.8). Crash rates are lowest among drivers 75 years and older (410 per 10,000 licensed), but are nearly three times higher for young drivers (1,201 per 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 five-year 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.



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

Notes:

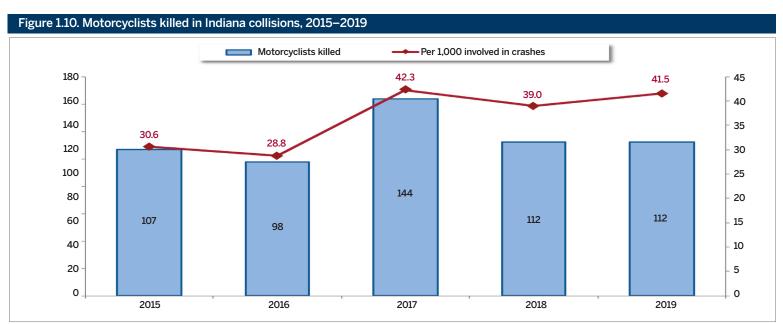
- 1) Young drivers include drivers ages 15 to 20 years old.
- 2) Non-motorists are excluded.

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

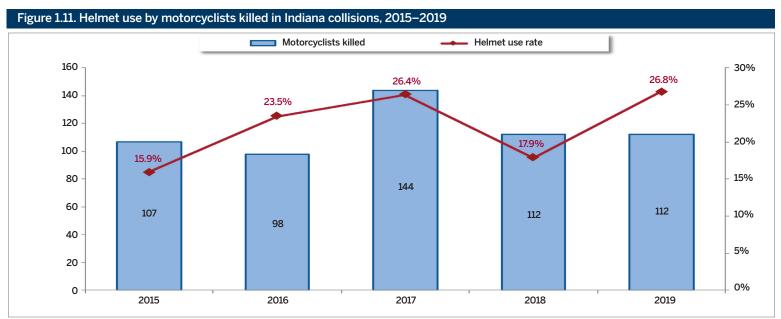
1.000 in 2018.

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.



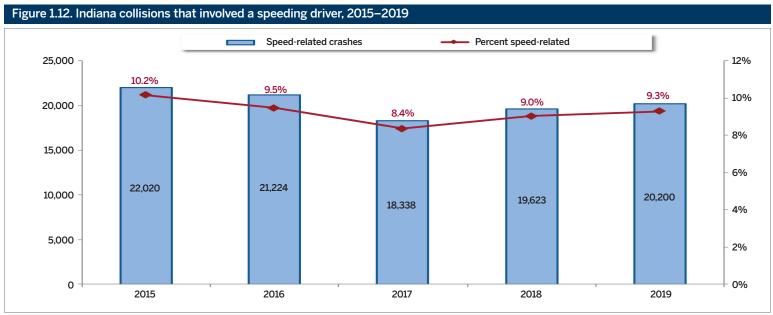
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

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

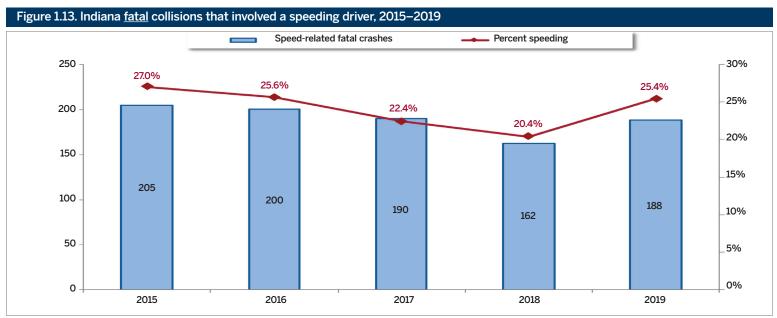
GOAL: Reducing drivers speeding in crashes

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



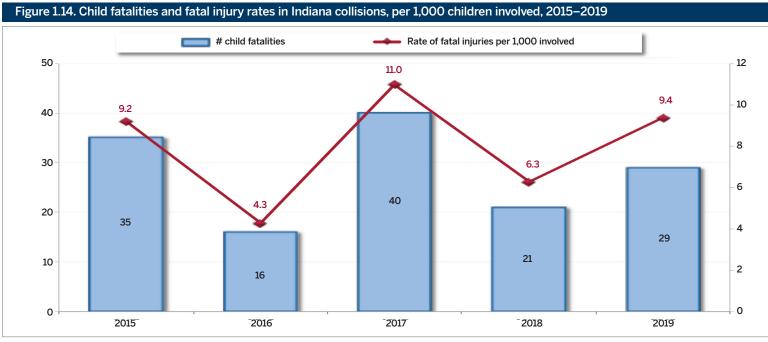
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

GOAL: Reducing fatalities and serious injuries among children

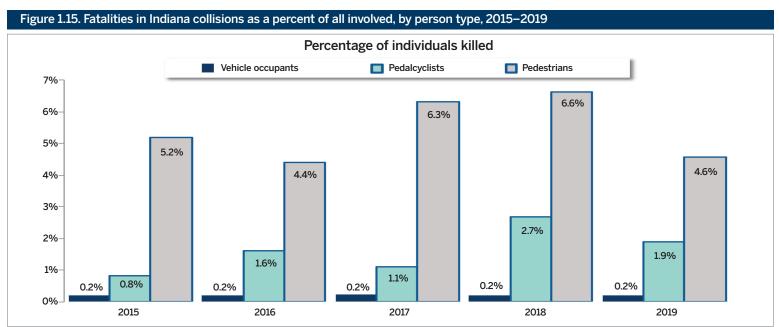
The total number of children killed in crashes increased from 21 in 2018 to 29 in 2019. (Figure 1.14). The rate of fatal injuries per 1,000 children involved in crashes also increased between 2018 and 2019. However, the number of child fatalities in 2019 are lower than 2015 (35) and the five-year high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



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

Note: Animal-drawn vehicle operators are excluded.



COUNTY COMPARISONS

DESPITE VIEW TO

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-and-run 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	a collisions, by s	everity and col	inty, 2019						
	Total	collisions		Fatal		Non-fat	al injury	Property	damage only
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total
All counties	217,387	N/A	739	0.3	N/A	31,194	14.3	185,454	85.3
Mean	2,363	N/A	8	0.6	N/A	339	13.8	2,016	85.6
Median	1,021	N/A	6	0.5	N/A	133	14	876	86
Minimum	111	N/A	0	0.0	N/A	18	7.3	92	69.6
Maximum	37,726	N/A	101	3.3	N/A	5,803	28.0	31,822	91.9
Adams	763	57	7	0.9	13	84	11.0	672	88.1
Allen	13,976	3	36	0.3	63	2,192	15.7	11,748	84.1
Bartholomew	2,085	24	9	0.4	48	520	24.9	1,556	74.6
Benton	153	90	5	3.3	1	18	11.8	130	85.0
Blackford	283	84	0	0.0	89	28	9.9	255	90.1
Boone	2,238	23	4	0.2	76	258	11.5	1,976	88.3
Brown	534	69	4	0.7	27	77	14.4	453	84.8
Carroll	551	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	114	11.0	924	88.8
Crawford	279	85	2	0.7	30	31	11.1	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
Decatur	902	53	3	0.3	54	110	12.2	789	87.5
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	0.2	55	64	10.5	541	89.1
Fulton	625	62	4	0.5	34	58	9.3	563	90.1
				0.8		172	9.5 15.4	939	
Gibson	1,114	41 21	3	0.3	61	229	9.7		84.3
Grant	2,355 861	54	10 6	0.4	49 31	127	9.7	2,116 728	89.9
Greene			12						84.6
Hamilton	8,538	5		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
_aGrange	1,001	47	5	0.5	44	90	9.0	906	90.5
_ake	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

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

	Total	collisions		Fatal		Non-fa	atal 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	7 75	51	9.5	486	90.3
Steuben	1,640	30	14	0.2	16	119	9.5 7.3	1,507	91.9
Sullivan	1,040	75	2		47	60	13.6	380	86.0
	220	75 87		0.5					
Switzerland		7	7	3.2	2	25	11.4	188	85.5
Tippecanoe	7,022		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

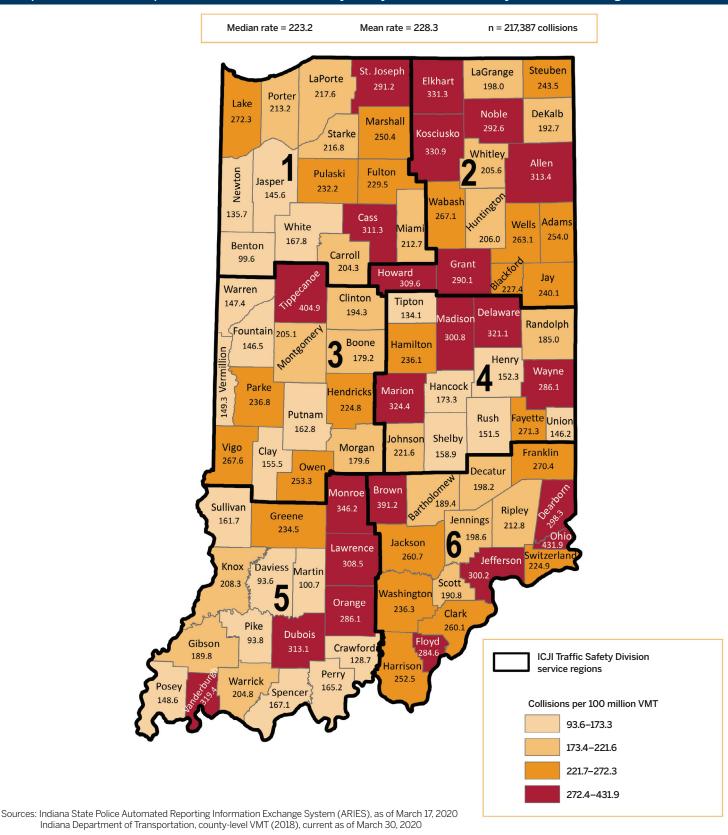


Table 2.2. Individuals involved in Indiana collisions, by injury status and county, 2019

	Total indivi	duals involved		Fatal		Incap	pacitating	Non-inc	apacitating	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	7.5	579	83.9
Carroll	718	70	4	0.6	26	62	8.6	53	7.4	599	83.4
Cass	1,896	35	3	0.2	67	146	7.7	116	6.1	1,631	86.0
Clark	6,963	11	9	0.1	76	439	6.3	389	5.6	6,126	88.0
Clay	1,020	60	7	0.7	17	89	8.7	52	5.1	872	85.5
Clinton	1,514	46	3	0.2	59	113	7.5	85	5.6	1,313	86.7
Crawford	326	85	2	0.6	22	28	8.6	17	5.2	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	55	71	5.3	78	5.8	1,200	88.8
DeKalb	1,938	34	2	0.1	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	0.0	77	245	5.2	282	6.0	4,188	88.7
Fountain	509	81	1	0.1	60	22	4.3	29	5.7	4,188	89.8
Franklin	798	63	2	0.2	52	63	7.9	26	3.3	707	88.6
Fulton	798	64	4	0.5	34	59	7.9	28	3.5	707	88.5
Gibson	1,722	40	3	0.5	63	135	7.4	135	7.8	1,449	84.1
	3,475			0.2	47	195		170		3,099	89.2
Grant	1,134	24 57	11 6	0.5	27	195	5.6 8.7	85	4.9 7.5	3,099 944	83.2
Greene Hamilton	14,997		14	0.5	81	646	4.3	1,001	6.7	13,336	88.9
		4			I						
Hancock	3,336	25	12	0.4	43	301	9.0	190	5.7	2,833	84.9
Harrison	1,748	39	9 18	0.5	32	166	9.5	131	7.5	1,442	82.5 88.9
Hendricks	7,570	10		0.2	54	420	5.5	402	5.3	6,730	
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

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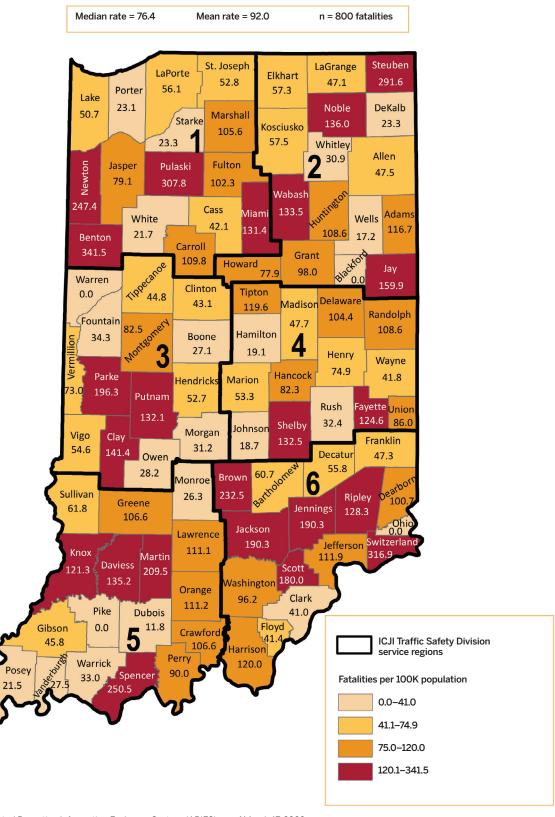
Table 2.2. Individuals involved in Indiana collisions, by injury status and county, 2019 (continued)

	Total indivi	duals involved		Fatal		Incap	pacitating	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	117	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	0.1	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	0.1	69	35	1.3	293	10.9	2,365	87.7
Washington	951	61	5	0.1	28	81	8.5	98	10.3	2,303 767	80.7
Wayne	3,538	23	5	0.1	70	194	5.5	248	7.0	3,091	87.4
Wells	1,165	54	1	0.1	83	64	5.5 5.5	59	5.1	1,041	89.4
White	1,305	53	1	0.1	86	80	6.1	64	4.9	1,160	88.9
Whitley	1,305	55 47	2	0.1	71	116	8.1	78	4.9 5.5	1,160	86.2
Unknown						0	0.1 N/A	0			
OHKHOWH	5	N/A	0	N/A	N/A	U	IN/A	U	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

		All collisions		ı	Fatal	Non-fa	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
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	2	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	11.2	142	9.1
Benton	10	6.5	64	0	0.0	3	16.7	7	5.4
Blackford	12	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	11.1	26	1	25.0	15	21.4	45	9.4
Cass	88	6.8	59	1	33.3	21	13.0	66	5.8
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
Daviess Dearborn	126	6.8	57	0	0.0	26	12.1		6.2
					1			100	
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	7.5 5.9
_aGrange	142	14.2	9	0	0.0	24	26.7	118	13.0
_ake	2,699	15.1	6	25	58.1	544	21.0	2,130	14.0
LaPorte	448	11.9	17	2	18.2	77	13.7	369	11.6
Lawrence	80	5.8	75	2	22.2	22	12.7	56	4.7
Madison	264	6.2	71	4	36.4	54	10.0	206	5.5

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

		All collisions			Fatal	Non-fa	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	11.3 N/A	N/A	0	0.0 N/A	0	17.5 N/A	0	10.5 N/A
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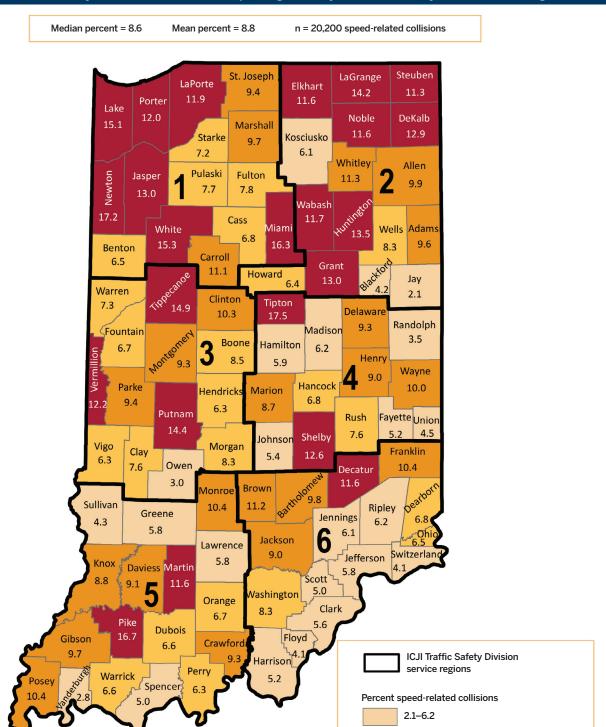
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

¹⁾ Percent calculations represent the percent of total county collisions (presented in Table 2.1) in each injury category that are speed-related.

2) Non-fatal injury collisions include collisions with incapacitating, non-incapacitating, and possible injuries.

3) 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



6.3-8.5 8.6-11.3 11.4-17.

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

Table 2.4. Indiana	collisions involv	ing an alcohol-im	paired drive	r, by severity and	county, 2019	9		
		Total		Fatal	Non-	fatal injury	Prope	erty 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
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	9	1.3	0	0.0	2	2.0	7	1.2
Clinton	22	2.1	0	0.0	2	1.8	20	2.2
Crawford	4	1.4	0	0.0	1	3.2	3	1.2
Daviess	15	4.4	0	0.0	8	8.4	7	3.0
Dearborn	33	1.8	0	0.0	5	2.3	28	1.7
Decatur	9	1.0	0	0.0	2	1.8	7	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 2.8	115	1.9 2.4
Fayette Floyd	12 38	2.4 1.4	2	0.0 40.0	2 7	2.0	10 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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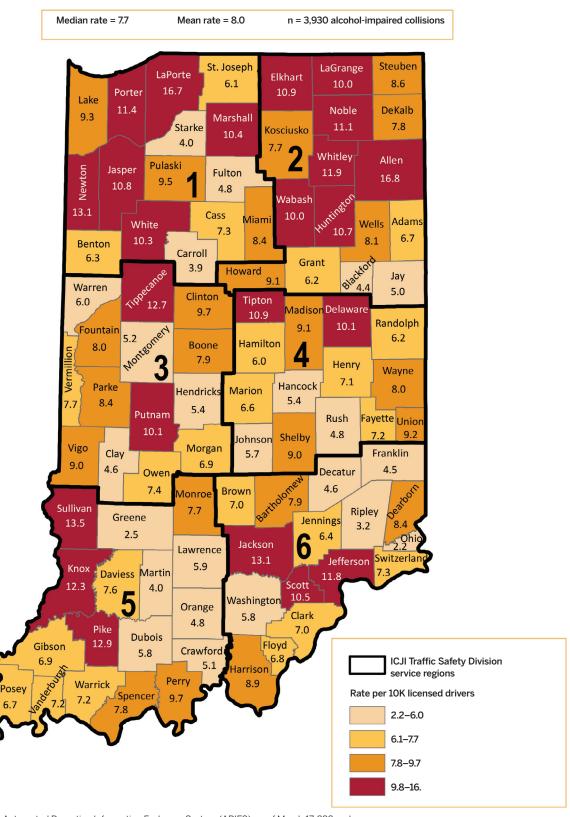
Table 2.4. Indiana collisions involving an alcohol-impaired driver, by severity and county, 2019 (continued)

		Total		Fatal	Non-	fatal injury	Prope	erty 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	139	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	1.2	1	11.1	32	2.4	55	0.9
Vermillion	9	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 Warren	23	2.5 1.7	1 0	14.3 N/A	13 1	11.2 5.0	9	1.1 1.4
Warrick	35	2.1	0	0.0	12	5.0 5.2	23	1.4
				0.0				
Washington	12 36	1.8	0		2	1.9	10 24	1.8
Wayne	17	1.5	0	0.0	12	3.8		1.2
Wells		2.1	0	0.0	7	8.5	10	1.4
White	19	2.1	0	0.0	3	3.1	16	1.9
Whitley	31	3.2	0	0.0	9	6.5	22	2.6
Unknown	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

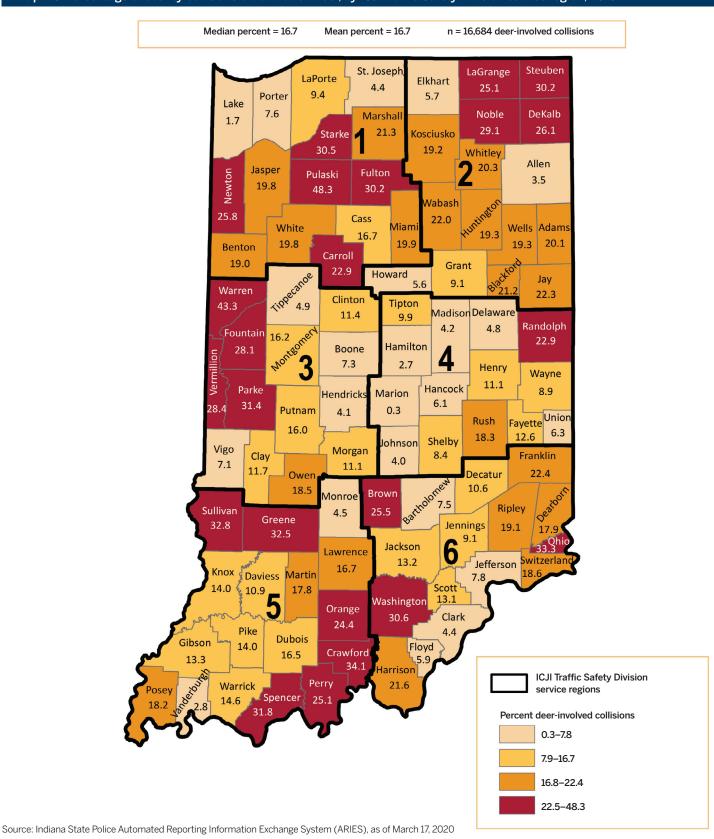
- 1) Percentage calculations represent the percent of total county collisions (presented in Table 2.1) in each injury category that are alcohol-impaired.
- 2) Includes collisions where at least one alcohol-impaired driver was involved.
- Non-fatal injury includes incapacitating, non-incapacitating, and 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

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

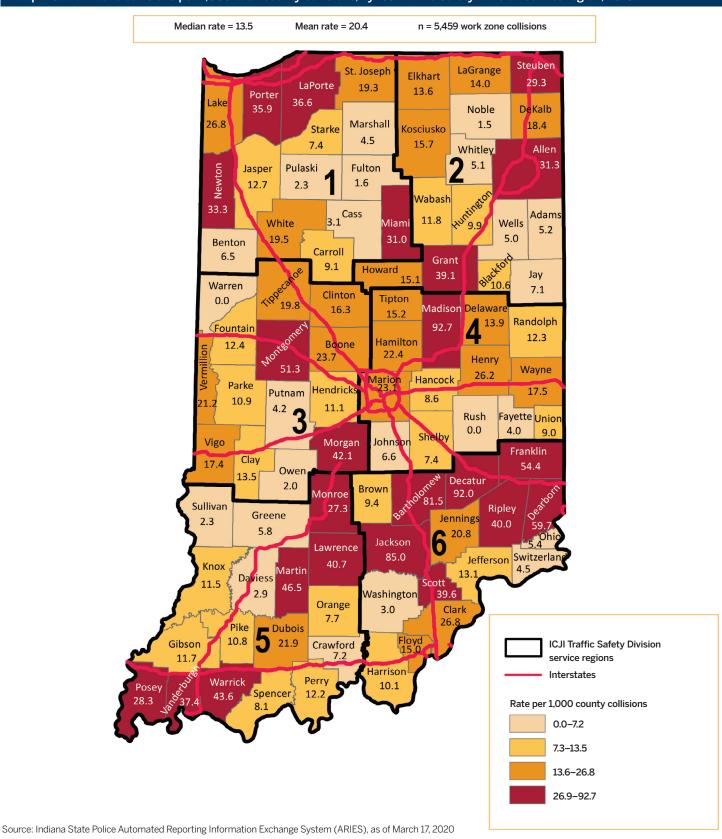


Table 2.5. Passenger vehicle occupants injured in Indiana collisions, by injury status, restraint use, and county, 2019

	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	26.9
Gibson	3	1	33.3	117	29	24.8	123	12	9.8
Grant	9	5	55.6	163	27	16.6	144	22	15.3
Greene	6	5	83.3	88	14	15.9	78	17	21.8
Hamilton	9	5	55.6	558	57	10.2	937	28	3.0
Hancock	7	3	42.9	274	30	10.9	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	13.2
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	2	1	50.0	433	68	15.7	285	23	8.1

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

	Fatal			Incapacitating			Non-incapacitating		
	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained
Marion	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	16.2	84	6	7.1
Wayne	3	2	66.7	162	14	8.6	202	12	5.9
Wells	1	0	0.0	55	12	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	69	6	8.7
vvilley		1	50.0	91	of March 17 2020	10.4	09	U	0.7

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

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

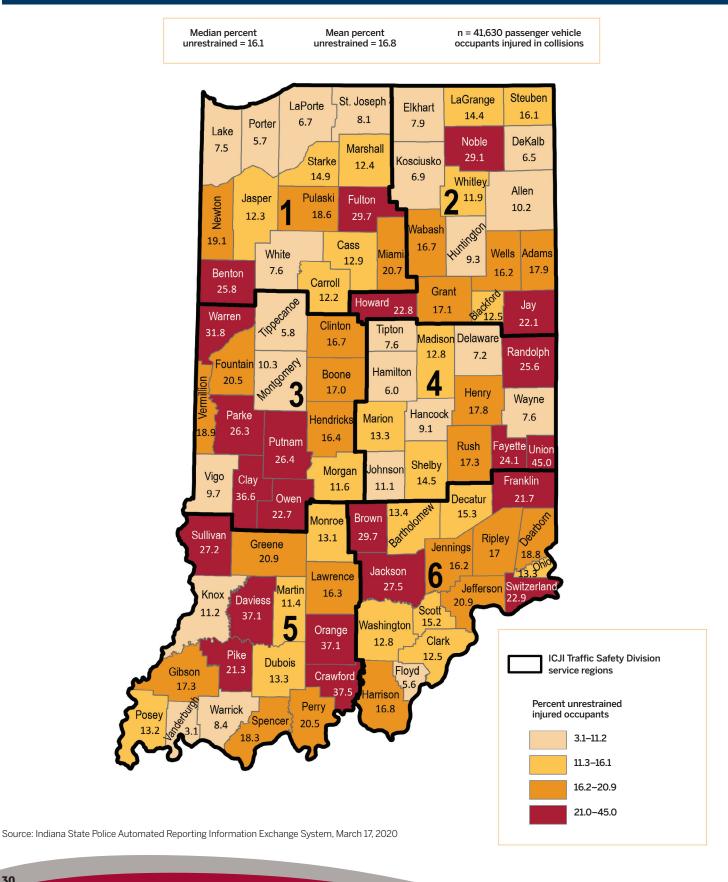


Table 2.6. Young drivers (ages 15-20) involved in Indiana collisions, by injury status and county, 2019

		Young drivers in collisions									
		1	Total .	ı	Fatal	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
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	10,884 745	1,396 121	12.8 16.2	1	0.1 0.0	44 6	3.2 5.0	47 6	3.4 5.0	1,304 109	93.4 90.1
Fayette	4,565	584	12.8	0	0.0	14	2.4	34	5.8	536	90.1
Floyd Fountain	4,565	74	15.1	0	0.0	14	2.4 1.4	1	1.4	72	97.3
Franklin	778	134	17.2	0	0.0	6	4.5	4	3.0	124	97.3
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	425	13.2	1	0.2	20	4.7	23	5.4	381	89.6
Harrison	1,651	223	13.5	1	0.4	13	5.8	19	8.5	190	85.2
Hendricks	7,382	1,097	14.9	0	0.0	44	4.0	47	4.3	1,006	91.7
Henry	1,588	206	13.0	0	0.0	18	8.7	16	7.8	172	83.5
Howard	3,891	587	15.1	0	0.0	24	4.1	26	4.4	537	91.5
Huntington	1,744	258	14.8	0	0.0	19	7.4	27	10.5	212	82.2
Jackson	2,647	356	13.4	0	0.0	18	5.1	9	2.5	329	92.4
Jasper	1,674	251	15.0	0	0.0	17	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	1.9	11	7.1	140	90.3
Johnson	6,510	882	13.5	1	0.1	39	4.4	40	4.5	802	90.9
Knox	1,461	211	14.4	0	0.0	11	5.2	4	1.9	196	92.9
Kosciusko	4,013	555	13.8	1	0.2	3	0.5	56	10.1	495	89.2
LaGrange	1,320	190	14.4	0	0.0	1	0.5	15	7.9	174	91.6
Lake	28,601	2,872	10.0	4	0.1	106	3.7	132	4.6	2,630	91.6
LaPorte	5,412	590	10.9	0	0.0	18	3.1	49	8.3	523	88.6
Lawrence	2,000	269	13.5	0	0.0	11	4.1	27	10.0	231	85.9
Madison	6,551	742	11.3	2	0.3	32	4.3	23	3.1	685	92.3

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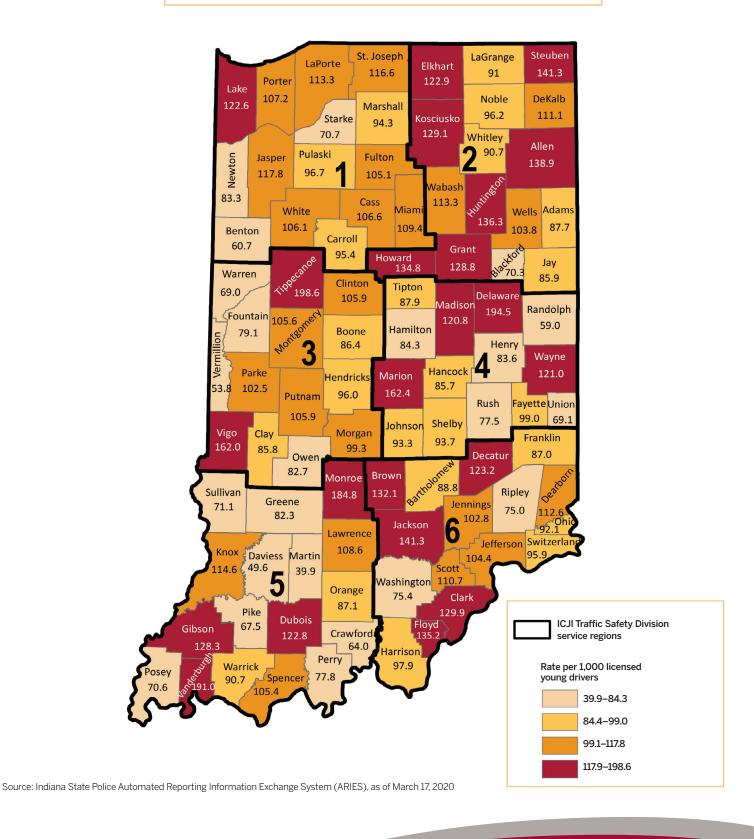
Table 2.6. Young drivers (ages 15-20) involved in Indiana collisions, by injury status and county, 2019 (continued)

			Young drivers in collisions										
		1	otal	F	atal	Incap	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		
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	12,341 496	1,505 50	12.2 10.1	2	0.1 0.0	43 7	2.9 14.0	118 4	7.8 8.0	1,342 39	89.2 78.0		
Vermillion				_									
Vigo	5,061	750	14.8	2	0.3	29	3.9	29	3.9	690	92.0		
Warran	1,299 276	198 35	15.2 12.7	0	0.0 0.0	8	4.0 8.6	6	3.0 2.9	184 31	92.9 88.6		
Warren Warrick	2,617	379	14.5	0	0.0	3	I	1	2.9 8.4	341	90.0		
Washington	2,617	118	14.5	0	0.0	6 10	1.6 8.5	32 10	8.4 8.5	98	90.0		
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	89.5 92.0		
White		150	11.9	0	0.0		3.4			133	92.0 88.7		
	1,263 1,377	185	13.4	0		5 9	4.9	12 13	8.0	163	88.1		
Whitley Unknown	1,3//	2	13.4 N/A	0	0.0 N/A	0	4.9 N/A	0	7.0 N/A	2	88.1 N/A		
OTIKITOWIT	J		IN/A	U	IN/A	U	IVA	U	IN/A		IN/A		

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





		s involved in Ir				•				
	Total indivi	duals involved	ı	Fatal	Incap	acitating	Non- inc	capacitating	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 27	24 28	0	0.0 3.7	10 10	33.3	4	13.3 22.2	16	53.3 37.0
Brown Carroll	5	28 82	1 0	0.0	2	37.0 40.0	6 1	20.0	10 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	48	1	7.1	10	71.4	1	7.1	2	14.3
Jennings	12	57	0	0.0	7	58.3	0	0.0	5	41.7
Johnson	55 16	12	2	3.6	29	52.7	9	16.4	15	27.3
Knox	16	45	2	12.5	7	43.8	2	12.5	5	31.3
Kosciusko	37	20	1	2.7	6	16.2	15	40.5	15	40.5
LaGrange	11 153	60 3	0 6	0.0 3.9	4 64	36.4 41.8	3 28	27.3 18.3	4 55	36.4 35.9
Lake LaPorte	153 38		1	2.6	64 17	41.8		18.3 28.9	9	35.9 23.7
Lawrence		18	0			61.9	11	28.9 9.5	6	23.7
Lawrence	21	36	U	0.0	13	01.9	2	9.5	ا ا	26.0

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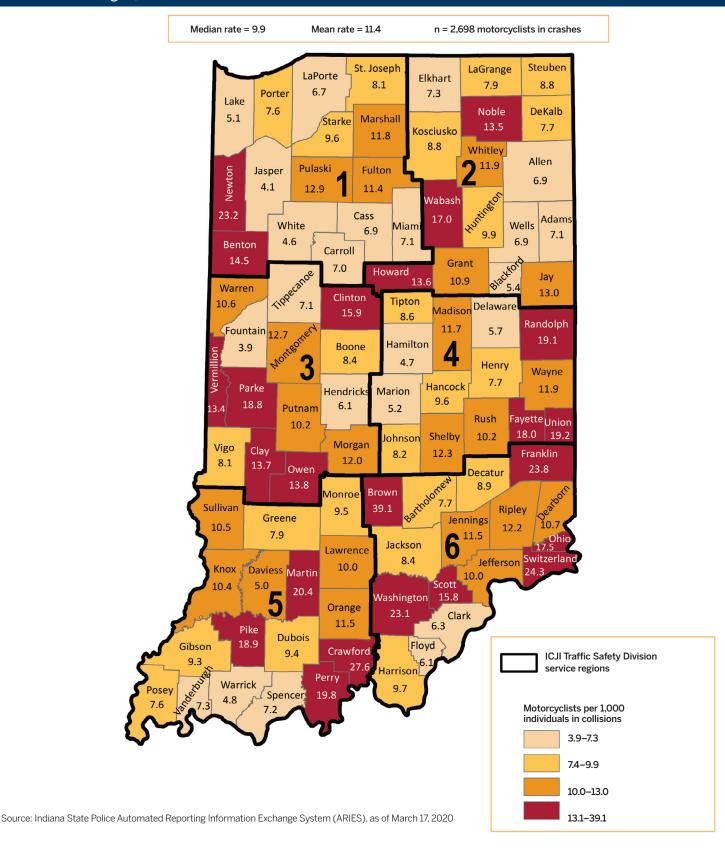
Table 2.7. Motorcyclists involved in Indiana collisions, by injury status and county, 2019 (continued)

	Total indivi	duals involved		Fatal	Incap	acitating	Non- inc	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
	22	34	0	0.0		50.0	5	22.7	6	27.3
Shelby	6	78	1	16.7	11 3	50.0	0	0.0	2	33.3
Spencer	7	76 72	0	0.0		14.3		14.3		33.3 71.4
Starke					1		1		5	
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

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

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

Map 2.9. Motorcyclists in Indiana collisions per 1,000 individuals involved in collisions, by county and ICJI Traffic Safety Division service region, 2019



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

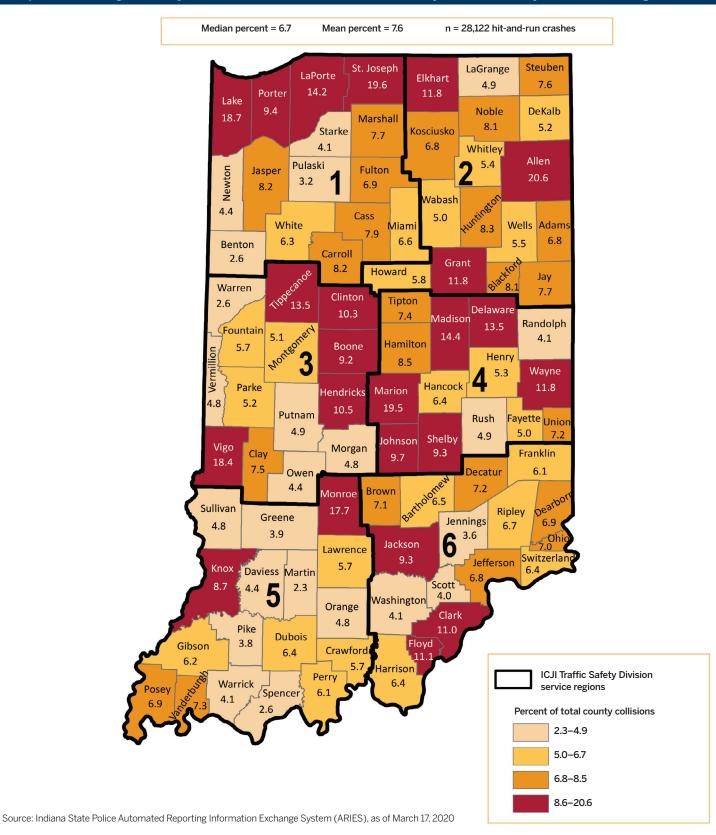


Table 2.8. County ranks by collision metric, 2019

Low

			Collision	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
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	88	34
Blackford	89		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		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	88	75	82	91	11	69
Fountain	72	61	18		27	75	58
Franklin	64	29	79	4	21	65	44
Fulton	29	51	86	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

High

continued on next page

Howard

Jasper

Jennings

Johnson

Kosciusko LaGrange

Lawrence

Madison

Knox

Lake LaPorte

Jay Jefferson

Huntington Jackson

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

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
Marshall	25	35	38	33	64	54	42
Martin	7	20	24	7	69	92	37
Miami	21	4	50	74	25	32	34
Monroe	87	28	64	51	58	4	49
Montgomery	41	40	78	27	72	39	50
Morgan	76	48	36	30	68	46	51
Newton	6	2	5	5	28	72	20
Noble	16	21	13	22	9	50	22
Ohio	89	65	92	14	55	57	62
Orange	27	60	77	36	3	64	45
Owen	78	90	23	19	19	73	50
Parke	10	38	44	12	13	45	27
Perry	41	67	8	8	26	76	38
Pike	89	3	1	11	22		35
Porter	83	16	14	68	90	34	51
Posey	84	27	26	69	57	82	58
Pulaski	3	52	41	26	31	49	34
Putnam	26	8	15	44	12	38	24
Randolph	28	89	30	10	15	89	44
Ripley	18	70	90	29	39	79	54
Rush	73	54	58	43	35	77	57
St. Joseph	56	37	82	62	78	25	57
Scott	12	83	16	17	49	31	35
Shelby	19	14	19	28	51	55	31
Spencer	5	82	45	72	32	40	46
Starke	80	56	80	49	50	81	66
Steuben	4	23	74	56	47	7	35
Sullivan	60	85	4	41	11	80	47
Switzerland	2	87	28	3	17	52	32
Tippecanoe	67	7	43	73	89	1	47
Tipton	31	1	7	57	80	62	40
Union	46	84	2	9	1	84	38
Vanderburgh	77	91	84	71	92	3	70
Vermillion	48	15	22	23	29	90	38
Vigo	61	69	55	61	74	6	54
Wabash	20	18	20	15	41	27	24
Warren	89	55	61	40	6	85	56
Warrick	71	62	39	88	77	59	66
Washington	38	49	54	6	60	78	48
-							50
-		50					56
							56
							44
Wayne Wells White Whitley	70 86 81 75	31	66 35 40	32 78 90 31	81 45 82 67	22 43 36 60	

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



COLLISIONS

LONG PROPRIEST

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 in January and February, but only an average of 6 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 non-fatal 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).

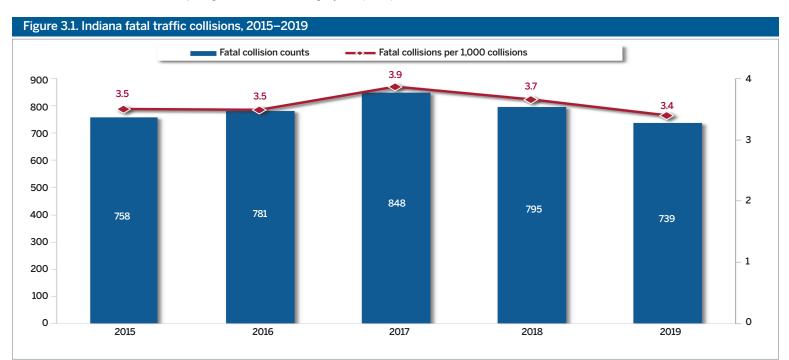
In 2019, work zone collision rates per 1,000 total collisions were highest in suburban areas (37.4), yet fatal collision rates were highest in rural areas (16.2) (Figure 3.9). Both work zone collision rates and fatal collision rates were highest on interstates (92.1 collisions and 7.4 fatal collisions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

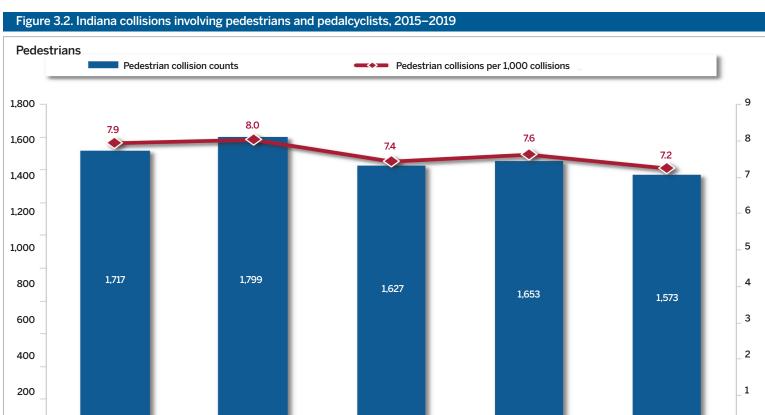
Table 3.1. Indiana traffic collisions by collision severity, 2015–2019

				Annual rate 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



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





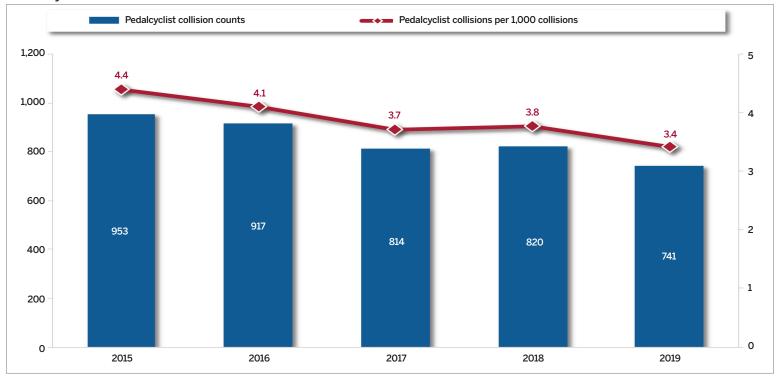


Table 3.2. In	ndiana tra	affic collisions	by month	. 2018–2019

		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%	

High

High

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

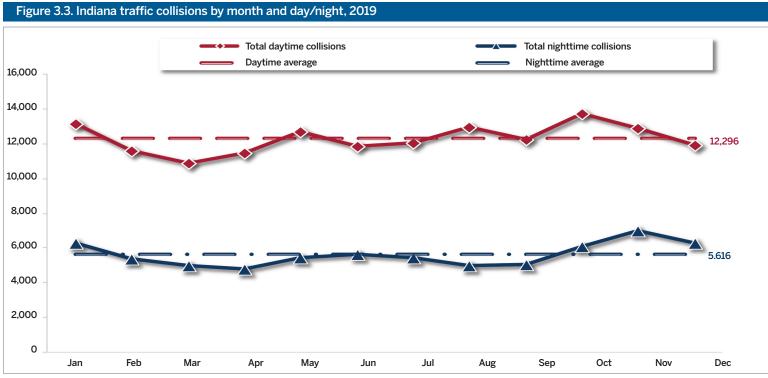
Low

				Time o	of day				All hours
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 nours
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%

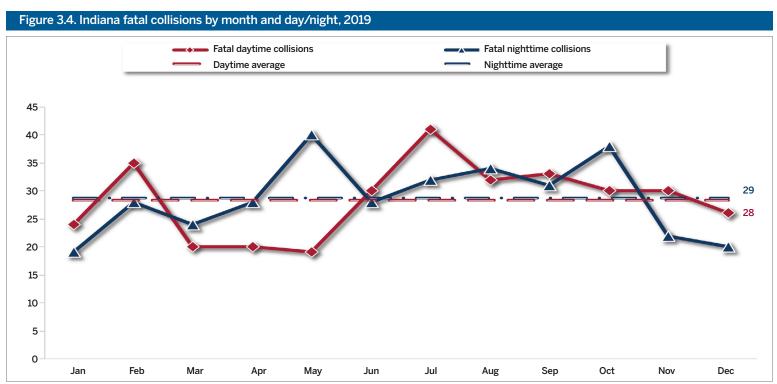
 $Source: Indiana\ State\ Police\ Automated\ Reporting\ and\ Information\ Exchange\ System\ (ARIES), as\ of\ March\ 17,2020$

Low

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



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.

Table 3.4. Collisions by month and collision circumstances, 2019	9
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		Alcohol-impaired		Aggressi	ve driving	Speed-	related	Disregard signal		Hit-and-run		Distracted, 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		2,202	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

High

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

Low

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.

Table 3.5. Indiana traffic collisions, by day, hour, and collision circumstances, 2019

		All collisions	Alcohol	-impaired	Aggress	ive driving	Speed	l-related	Disrega	ard signal	Hit-a	nd-run	Distracte	d, any type		cted, cell ione
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/tim 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
Sun	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
Juli	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
Mon	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
IVIOIT	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
Tue	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
rue	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
Wed	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
vvea	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.m11:59 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
TI	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.m11:59 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
Fri	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
П	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
Sat	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

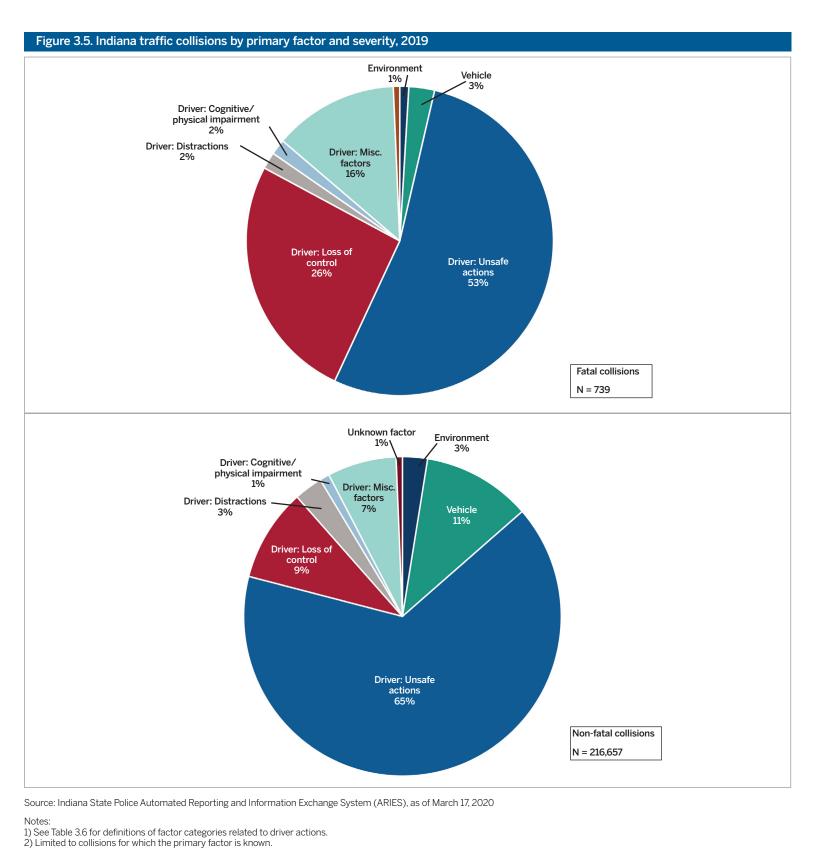
Low

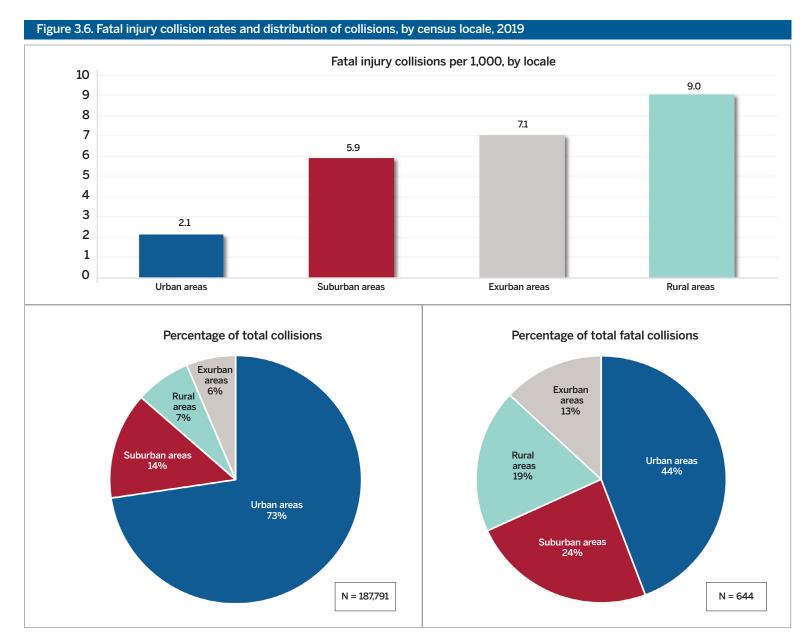
1) Total daily counts exclude collisions with invalid time reported.
2) Color comparisons are applied within collision-type categories.
3) Counts of different collisions circumstances will not sum to the total number of collisions.
4) See glossary for definitions of alcohol-impaired, aggressive driving,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

High

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

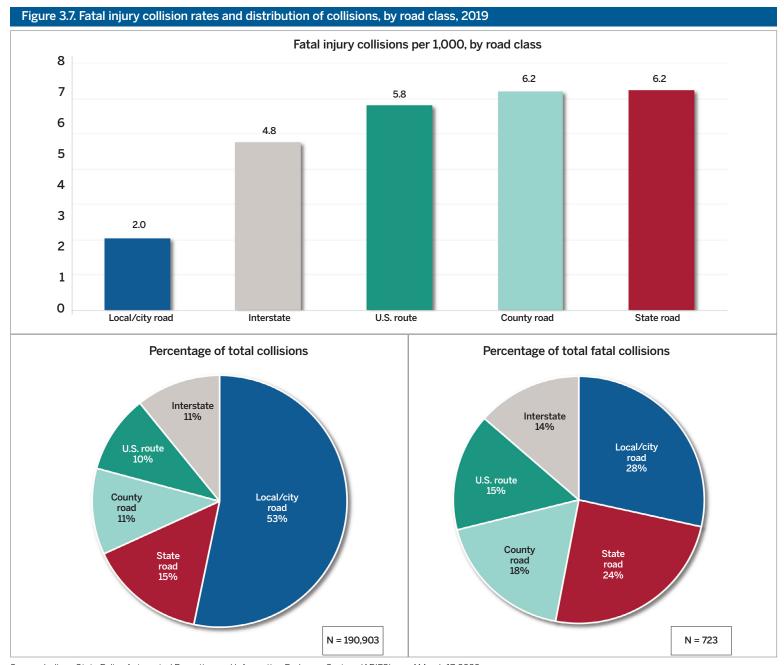
		Collisions, by severity					
Primary factor	Total	Fatal	Non-fatal	Property damage	per 1,000 collisions		
Driver: Unsafe actions	142,162	394	21,095	120,673	2.8		
Following too closely	37,494	27	5,228	32,239	0.7		
Failure to yield right of way	34,575	99	7,743	26,733	2.9		
Unsafe backing	19,644	6	256	19,382	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		





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.



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

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	s, 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

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

		Collisions	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
Ice	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

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

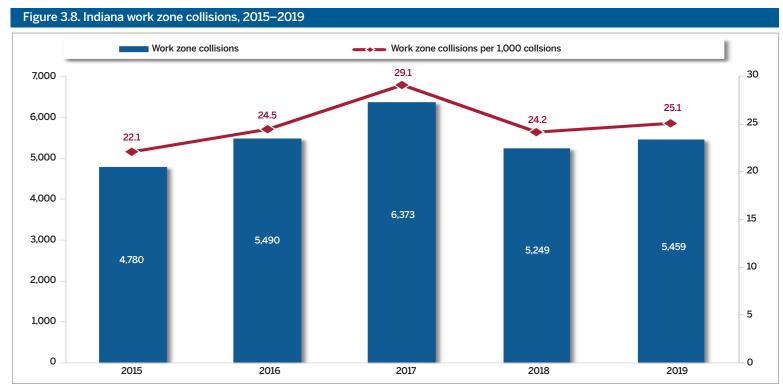
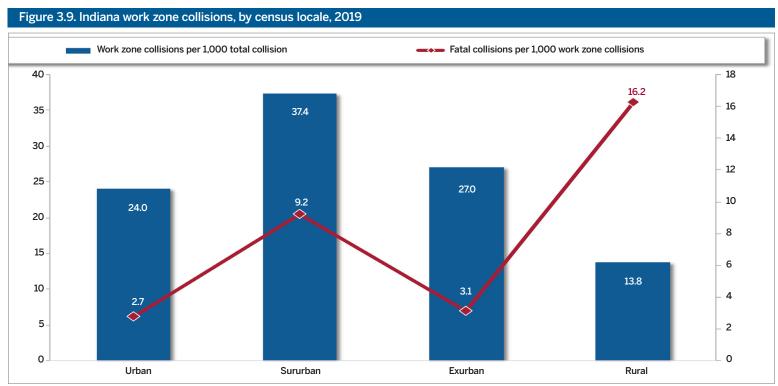


Table 3.11. Indiana collisions in work zones, by severity and construction type, 2019

		Collisions	s, by severity		Fatal collisions per	
	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

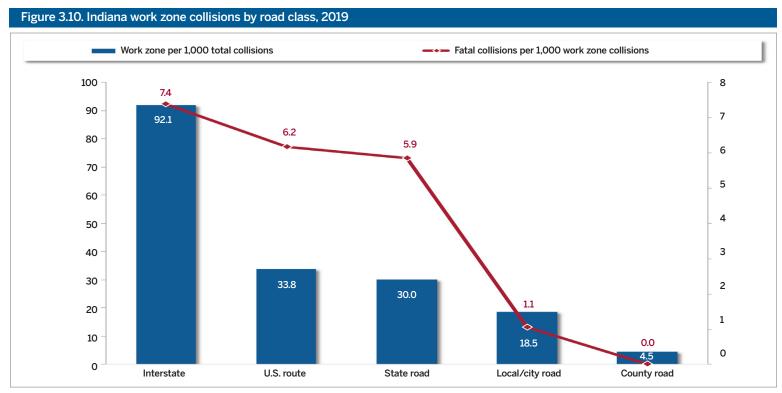
Note: Fatal collision rate is calculated per 1,000 total collisions in each construction zone type.



Notes:

1) Includes only collisions with valid locale reported

2) See glossary for census locale definitions



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

Note: Includes only collisions with valid road class reported

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

		Work zone collisions, by severity					
	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		

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	Non-fatal	Property damage	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.



MOTORCYCLES

LONG POPULATION

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).

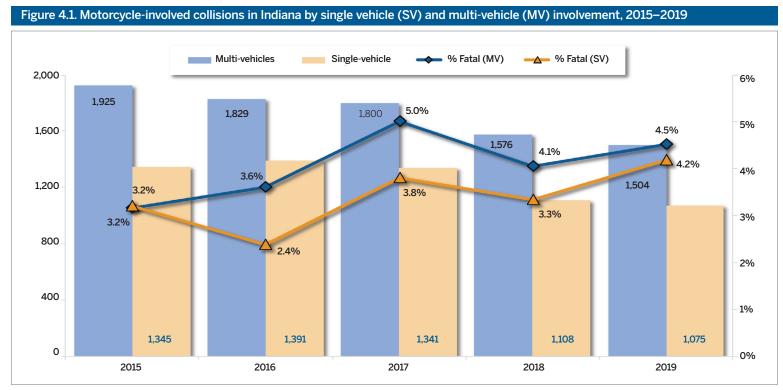


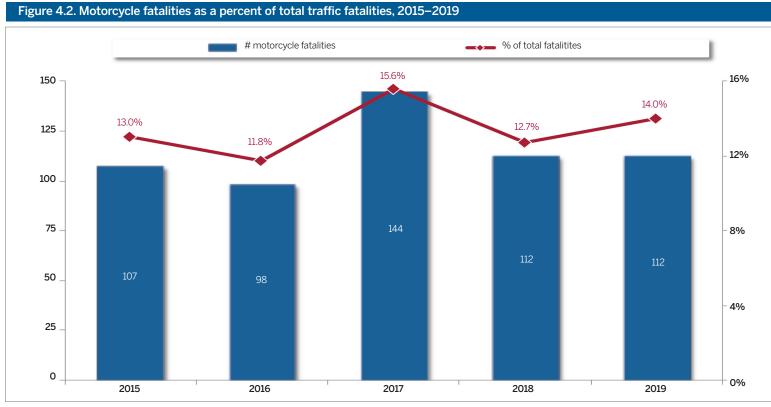
Table 4.1. Motorcyclists involved in Indiana collisions by injury status, 2015–2019										
All motorcyclists	2015	2016	2017	2018	2019	Annual rate of change 2018–19 2015–19				
All motorcyclists	3,499	3,407	3,403	2,875	2,698	-6.2%	-6.3%			
Fatal	107	98	144	112	112	0.0%	1.1%			
Non-fatal injuries	2,417	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%					

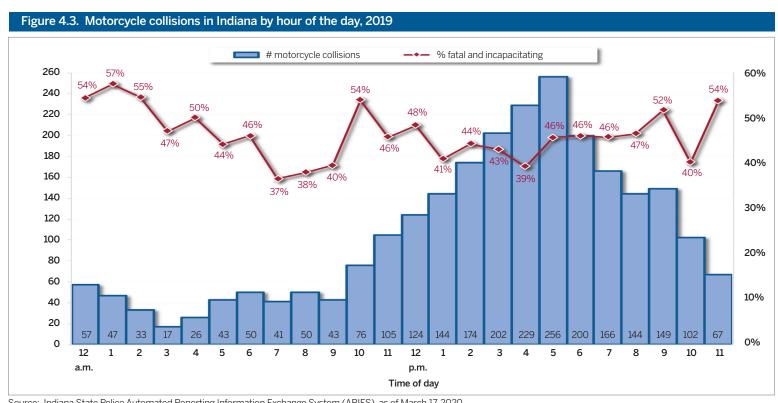
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020

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.





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.

Table 4.2. Motorcycle collisions as a percent of all Indiana collisions by time of day and day of week, 2019 % Motorcycle Time Sun Mon Tue Wed Thu Fri Sat 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% 1.6% 0.7% 1.0% 1.4% 1.2% 1.8% 1.0% 2a.m. 0.7% 0.8% 1.1% 0.0% 0.9% 0.7% 3a.m. 4a.m. 0.7% 1.2% 1.4% 0.8% 0.8% 0.5% 0.9% 0.9% 0.5% 0.4% 1.0% 1.1% 0.8% 1.0% 5a.m. 1.0% 1.7% 0.6% 0.7% 1.1% 0.6% 0.8% 0.7% 6a.m. 0.4% 0.6% 0.5% 7a.m. 0.0% 0.4% 8a.m. 0.9% 0.4% 0.4% 0.8% 0.4% 1.0% 0.5% 0.6% 9a.m. 0.8% 0.6% 0.7% 0.5% 0.9% 10a.m. 0.7% 0.6% 0.8% 0.9% 0.9% 1.0% 1.2% 0.9% 0.7% 0.8% 0.7% 1.0% 0.8% 1.9% 1.0% 11a.m. 0.6% 12p.m. 1.0% 0.6% 1.3% 0.8% 0.9% 1.6% 1.0% 0.5% 0.7% 1.1% 1.4% 1.2% 1.5% 0.7% 2.2% 1p.m. 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% 0.9% 1.2% 1.1% 4p.m. 1.9% 1.3% 1.1% 2.3% 1.3% 0.9% 5p.m. 2.4% 1.2% 1.4% 1.7% 1.2% 2.1% 1.5% 1.2% 1.2% 1.1% 1.5% 2.0% 1.5% 6p.m. 1.2% 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% 1.8% 1.9% 1.6% 2.2% 1.6% 2.3% 2.1% 9p.m. 10p.m. 1.6% 1.2% 1.8% 2.9% 1.1% 2.0% 1.5% 1.7% 1.5% 1.0% 2.1% 1.0% 0.7% 1.3% 1.5% 11p.m. % Motorcycle by day 1.6% 0.9% 0.9% 1.1% 1.0% 1.2% 1.8% 1.2%

High

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

Low

Notes:

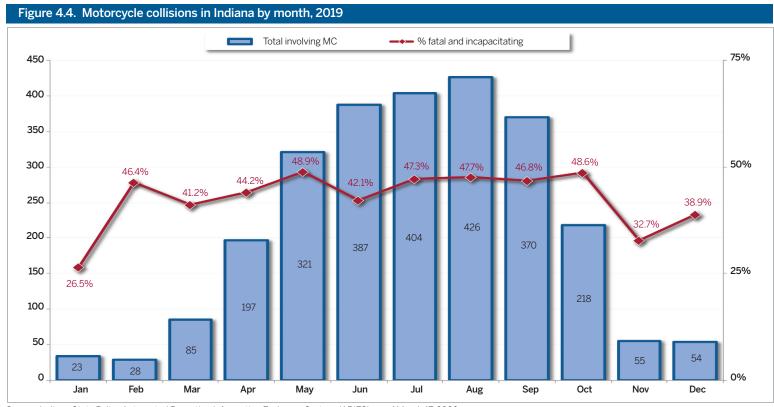
2) Color scale applies to all days/times.

¹⁾ Includes collisions where valid time was reported.

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

M II.			Total collisions				N	Motorcycle collisi	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	Au	g Jul	Jun	May	Aug
Low	Apr	Mar	Feb	Apr	Mar	Fel	b Dec	Jan	Jan	Feb
	1					'				
		Low		<		>		High		

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



Huit to me / Initiate constant	Count of i	ndividuals	Percent change	2010 inium vata humitta	
Unit type/Injury group	2018	2019	2018–2019	2019 injury rate, by unit typ	
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:

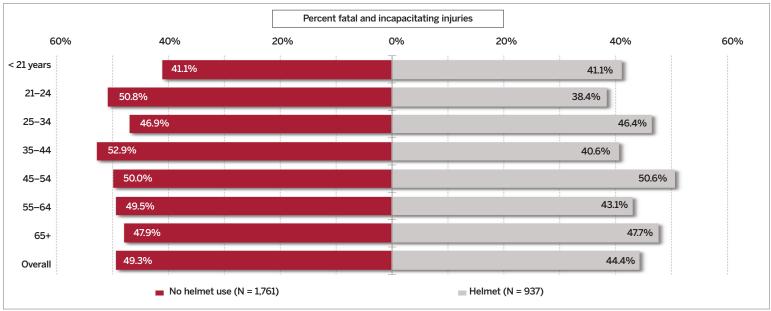
- 1) Motorcyclists include operators and passengers of motorcycles, class A and B motor driven cycles, mopeds, and motorized bicycles.
- 2) See Glossary for unit type definitions. ARIES includes motorized bicycle and moped as unit types.
- 3) Injury includes incapacitating, non-incapacitating, other, unknown, '+', not reported, and refused.

Table 4.5. Blood alcohol content (BAC) of vehicle operators involved in Indiana fatal and incapacitating collisions, by type of 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
Single-vehicle	Motorcycles	Total operators	45	554	599	58.5%	5.2%
		0 g0 g/dL/dL	6	9	15		
		0.01-0.07	0	7	7		
		0.8-0.14	3	6	9		
		0.15 & above	7	15	22		
		Not reported	29	517	546		
	Passenger vehicles	Total operators	296	4,467	4,763		7.0%
		0 g/dL	62	204	266	51.3%	
		0.01-0.07	5	45	50		
		0.8-0.14	9	94	103		
		0.15 & above	29	201	230		
		Not reported	191	3,923	4,114		
Multi-vehicle	Motorcycles	Total operators	73	536	609		
		0 g/dL	24	12	36	34.5%	3.3%
		0.01-0.07	1	1	2		
		0.8-0.14	6	5	11		
		0.15 & above	5	4	9		
		Not reported	37	514	551		
	Passenger vehicles	Total operators	591	18,910	19,501		1.4%
		0 g/dL	202	347	549	31.0%	
		0.01-0.07	5	52	57		
		0.8-0.14	15	58	73		
		0.15 & above	31	168	199		
		Not reported	338	18,285	18,623		

¹⁾ BAC range in grams per deciliter (g/dL). 0.08 or greater is legally impaired.
2) Includes only the operators of motorcycles and passenger vehicles (passenger car, pickup truck, sport utility vehicle, van).
3) 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



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

All motorcyclists

	20	015	20	016	2	017	20)18	20	019
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

	20	2015		2016		2017		018	2019	
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%

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

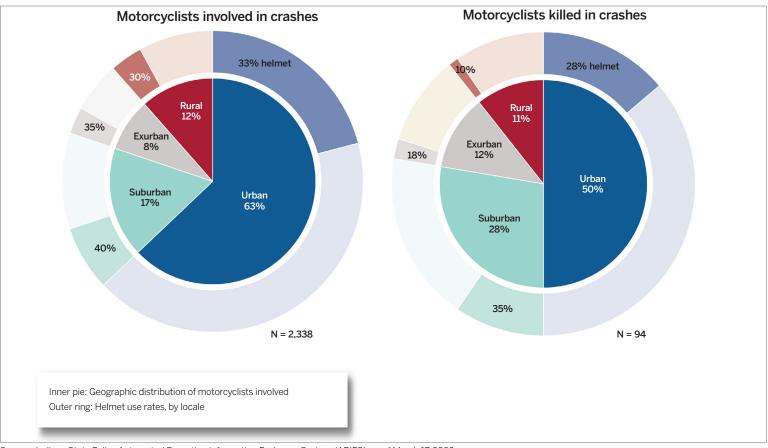
Notes:

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

2) Excludes drivers under 15 years old.

High

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



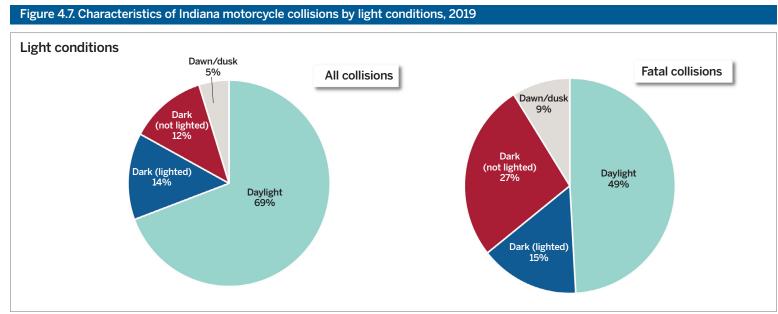
Note: Excludes cases where locale could not be determined.

Table 4.7. Characteristics of Indiana motorcycle collisions by severity of collision, 2019

Characteristics		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	8.1%	62.1%
Weather conditions	113	1,607	856	2,576		
Clear	99	1,366	712	2,177	4.5%	62.7%
Cloudy or poor visibility	11	181	110	302	3.6%	59.9%
Extreme weather	3	60	34	97	3.1%	61.9%
Road junctions	113	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%
Interchange/ramp	3	39	16	58	5.2%	67.2%
Road character	107	1,585	852	2,544		
Straight (level)	65	1,068	636	1,769	3.7%	60.4%
Curves	24	320	112	456	5.3%	70.2%
Straight (non-level)	18	193	81	292	6.2%	66.1%
Non-roadway	0	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	73	216	6.0%	60.2%
County road	24	253	103	380	6.3%	66.6%
Interstate	9	81	31	121	7.4%	66.9%

- 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:
 - Intersections includes 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.
 - Road character:

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





IMPAIRED DRIVING

WHITE VESTION

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.

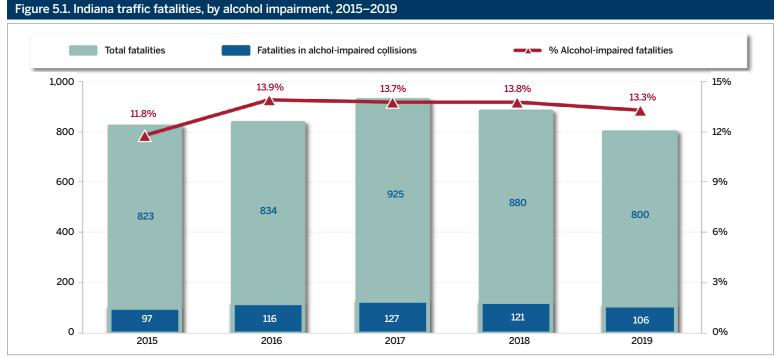
Impaired driving by month, day of week, and time of day

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).

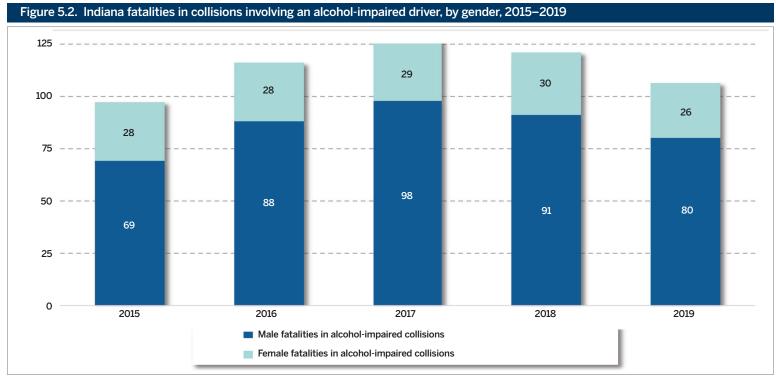


1) Alcohol-impaired fatalities occurred in collisions that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater. 2) 2018 and 2019 alcohol-impaired counts are current as of the June 15, 2020 ARIES data extract.

						Annual rat	e of change
	2015	2016	2017	2018	2019	2018–19	2015–19
Collisions involving an alcohol-impai	red 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-impaired 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.



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 c	collisions who were	tested for alcohol or (other substances,	by age and col	llision severity, 2019
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			Count o	f drivers		
		Fatal collisions			Incapacitating collision	ıs
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)

Notos:

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.

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

		Su	ırvived collis	ion			Ki	lled in collis	ion	
	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%

Notes:

- 1) Alcohol-impaired: BAC of 0.08 g/dL or higher.
- 2) Drug-positive: Reported as positive under drug test results in ARIES. ARIES does not currently specify drug type(s).

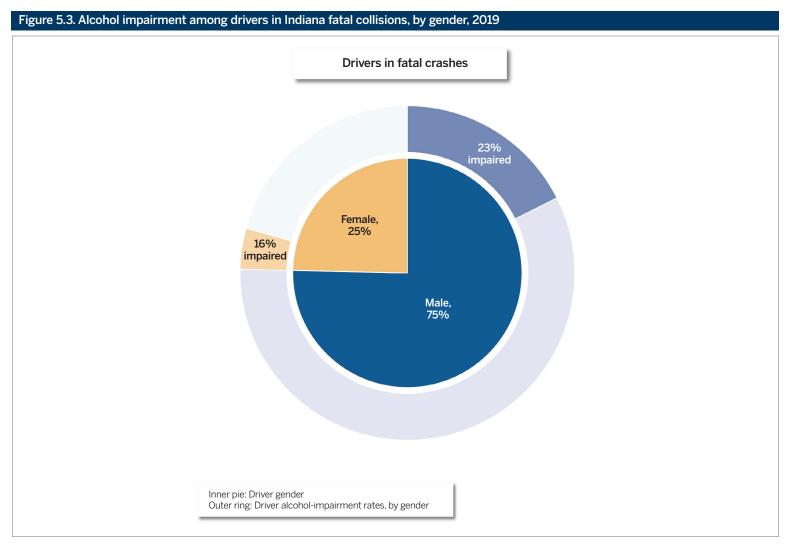
 3) Alcohol-impaired and drug-positive are not mutually exclusive (i.e., drivers can be one or the other or both).

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

		Сог	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%
Impaired 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%
	Low <	<		>	> H	ligh		

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)

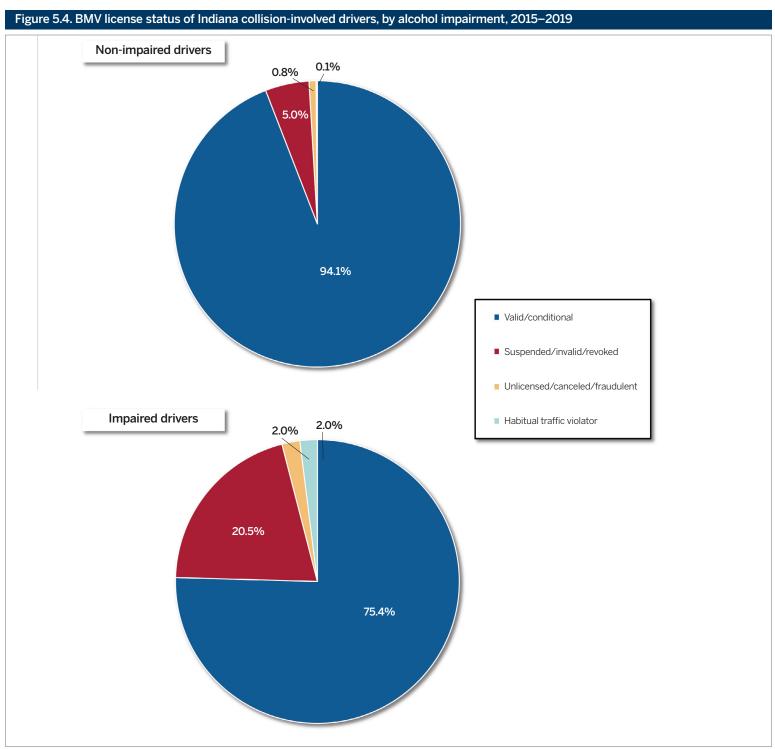
- 1) Impaired drivers are those with BAC of 0.08 g/dL or greater reported in ARIES.
- 2) Excludes ages under 15 and over 109 years and cases with unknown or non-reported age.



Notes:

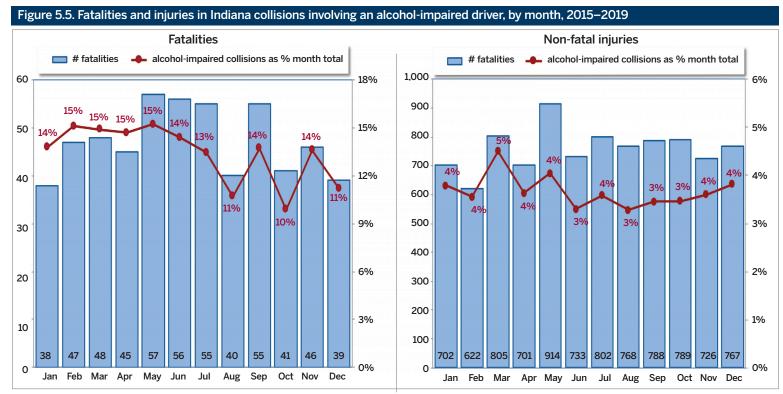
1) Alcohol-impaired includes drivers with a reported BAC of 0.08 g/dL or higher.

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

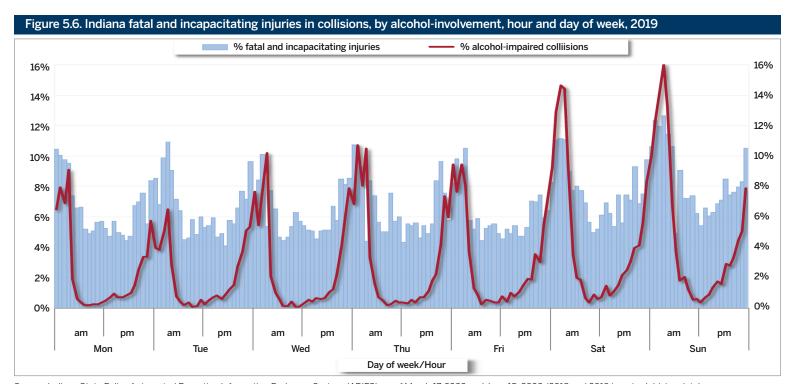


Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

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).



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

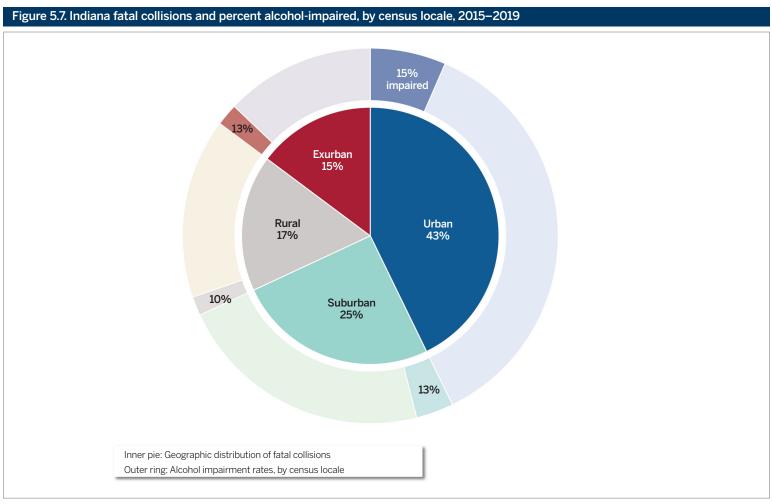


Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 17, 2020 and June 15, 2020 (2018 and 2019 impaired driving data)

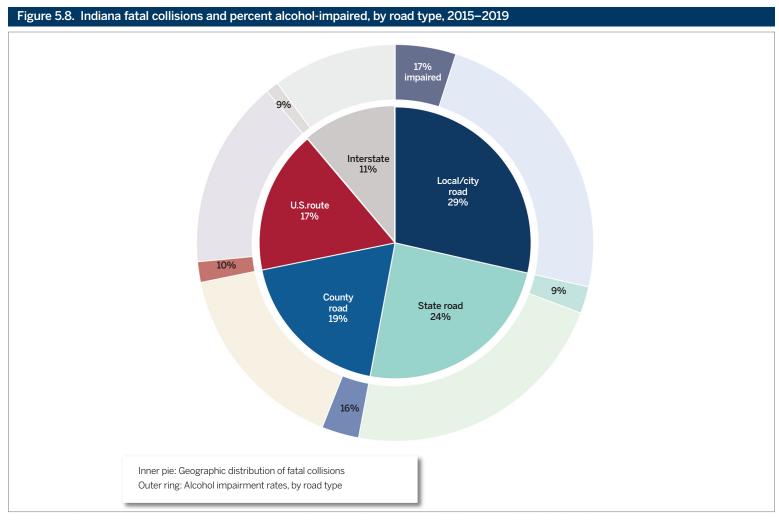
Notes:

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.



- 1) See glossary for census locale definitions.
 2) Excludes cases where locale could not be determined.



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.



SPEED

SHEET VIESTIGE

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) compared to not speeding (76 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

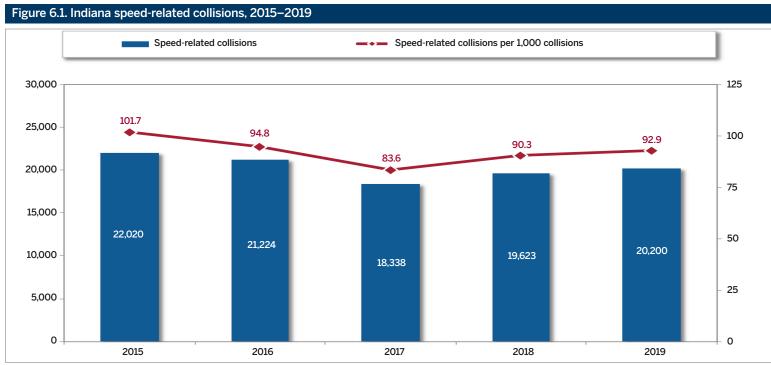
Between 2015 and 2019, passenger vehicle occupants involved in speed-related collisions had consistently lower restraint use rates than those who were not involved in speed-related collisions (Figure 6.6). Additionally, the rate of restraint use among individuals involved in speed-related collisions 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.



			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%

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

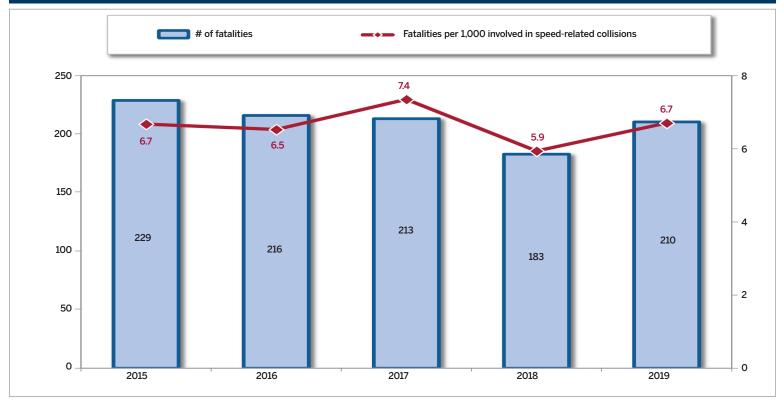
 $Note: Speed-related\ criteria\ categories\ are\ not\ mutally\ exclusive.\ All\ speed-related\ collisions\ may\ not\ equal\ total\ of\ individual\ categories.$

Table 6.2. Individuals involved in Indiana collisions, by speed involvement a

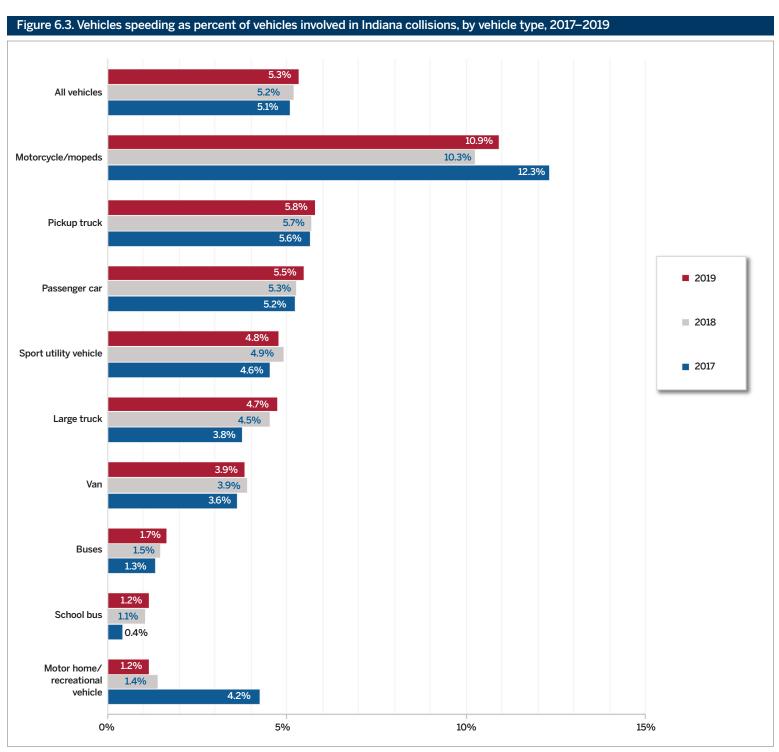
		(Count of individua	als			Annual rat	e of change
Speed involvement / injury status	2015	2016	2017	2018	2019	% 2019 total	2018–19	2015–19
All individuals	351,321	364,358	358,130	352,405	350,646	100.0%	-0.5%	0.0%
Speed-related	34,364	33,144	28,961	30,831	31,354	100.0%	1.7%	-2.3%
Fatal	229	216	213	183	210	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%

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.

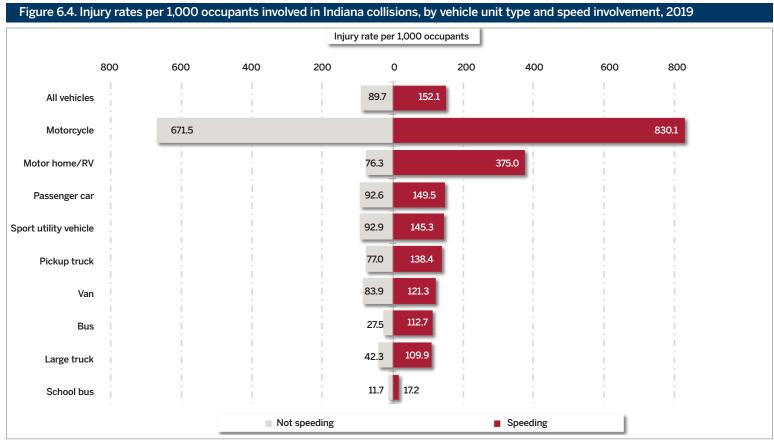
Figure 6.2. Indiana traffic fatalities in speed-related collisions, 2015–2019



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



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



Notes:

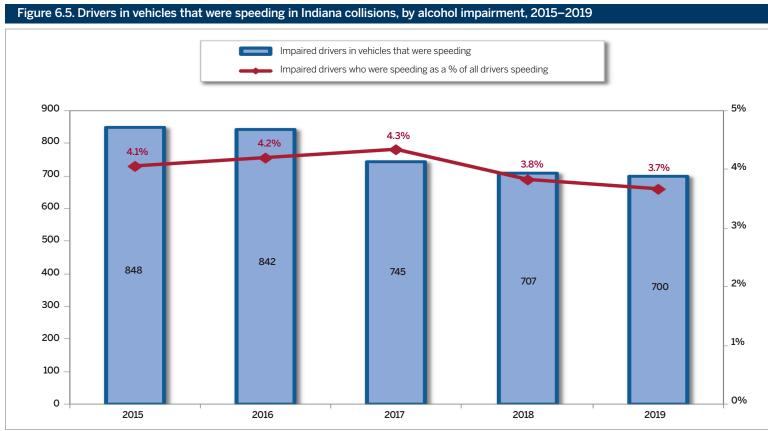
- 1) Injury includes fatal, incapacitating, non-incapacitating, possible, and other injury types.
- 2) Excludes vehicle types of animal-drawn vehicle (non-motor vehicle), farm vehicle, combination vehicle, pedestrian, bicycle, and unknown.
- 3) In 2018, no school buses were speeding in collisions.

Age group	2	015	2016		2017		2018		2019	
	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%

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.



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

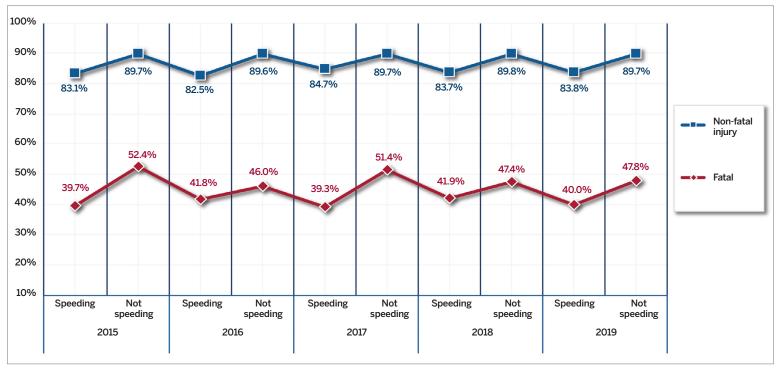
Age group		Not speeding		Speeding				
	Non-impaired	Impaired	% impaired	Non-impaired	Impaired	% impaired		
15-20	37,486	153	0.4%	4,126	41	1.0%		
21-24	30,214	484	1.6%	2,790	148	5.0%		
25-34	65,589	965	1.4%	4,627	223	4.6%		
35-44	52,937	668	1.2%	2,800	146	5.0%		
45-54	46,408	494	1.1%	1,824	80	4.2%		
55-64	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

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.

Figure 6.6. Restraint use rates among passenger vehicle occupants involved in Indiana collisions, by speed involvement and injury status, 2015–2019



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

Month		Total collisions						Speed-related collisions						
Month	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019				
Jan	19,694	19,376	17,277	20,787	19,457	4,708	3,609	2,478	4,350	4,418				
Feb	19,785	17,785	14,574	16,179	16,977	4,723	2,908	1,109	2,366	3,198				
Mar	16,438	16,387	16,970	16,980	15,959	1,925	1,402	1,682	1,864	1,208				
Apr	15,368	17,534	17,027	15,775	16,387	866	1,541	1,127	995	1,086				
May	17,366	18,057	19,457	18,421	18,315	1,074	1,102	1,215	1,055	1,065				
Jun	17,147	17,889	19,009	17,286	17,676	1,273	1,031	1,125	977	1,098				
Jul	17,311	17,692	17,156	17,270	17,640	1,039	1,153	1,020	1,042	973				
Aug	17,110	19,340	17,726	17,860	18,083	1,014	1,303	1,001	1,061	1,007				
Sep	17,706	18,639	17,961	17,750	17,511	1,124	1,155	1,041	1,056	938				
Oct	19,239	19,487	19,999	20,311	20,128	1,173	1,135	1,373	1,225	1,316				
Nov	20,483	20,528	20,081	20,151	20,506	1,552	1,225	1,193	1,944	1,943				
Dec	18,884	21,247	22,077	18,494	18,757	1,549	3,660	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				
Low	Apr	Mar	Feb	Apr	Mar	Apr	Jun	Aug	Jun	Sep				

High

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

Low

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

ne	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% Speed-rela 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%

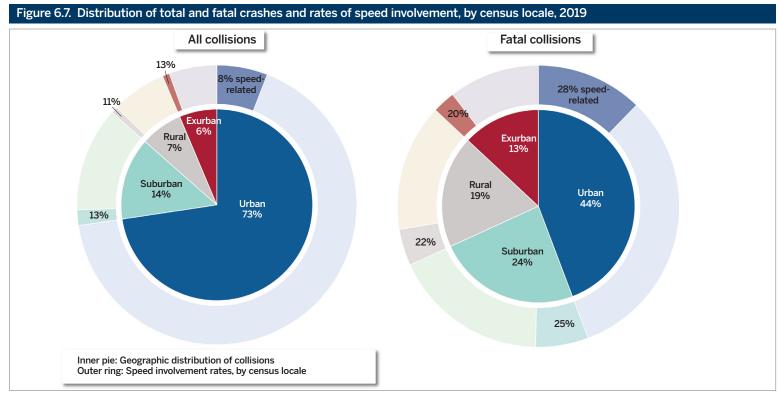
High

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

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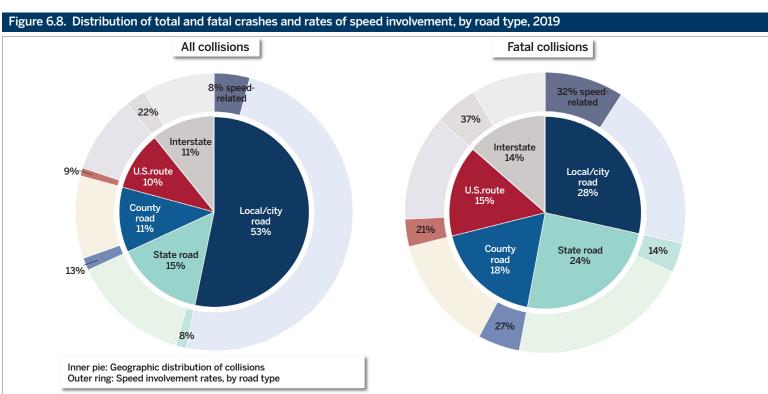
Notes:
1) Includes collisions where valid time was reported.
2) Color scale applies to all days/times.

Low



1) See glossary for census locale definitions.

2) 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 AND REFERENCES

LANGER VIEWFOR

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

REFERENCES

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 OFF	ICER'S STANDARD CR Electronic Version	ASH REPOF	₹T	Local ID		Page		of	
Date of Crash Day of Week Actual Local Ti	County Nearest/Intersecting Road/MileM	Townsh arker/Interchange	•	# Motor Vehicles	# Injured	# Dead	# Comr Vehi Road Clas	cles	# Deer
		antermierenange	number of	f feet from					
Inside Corporate Limits?	City/Town or Nearest City/Town		Property	y?	Crash Lat			sh Longi	tude
Driver #1	Driver #2		Driver #3			'	Oriver #4		
Primary Cause Vehicle 2 Vehicle 3 Vehicle 4	Primary Cause Vahicle 1 Vahicle 2 Vahicle 3 Vahicle 4				Area Info	rmation			
Driver Contribution Circumstances	Application of the control of the co		Hit and Run						
Alcoholic Beverages	Engine Failure		School Zone						
Prescription Drugs Driver Asleep or Fatigued	Brake Failure o		Rumble Strip:	s					
Driver Illness Unsafe Speed	Headlight(s) Do		Locality						
Failure to Yield Disregard Signal	===	hield Defective	Light Condition	on					
Left of Center Improper Passing	Oversize/Overs Insecure/Leaky	Load	Weather Cond	ditions					
Improper Turning Improper Lane Usage	Tow Hitch Faile		Surface Cond	lition					
Following Too Closely Unsafe Backing Overcorrecting	Environment Contributing Circu	mstances	Type of Media	an					
Ran off Road Wrong Way on One Way		ı	Type of Road	way Junction	l				
Pedestrian's Action Passenger Distraction	Shoulder Defea	I	Road Charact	ter					
Restriction Violation Jackknifing	Severe Crossw Obstruction No	t Marked	Roadway Sur	face					
Cell Phone Usage Other Telematics	Lane Marking (ed .	Construction	If Yes,	Construction	Туре			
Driver Distracted Speed/Weather Conditions	====		Traffic Contro	ol Devices					
Other None	Utility Work Other None	-	Traffic Contro	N Davica One	urational?				
Total Estimate of all damage in the Crash:									
Other Property Damage (1) State Property	Owner's Name and Address		Was this cras	ii die result (or aggressive	unving:			
Other Property Damage (2) State Property	Owner's Name and Address								
Witness/Other Pa	 ticipant			Non-	Motorist				
Witness # Name Other Participant	•	(Last Name, First Na	ame, MI)						
Address etc.		Non-Motorist Type		Non-Motorist	Action				
Phone # Location at Time of Cra	sh	Apparent Physical (Condition						
Witness # Name Other Participant		Cited?	Direction						
Address etc.		Street/Highway							
Phone# Location at Time of Cra	sh	Traffic C	ontrol?	If	yes, was t	raffic co	ntrol ope	erationa	al?

Local ID				Page	of
Type of Crash					
Time Notified Time Arrived	Other Location of Invest	ligation			
Assisting Officer	ID No.	Agency		Investigation Complete?	Photos Taken?
Assisting Officer	ID No.	Agency	I	Date of Report	
Investigating Officer	ID No.	Agency	1	Reviewing Officer	
Narrative	•				

	TION							Page	of
Driver's Nan	ne (Last, Fi	rst, MI)				Safety Equipment Used			
Address (Street, City	y, State, Zip)				Safety Equipment Effect	tive?		
						Ejection/Trapped			
Date of Birt	th I	Age		Gender			Immed Attn	Driver Injury Status	
Date of Bill	"	Age		Gender		LING NO.	IIIIIIed Atul	Driver injury status	
Driver's License#			Lic Type	CDL Class	Lic State	Nature of Most Severe li	njury		
Apparent Physical Normal	Status	Glasses/Contact	Restriction	ns Employer's Vehic	cle Only	Location of Most Severe	e Injury		
Had Been Dr		Outside Rearvie	w Mirror	State-Owned Vel	hicles	If Cited?	IC Codes		
Handicapped	•	Daylight Driving Automatic Trans	=	PP Chauffeurs Ta Power Steering	axi Only	Infraction			
Asleep/Fatig Drugs/Medic	1.3	Special Controls Employment On	=	Special Restriction Probation DWI	ons	Mis demeanor Felony			
Unknown		Motorcycle Only		Probation HTO					
Test Given	Тур	To!From Employ e Given	ment	None					
NONE Alcohol Results		Blood Urine	Breath	SFST Drug Res	PBT				
PBT	Certified Test		Pending						
Veh# Color	Vehicle	Year Make	Model		Style	Initial Impact Area Undercarriage	(
# Occupants	Lic Year	License #	I	License State	,	Trailer	Front		
# Axles Speed Lim	nit Insured	Ву		Phone Number	er	☐ None ☐ Unknown			□∫¯
Vehicle Identification	n#					Areas Damaged (Mult	tiples)		
Registered Owner's	Name (I as	Firet MI)		☐ Sama	as Driver	Undercarriage	Ħ		
Address (Street, City	-			Saine	as Dilvei	Trailer None	Front		Regi 🗆
Address (offeet, oil)	y, otate, zip	,				I 🗖	(
						Unknown			
						Vehicle Use			
Towed? To			Reason			Vehicle Use		Fire?	
Ву	Lic Year R	egistered Owner's Na		st, MI) 🔲 Same	as Driver			Fire?	IO
By Lic State			ame (Last, Firs	st, MI) Same	as Driver	Vehicle Use			10
By Lic State		egistered Owner's Na	ame (Last, Firs	st, MI) Same	as Driver	Vehicle Type			IO
By Lic State License# License# Jeh Year Make	A	egistered Owner's Na ddress (Street, City,	ame (Last, Fire	- Game		Vehicle Use Emergency Run?	on.		10
By Lic State License# Jeh Year Make Lic State	A Lic Year R	egistered Owner's N. ddress (Street, City,	ame (Last, Fire State, Zip) ame (Last, Fire	- Game	as Driver	Vehicle Type	on.		IO
By Lic State License# Jeh Year Make Lic State	A Lic Year R	egistered Owner's Na ddress (Street, City,	ame (Last, Fire State, Zip) ame (Last, Fire	- Game		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio			IO
By Lic State License# License# Lic State License#	A Lic Year R	egistered Owner's N. ddress (Street, City,	ame (Last, Fire State, Zip) ame (Last, Fire	- Game		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Action Direction of Travel	ondary Roadway	N	IO
By Lic State License# License# Lic State License#	Lic Year R	egistered Owner's N. ddress (Street, City,	ame (Last, Fire	st, MI) Same		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio		affic	IO Private Drive
By Lic State License# License# Lic State License#	Lic Year R	egistered Owner's N: ddress (Street, City, egistered Owner's N: ddress (Street, City,	ame (Last, Fire	st, MI) Same		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic	ondary Roadway Two Way Tr.	affic	
By Lic State License# License# Lic State License#	Lic Year R	egistered Owner's N: ddress (Street, City, egistered Owner's N: ddress (Street, City,	ame (Last, Fire	st, MI) Same		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic One Lane	ondary Roadway Two Way Tr Two Lai Multi-La	affic nes ne Divided (3 or more) ne Undivided 2 way left	Private Drive
By Lic State License# Lic State Lic State Lic State Make Lic State	Lic Year R	egistered Owner's N. ddress (Street, City, egistered Owner's N. ddress (Street, City, mercial Vehicle: Carr	ame (Last, First State, Zip) ame (Last, First State, Zip)	st, MI) Same		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic One Lane Two Lanes Multi-Lanes (3 or n	ondary Roadway Two Way Tr Two Lai Multi-La	affic nes ne Divided (3 or more)	Private Drive
By License# Veh Year Make Lic State License# Veh Year Make	Lic Year R	egistered Owner's Na ddress (Street, City, egistered Owner's Na ddress (Street, City, mercial Vehicle: Carr	ame (Last, First State, Zip) ame (Last, First State, Zip) rier's Name and	st, MI) Same	as Driver	Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic One Lane Two Lanes	ondary Roadway Two Way Tr Two Lai Multi-La	affic nes ne Divided (3 or more) ne Undivided 2 way left	Private Drive
By Lic State License# Lic State Lic State Lic State Make Lic State	Lic Year R	egistered Owner's N. ddress (Street, City, egistered Owner's N. ddress (Street, City, mercial Vehicle: Carr	ame (Last, First State, Zip) ame (Last, First State, Zip) rier's Name and	st, MI) Same		Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic One Lane Two Lanes Multi-Lanes (3 or n	ondary Roadway Two Way Tr Two Lai Multi-La	affic nes ne Divided (3 or more) ne Undivided 2 way left	Private Drive
By Lic State	Lic Year R A Com	egistered Owner's N. ddress (Street, City, egistered Owner's N. ddress (Street, City, mercial Vehicle: Can	ame (Last, First State, Zip) ame (Last, First State, Zip) rier's Name and	st, MI) Same and Address arte DOT#	as Driver	Vehicle Use Emergency Run? Vehicle Type Pre-Crash Vehicle Actio Direction of Travel Type of Primary/Seco One Way Traffic One Lane Two Lanes Multi-Lanes (3 or n	ondary Roadway Two Way Tr Two Lai Multi-La	affic nes ne Divided (3 or more) ne Undivided 2 way left	Private Drive

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.
- 2. 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 horse-power; and (5) is registered as a Motor Driven Cycle Class A. The term does not include an electric personal assistive mobility device.
- 3. 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.

INDIANA CRASH FACTS 2019

An Indiana Traffic Safety Facts publication

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.



