INDIANA
TRAFFIC SAFETY
FACTS

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INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

An Indiana Traffic Safety Facts publication

INDIANA CRASH FACTS 2018

BICYCLISTS

COMMERCIAL VEHICLES

SEAT BELT USE

MOTORCYCLES

YOUNG DRIVERS

PEDESTRIANS

CHILD PASSENGER SAFETY

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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 2018 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.

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NOTES:
Data discrepancies may exist between the 2018 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. 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"; therefore, recent increases in incapacitating injuries should be interpreted with caution. Additionally, when considering reported decreases in 2018 alcohol-impaired crashes and fatalities, it is important to note that these numbers are likely to increase once blood alcohol content (BAC) results reported after the March 18, 2019 extract are submitted and analyzed.

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PROBLEM IDENTIFICATION

PROBLEM IDENTIFICATION, 2018

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 usage, 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 2020 Indiana Highway Safety Plan. This annual ICJI document uses ARIES crash data summarized in the 2018 traffic safety fact sheets produced by the Indiana University Public Policy Institute. These publications, along with this Crash Fact Book and the 2018 Indiana County Profile Book, were produced using the collision database current as of March 18, 2019. 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 2020 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 usage, 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 an historic low of 11 per 100,000 of the state's population in 2009 (Figure 1.1). The 2018 Indiana fatality rate per 100k dropped slightly to 13, after reaching a 10-year high of nearly 14 per 100,000 in 2017. There were 873 traffic deaths in 2018, down from 913 the previous year.

The number of non-fatal injuries in collisions fell from 50,065 in 2017 to 47,428 in 2018, reaching a five-year low (Figure 1.2). The rate of non-fatal traffic injuries per 100,000 people also decreased to a five-year low of 709 in 2018.

Figure 1.1. Individuals killed in Indiana collisions, 2009–2018
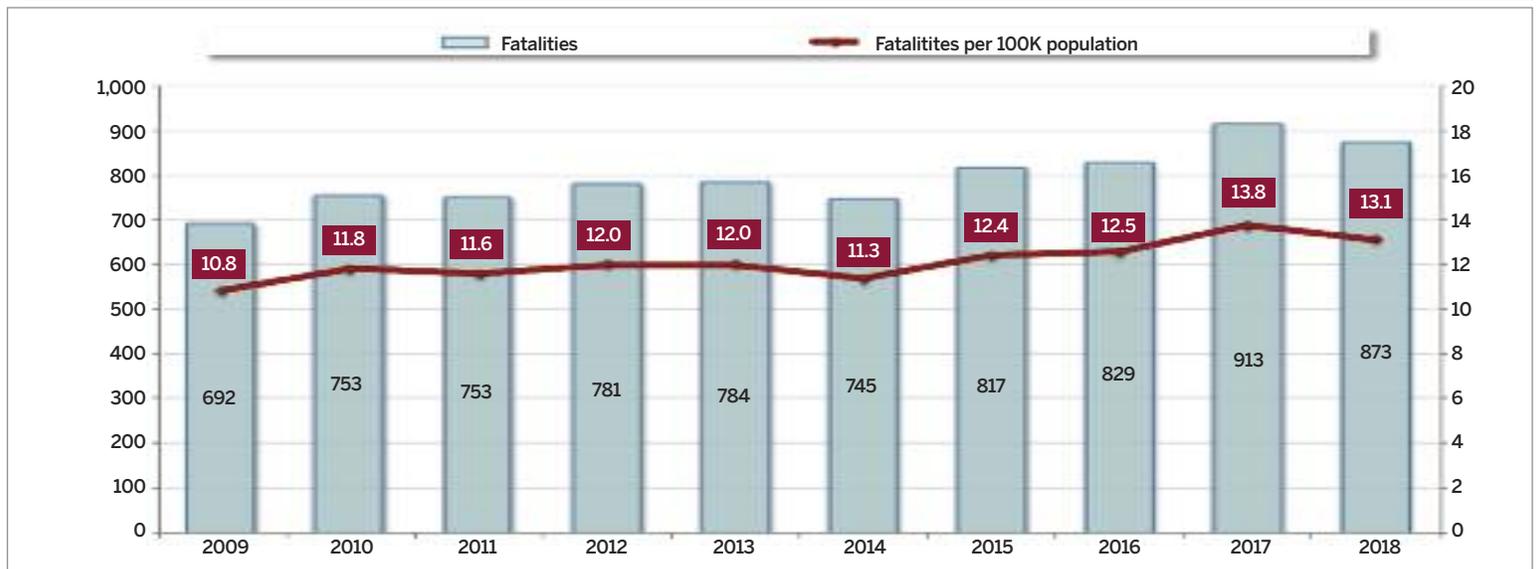
Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 12, 2019

Figure 1.2. Individuals suffering non-fatal injuries in Indiana collisions, 2009–2018

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; U.S. Census Bureau, extracted from STATS Indiana, Indiana Business Research Center, August 12, 2019

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 non-urban areas. In 2018, consistent with previous years, about 31 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 6.7 and 7.5, respectively, compared to 1.4 per 1,000 in urban areas.

Figure 1.3. Fatality rates and geographic distribution of fatalities and non-fatal injuries in Indiana collisions, by census locale, 2018
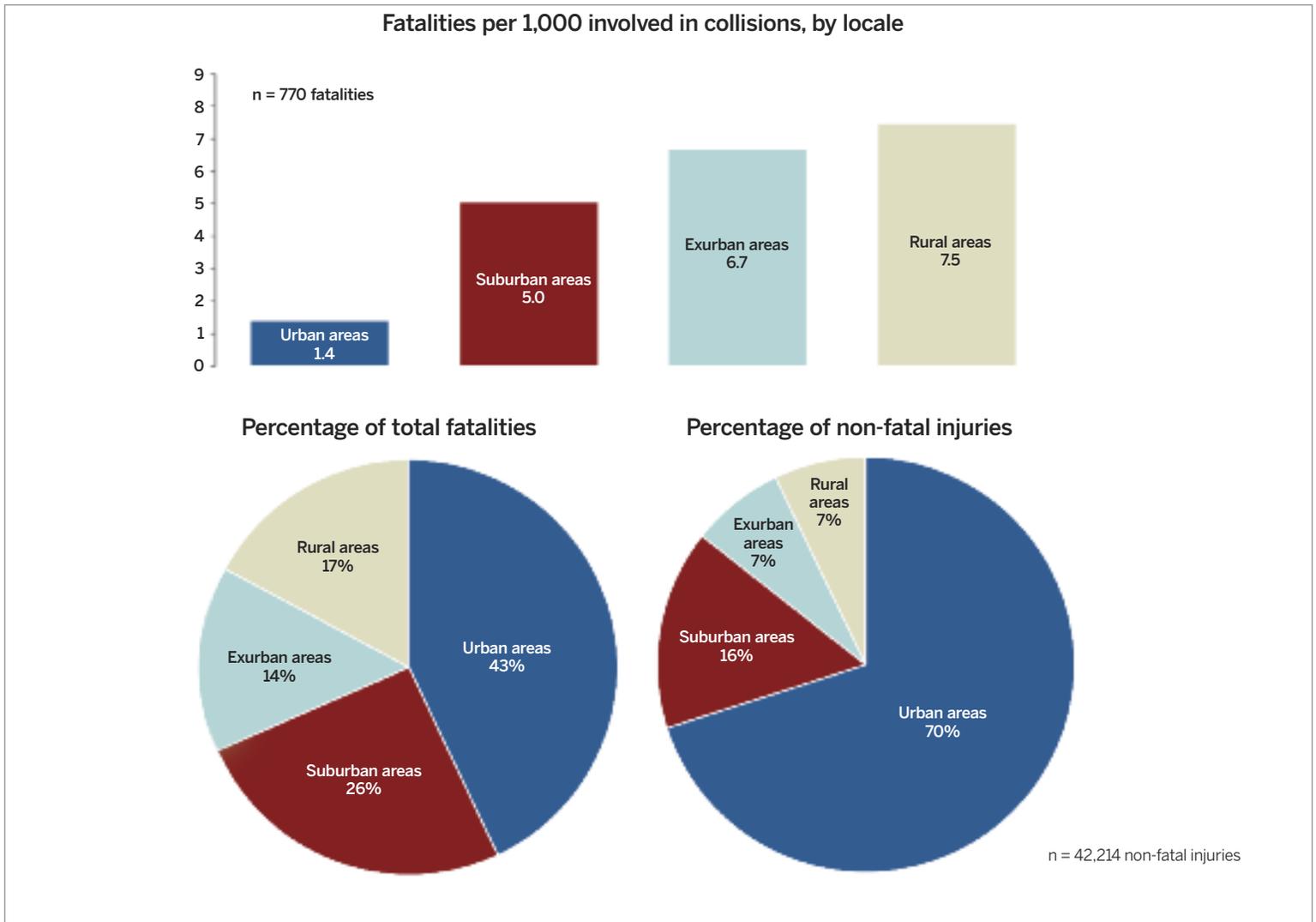
Fatalities per 1,000 involved in collisions, by locale

n = 770 fatalities

Urban areas 1.4
Suburban areas 5.0
Exurban areas 6.7
Rural areas 7.5

Percentage of total fatalities

Urban areas 43%
Suburban areas 26%
Exurban areas 14%
Rural areas 17%

Percentage of non-fatal injuries

Urban areas 70%
Suburban areas 16%
Exurban areas 7%
Rural areas 7%

n = 42,214 non-fatal injuries

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Non-fatal injuries include those reported as incapacitating, non-incapacitating, possible, not reported, and unknown.
2) Excludes fatalities and injuries where locale could not be determined. .

GOAL: Reducing impaired driving

According to available blood alcohol content (BAC) test results reported in ARIES, 83 people died in alcohol-impaired driving crashes in 2018. The percentage of Indiana traffic fatalities that involved an impaired driver (10 percent) reached a five-year low in 2018 (Figure 1.4). However, these numbers are likely to increase once BAC results reported after the March 18, 2019 data extract are analyzed. According to the most recent data available from the NHTSA's Fatality Analysis Reporting System, 24 percent

of all 2017 Indiana traffic fatalities involved an alcohol-impaired driver, compared to 12 percent in 2017 as reported in ARIES (DOT HS 812 630).

Rates of driver alcohol impairment vary by vehicle type. Figure 1.5 shows that, among drivers in 2018 fatal crashes who had BAC test results reported in ARIES, motorcycle operators (23 percent) and passenger car drivers (27 percent) had the highest percentages of impaired driving across all vehicle types. Twenty-two percent of all drivers in fatal collisions in Indiana were legally impaired.

Figure 1.4. Indiana alcohol-impaired traffic fatalities as a percent of total traffic fatalities, 2014–2018
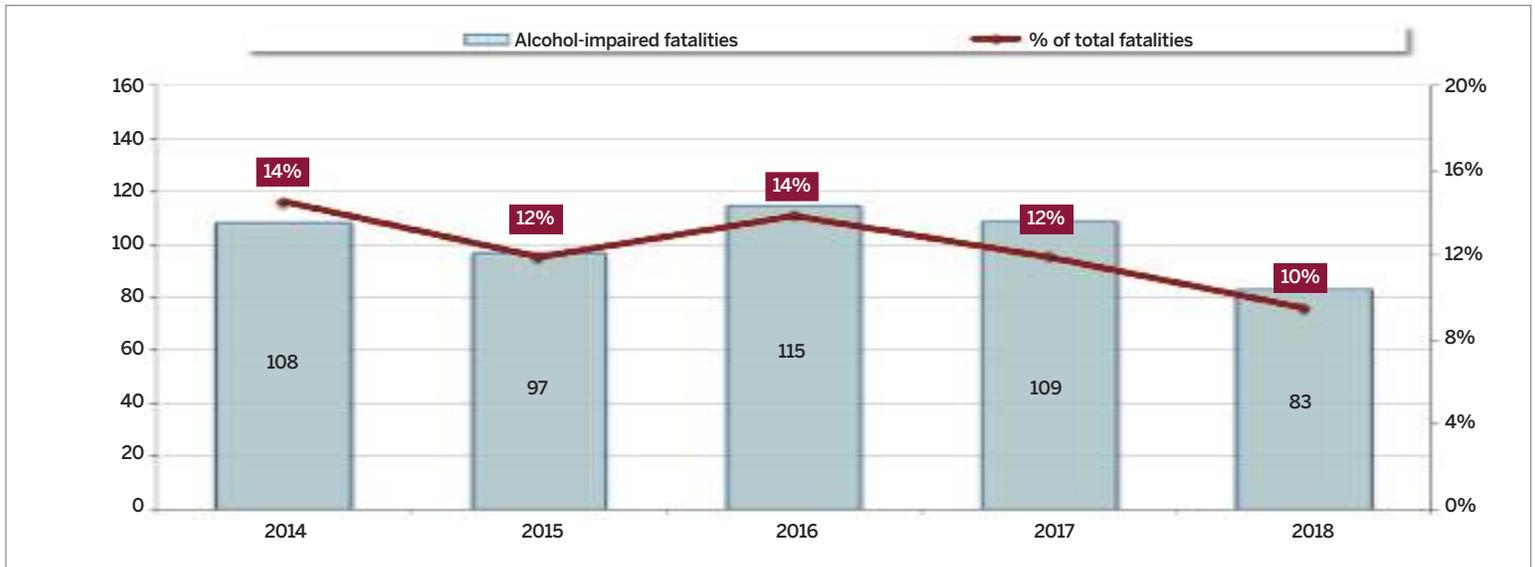
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Note: When considering the reported decreases in 2018 alcohol-impaired crashes and fatalities, it is important to note that these numbers are likely to increase once BAC results reported after the March 18, 2019 extract are analyzed.

Figure 1.5. Percentage of drivers involved in fatal collisions with reported BAC results who were legally impaired, by vehicle type, 2018
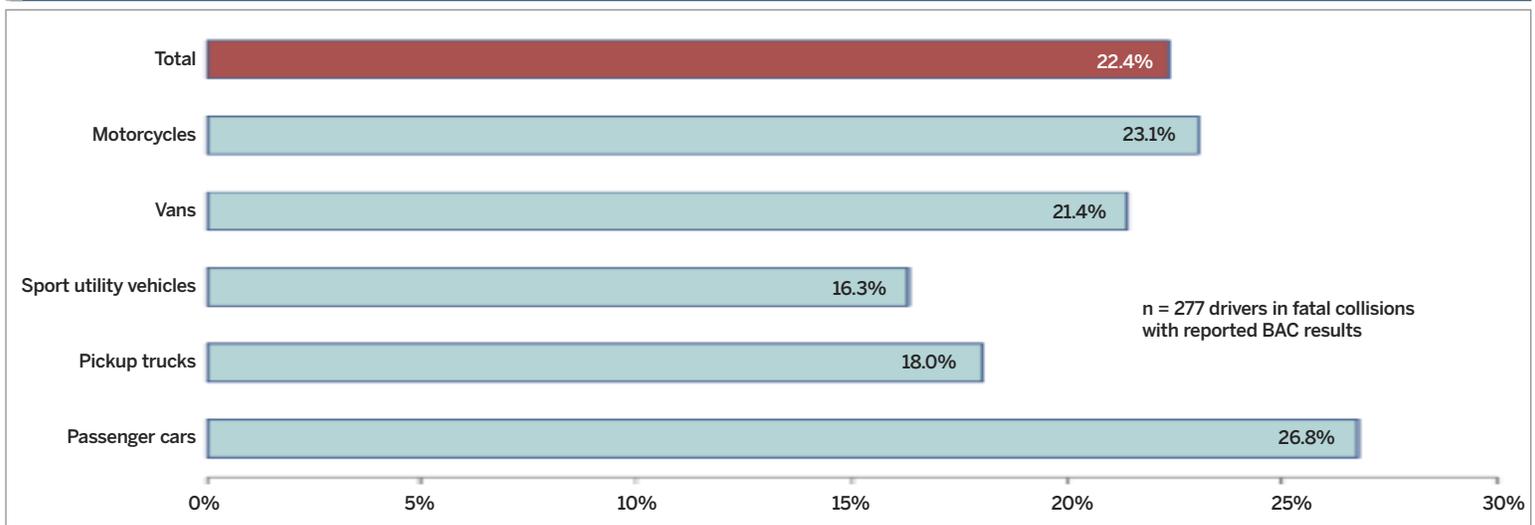
n = 277 drivers in fatal collisions with reported BAC results

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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 usage

Between 2009 and 2018, Indiana's observational rate of seat belt usage among passenger vehicle occupants remained consistent at 93 percent, a rate that was 3 percentage points higher than the most recently reported national rate (Figure 1.6). According to observational surveys in Indiana, seat belt usage rates in pickup trucks continually lag behind rates for passenger cars. However, they have remained steady during the past decade ranging from 85 to 84 percent between 2009 and 2018.

Seat belt usage among people involved in collisions varies by injury severity and census locale. Overall, occupants involved in collisions in 2018 in densely populated urban (91 percent) and suburban areas (92 percent) were more likely to be buckled up compared to people in rural areas (Figure 1.7). Restraint usage 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, 51 percent in suburban areas, 54 percent in exurban areas, and 45 percent in rural areas.

Figure 1.6. Comparison of observed seat belt usage rates by vehicle type, 2009–2018
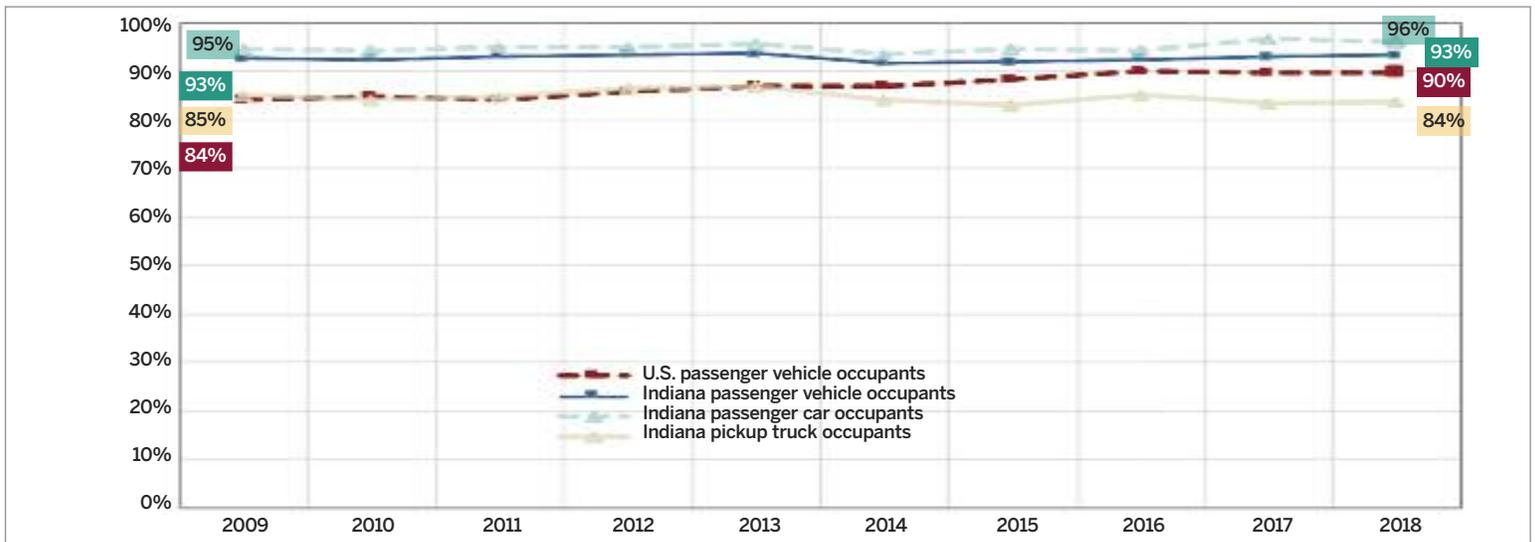
Sources: Indiana - Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, Center for Road Safety, Purdue University, 2018
U.S. - DOT HS 812 662, January 2019

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

Figure 1.7. Seat belt usage among passenger vehicle occupants in Indiana collisions, by injury status and census locale, 2018
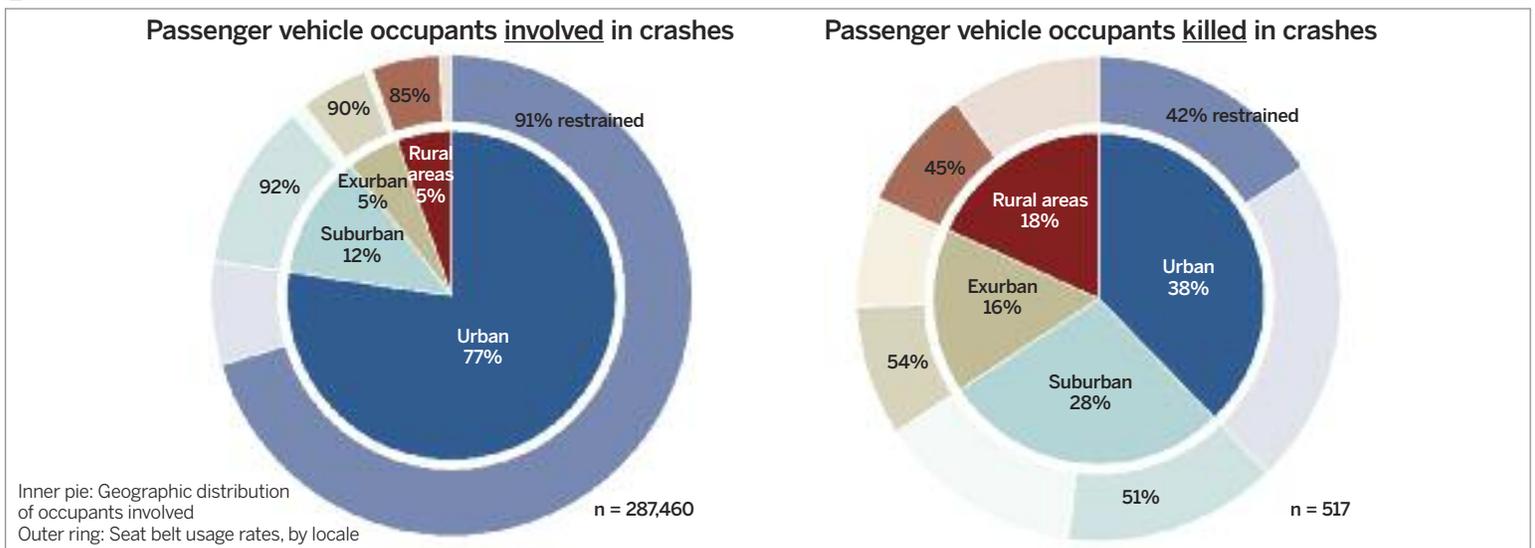
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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 2018, 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 (416 per 10,000 licensed), but are nearly three times higher for young drivers (1,215 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 2017 and 2018, from 44,667 to 42,250, respectively. During this same time, the number of young drivers killed in collisions reached a five-year high, increasing from 47 in 2017 to 62 in 2018 (Figure 1.9).

Figure 1.8. Drivers in Indiana crashes per 10,000 licensed, by age group, 2018
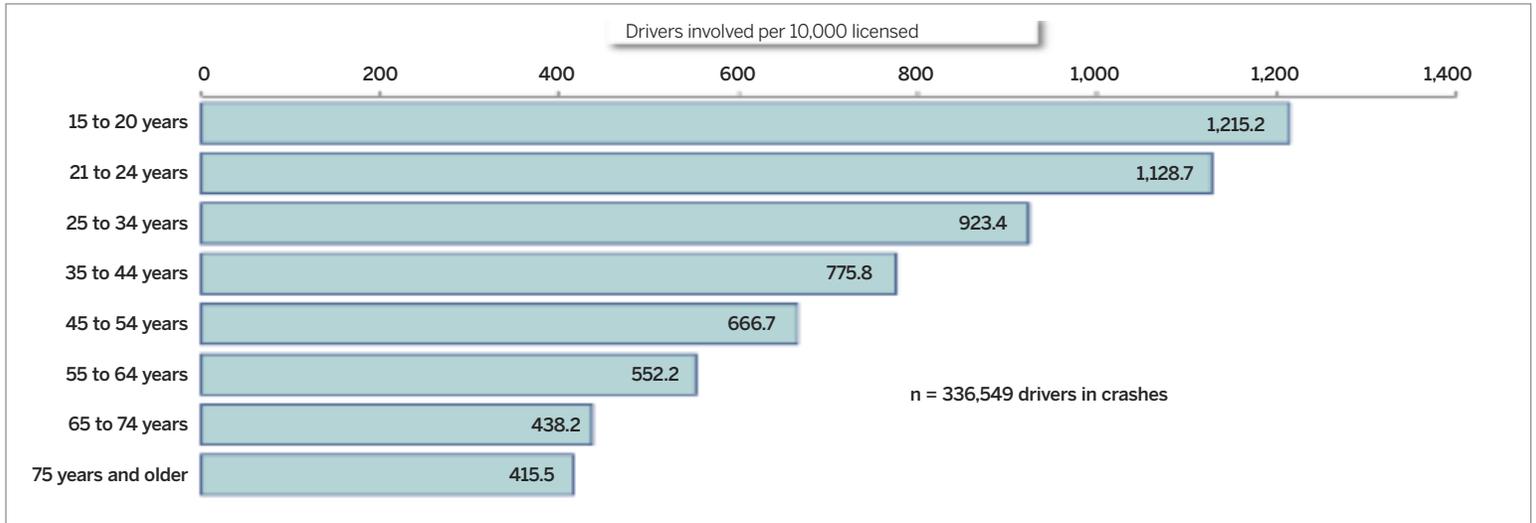
Drivers involved per 10,000 licensed

Age group	Drivers involved per 10,000 licensed
15 to 20 years	1,215.2
21 to 24 years	1,128.7
25 to 34 years	923.4
35 to 44 years	775.8
45 to 54 years	666.7
55 to 64 years	552.2
65 to 74 years	438.2
75 years and older	415.5

n = 336,549 drivers in crashes

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; Indiana Bureau of Motor Vehicles, as of March 4, 2019

Note: Drivers with unknown or invalid age are excluded.

Figure 1.9. Young drivers killed in Indiana collisions, 2014–2018

Legend: Young drivers killed — Per 100,000 licensed drivers

Year	Young drivers killed	Per 100,000 licensed drivers
2014	34	9.9
2015	52	15.1
2016	48	13.9
2017	47	13.7
2018	62	17.8

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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

GOAL: Reducing motorcyclist fatalities

The number of motorcyclist fatalities in Indiana dropped from 147 in 2017 to 112 in 2018 (Figure 1.10). Meanwhile, the rate of motorcyclists involved in crashes fell slightly to 39 per 1,000 in 2018 after reaching a five-year high in 2017.

Figure 1.10. Motorcyclists killed in Indiana collisions, 2014–2018
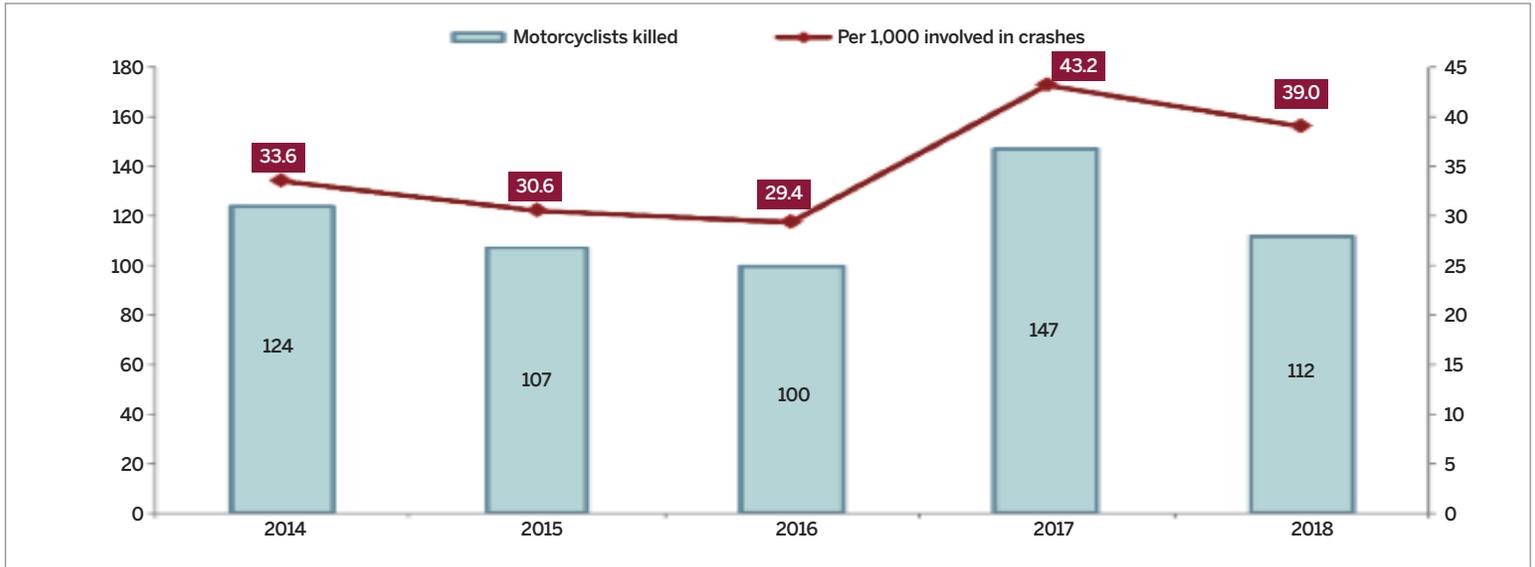
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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

GOAL: Reducing drivers speeding in crashes

After decreasing for four consecutive years, the number of Indiana collisions that involved a speeding driver jumped to 19,604 in 2018 (Figure 1.11). Among fatal collisions, the number that involved a speeding driver fell from 186 in 2017 to 160 in 2018, marking a five-year low in speed-related fatal crashes. Meanwhile, 9 percent of the state's collisions in 2018 involved a speeding driver compared to 20 percent of the state's fatal collisions (Figure 1.12).

Figure 1.11. Indiana collisions that involved a speeding driver, 2014–2018
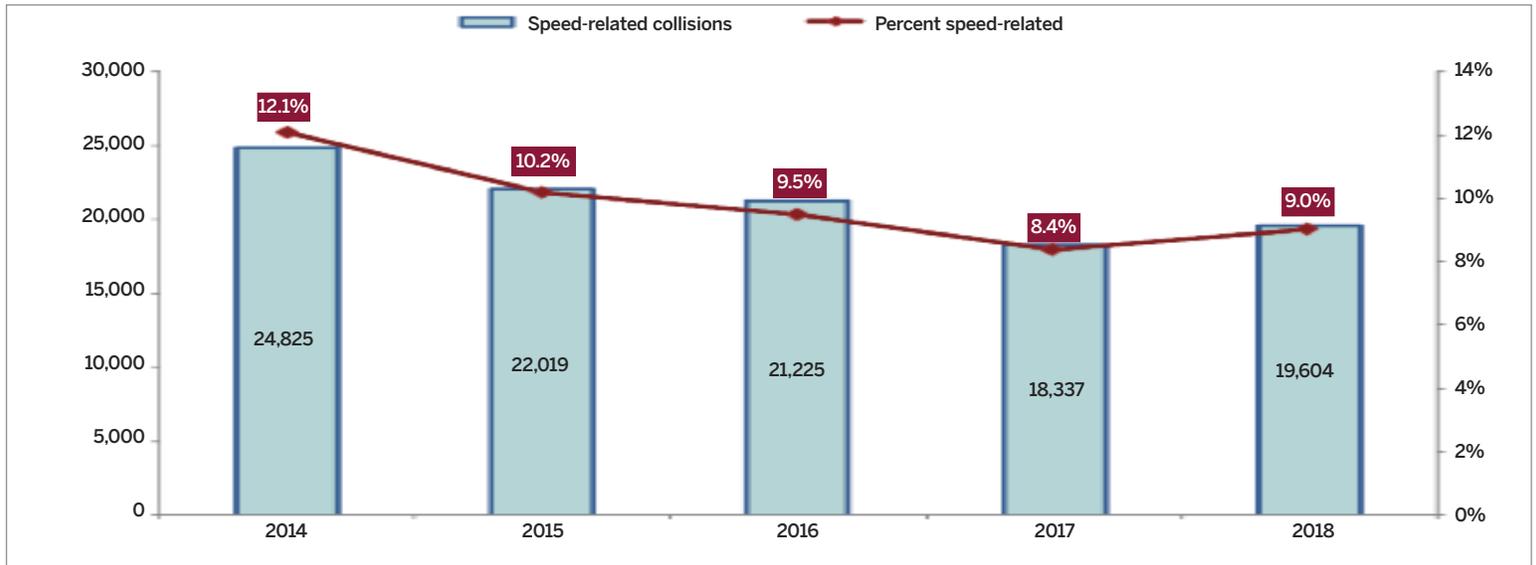
Legend: Speed-related collisions (bars); Percent speed-related (line)

Year	Speed-related collisions	Percent speed-related
2014	24,825	12.1%
2015	22,019	10.2%
2016	21,225	9.5%
2017	18,337	8.4%
2018	19,604	9.0%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Figure 1.12. Indiana fatal collisions that involved a speeding driver, 2014–2018
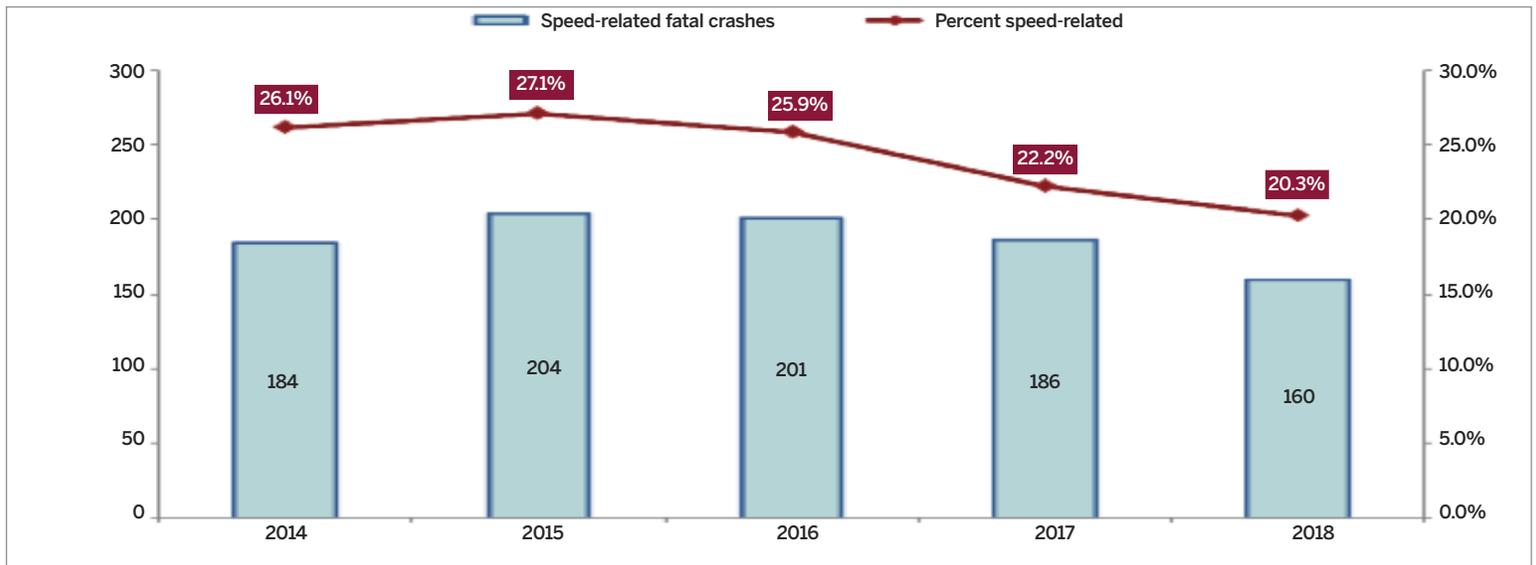
Legend: Speed-related fatal crashes (bars); Percent speed-related (line)

Year	Speed-related fatal crashes	Percent speed-related
2014	184	26.1%
2015	204	27.1%
2016	201	25.9%
2017	186	22.2%
2018	160	20.3%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

GOAL: Reducing fatalities and serious injuries among children

Indiana child traffic fatalities dropped significantly in 2018 after reaching a five-year high in 2017 (Figure 1.13). The number of children killed in Indiana traffic collisions decreased by nearly half, from 40 in 2017 to 21 in 2018.

GOAL: Reducing fatalities among non-motorists

In 2018, non-motorists—pedestrians and pedalcyclists—represented less than 1 percent of people involved in traffic collisions. However, they made up 16 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. The percentage of pedestrians killed in Indiana crashes increased from 6.1 percent in 2017 to 6.5 percent in 2018 (Figure 1.14). The percentage of pedalcyclists who died in crashes also increased from 1.2 percent to 2.7 percent in that same time period.

Figure 1.13. Children ages 14 and under killed in Indiana collisions, 2014–2018
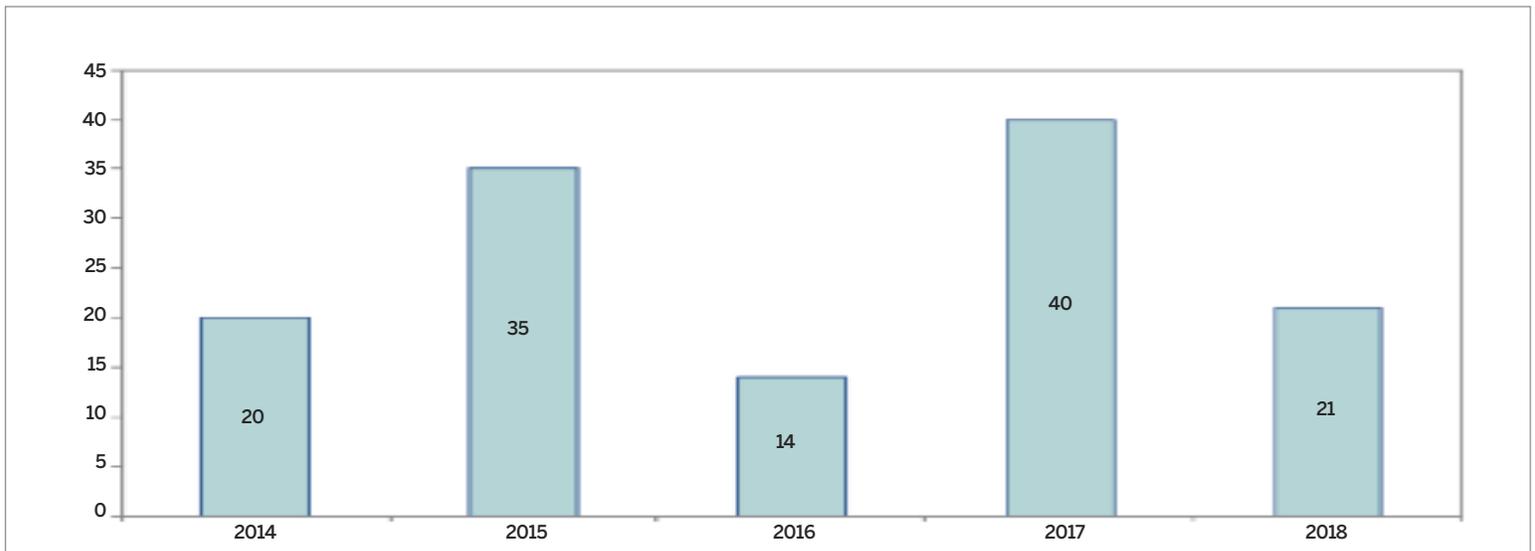
Year	Children killed
2014	20
2015	35
2016	14
2017	40
2018	21

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Note: Children include individuals ages 14 and under in collisions.

Figure 1.14. Fatalities in Indiana collisions as a percent of all involved, by person type, 2014–2018
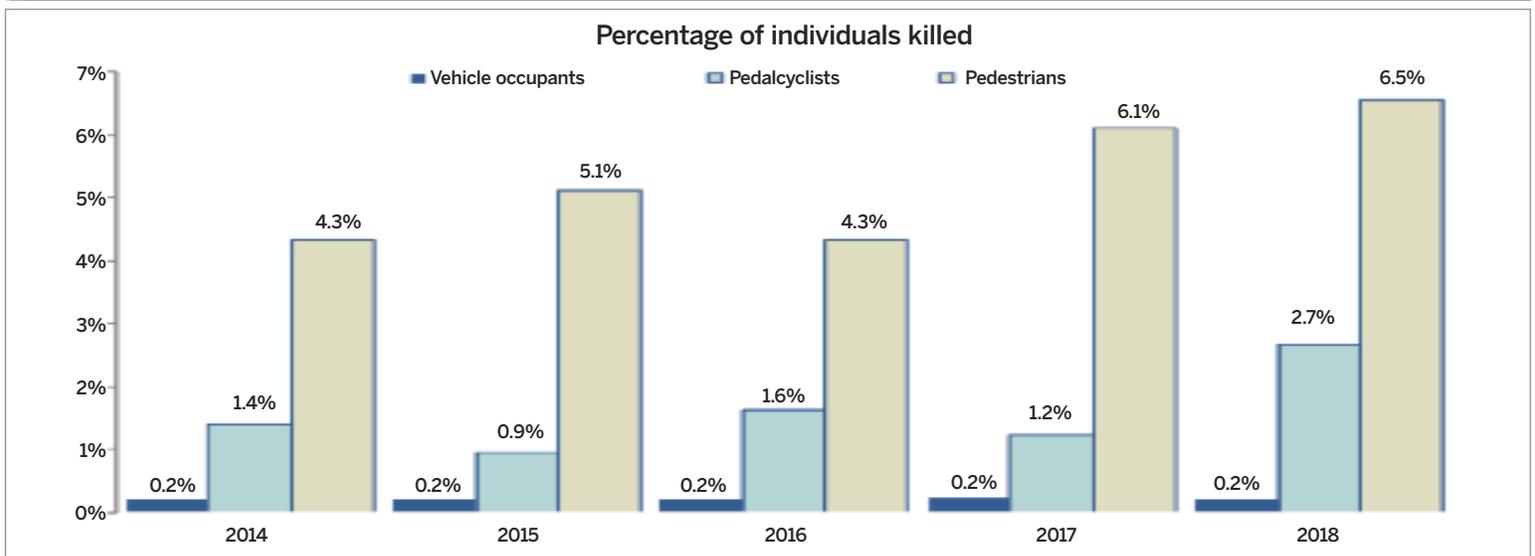
Percentage of individuals killed

Year	Vehicle occupants	Pedalcyclists	Pedestrians
2014	0.2%	1.4%	4.3%
2015	0.2%	0.9%	5.1%
2016	0.2%	1.6%	4.3%
2017	0.2%	1.2%	6.1%
2018	0.2%	2.7%	6.5%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Note: Animal-drawn vehicle occupants are excluded.

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COUNTY COMPARISONS

COUNTY COMPARISONS BY SUBJECT AREA, 2018

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 2018.

Note: Choropleth maps show counties grouped by quartiles.

Collision severity and injuries
In 2018, 217,077 collisions occurred in Indiana, 789 of which were fatal. Counties averaged 2,360 collisions that same year, with an average of 9 fatal crashes (Table 2.1). Marion County ranked highest in the total number of collisions (36,932), and Newton County ranked highest in the percentage of all collisions that were fatal (2.2). The mean county rate of collisions per 100 million VMT was 232, and the median rate was 221 (Map 2.1). Ohio (489), Brown (406), Tippecanoe (400), and Monroe (385) counties had the highest rates of collisions per 100M VMT.

The total number of individuals involved in 2018 Indiana collisions was 352,119. Across all counties, there was an average of 3,827 people in crashes (Table 2.2). Marion County had the largest number of individuals involved (65,104) and the largest number of traffic fatalities (111). The median county traffic fatality rate per 100,000 people was 15 (Map 2.2), with Newton County having the highest rate per 100,000 (64) and Martin, Parke, Pike, and Pulaski counties having the lowest (0).

Speed-related collisions
Speed-related collisions accounted for 9 percent of all Indiana collisions in 2018, and 20 percent of all fatal collisions (Table 2.3). The average number of speed-related collisions per county was 213. Blackford County (3 percent) had the lowest percentage of speed-related collisions, and Pike (19.7 percent) and Tipton (16.3 percent) counties had the highest percentages of collisions that were speed-related. The median county percent of speed-related collisions was 8.1, 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 2018, and 8 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 9. Tipton (19 per 10,000) and Ohio (18 per 10,000) counties had the highest rates of alcohol-impaired drivers in collisions, Franklin (2 per 10,000) and Martin (3 per 10,000) counties had the lowest rates of alcohol-impaired drivers in collisions (Map 2.4).

It is important to note that these numbers were current as of the March 18, 2019 Indiana State Police Automated Reporting Information Exchange System (ARIES) data extract and are likely to change as pending BAC test results are finalized and reported into the ARIES crash database. For example, according to ARIES data, about 60 percent of drivers involved in Indiana fatal collisions in 2018 were tested for alcohol. Yet at the time of the data extract, the ARIES database only included results for 343 of those 1,228 (28 percent) drivers tested. For this reason, trends related to alcohol-impaired crashes and fatalities in Indiana—as well as reported differences between Indiana and national data—should be interpreted with caution.

Deer collisions
Nearly 16,000 Indiana collisions in 2018 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 15.6 percent. Pulaski County (47.6) and Warren County (43.5 percent) had the highest percentages of deer-involved collisions, while the urban counties of Marion (0.3 percent) and Lake (1.4 percent) had the lowest percentages of collisions that involved deer.

Work zone collisions
There were 5,991 work zone collisions in Indiana in 2018 (Map 2.6). The mean county rate of work zone collisions per 1,000 total collisions was 21, and the median rate was 15. 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 2018, Owen (82), Ripley (64), Bartholomew (64), and Monroe (61) counties, located in the southern third of the state had the highest rates of work zone collisions per 1,000 collisions.

Restraint use
Fifty-three percent of all passenger vehicle (passenger cars, pickup trucks, sport utility vehicles, and vans) occupants killed in Indiana collisions were unrestrained in 2018, while only 9 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 15.4 (Map 2.7). Clay (40.5) and Fountain (37.8) counties, located in the western portion of Indiana, 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 2018, 42,250 young drivers (ages 15 to 20) were involved in collisions (13 percent of all drivers involved). That same year, 126 young drivers were involved in 2018 fatal collisions (Table 2.6). Franklin County (21.6 percent) had the highest percentage of young drivers in collisions. The mean county rate of young driver involvement in collisions was 105 per 1,000 licensed young drivers, and the median county rate was 104. Counties that are the locations of large universities (Delaware, Monroe, Vanderburgh, Tippecanoe, Vigo, and Marion) were among the highest

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 2018, 2,871 motorcyclists were involved in collisions, and 112 motorcyclists were killed in collisions (Table 2.7). Nearly 4 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 (45 per 1,000), Switzerland (33 per 1,000), and Washington (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 28,617 of the 217,077 collisions in Indiana in 2018. The average county percent of hit-and-run collisions was 8.2, and the median county percent was 7.4 (Map 2.10). The urban counties of Allen (20.9 percent), Monroe (19.8 percent), St. Joseph (19.7 percent), Vigo (19.5 percent), , and Lake (18.8 percent) counties had the highest hit-and-run collision rates in 2018.

County ranks

Table 2.8 shows Indiana counties ranked by six collision metrics:

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

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

Table 2.1. Indiana collisions, by severity and county, 2018

	Total collisions		Fatal			Non-fatal injury		Property damage only	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total
All counties	217,077	N/A	789	0.4	N/A	32,383	14.9	183,905	84.7
Mean	2,360	N/A	9	0.6	N/A	352	14.2	1,999	85.3
Median	984	N/A	6	0.5	N/A	151	14	856	86
Minimum	116	N/A	0	0.0	N/A	10	5.4	97	73.2
Maximum	36,932	N/A	102	2.2	N/A	5,830	25.9	31,000	94.3
Adams	725	58	4	0.6	37	86	11.9	635	87.6
Allen	13,861	3	29	0.2	81	2,264	16.3	11,568	83.5
Bartholomew	2,213	22	19	0.9	14	573	25.9	1,621	73.2
Benton	160	89	3	1.9	2	19	11.9	138	86.3
Blackford	266	86	1	0.4	61	25	9.4	240	90.2
Boone	2,095	24	8	0.4	60	245	11.7	1,842	87.9
Brown	551	69	2	0.4	63	99	18.0	450	81.7
Carroll	533	72	3	0.6	34	58	10.9	472	88.6
Cass	1,210	40	6	0.5	44	158	13.1	1,046	86.4
Clark	4,351	11	12	0.3	73	565	13.0	3,774	86.7
Clay	726	57	3	0.4	55	104	14.3	619	85.3
Clinton	1,092	43	4	0.4	62	167	15.3	921	84.3
Crawford	361	81	1	0.3	71	32	8.9	328	90.9
Daviess	299	84	2	0.7	26	77	25.8	220	73.6
Dearborn	1,652	29	8	0.5	46	200	12.1	1,444	87.4
Decatur	907	51	4	0.4	53	125	13.8	778	85.8
DeKalb	1,474	33	6	0.4	58	215	14.6	1,253	85.0
Delaware	4,044	14	14	0.3	66	659	16.3	3,371	83.4
Dubois	1,517	32	3	0.2	82	183	12.1	1,331	87.7
Elkhart	7,445	6	18	0.2	77	900	12.1	6,527	87.7
Fayette	603	64	5	0.8	19	82	13.6	516	85.6
Floyd	3,028	18	9	0.3	69	368	12.2	2,651	87.5
Fountain	442	75	1	0.2	80	24	5.4	417	94.3
Franklin	534	71	5	0.9	9	83	15.5	446	83.5
Fulton	611	63	5	0.8	21	58	9.5	548	89.7
Gibson	1,198	41	7	0.6	32	202	16.9	989	82.6
Grant	2,196	23	9	0.4	56	244	11.1	1,943	88.5
Greene	830	54	3	0.4	64	136	16.4	691	83.3
Hamilton	8,810	5	17	0.2	83	999	11.3	7,794	88.5
Hancock	1,973	25	6	0.3	68	340	17.2	1,627	82.5
Harrison	1,277	37	14	1.1	6	203	15.9	1,060	83.0
Hendricks	4,501	10	11	0.2	75	572	12.7	3,918	87.0
Henry	963	48	8	0.8	18	175	18.2	780	81.0
Howard	2,458	20	15	0.6	31	402	16.4	2,041	83.0
Huntington	1,248	39	8	0.6	28	167	13.4	1,073	86.0
Jackson	1,791	26	9	0.5	43	204	11.4	1,578	88.1
Jasper	1,273	38	10	0.8	24	197	15.5	1,066	83.7
Jay	630	61	3	0.5	47	77	12.2	550	87.3
Jefferson	976	47	4	0.4	56	137	14.0	835	85.6
Jennings	769	56	9	1.2	5	100	13.0	660	85.8
Johnson	3,668	16	13	0.4	65	590	16.1	3,065	83.6
Knox	919	50	4	0.4	54	184	20.0	731	79.5
Kosciusko	2,671	19	13	0.5	45	405	15.2	2,253	84.4
LaGrange	992	46	5	0.5	42	109	11.0	878	88.5
Lake	17,244	2	46	0.3	74	2,917	16.9	14,281	82.8
LaPorte	3,774	15	20	0.5	40	595	15.8	3,159	83.7
Lawrence	1,455	34	8	0.5	38	199	13.7	1,248	85.8
Madison	4,110	13	21	0.5	41	569	13.8	3,520	85.6

Table 2.1. *(continued)*

	Total collisions		Fatal			Non-fatal injury		Property damage only	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total
Marion	36,932	1	102	0.3	72	5,830	15.8	31,000	83.9
Marshall	1,559	31	9	0.6	33	203	13.0	1,347	86.4
Martin	121	91	0	0.0	89	24	19.8	97	80.2
Miami	1,035	45	11	1.1	8	147	14.2	877	84.7
Monroe	4,191	12	7	0.2	87	702	16.8	3,482	83.1
Montgomery	1,093	42	9	0.8	20	155	14.2	929	85.0
Morgan	1,724	27	7	0.4	59	263	15.3	1,454	84.3
Newton	415	78	9	2.2	1	56	13.5	350	84.3
Noble	1,328	36	6	0.5	51	168	12.7	1,154	86.9
Ohio	214	87	2	0.9	10	19	8.9	193	90.2
Orange	602	65	1	0.2	88	66	11.0	535	88.9
Owen	589	66	1	0.2	86	73	12.4	515	87.4
Parke	442	75	0	0.0	89	40	9.0	402	91.0
Perry	435	77	2	0.5	50	53	12.2	380	87.4
Pike	157	90	0	0.0	89	33	21.0	124	79.0
Porter	5,081	9	17	0.3	67	861	16.9	4,203	82.7
Posey	625	62	5	0.8	23	73	11.7	547	87.5
Pulaski	410	80	0	0.0	89	47	11.5	363	88.5
Putnam	1,069	44	5	0.5	49	163	15.2	901	84.3
Randolph	496	73	4	0.8	22	55	11.1	437	88.1
Ripley	784	55	5	0.6	30	117	14.9	662	84.4
Rush	358	82	2	0.6	36	62	17.3	294	82.1
St. Joseph	9,091	4	22	0.2	76	1,375	15.1	7,694	84.6
Scott	581	67	5	0.9	13	112	19.3	464	79.9
Shelby	1,352	35	9	0.7	27	248	18.3	1,095	81.0
Spencer	572	68	5	0.9	11	74	12.9	493	86.2
Starke	551	69	3	0.5	39	74	13.4	474	86.0
Steuben	1,667	28	4	0.2	78	174	10.4	1,489	89.3
Sullivan	475	74	4	0.8	15	66	13.9	405	85.3
Switzerland	182	88	3	1.6	3	28	15.4	151	83.0
Tippecanoe	6,978	7	13	0.2	84	972	13.9	5,993	85.9
Tipton	411	79	6	1.5	4	100	24.3	305	74.2
Union	116	92	1	0.9	12	10	8.6	105	90.5
Vanderburgh	6,879	8	16	0.2	79	1,199	17.4	5,664	82.3
Vermillion	357	83	2	0.6	35	42	11.8	313	87.7
Vigo	3,548	17	10	0.3	70	518	14.6	3,020	85.1
Wabash	939	49	6	0.6	29	134	14.3	799	85.1
Warren	278	85	3	1.1	7	23	8.3	252	90.6
Warrick	1,568	30	11	0.7	25	198	12.6	1,359	86.7
Washington	717	60	6	0.8	16	98	13.7	613	85.5
Wayne	2,267	21	4	0.2	85	292	12.9	1,971	86.9
Wells	722	59	6	0.8	17	89	12.3	627	86.8
White	853	53	4	0.5	48	110	12.9	739	86.6
Whitley	887	52	4	0.5	52	145	16.3	738	83.2
Unknown	4	N/A	0	N/A	N/A	0	N/A	4	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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 Indiana State Police district, 2018

Median rate = 220.7   Mean rate = 231.7   n = 217,081 collisions

ISP districts

Collisions per 100 million VMT
- 78.9 - 176.3
- 176.4 - 220.7
- 220.8 - 276.6
- 276.7 - 488.6

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; Indiana Department of Transportation, county level VMT (2017), current as of March 5, 2019

Table 2.2. Individuals involved in Indiana collisions, by injury status and county, 2018

	Total individuals involved		Fatal			Incapacitating		Non-incapacitating		No injury	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total	Count	As % county total
All counties	352,119	N/A	873	0.2	N/A	19,976	5.7	28,295	8.0	302,975	86.0
Mean	3,827	N/A	9	0.4	N/A	217	7.7	308	6.7	3,293	85.1
Median	1,502	N/A	6	0.4	N/A	123	7.6	101	6.3	1,243	85.6
Minimum	161	N/A	0	0.0	N/A	9	0.6	5	3.1	146	71.1
Maximum	65,104	N/A	111	1.6	N/A	2,269	17.1	6,664	14.2	56,626	91.4
Adams	1,038	59	5	0.5	30	78	7.5	71	6.8	884	85.2
Allen	22,244	3	33	0.1	81	1,173	5.3	2,193	9.9	18,845	84.7
Bartholomew	3,827	21	22	0.6	20	364	9.5	483	12.6	2,958	77.3
Benton	217	90	3	1.4	2	27	12.4	9	4.1	178	82.0
Blackford	354	85	1	0.3	58	18	5.1	15	4.2	320	90.4
Boone	3,258	25	8	0.2	65	219	6.7	147	4.5	2,884	88.5
Brown	756	70	2	0.3	63	74	9.8	79	10.4	601	79.5
Carroll	705	72	3	0.4	37	64	9.1	40	5.7	598	84.8
Cass	1,817	40	8	0.4	32	121	6.7	118	6.5	1,570	86.4
Clark	7,220	11	13	0.2	72	440	6.1	420	5.8	6,347	87.9
Clay	1,069	57	3	0.3	59	96	9.0	48	4.5	922	86.2
Clinton	1,597	43	5	0.3	57	140	8.8	112	7.0	1,340	83.9
Crawford	435	84	1	0.2	68	26	6.0	23	5.3	385	88.5
Daviess	515	81	2	0.4	40	88	17.1	59	11.5	366	71.1
Dearborn	2,508	28	8	0.3	53	207	8.3	107	4.3	2,186	87.2
Decatur	1,380	51	5	0.4	46	115	8.3	66	4.8	1,194	86.5
DeKalb	2,154	34	7	0.3	52	152	7.1	170	7.9	1,825	84.7
Delaware	6,614	13	17	0.3	64	359	5.4	638	9.6	5,600	84.7
Dubois	2,217	32	3	0.1	84	133	6.0	137	6.2	1,944	87.7
Elkhart	12,243	7	18	0.1	82	811	6.6	546	4.5	10,868	88.8
Fayette	993	61	5	0.5	27	81	8.2	53	5.3	854	86.0
Floyd	5,068	18	9	0.2	74	268	5.3	251	5.0	4,540	89.6
Fountain	560	79	1	0.2	73	29	5.2	18	3.2	512	91.4
Franklin	719	71	6	0.8	8	90	12.5	34	4.7	589	81.9
Fulton	810	67	7	0.9	7	45	5.6	34	4.2	724	89.4
Gibson	1,833	39	8	0.4	33	146	8.0	166	9.1	1,513	82.5
Grant	3,286	24	9	0.3	60	179	5.4	202	6.1	2,896	88.1
Greene	1,108	56	3	0.3	61	124	11.2	63	5.7	918	82.9
Hamilton	15,669	4	20	0.1	86	618	3.9	1,076	6.9	13,955	89.1
Hancock	3,406	22	6	0.2	76	337	9.9	215	6.3	2,848	83.6
Harrison	1,906	36	14	0.7	11	239	12.5	112	5.9	1,541	80.8
Hendricks	7,510	10	13	0.2	77	435	5.8	407	5.4	6,655	88.6
Henry	1,512	45	8	0.5	24	156	10.3	118	7.8	1,230	81.3
Howard	4,219	19	18	0.4	35	364	8.6	294	7.0	3,543	84.0
Huntington	1,803	41	10	0.6	23	128	7.1	140	7.8	1,525	84.6
Jackson	2,681	27	13	0.5	29	185	6.9	144	5.4	2,339	87.2
Jasper	1,874	38	11	0.6	18	148	7.9	157	8.4	1,558	83.1
Jay	856	65	3	0.4	48	49	5.7	60	7.0	744	86.9
Jefferson	1,507	46	4	0.3	62	125	8.3	82	5.4	1,296	86.0
Jennings	1,162	54	9	0.8	10	80	6.9	70	6.0	1,003	86.3
Johnson	6,511	15	13	0.2	70	459	7.0	397	6.1	5,642	86.7
Knox	1,394	49	5	0.4	47	134	9.6	119	8.5	1,136	81.5
Kosciusko	4,089	20	14	0.3	50	48	1.2	522	12.8	3,505	85.7
LaGrange	1,409	48	6	0.4	36	34	2.4	151	10.7	1,218	86.4
Lake	29,050	2	50	0.2	78	2,269	7.8	1,976	6.8	24,755	85.2
LaPorte	5,750	16	20	0.3	49	438	7.6	510	8.9	4,782	83.2
Lawrence	2,195	33	8	0.4	45	138	6.3	204	9.3	1,845	84.1
Madison	6,627	12	21	0.3	54	518	7.8	348	5.3	5,740	86.6

continued on next page

Table 2.2. *(continued)*

	Total individuals involved		Fatal			Incapacitating		Non-incapacitating		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	65,104	1	111	0.2	79	1,703	2.6	6,664	10.2	56,626	87.0
Marshall	2,238	30	11	0.5	28	145	6.5	179	8.0	1,903	85.0
Martin	187	91	0	0.0	89	24	12.8	15	8.0	148	79.1
Miami	1,527	44	11	0.7	12	147	9.6	93	6.1	1,276	83.6
Monroe	6,533	14	10	0.2	80	383	5.9	603	9.2	5,537	84.8
Montgomery	1,721	42	9	0.5	25	128	7.4	110	6.4	1,474	85.6
Morgan	2,847	26	9	0.3	56	227	8.0	173	6.1	2,438	85.6
Newton	570	77	9	1.6	1	59	10.4	34	6.0	468	82.1
Noble	1,884	37	7	0.4	43	129	6.8	133	7.1	1,615	85.7
Ohio	258	87	2	0.8	9	15	5.8	13	5.0	228	88.4
Orange	835	66	1	0.1	87	39	4.7	52	6.2	743	89.0
Owen	857	64	2	0.2	67	46	5.4	54	6.3	755	88.1
Parke	564	78	0	0.0	89	33	5.9	23	4.1	508	90.1
Perry	607	76	2	0.3	51	45	7.4	26	4.3	534	88.0
Pike	232	89	0	0.0	89	31	13.4	17	7.3	184	79.3
Porter	8,363	9	20	0.2	66	578	6.9	635	7.6	7,130	85.3
Posey	877	63	5	0.6	22	58	6.6	39	4.4	775	88.4
Pulaski	492	83	0	0.0	89	39	7.9	19	3.9	434	88.2
Putnam	1,497	47	6	0.4	38	136	9.1	100	6.7	1,255	83.8
Randolph	678	73	4	0.6	17	58	8.6	31	4.6	585	86.3
Ripley	1,161	55	5	0.4	34	118	10.2	60	5.2	978	84.2
Rush	534	80	2	0.4	42	66	12.4	36	6.7	430	80.5
St. Joseph	14,532	5	29	0.2	71	919	6.3	1,078	7.4	12,506	86.1
Scott	985	62	6	0.6	16	99	10.1	78	7.9	802	81.4
Shelby	1,970	35	10	0.5	26	208	10.6	147	7.5	1,605	81.5
Spencer	795	68	5	0.6	14	78	9.8	29	3.6	683	85.9
Starke	793	69	3	0.4	41	101	12.7	62	7.8	627	79.1
Steuben	2,233	31	5	0.2	69	149	6.7	100	4.5	1,979	88.6
Sullivan	649	74	6	0.9	6	57	8.8	51	7.9	535	82.4
Switzerland	240	88	3	1.3	3	27	11.3	17	7.1	193	80.4
Tippecanoe	11,060	8	15	0.1	83	105	0.9	1,194	10.8	9,746	88.1
Tipton	633	75	6	0.9	5	88	13.9	70	11.1	469	74.1
Union	161	92	1	0.6	15	9	5.6	5	3.1	146	90.7
Vanderburgh	12,446	6	16	0.1	85	77	0.6	1,767	14.2	10,586	85.1
Vermillion	499	82	2	0.4	38	50	10.0	23	4.6	424	85.0
Vigo	5,642	17	10	0.2	75	437	7.7	317	5.6	4,878	86.5
Wabash	1,391	50	8	0.6	19	138	9.9	78	5.6	1,167	83.9
Warren	328	86	4	1.2	4	21	6.4	13	4.0	290	88.4
Warrick	2,463	29	11	0.4	31	37	1.5	264	10.7	2,151	87.3
Washington	1,004	60	7	0.7	13	73	7.3	73	7.3	851	84.8
Wayne	3,373	23	4	0.1	88	197	5.8	197	5.8	2,975	88.2
Wells	1,047	58	6	0.6	21	82	7.8	52	5.0	907	86.6
White	1,265	53	4	0.3	55	114	9.0	66	5.2	1,081	85.5
Whitley	1,369	52	5	0.4	44	134	9.8	101	7.4	1,129	82.5
Unknown	3	N/A	0	N/A	N/A	0	N/A	0	N/A	3	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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 Indiana State Police district, 2018

Median rate = 14.8   Mean rate = 17.1   n = 873 fatalities

| Lake 10.3 | Porter 11.8 | LaPorte 18.2 | St. Joseph 10.7 | Elkhart 8.8 | LaGrange 15.3 | Steuben 14.5 |
| Newton 64.2 | Jasper 33.0 | Pulaski 0.0 | Starke 13.1 | Marshall 23.8 | Koscuisko 17.6 | Noble 14.7 | DeKalb 16.2 | Whitley 14.7 | Allen 8.8 |

Benton 34.7
White 16.6
Cass 21.1
Fulton 34.8
Wabash 25.6
Huntington 27.6
Wells 21.3
Adams 14.0
Miami 30.9

Warren 48.4
Tippecanoe 7.8
Carroll 14.9
Howard 21.9
Grant 13.6
Blackford 8.4
Jay 14.4

Fountain 6.1
Montgomery 23.5
Clinton 15.5
Tipton 39.7
Madison 16.2
Delaware 14.8
Randolph 16.1

Vermillion 12.9
Parke 0.0
Boone 11.9
Hamilton 6.1
Henry 16.6
Wayne 6.1

Putnam 15.9
Hendricks 7.8
Marion 11.6
Hancock 7.9
Rush 12.0
Fayette 21.7
Union 14.2

Vigo 9.3
Clay 11.5
Owen 9.6
Morgan 12.8
Johnson 8.3
Shelby 22.4
Decatur 18.7
Franklin 26.4

Sullivan 29.0
Greene 9.4
Monroe 6.8
Brown 13.1
Bartholomew 26.6
Jennings 32.6
Ripley 17.5
Dearborn 16.1
Ohio 34.2

Lawrence 17.5
Jackson 29.5
Jefferson 12.4
Switzerland 28.0

Knox 13.6
Daviess 6.0
Martin 0.0
Orange 5.1
Washington 25.1
Scott 25.1
Clark 11.1

Pike 0.0
Dubois 7.0
Crawford 9.5
Floyd 11.6
Gibson 23.9
Harrison 34.7

Posey 19.6
Vanderburgh 8.8
Warrick 17.6
Spencer 24.6
Perry 10.5

ISP districts

Fatalities per 100K population
- 0.0 - 9.6
- 9.7 - 14.8
- 14.9 - 22.4
- 22.5 - 64.2

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019;
U.S. Census Bureau, Population Estimates for Indiana Counties, 2014-2018, provided by the Indiana Business Research Center, Indiana University.

Table 2.3. Indiana speed-related collisions, by severity and county, 2018

	All collisions			Fatal		Non-fatal 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	19,604	9.0	N/A	160	20.3	4,181	12.9	15,263	8.3
Mean	213	8.7	N/A	2	19.8	45	13.8	166	7.8
Median	95	8.1	N/A	1	18.9	23	14	67	7.0
Minimum	6	3.0	N/A	0	0.0	0	0.0	5	2.2
Maximum	3,165	19.7	N/A	20	100.0	671	36.4	2,474	16.4
Adams	57	7.9	47	1	25.0	15	17.4	41	6.5
Allen	1,165	8.4	42	7	24.1	260	11.5	898	7.8
Bartholomew	162	7.3	57	3	15.8	59	10.3	100	6.2
Benton	12	7.5	52	0	0.0	1	5.3	11	8.0
Blackford	8	3.0	92	0	0.0	0	0.0	8	3.3
Boone	143	6.8	61	1	12.5	28	11.4	114	6.2
Brown	59	10.7	26	1	50.0	22	22.2	36	8.0
Carroll	67	12.6	11	0	0.0	14	24.1	53	11.2
Cass	75	6.2	71	0	0.0	18	11.4	57	5.4
Clark	248	5.7	74	1	8.3	72	12.7	175	4.6
Clay	70	9.6	34	1	33.3	19	18.3	50	8.1
Clinton	102	9.3	37	1	25.0	24	14.4	77	8.4
Crawford	30	8.3	43	0	0.0	7	21.9	23	7.0
Daviess	32	10.7	27	0	0.0	10	13.0	22	10.0
Dearborn	122	7.4	56	2	25.0	29	14.5	91	6.3
Decatur	119	13.1	8	1	25.0	23	18.4	95	12.2
DeKalb	186	12.6	9	2	33.3	44	20.5	140	11.2
Delaware	303	7.5	53	3	21.4	73	11.1	227	6.7
Dubois	117	7.7	48	1	33.3	29	15.8	87	6.5
Elkhart	889	11.9	15	8	44.4	120	13.3	761	11.7
Fayette	21	3.5	88	1	20.0	5	6.1	15	2.9
Floyd	164	5.4	79	2	22.2	38	10.3	124	4.7
Fountain	30	6.8	63	0	0.0	3	12.5	27	6.5
Franklin	63	11.8	18	2	40.0	16	19.3	45	10.1
Fulton	39	6.4	70	2	40.0	8	13.8	29	5.3
Gibson	119	9.9	30	4	57.1	31	15.3	84	8.5
Grant	225	10.2	28	0	0.0	30	12.3	195	10.0
Greene	47	5.7	76	1	33.3	18	13.2	28	4.1
Hamilton	458	5.2	83	1	5.9	73	7.3	384	4.9
Hancock	138	7.0	59	0	0.0	27	7.9	111	6.8
Harrison	97	7.6	50	2	14.3	29	14.3	66	6.2
Hendricks	333	7.4	55	0	0.0	61	10.7	272	6.9
Henry	94	9.8	32	2	25.0	24	13.7	68	8.7
Howard	132	5.4	80	2	13.3	31	7.7	99	4.9
Huntington	120	9.6	35	1	12.5	23	13.8	96	8.9
Jackson	148	8.3	44	2	22.2	28	13.7	118	7.5
Jasper	147	11.5	20	1	10.0	38	19.3	108	10.1
Jay	21	3.3	89	0	0.0	9	11.7	12	2.2
Jefferson	66	6.8	64	1	25.0	24	17.5	41	4.9
Jennings	42	5.5	78	1	11.1	8	8.0	33	5.0
Johnson	239	6.5	69	2	15.4	51	8.6	186	6.1
Knox	60	6.5	68	1	25.0	12	6.5	47	6.4
Kosciusko	182	6.8	62	1	7.7	36	8.9	145	6.4
LaGrange	134	13.5	7	1	20.0	18	16.5	115	13.1
Lake	2,490	14.4	5	10	21.7	574	19.7	1,906	13.3
LaPorte	455	12.1	14	8	40.0	80	13.4	367	11.6
Lawrence	98	6.7	66	2	25.0	30	15.1	66	5.3
Madison	233	5.7	75	6	28.6	46	8.1	181	5.1

continued on next page

Table 2.3. *(continued)*

	All collisions			Fatal		Non-fatal 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	3,165	8.6	41	20	19.6	671	11.5	2,474	8.0
Marshall	158	10.1	29	1	11.1	38	18.7	119	8.8
Martin	12	9.9	31	0	0.0	2	8.3	10	10.3
Miami	115	11.1	23	4	36.4	26	17.7	85	9.7
Monroe	463	11.0	24	0	0.0	104	14.8	359	10.3
Montgomery	83	7.6	51	1	11.1	18	11.6	64	6.9
Morgan	168	9.7	33	2	28.6	34	12.9	132	9.1
Newton	52	12.5	12	2	22.2	8	14.3	42	12.0
Noble	158	11.9	16	2	33.3	30	17.9	126	10.9
Ohio	7	3.3	91	0	0.0	1	5.3	6	3.1
Orange	33	5.5	77	0	0.0	10	15.2	23	4.3
Owen	28	4.8	85	1	100.0	7	9.6	20	3.9
Parke	33	7.5	54	0	0.0	7	17.5	26	6.5
Perry	29	6.7	67	1	50.0	7	13.2	21	5.5
Pike	31	19.7	1	0	0.0	12	36.4	19	15.3
Porter	639	12.6	10	2	11.8	135	15.7	502	11.9
Posey	74	11.8	17	0	0.0	15	20.5	59	10.8
Pulaski	36	8.8	39	0	0.0	15	31.9	21	5.8
Putnam	162	15.2	3	2	40.0	38	23.3	122	13.5
Randolph	23	4.6	86	0	0.0	7	12.7	16	3.7
Ripley	53	6.8	65	1	20.0	18	15.4	34	5.1
Rush	31	8.7	40	1	50.0	8	12.9	22	7.5
St. Joseph	988	10.9	25	8	36.4	180	13.1	800	10.4
Scott	48	8.3	45	4	80.0	11	9.8	33	7.1
Shelby	163	12.1	13	3	33.3	41	16.5	119	10.9
Spencer	33	5.8	73	0	0.0	11	14.9	22	4.5
Starke	38	6.9	60	1	33.3	7	9.5	30	6.3
Steuben	193	11.6	19	0	0.0	40	23.0	153	10.3
Sullivan	22	4.6	87	0	0.0	6	9.1	16	4.0
Switzerland	14	7.7	49	1	33.3	3	10.7	10	6.6
Tippecanoe	972	13.9	6	3	23.1	162	16.7	807	13.5
Tipton	67	16.3	2	1	16.7	16	16.0	50	16.4
Union	6	5.2	84	1	100.0	0	0.0	5	4.8
Vanderburgh	226	3.3	90	2	12.5	55	4.6	169	3.0
Vermillion	54	15.1	4	0	0.0	10	23.8	44	14.1
Vigo	188	5.3	81	2	20.0	38	7.3	148	4.9
Wabash	87	9.3	38	0	0.0	19	14.2	68	8.5
Warren	31	11.2	21	0	0.0	2	8.7	29	11.5
Warrick	113	7.2	58	2	18.2	30	15.2	81	6.0
Washington	44	6.1	72	1	16.7	11	11.2	32	5.2
Wayne	187	8.2	46	1	25.0	43	14.7	143	7.3
Wells	38	5.3	82	0	0.0	8	9.0	30	4.8
White	95	11.1	22	0	0.0	18	16.4	77	10.4
Whitley	83	9.4	36	1	25.0	21	14.5	61	8.3
Unknown	0	N/A	N/A	0	N/A	0	N/A	0	N/A

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
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 Indiana State Police district, 2018

Median percent = 8.1   Mean percent = 8.7   n = 19,604 speed-related collisions

	ISP districts

Percent speed-related collisions

	3.0 - 6.4
	6.5 - 8.1
	8.2 - 11.0
	11.1 - 19.7

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 2.4. Indiana collisions involving an alcohol-impaired driver, by severity and county, 2018

County	Total Count	Total Alcohol-impaired as % of total collisions	Fatal Count	Fatal Alcohol-impaired as % of total fatal collisions	Non-fatal injury Count	Non-fatal injury Alcohol-impaired as % of total non-fatal injury collisions	Property damage Count	Property damage Alcohol-impaired as % of total property damage collisions
All counties	3,990	1.8	63	8.0	1,046	3.2	2,881	1.6
Mean	43	2.2	1	6.3	11	3.9	31	1.9
Median	22	2.0	0	0.0	6	3.6	16	1.7
Minimum	2	0.7	0	0.0	0	0.0	1	0.6
Maximum	381	6.7	7	50.0	120	10.0	263	7.3
Adams	22	3.0	2	50.0	5	5.8	15	2.4
Allen	375	2.7	7	24.1	120	5.3	248	2.1
Bartholomew	51	2.3	1	5.3	15	2.6	35	2.2
Benton	3	1.9	0	0.0	0	0.0	3	2.2
Blackford	6	2.3	0	0.0	0	0.0	6	2.5
Boone	46	2.2	0	0.0	12	4.9	34	1.8
Brown	17	3.1	0	0.0	4	4.0	13	2.9
Carroll	11	2.1	1	33.3	3	5.2	7	1.5
Cass	25	2.1	0	0.0	3	1.9	22	2.1
Clark	66	1.5	0	0.0	17	3.0	49	1.3
Clay	21	2.9	0	0.0	7	6.7	14	2.3
Clinton	32	2.9	0	0.0	11	6.6	21	2.3
Crawford	4	1.1	0	0.0	2	6.3	2	0.6
Daviess	20	6.7	0	0.0	4	5.2	16	7.3
Dearborn	33	2.0	1	12.5	6	3.0	26	1.8
Decatur	23	2.5	1	25.0	3	2.4	19	2.4
DeKalb	40	2.7	1	16.7	10	4.7	29	2.3
Delaware	59	1.5	0	0.0	19	2.9	40	1.2
Dubois	31	2.0	0	0.0	12	6.6	19	1.4
Elkhart	137	1.8	4	22.2	29	3.2	104	1.6
Fayette	8	1.3	0	0.0	0	0.0	8	1.6
Floyd	64	2.1	1	11.1	11	3.0	52	2.0
Fountain	8	1.8	0	0.0	2	8.3	6	1.4
Franklin	4	0.7	0	0.0	0	0.0	4	0.9
Fulton	10	1.6	0	0.0	1	1.7	9	1.6
Gibson	15	1.3	1	14.3	6	3.0	8	0.8
Grant	21	1.0	0	0.0	5	2.0	16	0.8
Greene	14	1.7	0	0.0	4	2.9	10	1.4
Hamilton	179	2.0	3	17.6	42	4.2	134	1.7
Hancock	24	1.2	0	0.0	4	1.2	20	1.2
Harrison	22	1.7	0	0.0	6	3.0	16	1.5
Hendricks	52	1.2	1	9.1	10	1.7	41	1.0
Henry	17	1.8	0	0.0	7	4.0	10	1.3
Howard	58	2.4	2	13.3	19	4.7	37	1.8
Huntington	24	1.9	0	0.0	9	5.4	15	1.4
Jackson	36	2.0	0	0.0	13	6.4	23	1.5
Jasper	26	2.0	0	0.0	9	4.6	17	1.6
Jay	16	2.5	0	0.0	2	2.6	14	2.5
Jefferson	22	2.3	0	0.0	5	3.6	17	2.0
Jennings	19	2.5	1	11.1	5	5.0	13	2.0
Johnson	64	1.7	0	0.0	9	1.5	55	1.8
Knox	18	2.0	0	0.0	4	2.2	14	1.9
Kosciusko	53	2.0	1	7.7	15	3.7	37	1.6
LaGrange	22	2.2	1	20.0	6	5.5	15	1.7
Lake	333	1.9	6	13.0	87	3.0	240	1.7
LaPorte	122	3.2	4	20.0	38	6.4	80	2.5
Lawrence	33	2.3	0	0.0	9	4.5	24	1.9
Madison	78	1.9	1	4.8	15	2.6	62	1.8

Table 2.4.*(continued)*

County	Total		Fatal		Non-fatal injury		Property damage	
	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	381	1.0	5	4.9	113	1.9	263	0.8
Marshall	42	2.7	0	0.0	11	5.4	31	2.3
Martin	2	1.7	0	0.0	1	4.2	1	1.0
Miami	28	2.7	1	9.1	7	4.8	20	2.3
Monroe	59	1.4	1	14.3	18	2.6	40	1.1
Montgomery	13	1.2	0	0.0	2	1.3	11	1.2
Morgan	24	1.4	0	0.0	6	2.3	18	1.2
Newton	11	2.7	1	11.1	4	7.1	6	1.7
Noble	27	2.0	1	16.7	5	3.0	21	1.8
Ohio	8	3.7	0	0.0	0	0.0	8	4.1
Orange	9	1.5	0	0.0	2	3.0	7	1.3
Owen	15	2.5	0	0.0	3	4.1	12	2.3
Parke	11	2.5	0	0.0	1	2.5	10	2.5
Perry	11	2.5	0	0.0	4	7.5	7	1.8
Pike	7	4.5	0	0.0	3	9.1	4	3.2
Porter	152	3.0	2	11.8	39	4.5	111	2.6
Posey	12	1.9	1	20.0	3	4.1	8	1.5
Pulaski	4	1.0	0	0.0	1	2.1	3	0.8
Putnam	28	2.6	0	0.0	10	6.1	18	2.0
Randolph	10	2.0	0	0.0	3	5.5	7	1.6
Ripley	15	1.9	0	0.0	2	1.7	13	2.0
Rush	7	2.0	1	50.0	0	0.0	6	2.0
St. Joseph	132	1.5	3	13.6	18	1.3	111	1.4
Scott	16	2.8	1	20.0	3	2.7	12	2.6
Shelby	40	3.0	0	0.0	18	7.3	22	2.0
Spencer	7	1.2	0	0.0	3	4.1	4	0.8
Starke	6	1.1	0	0.0	1	1.4	5	1.1
Steuben	27	1.6	0	0.0	5	2.9	22	1.5
Sullivan	23	4.8	0	0.0	6	9.1	17	4.2
Switzerland	3	1.6	0	0.0	0	0.0	3	2.0
Tippecanoe	127	1.8	1	7.7	34	3.5	92	1.5
Tipton	22	5.4	0	0.0	7	7.0	15	4.9
Union	2	1.7	0	0.0	1	10.0	1	1.0
Vanderburgh	78	1.1	0	0.0	19	1.6	59	1.0
Vermillion	8	2.2	0	0.0	3	7.1	5	1.6
Vigo	49	1.4	0	0.0	14	2.7	35	1.2
Wabash	34	3.6	1	16.7	10	7.5	23	2.9
Warren	3	1.1	0	0.0	0	0.0	3	1.2
Warrick	32	2.0	3	27.3	6	3.0	23	1.7
Washington	18	2.5	0	0.0	8	8.2	10	1.6
Wayne	54	2.4	0	0.0	13	4.5	41	2.1
Wells	10	1.4	0	0.0	5	5.6	5	0.8
White	17	2.0	0	0.0	4	3.6	13	1.8
Whitley	22	2.5	1	25.0	5	3.4	16	2.2
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 18, 2019

Notes:
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.
3) Non-fatal injury includes incapacitating, non-incapacitating, and possible injury collisions.
4) 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. Alcohol-impaired drivers in collisions per 10,000 licensed drivers, by county and Indiana State Police district, 2018

Median percent = 8.5   Mean percent = 8.6   n = 3,990 alcohol-impaired collisions

County	Rate
Lake	10.1
Porter	11.8
LaPorte	15.8
St. Joseph	7.5
Elkhart	10.5
LaGrange	11.7
Steuben	10.7
Newton	10.2
Jasper	10.5
Pulaski	4.2
Starke	3.4
Marshall	12.9
Kosciusko	9.3
Noble	8.2
DeKalb	12.5
Fulton	6.8
Whitley	8.5
Allen	14.6
White	9.3
Cass	9.6
Miami	11.7
Wabash	14.7
Huntington	8.9
Wells	4.8
Adams	10.5
Benton	4.8
Carroll	7.2
Howard	9.6
Grant	4.6
Blackford	6.6
Jay	11.3
Warren	4.5
Tippecanoe	11.7
Clinton	14.3
Tipton	18.5
Madison	8.7
Delaware	8.2
Randolph	5.6
Fountain	6.4
Montgomery	4.8
Boone	8.8
Hamilton	7.1
Henry	5.0
Wayne	12.0
Vermillion	
Parke	10.2
Hendricks	4.2
Marion	6.5
Hancock	4.0
Rush	5.6
Fayette	4.8
Union	3.7
Putnam	11.0
Vigo	7.3
Clay	10.8
Owen	9.3
Morgan	4.4
Johnson	5.6
Shelby	12.1
Franklin	2.3
Parke	6.8
Monroe	7.1
Brown	13.4
Bartholomew	8.7
Decatur	12.0
Ripley	5.9
Dearborn	8.4
Sullivan	16.4
Greene	5.9
Jennings	9.4
Ohio	7.7
Lawrence	9.8
Jackson	11.6
Jefferson	9.6
Switzerland	4.4
Knox	7.2
Daviess	10.3
Martin	2.7
Scott	9.4
Orange	6.3
Washington	8.8
Clark	7.9
Gibson	6.1
Pike	7.5
Dubois	9.5
Crawford	5.1
Floyd	11.1
Posey	6.2
Vanderburgh	6.5
Warrick	6.7
Spencer	4.6
Perry	8.3
Harrison	7.3

Legend:

☐ ISP districts

Rate per 10K licensed drivers
- 2.3 - 6.1
- 6.2 - 8.5
- 8.6 - 10.5
- 10.6 - 18.5

Sources: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019; Indiana Bureau of Motor Vehicles, as of March 4, 2019.

Map 2.5. Percentage of county collisions that involved deer, by Indiana State Police district, 2018

Median percent = 15.5　　Mean percent = 15.6　　n = 15,640 deer-involved collisions

ISP districts

Percent deer-involved collisions

- 0.3 - 8.1
- 8.2 - 15.5
- 15.6 - 20.5
- 20.6 - 47.6

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Map 2.6. Work zone collisions per 1,000 total county collisions, by Indiana State Police district, 2018

Median rate = 15.3   Mean rate = 20.8   n = 5,991 work zone collisions

Rate per 1,000 county collisions	
	ISP districts
	Interstates
	0.0 - 7.0
	7.1 - 15.3
	15.4 - 30.1
	30.2 - 81.5

County rates shown on map:

Lake 44.1, Porter 17.7, LaPorte 34.4, St. Joseph 22.0, Elkhart 20.3, LaGrange 2.0, Steuben 18.0, Noble 9.8, DeKalb 7.5, Marshall 13.5, Kosciusko 6.7, Whitley 13.5, Allen 32.2, Starke 29.0, Jasper 5.5, Pulaski 0.0, Fulton 0.0, Wabash 12.8, Newton 62.7, White 9.4, Cass 9.1, Miami 33.8, Wabash 17.0, Huntington, Wells 9.7, Adams 16.6, Benton 12.5, Carroll 9.4, Howard 10.2, Grant 10, Blackford 15.0, Jay 3.2, Warren 3.6, Tippecanoe 32.7, Clinton 31.1, Tipton 53.5, Madison 48.2, Delaware 21.3, Randolph 6.0, Fountain 29.4, Montgomery 49.4, Boone 19.6, Hamilton 23.6, Henry 50.9, Wayne 52.1, Vermillion 16.8, Parke 15.8, Hendricks 10.7, Marion 11.5, Hancock 12.7, Putnam 10.3, Rush 25.1, Fayette 3.3, Union 8.6, Vigo 9.7, Clay 2.8, Owen 81.5, Morgan 28.4, Johnson 12.0, Shelby 15.5, Franklin 20.6, Sullivan 6.3, Greene 4.8, Monroe 61.3, Brown 21.8, Bartholomew 63.7, Decatur 26.5, Ripley 63.8, Dearborn 44.2, Jennings 15.6, Ohio 4.7, Lawrence 15.8, Jackson 44.1, Jefferson 5.1, Switzerland 5.5, Knox 5.4, Daviess 10.0, Martin 33.1, Washington 7.0, Scott 5.2, Clark 46.0, Orange 1.7, Pike 0.0, Dubois 12.5, Crawford 2.8, Floyd, Gibson 30.9, Harrison 6.3, Posey 59.2, Vanderburgh 51.5, Warrick 9.6, Spencer 19.2, Perry 6.9

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 2.5. Passenger vehicle occupants injured in Indiana collisions, by injury status, restraint use, and county, 2018

	Fatal			Incapacitating			Non-incapacitating		
	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained
All counties	582	311	53.4	17,159	2,483	14.5	25,599	2,210	8.6
Mean	6	3	48.0	187	27	19.4	278	24	11.6
Median	4	2	50.0	105	18	18	96	10	11
Minimum	0	0	0.0	9	0	0.0	3	0	0.0
Maximum	64	44	100.0	2,014	225	46.0	6,055	684	32.6
Adams	4	0	0.0	68	5	7.4	56	6	10.7
Allen	18	11	61.1	1,004	133	13.2	1,991	180	9.0
Bartholomew	15	9	60.0	303	32	10.6	436	26	6.0
Benton	3	2	66.7	22	6	27.3	8	1	12.5
Blackford	1	1	100.0	14	3	21.4	14	0	0.0
Boone	7	5	71.4	189	44	23.3	133	23	17.3
Brown	2	0	0.0	55	15	27.3	68	9	13.2
Carroll	2	0	0.0	55	11	20.0	38	1	2.6
Cass	5	3	60.0	100	24	24.0	112	17	15.2
Clark	6	4	66.7	374	43	11.5	387	34	8.8
Clay	3	1	33.3	87	40	46.0	41	12	29.3
Clinton	5	1	20.0	128	16	12.5	100	5	5.0
Crawford	1	0	0.0	20	4	20.0	22	6	27.3
Daviess	1	0	0.0	74	23	31.1	48	7	14.6
Dearborn	7	6	85.7	188	34	18.1	96	18	18.8
Decatur	3	2	66.7	101	25	24.8	57	6	10.5
DeKalb	5	1	20.0	113	19	16.8	154	14	9.1
Delaware	12	4	33.3	316	41	13.0	581	30	5.2
Dubois	3	1	33.3	110	22	20.0	129	2	1.6
Elkhart	8	3	37.5	678	56	8.3	491	27	5.5
Fayette	4	3	75.0	74	10	13.5	47	7	14.9
Floyd	4	2	50.0	240	13	5.4	234	9	3.8
Fountain	1	0	0.0	27	12	44.4	17	5	29.4
Franklin	4	3	75.0	82	25	30.5	33	5	15.2
Fulton	4	4	100.0	36	13	36.1	29	4	13.8
Gibson	8	3	37.5	125	24	19.2	152	19	12.5
Grant	9	8	88.9	158	28	17.7	175	30	17.1
Greene	2	2	100.0	111	24	21.6	57	11	19.3
Hamilton	17	8	47.1	551	47	8.5	1,004	24	2.4
Hancock	4	1	25.0	305	38	12.5	208	10	4.8
Harrison	12	6	50.0	197	27	13.7	98	16	16.3
Hendricks	7	2	28.6	390	56	14.4	380	47	12.4
Henry	7	3	42.9	130	17	13.1	112	11	9.8
Howard	15	10	66.7	316	63	19.9	272	30	11.0
Huntington	9	3	33.3	119	17	14.3	127	5	3.9
Jackson	2	0	0.0	155	30	19.4	127	18	14.2
Jasper	6	4	66.7	131	31	23.7	132	10	7.6
Jay	3	2	66.7	45	10	22.2	54	9	16.7
Jefferson	3	2	66.7	107	31	29.0	77	21	27.3
Jennings	7	5	71.4	75	15	20.0	62	5	8.1
Johnson	10	3	30.0	391	62	15.9	373	27	7.2
Knox	4	4	100.0	112	28	25.0	105	18	17.1
Kosciusko	11	8	72.7	32	11	34.4	465	36	7.7
LaGrange	4	0	0.0	24	7	29.2	116	16	13.8
Lake	32	15	46.9	2,014	190	9.4	1,798	82	4.6
LaPorte	16	7	43.8	385	44	11.4	466	22	4.7
Lawrence	7	4	57.1	119	16	13.4	191	41	21.5
Madison	15	6	40.0	462	38	8.2	329	23	7.0

continued on next page

Table 2.5. *(continued)*

	Fatal			Incapacitating			Non-incapacitating		
	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained	Total	Unrestrained	% Unrestrained
Marion	64	44	68.8	1,463	225	15.4	6,055	684	11.3
Marshall	8	4	50.0	128	16	12.5	138	14	10.1
Martin	0	0	0.0	19	2	10.5	14	0	0.0
Miami	8	6	75.0	117	26	22.2	81	10	12.3
Monroe	5	3	60.0	292	63	21.6	507	60	11.8
Montgomery	5	3	60.0	110	9	8.2	99	7	7.1
Morgan	8	2	25.0	192	24	12.5	164	11	6.7
Newton	6	3	50.0	50	15	30.0	25	4	16.0
Noble	5	2	40.0	111	28	25.2	119	22	18.5
Ohio	1	0	0.0	10	1	0.0	13	3	23.1
Orange	1	1	100.0	34	12	35.3	46	15	32.6
Owen	2	0	0.0	42	14	33.3	51	10	19.6
Parke	0	0	0.0	30	10	33.3	22	4	18.2
Perry	2	2	100.0	38	13	34.2	26	6	23.1
Pike	0	0	0.0	26	4	15.4	11	1	9.1
Porter	11	6	54.5	512	45	8.8	572	28	4.9
Posey	4	2	50.0	48	12	25.0	36	5	13.9
Pulaski	0	0		29	13	44.8	16	3	18.8
Putnam	3	2	66.7	120	30	25.0	96	14	14.6
Randolph	4	2	50.0	43	7	16.3	26	1	3.8
Ripley	3	3	100.0	101	22	21.8	50	13	26.0
Rush	2	2	100.0	62	7	11.3	29	1	3.4
St. Joseph	22	12	54.5	777	64	8.2	993	62	6.2
Scott	4	3	75.0	87	10	11.5	74	10	13.5
Shelby	8	3	37.5	178	27	15.2	127	15	11.8
Spencer	3	2	66.7	66	18	27.3	25	5	20.0
Starke	0	0	0.0	90	16	17.8	60	11	18.3
Steuben	4	3	75.0	115	29	25.2	88	9	10.2
Sullivan	4	2	50.0	46	18	39.1	42	7	16.7
Switzerland	1	0	0.0	24	7	29.2	15	0	0.0
Tippecanoe	8	4	50.0	78	12	15.4	1,034	43	4.2
Tipton	4	3	75.0	75	13	17.3	65	4	6.2
Union	1	0	0.0	9	0	0.0	3	0	0.0
Vanderburgh	1	1	100.0	49	7	14.3	1,616	75	4.6
Vermillion	2	1	50.0	46	6	13.0	20	1	5.0
Vigo	5	3	60.0	358	36	10.1	287	17	5.9
Wabash	8	4	50.0	117	25	21.4	70	6	8.6
Warren	2	1	50.0	19	7	36.8	13	4	30.8
Warrick	6	3	50.0	31	4	12.9	241	19	7.9
Washington	3	0	0.0	62	7	11.3	63	6	9.5
Wayne	4	2	50.0	159	25	15.7	166	4	2.4
Wells	4	2	50.0	62	10	16.1	45	1	2.2
White	4	3	75.0	103	14	13.6	58	8	13.8
Whitley	4	0	0.0	119	7	5.9	96	2	2.1

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Non-incapacitating injuries include those reported as non-incapacitating, possible, not reported, refused, and unknown injuries.
2) Includes only vehicle occupants (drivers and passengers). Pedestrians, pedalcyclists and animal-drawn vehicle operators are excluded.
3) 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 Indiana State Police district, 2018

LaPorte 8.4
St. Joseph 7.7
Elkhart 7.3
LaGrange 16.0
Steuben 19.8
Lake 7.5
Porter 7.2
Marshall 12.4
Kosciusko 10.8
Noble 22.1
DeKalb 12.5
Starke 18.0
Whitley 4.1
Allen 10.8
Newton 27.2
Jasper 16.7
Pulaski 35.6
Fulton 30.4
Wabash 17.9
Huntington
White 15.2
Cass 20.3
Miami 20.4
Wells 9.8
Adams 8.6
Benton 27.3
Carroll 12.6
Grant 19.3
Blackford 13.6
Jay 20.6
Warren 35.3
Tippecanoe 5.3
Howard 17.1
Clinton 9.4
Tipton 13.9
Madison 8.3
Delaware 8.3
Randolph 13.7
Fountain 37.8
Montgomery 8.9
Boone 21.9
Hamilton 5.0
Henry 12.4
Wayne 9.4
Vermillion
Parke 26.9
Hendricks 13.5
Marion 12.6
Hancock 9.5
Rush 10.8
Fayette 16.0
Union 0.0
Putnam 21.0
Vigo 8.6
Clay 40.5
Owen 25.3
Morgan 10.2
Johnson 11.9
Shelby 14.4
Franklin 27.7
Decatur 20.5
Sullivan 29.3
Greene 21.8
Monroe 15.7
Brown 19.2
Bartholomew 8.9
Jennings 17.4
Ripley 24.7
Dearborn 19.9
Lawrence 19.2
Jackson 16.9
Jefferson 28.9
Switzerland 17.5
Ohio 16.7
Knox 22.6
Daviess 24.4
Martin 6.1
Orange 34.6
Washington 10.2
Scott 13.9
Clark 10.8
Pike 13.5
Dubois 10.3
Crawford 23.3
Floyd 5.0
Gibson 16.1
Harrison 16
Posey 21.6
Vanderburgh 5.0
Warrick 9.4
Spencer 26.6
Perry 31.8

ISP districts

Percent unrestrained injured occupants
- 0.0 - 9.8
- 9.9 - 15.4
- 15.5 - 21.0
- 21.1 - 40.5

Median percent unrestrained = 15.4

Mean percent unrestrained = 16.5

n = 43,340 passenger vehicle occupants injured in collisions

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 2.6. Young drivers (ages 15-20) involved in Indiana collisions, by injury status and county, 2018

| | | Young drivers in collisions | | | | | | | | | |
| | | Total | | Fatal | | Incapacitating | | Non-incapacitating | | 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	337,037	42,250	12.5	126	0.3		7.1	3,887	9.2	35,225	83.4
Mean	3,663	459	13.7	1	0.5	33	9.2	42	7.1	383	83.2
Median	1,435	177	13.7	1	0.2	19	8.9	14	6.5	149	83.6
Minimum	159	18	9.7	0	0.0	1	0.6	0	0.0	17	63.2
Maximum	62,646	6,058	21.6	7	2.9	278	25.3	797	16.6	5,041	94.4
Adams	968	145	15.0	0	0.0	14	9.7	13	9.0	118	81.4
Allen	21,192	2,973	14.0	6	0.2	166	5.6	366	12.3	2,435	81.9
Bartholomew	3,553	435	12.2	4	0.9	50	11.5	57	13.1	324	74.5
Benton	206	34	16.5	1	2.9	2	5.9	3	8.8	28	82.4
Blackford	343	42	12.2	0	0.0	3	7.1	4	9.5	35	83.3
Boone	3,153	412	13.1	3	0.7	27	6.6	24	5.8	358	86.9
Brown	707	99	14.0	0	0.0	7	7.1	14	14.1	78	78.8
Carroll	673	84	12.5	0	0.0	6	7.1	2	2.4	76	90.5
Cass	1,738	242	13.9	2	0.8	22	9.1	14	5.8	204	84.3
Clark	6,910	818	11.8	0	0.0	71	8.7	42	5.1	705	86.2
Clay	1,028	149	14.5	1	0.7	15	10.1	3	2.0	130	87.2
Clinton	1,526	215	14.1	0	0.0	22	10.2	11	5.1	182	84.7
Crawford	423	47	11.1	0	0.0	3	6.4	4	8.5	40	85.1
Daviess	440	61	13.9	0	0.0	7	11.5	6	9.8	48	78.7
Dearborn	2,430	345	14.2	0	0.0	49	14.2	15	4.3	281	81.4
Decatur	1,323	163	12.3	0	0.0	23	14.1	9	5.5	131	80.4
DeKalb	2,049	287	14.0	1	0.3	26	9.1	20	7.0	240	83.6
Delaware	6,236	975	15.6	1	0.1	67	6.9	116	11.9	791	81.1
Dubois	2,145	317	14.8	0	0.0	33	10.4	21	6.6	263	83.0
Elkhart	11,766	1,499	12.7	2	0.1	123	8.2	63	4.2	1,311	87.5
Fayette	947	144	15.2	0	0.0	11	7.6	10	6.9	123	85.4
Floyd	4,908	652	13.3	2	0.3	45	6.9	39	6.0	566	86.8
Fountain	542	66	12.2	1	1.5	4	6.1	2	3.0	59	89.4
Franklin	680	147	21.6	0	0.0	16	10.9	7	4.8	124	84.4
Fulton	784	94	12.0	1	1.1	3	3.2	5	5.3	85	90.4
Gibson	1,759	210	11.9	3	1.4	20	9.5	21	10.0	166	79.0
Grant	3,142	410	13.0	2	0.5	24	5.9	31	7.6	353	86.1
Greene	1,056	169	16.0	0	0.0	23	13.6	15	8.9	131	77.5
Hamilton	15,281	2,099	13.7	0	0.0	122	5.8	138	6.6	1,839	87.6
Hancock	3,255	468	14.4	2	0.4	52	11.1	38	8.1	376	80.3
Harrison	1,783	259	14.5	3	1.2	36	13.9	14	5.4	206	79.5
Hendricks	7,278	1,092	15.0	5	0.5	66	6.0	65	6.0	956	87.5
Henry	1,432	169	11.8	2	1.2	19	11.2	16	9.5	132	78.1
Howard	4,000	548	13.7	5	0.9	53	9.7	48	8.8	442	80.7
Huntington	1,708	223	13.1	2	0.9	26	11.7	12	5.4	183	82.1
Jackson	2,574	347	13.5	0	0.0	38	11.0	18	5.2	291	83.9
Jasper	1,767	239	13.5	0	0.0	13	5.4	26	10.9	200	83.7
Jay	813	124	15.3	1	0.8	12	9.7	8	6.5	103	83.1
Jefferson	1,449	176	12.1	0	0.0	12	6.8	9	5.1	155	88.1
Jennings	1,109	161	14.5	2	1.2	16	9.9	10	6.2	133	82.6
Johnson	6,268	898	14.3	4	0.4	85	9.5	59	6.6	750	83.5
Knox	1,322	223	16.9	0	0.0	19	8.5	23	10.3	181	81.2
Kosciusko	3,907	513	13.1	4	0.8	8	1.6	72	14.0	429	83.6
LaGrange	1,315	162	12.3	2	1.2	3	1.9	15	9.3	142	87.7
Lake	27,698	2,735	9.9	7	0.3	278	10.2	245	9.0	2,205	80.6
LaPorte	5,428	624	11.5	7	1.1	57	9.1	49	7.9	511	81.9
Lawrence	2,080	298	14.3	1	0.3	20	6.7	21	7.0	256	85.9
Madison	6,372	791	12.4	4	0.5	95	12.0	48	6.1	644	81.4

Table 2.6. *(continued)*

County	All drivers in collisions	Total Count	Total As % of total drivers in collisions	Fatal Count	Fatal As % of all young drivers in collisions	Incapacitating Count	Incapacitating As % of all young drivers in collisions	Non-incapacitating Count	Non-incapacitating As % of all young drivers in collisions	Other/no injury Count	Other/no injury As % of all young drivers in collisions
Marion	62,646	6,058	9.7	7	0.1	213	3.5	797	13.2	5,041	83.2
Marshall	2,119	287	13.5	1	0.3	25	8.7	20	7.0	241	84.0
Martin	176	27	15.3	0	0.0	2	7.4	1	3.7	24	88.9
Miami	1,450	156	10.8	1	0.6	14	9.0	12	7.7	129	82.7
Monroe	6,192	1,073	17.3	0	0.0	76	7.1	117	10.9	880	82.0
Montgomery	1,642	222	13.5	0	0.0	25	11.3	15	6.8	182	82.0
Morgan	2,742	421	15.4	2	0.5	37	8.8	26	6.2	356	84.6
Newton	541	74	13.7	2	2.7	11	14.9	2	2.7	59	79.7
Noble	1,784	268	15.0	1	0.4	22	8.2	24	9.0	221	82.5
Ohio	250	46	18.4	1	2.2	1	2.2	2	4.3	42	91.3
Orange	809	108	13.3	0	0.0	10	9.3	6	5.6	92	85.2
Owen	834	126	15.1	0	0.0	5	4.0	8	6.3	113	89.7
Parke	546	77	14.1	0	0.0	8	10.4	3	3.9	66	85.7
Perry	590	91	15.4	0	0.0	5	5.5	3	3.3	83	91.2
Pike	221	36	16.3	0	0.0	9	25.0	3	8.3	24	66.7
Porter	7,999	1,030	12.9	2	0.2	85	8.3	108	10.5	835	81.1
Posey	848	104	12.3	0	0.0	5	4.8	10	9.6	89	85.6
Pulaski	474	54	11.4	0	0.0	4	7.4	3	5.6	47	87.0
Putnam	1,438	200	13.9	1	0.5	18	9.0	13	6.5	168	84.0
Randolph	644	95	14.8	0	0.0	16	16.8	3	3.2	76	80.0
Ripley	1,112	165	14.8	2	1.2	25	15.2	7	4.2	131	79.4
Rush	502	70	13.9	1	1.4	12	17.1	2	2.9	55	78.6
St. Joseph	13,853	1,611	11.6	1	0.1	129	8.0	122	7.6	1,359	84.4
Scott	916	127	13.9	0	0.0	19	15.0	8	6.3	100	78.7
Shelby	1,848	231	12.5	2	0.9	26	11.3	22	9.5	181	78.4
Spencer	777	138	17.8	1	0.7	18	13.0	7	5.1	112	81.2
Starke	736	90	12.2	0	0.0	14	15.6	3	3.3	73	81.1
Steuben	2,151	270	12.6	0	0.0	26	9.6	17	6.3	227	84.1
Sullivan	615	101	16.4	2	2.0	9	8.9	5	5.0	85	84.2
Switzerland	227	27	11.9	0	0.0	4	14.8	2	7.4	21	77.8
Tippecanoe	10,652	1,492	14.0	4	0.3	11	0.7	220	14.7	1,257	84.2
Tipton	591	87	14.7	1	1.1	22	25.3	9	10.3	55	63.2
Union	159	18	11.3	0	0.0	1	5.6	0	0.0	17	94.4
Vanderburgh	11,925	1,493	12.5	3	0.2	15	1.0	248	16.6	1,227	82.2
Vermillion	470	65	13.8	1	1.5	12	18.5	0	0.0	52	80.0
Vigo	5,344	769	14.4	2	0.3	58	7.5	45	5.9	664	86.3
Wabash	1,317	177	13.4	1	0.6	23	13.0	11	6.2	142	80.2
Warren	319	40	12.5	0	0.0	3	7.5	2	5.0	35	87.5
Warrick	2,372	353	14.9	1	0.3	2	0.6	45	12.7	305	86.4
Washington	960	113	11.8	0	0.0	10	8.8	7	6.2	96	85.0
Wayne	3,259	413	12.7	1	0.2	34	8.2	28	6.8	350	84.7
Wells	1,010	138	13.7	3	2.2	7	5.1	14	10.1	114	82.6
White	1,206	158	13.1	1	0.6	12	7.6	8	5.1	137	86.7
Whitley	1,305	168	12.9	0	0.0	17	10.1	8	4.8	143	85.1

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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 Indiana State Police district, 2018

Median rate = 104.0   Mean rate = 104.5   n = 39,317 young drivers

County	Rate
LaPorte	117.2
St. Joseph	127.3
Elkhart	131.8
LaGrange	78.9
Steuben	158.5
Lake	115.9
Porter	102.9
Noble	98.4
DeKalb	112.7
Marshall	104.0
Starke	69.7
Kosciusko	116.6
Whitley	83.0
Allen	142.9
Newton	90.1
Jasper	114.0
Pulaski	73.7
Fulton	85.5
Wabash	100.4
Huntington	119.0
Wells	84.0
Adams	83.6
White	110.5
Cass	115.3
Miami	85.0
Benton	63.7
Carroll	70.0
Howard	127.8
Grant	129.2
Blackford	63.3
Jay	112.9
Warren	76.6
Tippecanoe	188.0
Clinton	108.6
Tipton	94.0
Madison	128.3
Delaware	202.1
Randolph	67.3
Fountain	69.3
Montgomery	108.6
Boone	88.0
Hamilton	89.2
Henry	66.6
Wayne	139.1
Vermillion	—
Parke	107.4
Hendricks	97.9
Marion	162.6
Hancock	95.3
Rush	75.0
Fayette	118.2
Union	40.4
Putnam	105.3
Vigo	165.0
Clay	105.4
Morgan	96.8
Johnson	96.1
Shelby	92.9
Franklin	94.4
Owen	108.5
Monroe	199.4
Brown	122.4
Bartholomew	98.9
Decatur	106.9
Sullivan	86.4
Greene	88.2
Jennings	104.1
Ripley	86.4
Dearborn	104.2
Lawrence	120.7
Jackson	137.4
Jefferson	108.2
Switzerland	56.8
Ohio	—
Knox	124.9
Daviess	36.2
Martin	47.1
Scott	108.4
Washington	71.6
Clark	140.0
Pike	50.7
Dubois	112.7
Orange	95.5
Crawford	81.6
Floyd	149.6
Gibson	110.2
Harrison	113.2
Perry	92.3
Posey	71.6
Vanderburgh	150.0
Warrick	86.7
Spencer	110.0

Legend

ISP districts

Rate per 1,000 licensed young drivers

- 36.2 - 84.0
- 84.1 - 104.0
- 104.1 - 117.2
- 117.3 - 202.1

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 2.7. Motorcyclists involved in Indiana collisions, by injury status and county, 2018

	Total individuals involved		Fatal		Incapacitating		Non- incapacitating		No injury	
	Count	County rank	Count	As % county	Count	As % county	Count	As % county	Count	As % county
All counties	2,871	N/A	112	3.9	1,187	41.3	743	25.9	829	28.9
Mean	31	N/A	1	4.2	13	45.9	8	20.3	9	28.5
Median	17	N/A	1	1.0	8	44.0	3	20.0	4	28.6
Minimum	0	N/A	0	0.0	0	0.0	0	0.0	0	0.0
Maximum	322	N/A	15	40.0	79	100.0	128	67.0	100	75.0
Adams	9	71	0	0.0	3	33.3	2	22.2	4	44.4
Allen	169	2	8	4.7	64	37.9	43	25.4	54	32.0
Bartholomew	46	18	0	0.0	27	58.7	10	21.7	9	19.6
Benton	1	90	0	0.0	1	100.0	0	0.0	0	0.0
Blackford	4	84	0	0.0	1	25.0	1	25.0	2	50.0
Boone	21	34	0	0.0	8	38.1	2	9.5	11	52.4
Brown	34	24	0	0.0	16	47.1	9	26.5	9	26.5
Carroll	12	56	1	8.3	8	66.7	0	0.0	3	25.0
Cass	18	43	0	0.0	13	72.2	2	11.1	3	16.7
Clark	65	11	3	4.6	24	36.9	14	21.5	24	36.9
Clay	8	73	0	0.0	5	62.5	3	37.5	0	0.0
Clinton	14	50	0	0.0	6	42.9	3	21.4	5	35.7
Crawford	5	82	0	0.0	3	60.0	0	0.0	2	40.0
Daviess	7	78	0	0.0	4	57.1	2	28.6	1	14.3
Dearborn	12	56	0	0.0	6	50.0	0	0.0	6	50.0
Decatur	15	49	1	6.7	4	26.7	3	20.0	7	46.7
DeKalb	33	25	1	3.0	16	48.5	11	33.3	5	15.2
Delaware	47	16	2	4.3	19	40.4	15	31.9	11	23.4
Dubois	21	34	0	0.0	10	47.6	3	14.3	8	38.1
Elkhart	108	5	4	3.7	47	43.5	13	12.0	44	40.7
Fayette	10	66	1	10.0	3	30.0	3	30.0	3	30.0
Floyd	36	23	1	2.8	13	36.1	8	22.2	14	38.9
Fountain	4	84	0	0.0	1	25.0	0	0.0	3	75.0
Franklin	11	61	2	18.2	5	45.5	1	9.1	3	27.3
Fulton	7	78	0	0.0	3	42.9	1	14.3	3	42.9
Gibson	17	46	0	0.0	9	52.9	1	5.9	7	41.2
Grant	32	27	0	0.0	8	25.0	9	28.1	15	46.9
Greene	10	66	1	10.0	4	40.0	3	30.0	2	20.0
Hamilton	69	10	0	0.0	30	43.5	20	29.0	19	27.5
Hancock	21	34	2	9.5	11	52.4	3	14.3	5	23.8
Harrison	21	34	2	9.5	13	61.9	2	9.5	4	19.0
Hendricks	55	12	3	5.5	24	43.6	3	5.5	25	45.5
Henry	21	34	0	0.0	17	81.0	2	9.5	2	9.5
Howard	46	18	0	0.0	23	50.0	9	19.6	14	30.4
Huntington	13	55	0	0.0	3	23.1	5	38.5	5	38.5
Jackson	31	28	4	12.9	13	41.9	2	6.5	12	38.7
Jasper	20	39	0	0.0	10	50.0	7	35.0	3	15.0
Jay	9	71	0	0.0	2	22.2	3	33.3	4	44.4
Jefferson	17	46	0	0.0	12	70.6	1	5.9	4	23.5
Jennings	8	73	0	0.0	3	37.5	2	25.0	3	37.5
Johnson	53	13	2	3.8	30	56.6	10	18.9	11	20.8
Knox	14	50	1	7.1	8	57.1	3	21.4	2	14.3
Kosciusko	47	16	1	2.1	9	19.1	26	55.3	11	23.4
LaGrange	18	43	0	0.0	4	22.2	7	38.9	7	38.9
Lake	160	3	6	3.8	71	44.4	43	26.9	40	25.0
LaPorte	43	20	1	2.3	24	55.8	9	20.9	9	20.9
Lawrence	18	43	0	0.0	9	50.0	7	38.9	2	11.1
Madison	49	15	1	2.0	26	53.1	8	16.3	14	28.6

continued on next page

Table 2.7. *(continued)*

	Total individuals involved		Fatal		Incapacitating		Non- incapacitating		No injury	
	Count	County rank	Count	As % county	Count	As % county	Count	As % county	Count	As % county
Marion	322	1	15	4.7	79	24.5	128	39.8	100	31.1
Marshall	20	39	2	10.0	6	30.0	5	25.0	7	35.0
Martin	3	87	0	0.0	2	66.7	0	0.0	1	33.3
Miami	33	25	3	9.1	18	54.5	5	15.2	7	21.2
Monroe	92	6	3	3.3	44	47.8	27	29.3	18	19.6
Montgomery	19	42	0	0.0	11	57.9	5	26.3	3	15.8
Morgan	41	22	1	2.4	24	58.5	4	9.8	12	29.3
Newton	8	73	3	37.5	2	25.0	2	25.0	1	12.5
Noble	24	30	1	4.2	8	33.3	4	16.7	11	45.8
Ohio	4	84	0	0.0	4	100.0	0	0.0	0	0.0
Orange	12	56	0	0.0	3	25.0	5	41.7	4	33.3
Owen	10	66	0	0.0	3	30.0	3	30.0	4	40.0
Parke	1	90	0	0.0	1	100.0	0	0.0	0	0.0
Perry	3	87	0	0.0	3	100.0	0	0.0	0	0.0
Pike	0	92	0	0.0	0	0.0	0	0.0	0	0.0
Porter	80	9	5	6.3	39	48.8	17	21.3	19	23.8
Posey	11	61	1	9.1	4	36.4	2	18.2	4	36.4
Pulaski	11	61	0	0.0	7	63.6	0	0.0	4	36.4
Putnam	12	56	0	0.0	8	66.7	0	0.0	4	33.3
Randolph	11	61	0	0.0	8	72.7	1	9.1	2	18.2
Ripley	10	66	1	10.0	4	40.0	3	30.0	2	20.0
Rush	7	78	0	0.0	3	42.9	3	42.9	1	14.3
St. Joseph	115	4	3	2.6	56	48.7	23	20.0	33	28.7
Scott	10	66	1	10.0	4	40.0	2	20.0	3	30.0
Shelby	27	29	1	3.7	13	48.1	9	33.3	4	14.8
Spencer	8	73	1	12.5	5	62.5	1	12.5	1	12.5
Starke	14	50	3	21.4	6	42.9	1	7.1	4	28.6
Steuben	24	30	1	4.2	10	41.7	4	16.7	9	37.5
Sullivan	14	50	0	0.0	7	50.0	3	21.4	4	28.6
Switzerland	8	73	1	12.5	2	25.0	0	0.0	5	62.5
Tippecanoe	88	8	2	2.3	11	12.5	59	67.0	16	18.2
Tipton	11	61	1	9.1	10	90.9	0	0.0	0	0.0
Union	3	87	0	0.0	0	0.0	2	66.7	1	33.3
Vanderburgh	90	7	5	5.6	16	17.8	42	46.7	27	30.0
Vermillion	6	81	0	0.0	2	33.3	0	0.0	4	66.7
Vigo	52	14	1	1.9	31	59.6	7	13.5	13	25.0
Wabash	24	30	0	0.0	12	50.0	4	16.7	8	33.3
Warren	5	82	2	40.0	1	20.0	0	0.0	2	40.0
Warrick	20	39	2	10.0	3	15.0	12	60.0	3	15.0
Washington	24	30	4	16.7	7	29.2	7	29.2	6	25.0
Wayne	42	21	0	0.0	17	40.5	11	26.2	14	33.3
Wells	14	50	0	0.0	5	35.7	5	35.7	4	28.6
White	12	56	0	0.0	7	58.3	2	16.7	3	25.0
Whitley	17	46	1	5.9	8	47.1	1	5.9	7	41.2
Unknown	0	na	0	na	0	na	0	na	0	na

Source: IIndiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
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 Indiana State Police district, 2018

Median percent = 1.6   Mean percent = 1.8   n = 3,131 motorcycle-involved crashes
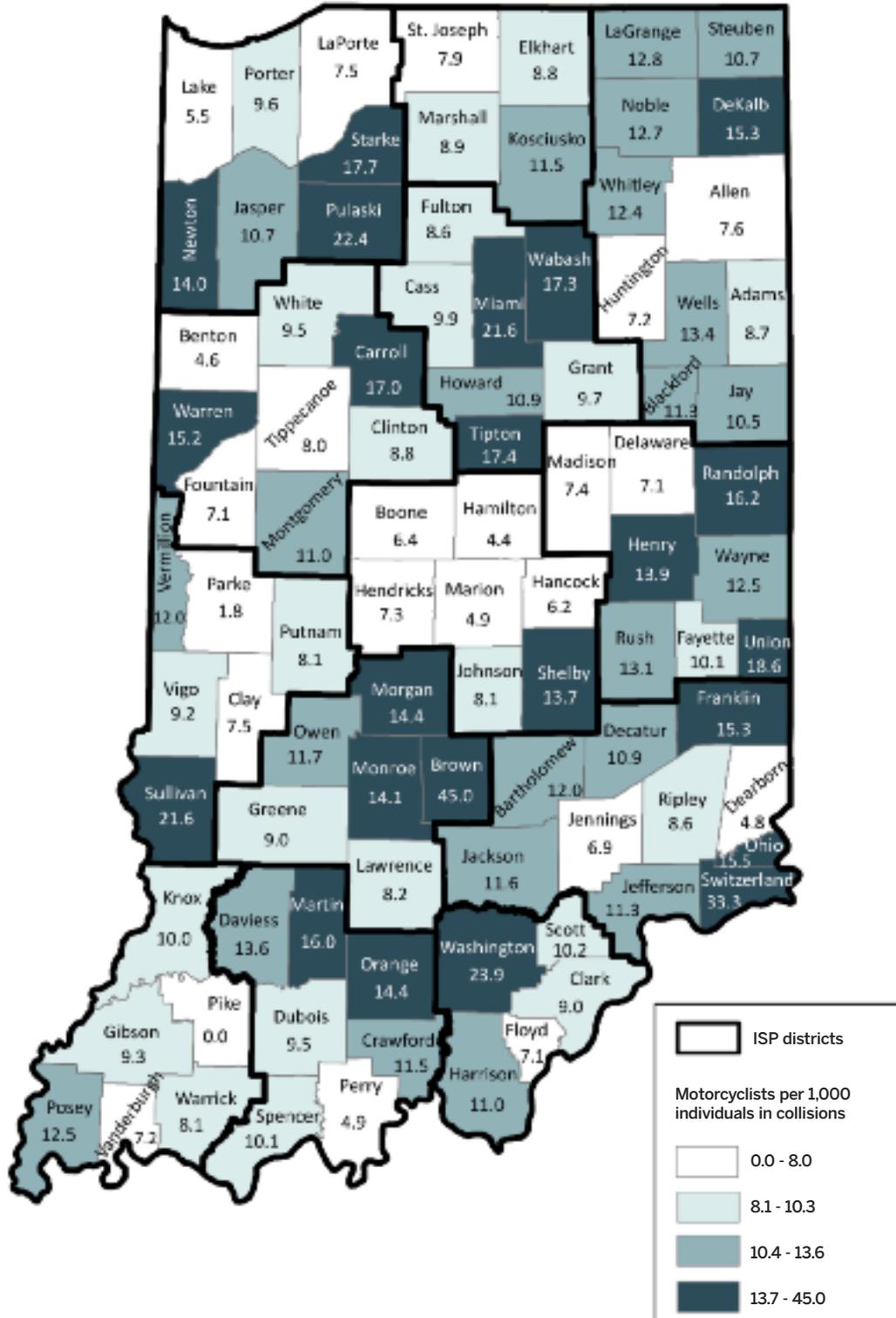
ISP districts

Motorcyclists per 1,000
individuals in collisions

0.0 - 8.0

8.1 - 10.3

10.4 - 13.6

13.7 - 45.0

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Median percent = 7.4   Mean percent = 8.2   n = 28,621 hit-and-run crashes

▢	ISP districts

Percent of total county collisions

▢	2.3 - 5.7
▢	5.8 - 7.4
▢	7.5 - 9.2
▢	9.3 - 20.9
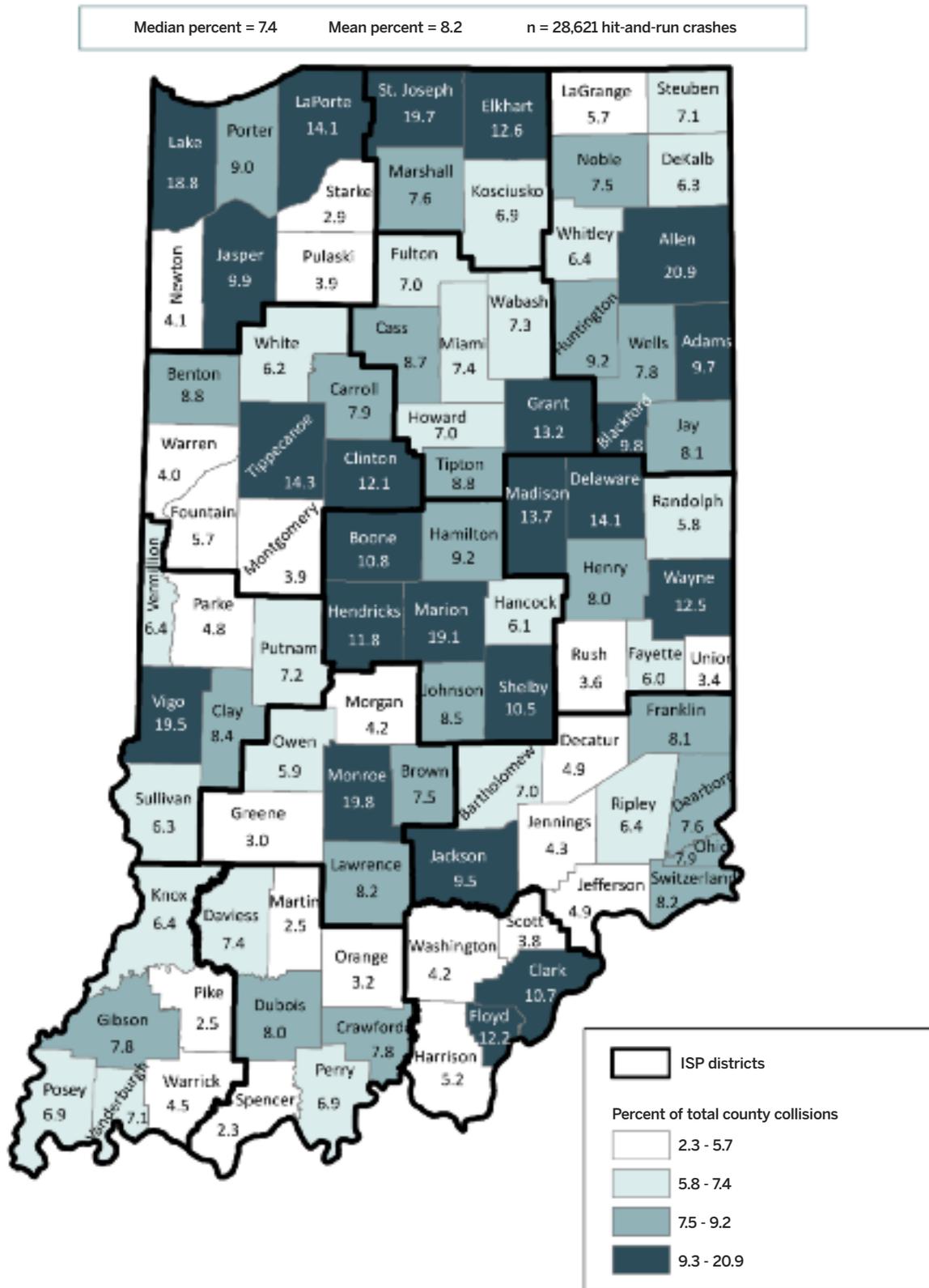
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 2.8. County ranks by collision metric, 2018
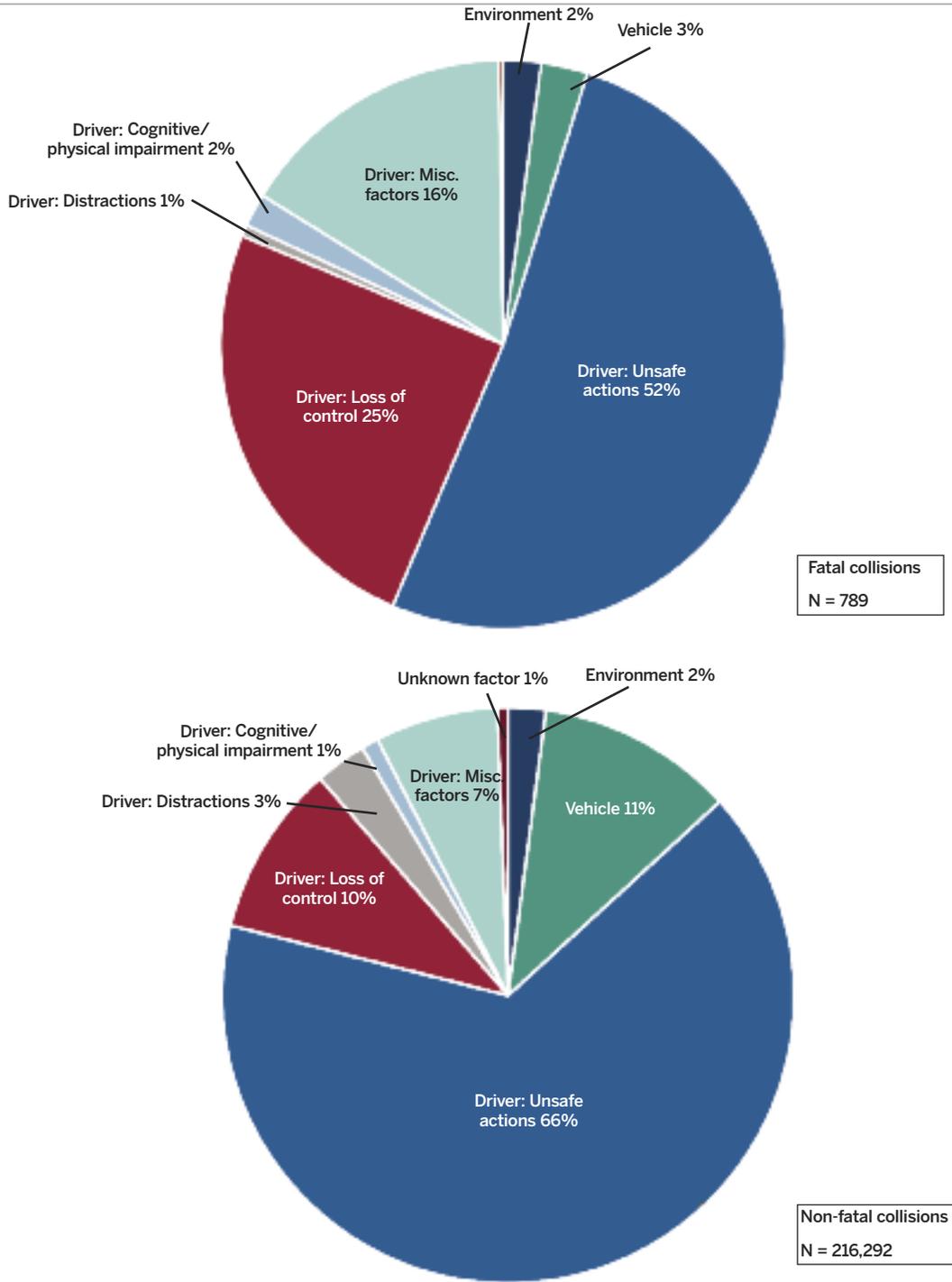
Low — High

County	Collision metric						Avg score of 6 metrics
	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	
Adams	52	47	9	63	78	71	53
Allen	75	42	16	72	64	10	47
Bartholomew	15	57	31	33	75	50	44
Benton	6	52	58	89	11	86	50
Blackford	77	92	33	38	51	87	63
Boone	61	61	37	83	21	64	55
Brown	55	26	8	1	33	20	24
Carroll	45	11	40	11	55	81	41
Cass	28	71	39	51	28	27	41
Clark	66	74	71	59	66	11	58
Clay	65	34	13	73	1	43	38
Clinton	43	37	12	62	72	37	44
Crawford	71	43	86	36	18	73	55
Daviess	87	27	1	24	17	92	41
Dearborn	40	56	48	88	29	45	51
Decatur	30	8	23	43	26	42	29
DeKalb	39	9	15	15	57	31	28
Delaware	46	53	73	80	81	1	56
Dubois	82	48	41	55	67	32	54
Elkhart	76	15	59	61	84	14	52
Fayette	26	88	79	48	43	23	51
Floyd	64	79	38	81	89	9	60
Fountain	84	63	61	79	2	83	62
Franklin	16	18	92	16	10	57	35
Fulton	4	70	69	64	7	68	47
Gibson	21	30	80	56	42	34	44
Grant	53	28	91	52	31	16	45
Greene	72	76	66	58	22	63	60
Hamilton	86	83	45	90	88	62	76
Hancock	79	59	82	84	71	56	72
Harrison	5	50	65	41	45	29	39
Hendricks	80	55	84	76	53	52	67
Henry	37	32	62	22	58	85	49
Howard	25	80	30	42	38	17	39
Huntington	14	35	54	78	70	22	46
Jackson	11	44	47	35	39	13	32
Jasper	8	20	42	45	40	28	31
Jay	50	89	22	46	25	30	44
Jefferson	59	64	34	39	9	40	41
Jennings	9	78	28	82	37	46	47
Johnson	78	69	63	67	60	54	65
Knox	54	68	51	50	19	19	44
Kosciusko	32	62	50	36	63	25	45
LaGrange	44	7	36	27	44	74	39
Lake	69	5	53	85	83	26	54
LaPorte	31	14	7	74	79	24	38
Lawrence	35	66	32	66	32	21	42
Madison	38	75	57	75	80	15	57

Table 2.8. (continued)

Low   High

County	Collision metric						Avg score of 6 metrics
	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	
Marion	63	41	89	86	56	6	57
Marshall	22	29	18	60	59	47	39
Martin	89	31	67	13	86	90	63
Miami	10	23	17	5	27	69	25
Monroe	83	24	75	20	46	2	42
Montgomery	23	51	83	40	76	36	52
Morgan	58	33	76	18	68	53	51
Newton	1	12	19	21	12	61	21
Noble	47	16	44	28	20	51	34
Ohio	7	91	5	14	41	8	28
Orange	88	77	72	19	5	55	53
Owen	70	85	21	34	15	38	44
Parke	89	54	26	91	13	41	52
Perry	68	67	24	87	6	60	52
Pike	89	1	4	92	53	89	55
Porter	62	10	10	53	85	48	45
Posey	29	17	55	29	23	78	39
Pulaski	89	39	90	4	3	77	50
Putnam	42	3	20	69	24	44	34
Randolph	41	86	46	12	52	84	54
Ripley	34	65	56	65	16	66	50
Rush	60	40	52	26	65	76	53
St. Joseph	67	25	74	71	82	18	56
Scott	18	45	14	47	49	39	35
Shelby	24	13	11	23	48	59	30
Spencer	20	73	81	49	14	35	45
Starke	56	60	87	8	34	82	55
Steuben	49	19	70	44	30	7	37
Sullivan	12	87	3	6	8	67	31
Switzerland	13	49	68	2	36	88	43
Tippecanoe	81	6	60	70	87	4	51
Tipton	3	2	2	9	50	58	21
Union	51	84	64	7	92	91	65
Vanderburgh	74	90	85	77	90	3	70
Vermillion	57	4	35	32	61	80	45
Vigo	73	81	78	57	77	5	62
Wabash	17	38	6	10	35	49	26
Warren	2	21	88	17	4	75	35
Warrick	33	58	43	68	74	65	57
Washington	19	72	25	3	69	79	45
Wayne	85	46	29	30	73	12	46
Wells	27	82	77	25	62	70	57
White	36	22	49	54	47	33	40
Whitley	48	36	27	31	91	72	51

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
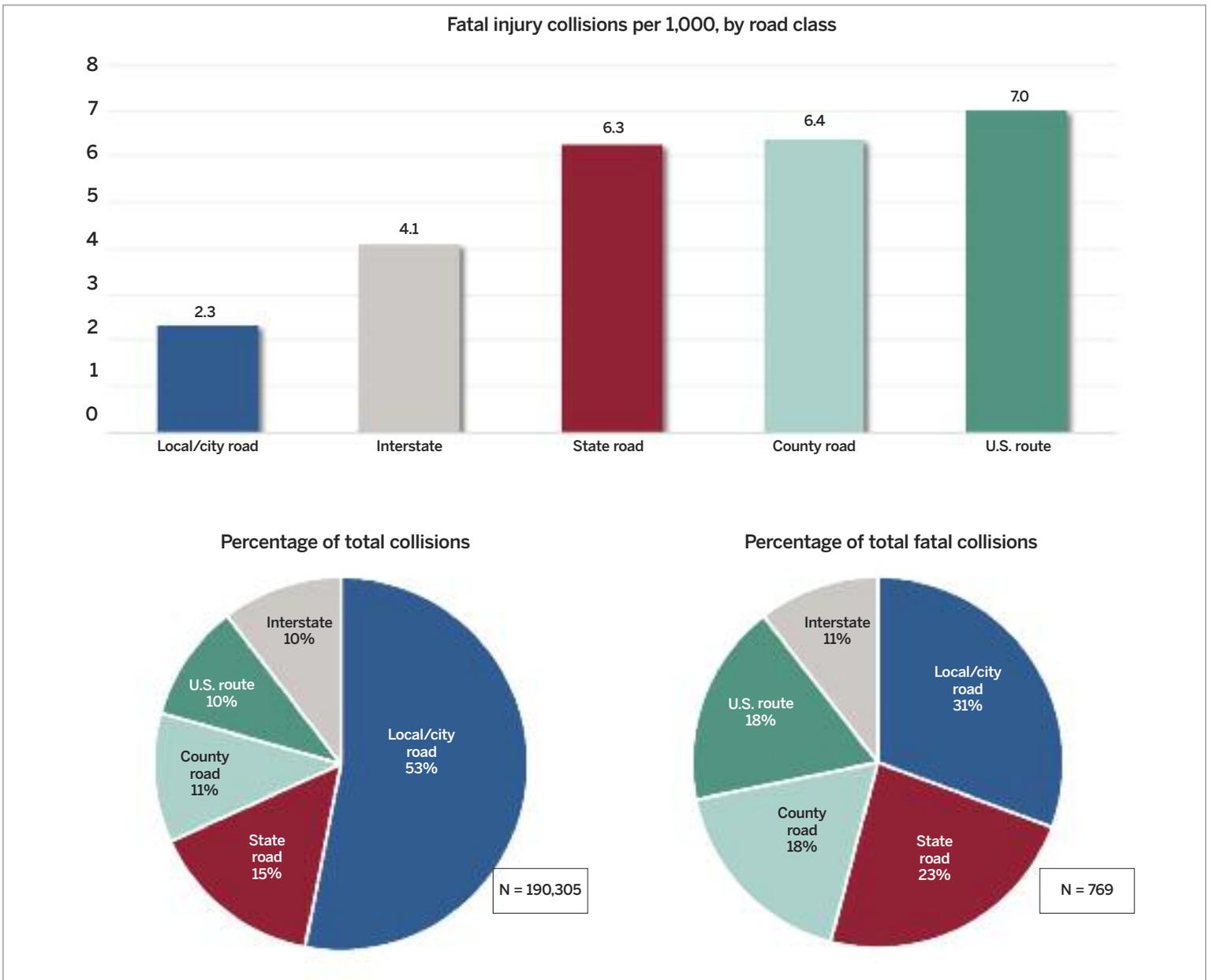1) A collision is identified as speed-related if any one of the following conditions is met: (1) unsafe speed or speed too fast for weather conditions is listed as the primary or contributing factor of the collision; (2) a vehicle driver is issued a speeding citation.
2) A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test
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.

INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

COLLISIONS

COLLISIONS, 2018

This section summarize single-year (2017 to 2018) and five-year (2014–2018) collision trends in Indiana. In 2018, 217,081 traffic collisions occurred in Indiana, a 1 percent decrease from the previous year. Fatal collisions declined 5.6 percent from 836 in 2017 to 789 in 2018. From 2014 to 2018, total collisions rose slightly by 1.3 percent annually (Table 3.1). From 2017 to 2018, the rate of fatal collisions per 1,000 crashes decreased slightly from 3.8 to 3.6. (Figure 3.1).

Non-motorists

In 2018, collisions involving pedestrians rose 1.5 percent from 2017. The rate of pedestrian collisions per 1,000 collisions also increased slightly. Crashes involving pedalcyclists declined 14 percent from a five-year high of 953 in 2015 to 820 in 2018. The rate of collisions involving pedalcyclists increased from 3.7 per 1,000 collisions to 3.8 between 2017 and 2018 (Figure 3.2).

Month, day, and time

The largest number of collisions per month in 2018 occurred in the late fall and winter—specifically October, November, and January. January accounted for the largest monthly total crashes. The highest number of monthly fatal collisions occurred in October and July (Table 3.2).

Collisions were most common on weekdays during 3–5:59pm. In 2018, the highest proportion of fatal crashes occurred on Saturdays and Sundays from 3–5:59 a.m., and on Mondays between midnight and 2:59 a.m. (Table 3.3).

On average, monthly counts of daytime collisions are higher than nighttime collisions. Average monthly daytime collisions were 12,485 in 2018 compared to 5,605 nighttime collisions (Figure 3.3). Both daytime and nighttime counts exceeded monthly averages in October, November, and January (Figure 3.3). Monthly average fatal crashes were slightly higher during the day (34) than night (32). The lowest number of daytime fatal collisions occurred in January and nighttime fatal collisions were lowest in March and November (Figure 3.4).

In 2018, alcohol-impaired collisions represented 1.8 percent of all collisions (Table 3.4). Crashes that involved speeding accounted for 9.0 percent of total collisions, and hit-and-run collisions represented 13.0 percent of total collisions. Speed-related collisions were proportionally most likely to occur during January and February, while alcohol-impaired collisions were mostly likely to occur in September and March. In 2018, speed-related collisions represented 20.3 percent (160 of 789) of fatal collisions and alcohol-impaired collisions accounted for 8 percent (63 of 789) of fatal crashes (not shown in table).

With regard to time of day, the highest proportion of hit-and-run, alcohol-impaired, and speed-related crashes occurred from midnight–5:59 a.m. across all days of the week, in particular on Saturday and Sunday (Table 3.5). Distracted, any type collisions were highest during the afternoon period (noon–5:59pm) most days of the week.

Primary factor

In 2018, driver-related factors accounted for 86 percent of collisions and 95 percent of fatal collisions (calculated from Table 3.6). Driver unsafe actions represented the largest number of collisions. Within the driver unsafe actions category, primary factors classified as following too closely and failure to yield right of way accounted for the most collisions. Proportional to all fatal collisions, ran off road was the most common primary factor within the driver loss of control category. Rates of fatal injury collisions were higher among primary factors attributed to driver actions (4.0 fatal collisions per 1,000) than those with primary factors attributed to vehicles or the environment. In 2018, 9.3 of 1,000 collisions where the driver was identified with a loss of control resulted in fatal injuries (Table 3.6).

Fatal collisions were less likely than non-fatal collisions to have been attributable to driver unsafe actions. Driver loss of control accounted for 25 percent of all fatal collisions, but only 10 percent of non-fatal collisions. Vehicle factors (11 percent) were more likely to have been the primary factor in non-fatal collisions than in fatal collisions (Figure 3.5).

Census locale and road class

Fatal injury collisions were more likely to occur in non-urban areas. In 2018, 31 percent of all fatal collisions occurred in exurban and rural areas, compared to 13 percent of total collisions (Figure 3.6). The exurban and rural rates of fatal collisions per 1,000 were 9.0 and 8.3, respectively, compared to 2.2 in urban areas. Accordingly, fatal injury collisions are less likely to occur on local or city roads than other road class types, and rates of fatal injury collisions were higher on U.S. routes, county roads, and state roads than on other road types (Figure 3.7).

Road parameters and manner of collisions

When observing collisions by junction type, 67 percent of fatal crashes occurred in locations with no junction (calculated from table). Collisions on a curved road had a higher rate of fatal injury per 1,000 collisions (5.9 in 2018) than those on a straight road (3.5) (Table 3.7). Rear end collisions accounted for 25 percent of all crashes. Ran off road collisions represented 29 percent of fatal crashes (calculated from table), and had a fatal injury rate of 7.4 in 2018 (Table 3.8).

Traffic control type and environmental conditions

Collisions that involved traffic control type identified as railroad crossing had the highest rate of fatal injury collisions per 1,000 collisions (21.9), following by no passing zone (12.4) collisions (Table 3.9). Forty-nine percent of fatal collisions occurred on daylight roads, while crashes on roads that were dark (not lighted) had the highest rate of fatal injury collisions (8.1 per 1,000 collisions). Fog/smoke/smog (8.7) had the highest rate of fatal injury collisions per 1,000 collisions (Table 3.10).

Work zone collisions

From 2014 to 2018, the number of collisions in work zones rose from nearly 4,000 in 2014 to a five-year high of 6,373 in 2017 before dropping to 5,241 in 2018. The work zone collision rate was 24.1 per 1,000 collisions in 2018, down from 29.1 in 2017 (Figure 3.8). In 2018, the fatal injury collision rate for work zones (3.2) was only slightly lower than for non-work zone collisions (3.6). Sixty-one percent of all work zone collisions occurred in areas with lane closure. Work zone collisions occurring in the construction type of work on shoulder had the highest rate of fatal injury collisions, followed by cross over/lane shift (Table 3.11).

In 2018, work zone collision rates per 1,000 total collisions were highest in exurban (44.7) area, yet fatal injury collision rates were highest in rural areas (14.9 per 1,000 work zone collisions) (Figure 3.9). Work zone collision rates were highest on interstates (75.9) and lowest on county roads (6.5), but rates of fatal injury crashes were highest on state roads (8.0 per 1,000 work zone collisions) (Figure 3.10).

While 75 percent of 2018 work zone collisions occurred during daylight, fatal injury work zone collision rates were highest during the dark (not

lighted) hours (4.9 fatal collisions per 1,000 work zone collisions). The weather condition with the highest rate of fatal injury in work zone collisions was rain (6.5 per 1,000 collisions) (Table 3.12). Lane control collisions (2,538) represented the largest number of work zone collisions that occurred under traffic control type, but the highest rate of fatal injury in work zone collision rates occurred at stop signs (15.3 per 1,000 collisions) (Table 3.13).

Table 3.1. Indiana traffic collisions, by collision severity, 2014–2018

| | 2014 | 2015 | 2016 | 2017 | 2018 | Annual rate of change | |
						2017–18	2014–18
All collisions	205,791	216,526	223,954	219,281	217,081	-1.0%	1.3%
Fatal	704	752	776	836	789	-5.6%	2.9%
Non-fatal	33,864	34,472	35,342	34,234	32,383	-5.4%	-1.1%
Property damage only	171,223	181,302	187,836	184,211	183,909	-0.2%	1.8%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Figure 3.1. Indiana fatal traffic collisions, 2014–2018
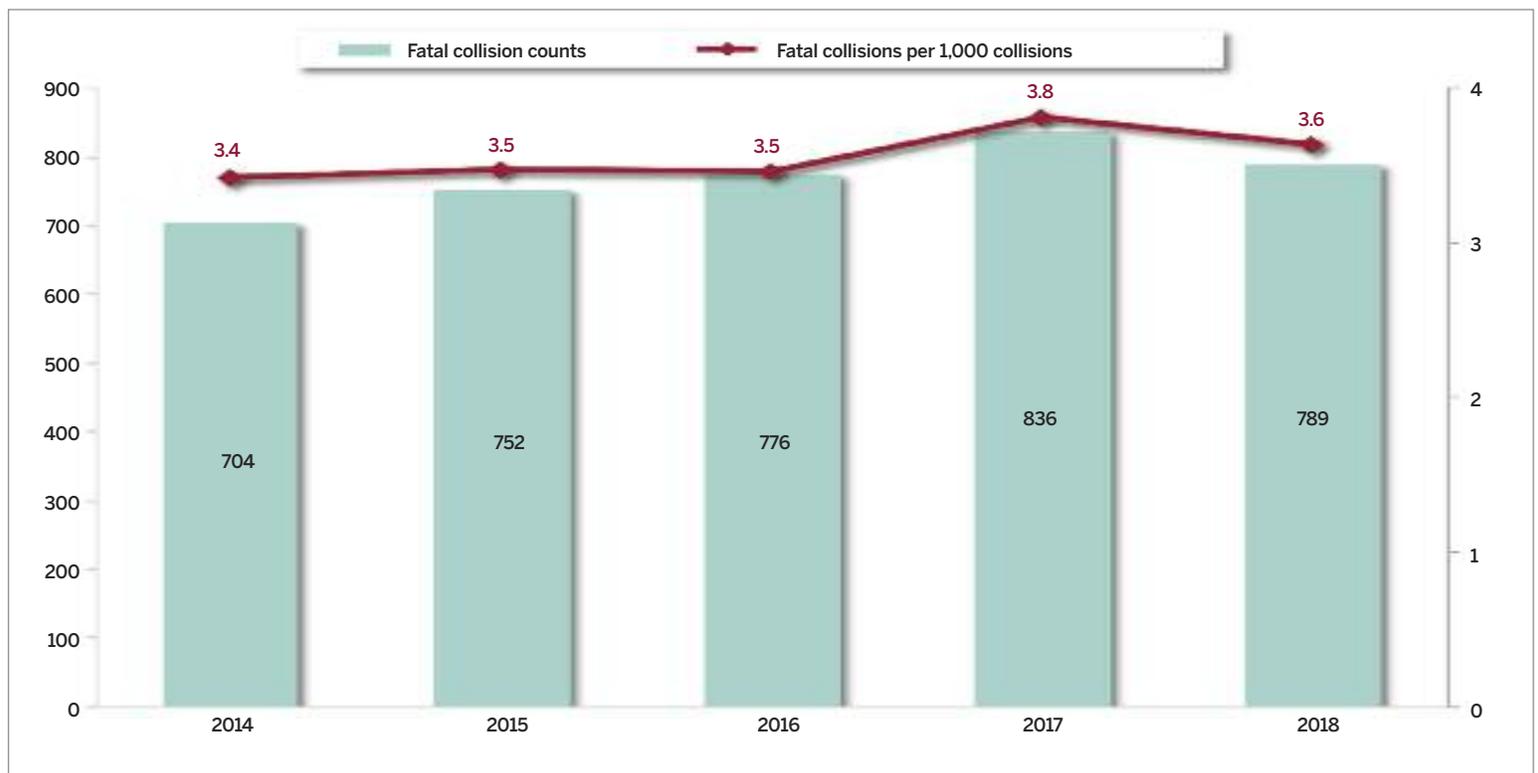
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Figure 3.2. Indiana collisions involving pedestrians and pedalcyclists, 2014–2018
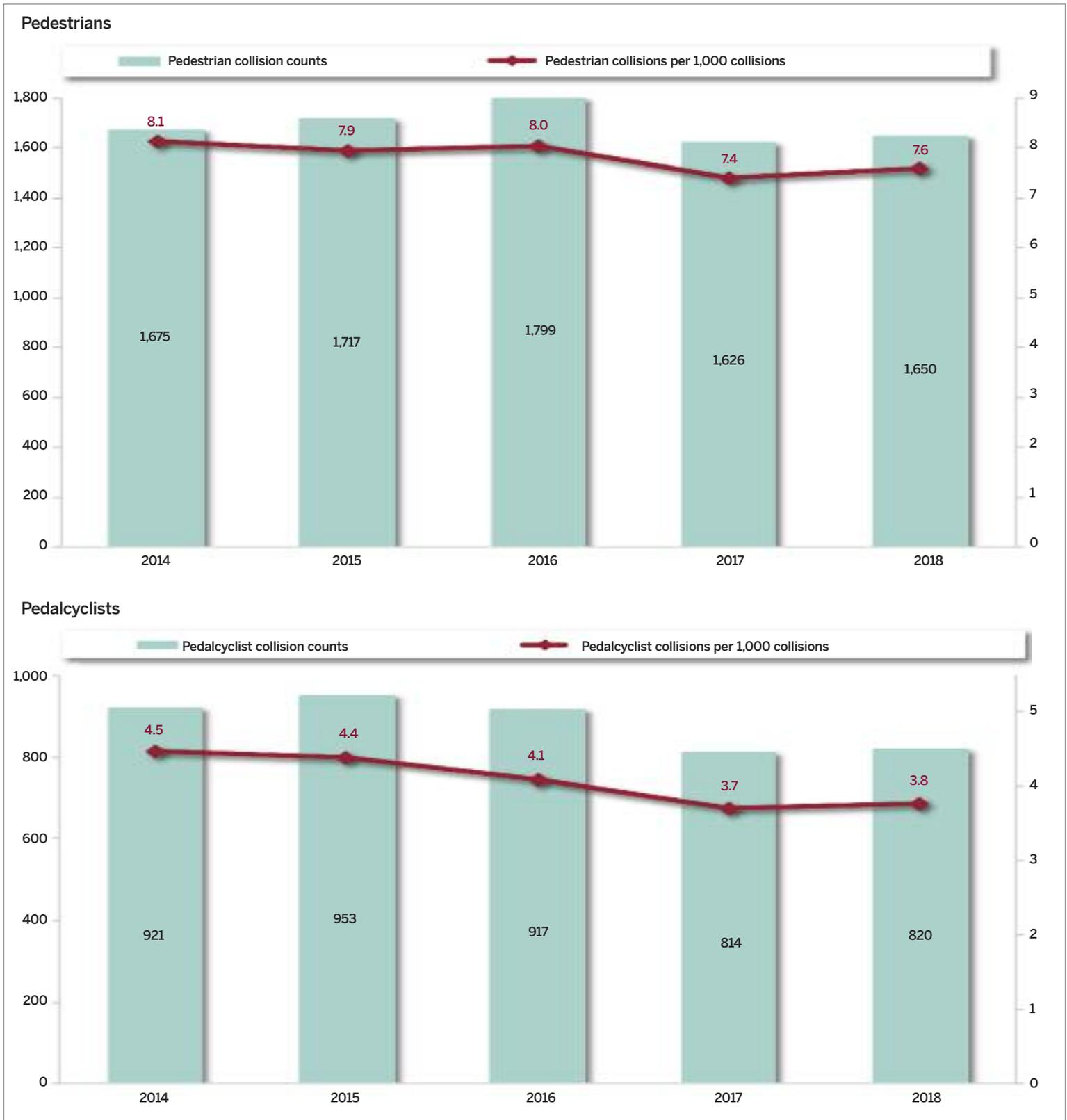
Pedestrians

Legend: Pedestrian collision counts | Pedestrian collisions per 1,000 collisions

Year	Collision counts	Collisions per 1,000
2014	1,675	8.1
2015	1,717	7.9
2016	1,799	8.0
2017	1,626	7.4
2018	1,650	7.6

Pedalcyclists

Legend: Pedalcyclist collision counts | Pedalcyclist collisions per 1,000 collisions

Year	Collision counts	Collisions per 1,000
2014	921	4.5
2015	953	4.4
2016	917	4.1
2017	814	3.7
2018	820	3.8

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Table 3.2. Indiana traffic collisions, by month, 2017–2018

Month	Fatal collisions			Total collisions			% Change (2017–18)	
	2017	2018	Change	2017	2018	Change	Fatal	Total
Jan	50	52	2	17,274	20,784	3,510	4.0%	20.3%
Feb	50	62	12	14,572	16,178	1,606	24.0%	11.0%
Mar	75	65	-10	16,969	16,974	5	-13.3%	0.0%
Apr	59	53	-6	17,026	15,768	-1,258	-10.2%	-7.4%
May	76	73	-3	19,455	18,416	-1,039	-3.9%	-5.3%
Jun	96	59	-37	19,007	17,280	-1,727	-38.5%	-9.1%
Jul	94	75	-19	17,152	17,258	106	-20.2%	0.6%
Aug	68	74	6	17,722	17,848	126	8.8%	0.7%
Sep	75	73	-2	17,960	17,737	-223	-2.7%	-1.2%
Oct	73	77	4	19,991	20,290	299	5.5%	1.5%
Nov	59	55	-4	20,079	20,105	26	-6.8%	0.1%
Dec	61	71	10	22,074	18,443	-3,631	16.4%	-16.4%
Total	**836**	**789**	**-47**	**219,281**	**217,081**	**-2,200**	**-5.6%**	**-1.0%**

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Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Table 3.3. Indiana traffic collisions, by day of the week and time of day, 2018

Day of the week	Time of day								All hours
	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.	
Total collisions	**9,041**	**10,357**	**29,993**	**28,356**	**39,207**	**52,269**	**30,695**	**17,163**	**217,081**
Sunday	2,024	1,562	1,472	2,657	4,275	4,292	3,683	2,170	22,135
Monday	1,062	1,456	5,088	4,273	5,617	7,864	4,171	2,135	31,666
Tuesday	899	1,381	5,305	4,259	5,690	8,458	4,068	2,044	32,104
Wednesday	986	1,691	6,139	4,356	5,590	8,266	4,449	2,207	33,684
Thursday	1,063	1,442	5,356	4,121	5,746	8,428	4,495	2,278	32,929
Friday	1,186	1,354	4,619	4,584	6,783	9,705	5,473	3,182	36,886
Saturday	1,821	1,471	2,014	4,106	5,506	5,256	4,356	3,147	27,677
Fatal collisions	**65**	**81**	**96**	**86**	**104**	**122**	**117**	**118**	**789**
Sunday	14	18	5	9	12	13	18	10	99
Monday	13	4	13	17	11	16	17	18	109
Tuesday	2	8	23	9	19	18	15	11	105
Wednesday	4	12	10	13	17	11	12	16	95
Thursday	8	8	18	17	12	20	11	19	113
Friday	7	13	15	16	16	25	23	23	138
Saturday	17	18	12	5	17	19	21	21	130
% Fatal	**0.72%**	**0.78%**	**0.32%**	**0.30%**	**0.27%**	**0.23%**	**0.38%**	**0.69%**	**0.36%**
Sunday	0.69%	1.15%	0.34%	0.34%	0.28%	0.30%	0.49%	0.46%	0.45%
Monday	1.22%	0.27%	0.26%	0.40%	0.20%	0.20%	0.41%	0.84%	0.34%
Tuesday	0.22%	0.58%	0.43%	0.21%	0.33%	0.21%	0.37%	0.54%	0.33%
Wednesday	0.41%	0.71%	0.16%	0.30%	0.30%	0.13%	0.27%	0.72%	0.28%
Thursday	0.75%	0.55%	0.34%	0.41%	0.21%	0.24%	0.24%	0.83%	0.34%
Friday	0.59%	0.96%	0.32%	0.35%	0.24%	0.26%	0.42%	0.72%	0.37%
Saturday	0.93%	1.22%	0.60%	0.12%	0.31%	0.36%	0.48%	0.67%	0.47%

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Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 3.3. Indiana traffic collisions, by month and day/night, 2018
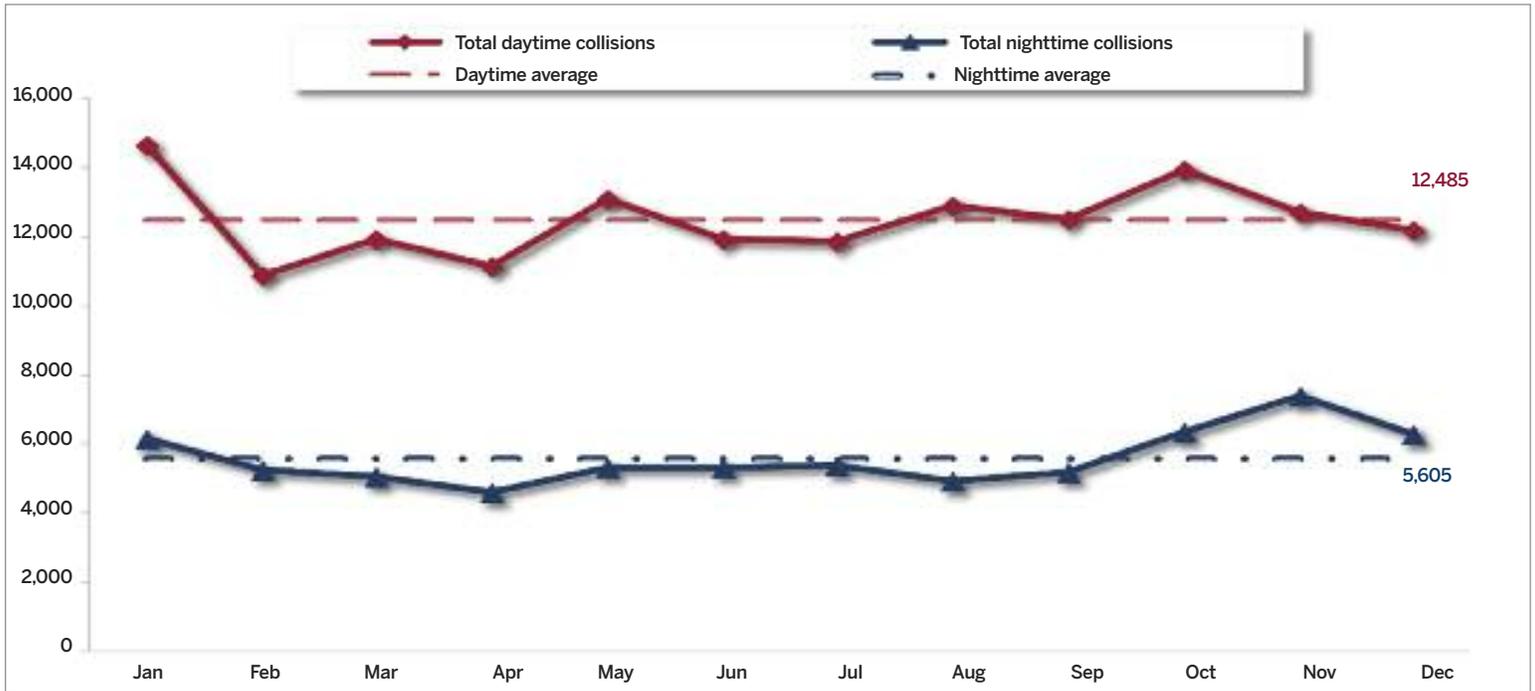
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 3.4. Indiana fatal collisions, by month and day/night, 2018
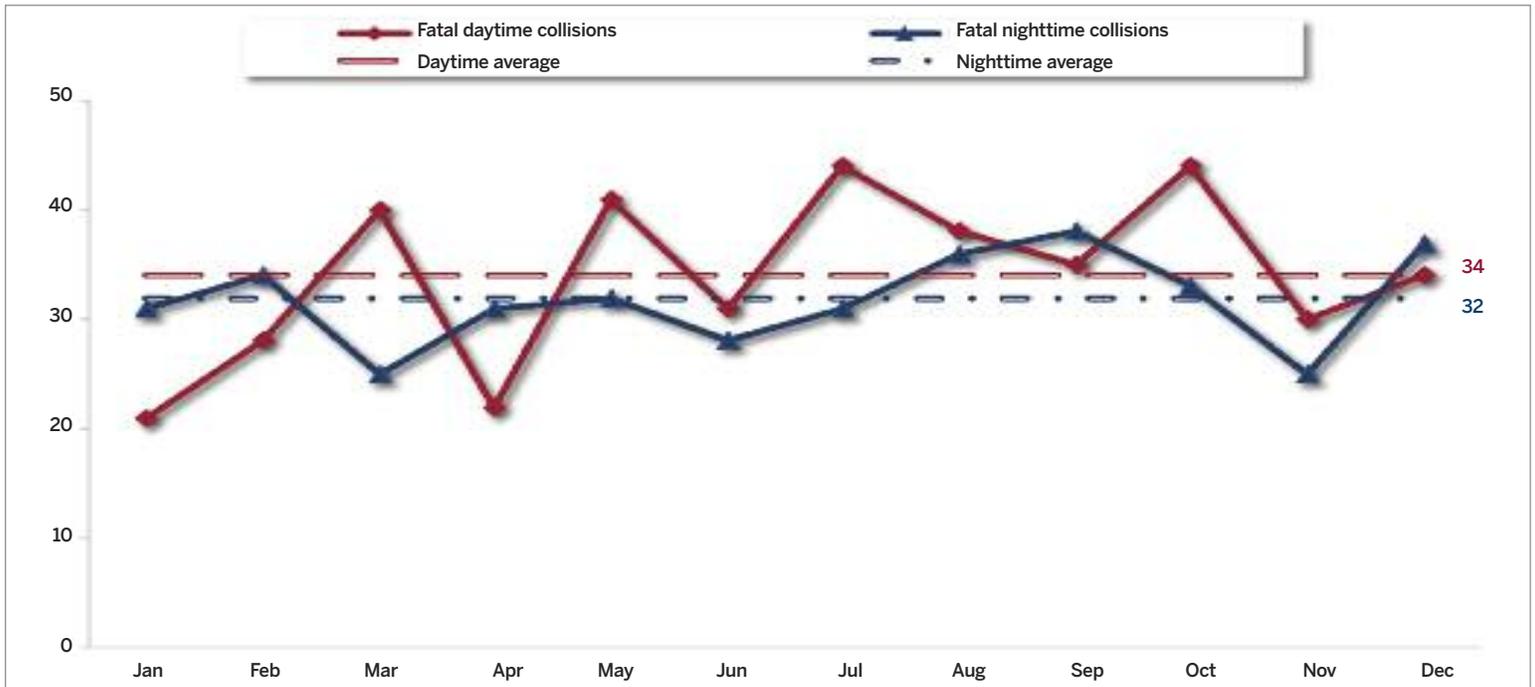
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2018

Month	Total	Alcohol-impaired		Aggressive driving		Speed-related		Disregard signal		Hit-and-run		Distracted, any type		Distracted, cell phone	
		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	20,784	341	1.6	732	3.5	4,349	20.9	387	1.9	2,129	10.2	619	3.0	56	0.3
Feb	16,178	303	1.9	533	3.3	2,366	14.6	281	1.7	1,937	12.0	674	4.2	83	0.5
Mar	16,974	342	2.0	517	3.0	1,863	11.0	343	2.0	2,291	13.5	840	4.9	103	0.6
Apr	15,768	307	1.9	481	3.1	994	6.3	345	2.2	2,412	15.3	876	5.6	107	0.7
May	18,416	350	1.9	511	2.8	1,055	5.7	323	1.8	2,529	13.7	999	5.4	101	0.5
Jun	17,280	312	1.8	520	3.0	977	5.7	343	2.0	2,501	14.5	927	5.4	97	0.6
Jul	17,258	333	1.9	542	3.1	1,041	6.0	338	2.0	2,386	13.8	957	5.5	104	0.6
Aug	17,848	331	1.9	559	3.1	1,060	5.9	348	1.9	2,360	13.2	943	5.3	128	0.7
Sep	17,737	374	2.1	547	3.1	1,055	5.9	312	1.8	2,285	12.9	925	5.2	131	0.7
Oct	20,290	337	1.7	607	3.0	1,224	6.0	378	1.9	2,429	12.0	1,063	5.2	128	0.6
Nov	20,105	331	1.6	574	2.9	1,940	9.6	353	1.8	2,326	11.6	806	4.0	100	0.5
Dec	18,443	329	1.8	579	3.1	1,680	9.1	358	1.9	2,680	14.5	837	4.5	108	0.6
Total	217,081	3,990	1.8	6,702	3.1	19,604	9.0	4,109	1.9	28,265	13.0	10,466	4.8	1,246	0.6

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Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Table 3.5. Indiana traffic collisions, by day, hour, and collision circumstances, 2018

Day	Time	All collisions Total	Alcohol-impaired Count	As % of day/time total	Aggressive driving Count	As % of day/time total	Speed-related Count	As % of day/time total	Disregard signal Count	As % of day/time total	Hit-and-run Count	As % of day/time total	Distracted, any type Count	As % of day/time total	Distracted, cell phone Count	As % of day/time total
Mon	Midnight–5:59 a.m.	2,518	103	4.1	79	3.1	356	14.1	21	0.8	456	18.1	89	3.5	19	0.8
	6–11:59 a.m.	9,361	22	0.2	247	2.6	986	10.5	222	2.4	902	9.6	406	4.3	36	0.4
	Noon–5:59 p.m.	13,481	97	0.7	383	2.8	882	6.5	259	1.9	1,540	11.4	764	5.7	92	0.7
	6 p.m.–11:59 p.m.	6,306	168	2.7	218	3.5	658	10.4	115	1.8	1,026	16.3	301	4.8	43	0.7
Tue	Midnight–5:59 a.m.	2,280	88	3.9	56	2.5	317	13.9	24	1.1	381	16.7	74	3.2	12	0.5
	6–11:59 a.m.	9,564	26	0.3	290	3.0	978	10.2	204	2.1	895	9.4	439	4.6	42	0.4
	Noon–5:59 p.m.	14,148	79	0.6	431	3.0	829	5.9	245	1.7	1,546	10.9	801	5.7	77	0.5
	6 p.m.–11:59 p.m.	6,112	164	2.7	197	3.2	485	7.9	126	2.1	986	16.1	272	4.5	44	0.7
Wed	Midnight–5:59 a.m.	2,677	84	3.1	86	3.2	482	18.0	32	1.2	430	16.1	64	2.4	13	0.5
	6–11:59 a.m.	10,495	15	0.1	347	3.3	1,718	16.4	191	1.8	1,004	9.6	442	4.2	49	0.5
	Noon–5:59 p.m.	13,856	77	0.6	450	3.2	772	5.6	271	2.0	1,609	11.6	731	5.3	75	0.5
	6 p.m.–11:59 p.m.	6,656	191	2.9	196	2.9	521	7.8	123	1.8	1,005	15.1	294	4.4	36	0.5
Thu	Midnight–5:59 a.m.	2,505	131	5.2	65	2.6	378	15.1	36	1.4	436	17.4	77	3.1	15	0.6
	6–11:59 a.m.	9,477	33	0.3	293	3.1	965	10.2	214	2.3	863	9.1	414	4.4	36	0.4
	Noon–5:59 p.m.	14,174	93	0.7	496	3.5	860	6.1	252	1.8	1,569	11.1	792	5.6	81	0.6
	6 p.m.–11:59 p.m.	6,773	223	3.3	200	3.0	499	7.4	111	1.6	1,109	16.4	304	4.5	43	0.6
Fri	Midnight–5:59 a.m.	2,540	158	6.2	86	3.4	287	11.3	32	1.3	488	19.2	95	3.7	14	0.6
	6–11:59 a.m.	9,203	47	0.5	261	2.8	714	7.8	203	2.2	913	9.9	465	5.1	39	0.4
	Noon–5:59 p.m.	16,488	92	0.6	559	3.4	1,229	7.5	254	1.5	1,767	10.7	882	5.3	86	0.5
	6 p.m.–11:59 p.m.	8,655	287	3.3	282	3.3	702	8.1	154	1.8	1,414	16.3	405	4.7	71	0.8
Sat	Midnight–5:59 a.m.	3,292	402	12.2	94	2.9	439	13.3	57	1.7	913	27.7	119	3.6	34	1.0
	6–11:59 a.m.	6,120	52	0.8	153	2.5	685	11.2	140	2.3	720	11.8	267	4.4	25	0.4
	Noon–5:59 p.m.	10,762	128	1.2	355	3.3	904	8.4	222	2.1	1,409	13.1	553	5.1	50	0.5
	6 p.m.–11:59 p.m.	7,503	364	4.9	241	3.2	740	9.9	146	1.9	1,347	18.0	322	4.3	43	0.6
Sun	Midnight–5:59 a.m.	3,586	454	12.7	97	2.7	471	13.1	62	1.7	1,029	28.7	162	4.5	44	1.2
	6–11:59 a.m.	4,129	50	1.2	114	2.8	521	12.6	100	2.4	570	13.8	172	4.2	26	0.6
	Noon–5:59 p.m.	8,567	104	1.2	259	3.0	613	7.2	173	2.0	1,254	14.6	502	5.9	49	0.6
	6 p.m.–11:59 p.m.	5,853	258	4.4	167	2.9	613	10.5	120	2.1	1,040	17.8	258	4.4	52	0.9
Mon	(Total)	31,166	390	1.2	927	2.9	2,882	9.1	617	1.9	3,924	12.4	1,560	4.9	190	0.6
Tue	(Total)	32,104	357	1.1	974	3.0	2,609	8.1	599	1.9	3,808	11.9	1,586	4.9	175	0.5
Wed	(Total)	33,684	367	1.1	1,079	3.2	3,493	10.4	617	1.8	4,048	12.0	1,531	4.5	173	0.5
Thu	(Total)	32,929	480	1.5	1,054	3.2	2,702	8.2	613	1.9	3,977	12.1	1,587	4.8	175	0.5
Fri	(Total)	36,886	584	1.6	1,888	3.2	2,932	7.9	643	1.7	4,582	12.4	1,847	5.0	210	0.6
Sat	(Total)	27,677	946	3.4	843	3.0	2,768	10.0	565	2.0	4,389	15.9	1,261	4.6	152	0.5
Sun	(Total)	22,135	866	3.9	637	2.9	2,218	10.0	455	2.1	3,893	17.6	1,094	4.9	171	0.8
		217,081	3,990	1.8	6,702	3.1	19,604	9.0	4,109	1.9	28.621	13.2	10,466	4.8	1,246	0.6

Low < < > > High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Table 3.6. Indiana collisions, by primary factor and collision severity, 2018

Primary factor	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non-fatal	Property damage	
Driver: Unsafe actions	**142,430**	**407**	**22,005**	**120,018**	**2.9**
Following too closely	37,978	27	5,527	32,424	0.7
Failure to yield right of way	34,971	101	7,898	26,972	2.9
Unsafe backing	19,944	3	304	19,637	0.2
Unsafe lane movement	10,301	12	1,012	9,277	1.2
Speed too fast for weather conditions	8,271	15	1,263	6,993	1.8
Disregard signal/Reg sign	7,648	52	2,628	4,968	6.8
Improper turning	7,630	6	523	7,101	0.8
Improper lane usage	5,355	9	428	4,918	1.7
Unsafe speed	4,509	69	1,177	3,263	15.3
Left of center	3,500	95	985	2,420	27.1
Improper passing	2,082	8	208	1,866	3.8
Wrong way on one way	241	10	52	179	41.5
Driver: Loss of control	**21,123**	**196**	**4,549**	**16,378**	**9.3**
Ran off road	18,119	175	4,020	13,924	9.7
Overcorrecting/oversteering	3,004	21	529	2,454	7.0
Driver: Distractions	**6,268**	**5**	**1,096**	**5,167**	**0.8**
Unspecified distraction	5,807	5	1,000	4,802	0.9
Cell phone/other electronic device	461	0	96	365	0.0
Driver: Cognitive/physical impairment	**2,112**	**15**	**661**	**1,436**	**7.1**
Driver asleep or fatigued	1,398	2	342	1,054	1.4
Driver illness	714	13	319	382	18.2
Driver: Miscellaneous factors	**15,139**	**126**	**2,243**	**12,770**	**8.3**
Other (unspecified)	14,417	51	1,747	12,619	3.5
Influenced by pedestrian action	722	75	496	151	103.9
Driver factors (all)	**187,072**	**749**	**30,554**	**155,769**	**4.0**
Environmental factors	**24,103**	**21**	**1,200**	**22,882**	**0.9**
Vehicle factors	**4,597**	**17**	**570**	**4,010**	**3.7**
Unknown	**1,309**	**2**	**59**	**1,248**	**1.5**
All collisions	**217,081**	**789**	**32,383**	**183,909**	**3.6**

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Figure 3.5. Indiana traffic collisions, by primary factor and severity, 2018

Environment 2%   Vehicle 3%

Driver: Cognitive/
physical impairment 2%

Driver: Misc.
factors 16%

Driver: Distractions 1%

Driver: Unsafe
actions 52%

Driver: Loss of
control 25%

Fatal collisions
N = 789

Unknown factor 1%   Environment 2%

Driver: Cognitive/
physical impairment 1%

Driver: Misc.
factors 7%

Driver: Distractions 3%

Vehicle 11%

Driver: Loss of
control 10%

Driver: Unsafe
actions 66%

Non-fatal collisions
N = 216,292

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Fatal injury collisions per 1,000, by locale

2.2	6.8	8.3	9.0
Urban areas	Suburban areas	Exurban areas	Rural areas

Percentage of total collisions

Urban areas 74%
Suburban areas 13%
Rural areas 7%
Exurban areas 6%

N = 171,675

Percentage of total fatal collisions

Urban areas 44%
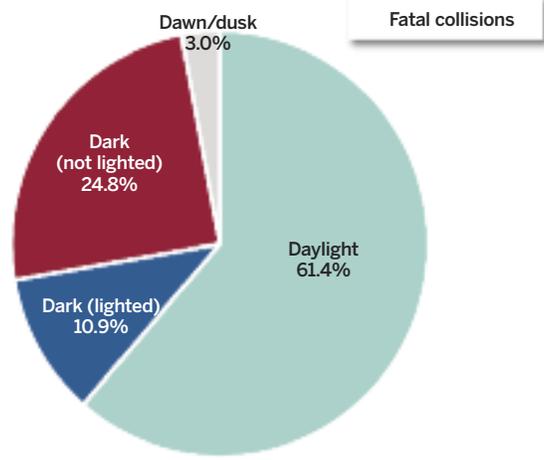Suburban areas 25%
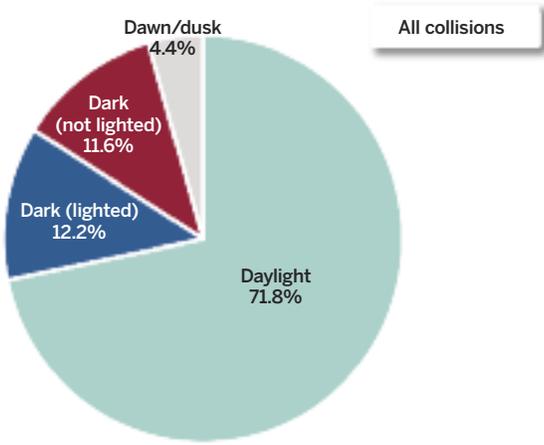Rural areas 17%
Exurban areas 14%

N = 544

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Includes only collisions where valid locale was identified.
2) Fatal injury collision rate is calculated per 1,000 total collisions in each locale.
3) See glossary for census locale definitions.

Figure 3.7. Fatal injury collision rates and distribution of collisions, by road class, 2018

Fatal injury collisions per 1,000, by road class

Road class	Rate
Local/city road	2.3
Interstate	4.1
State road	6.3
County road	6.4
U.S. route	7.0

Percentage of total collisions

Local/city road 53%
State road 15%
County road 11%
U.S. route 10%
Interstate 10%

N = 190,305

Percentage of total fatal collisions

Local/city road 31%
State road 23%
County road 18%
U.S. route 18%
Interstate 11%

N = 769

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

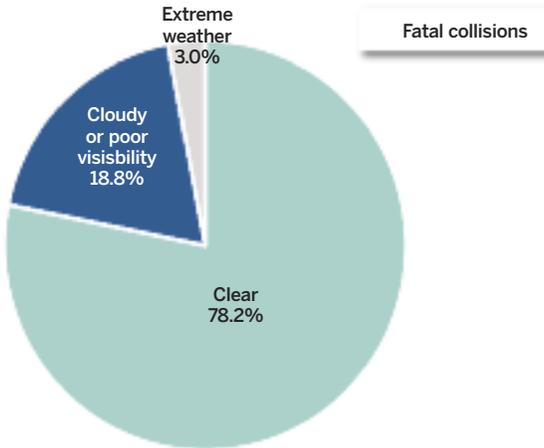Note: Excludes unknown road class.

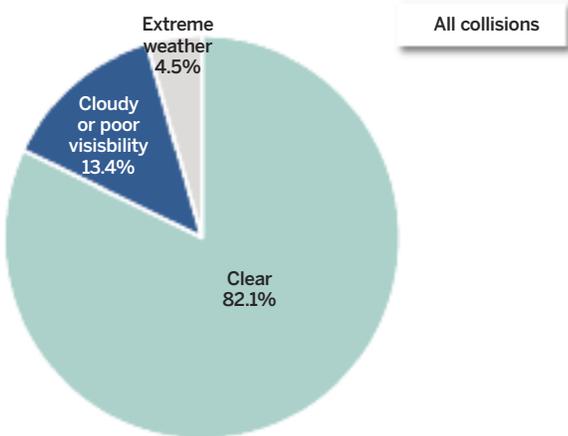## Table 3.7. Indiana traffic collisions, by severity and road parameters, 2018

	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non-fatal	Property damage	
Total collisions	217,081	789	32,383	183,909	3.6
By junction type					
No junction involved	145,079	560	18,794	125,725	3.9
Four-way intersection	41,553	128	8,964	32,461	3.1
T-intersection	21,544	64	3,404	18,076	3.0
Ramp	3,767	7	500	3,260	1.9
Traffic circle/roundabout	2,035	3	142	1,890	1.5
Interchange	1,541	9	290	1,242	5.8
Y-intersection	650	5	129	516	7.7
Five point or more	441	0	85	356	0.0
Railroad crossings	393	12	65	316	30.5
Trail crossings	50	0	0	50	0.0
Unknown	28	1	10	17	35.7
By road character					
Straight	**190,472**	**662**	**28,573**	**161,237**	**3.5**
Level	161,740	523	24,202	137,015	3.2
Graded	22,746	95	3,386	19,265	4.2
Hillcrest	5,986	44	985	4,957	7.4
Curve	**20,353**	**120**	**3,565**	**16,668**	**5.9**
Level	13,114	73	2,263	10,778	5.6
Graded	5,972	40	1,068	4,864	6.7
Hillcrest	1,267	7	234	1,026	5.5
Non-roadway crash	**5,956**	**7**	**233**	**5,716**	**1.2**
Unknown	300	0	12	288	0.0
Roadway surface type					
Asphalt	191,479	715	28,961	161,803	3.7
Concrete	21,956	56	3,088	18,812	2.6
Gravel	2,459	10	230	2,219	4.1
Other	905	8	92	805	8.8
Unknown	282	0	12	270	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2018

Manner of collision	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non-fatal	Property damage	
Total collision	**217,081**	**789**	**32,383**	**183,909**	**3.6**
Rear end	53,254	79	8,407	44,768	1.5
Ran off road	30,923	230	6,480	24,213	7.4
Right angle	27,373	138	7,444	19,791	5.0
Same direction sideswipe	21,679	13	1,272	20,394	0.6
Backing	20,278	5	343	19,930	0.2
Collision with deer	14,316	4	269	14,043	0.3
Left turn	11,439	28	2,381	9,030	2.4
Head on	4,812	114	1,723	2,975	23.7
Opposite direction sideswipe	4,538	12	525	4,001	2.6
Right turn	3,029	0	316	2,713	0.0
Collision with object in road	2,864	29	267	2,568	10.1
Left/right turn	2,380	0	308	2,072	0.0
Non-collision	1,477	26	376	1,075	17.6
Collision with animal (other)	1,374	2	61	1,311	1.5
Rear to rear	399	1	28	370	2.5
Other collisions manner	15,129	104	2,111	12,914	6.9
Unknown	1,817	4	72	1,741	2.2

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2018

Traffic control type	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non-fatal	Property damage	
Total collisions	**217,081**	**789**	**32,383**	**183,909**	**3.6**
Lane control	54,491	282	8,476	45,733	5.2
Traffic control signal	39,061	76	7,753	31,232	1.9
Stop sign	21,115	77	4,313	16,725	3.6
Yield sign	2,158	7	276	1,875	3.2
No passing zone	1,768	22	339	1,407	12.4
Other regulatory sign/marking	808	4	150	654	5.0
Roundabout intersection	507	1	40	466	2.0
Flashing signal	315	1	66	248	3.2
Person directing traffic	190	0	41	149	0.0
Railroad crossing	183	4	23	156	21.9
Other	497	0	66	431	0.0
None	95,461	315	10,810	84,336	3.3
Unknown	527	0	30	497	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2018

	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non-fatal	Property damage	
All collisions	217,081	789	32,383	183,909	3.6
By light conditions					
Daylight	143,844	388	22,116	121,340	2.7
Dark (not lighted)	31,067	252	4,187	26,628	8.1
Dark (lighted)	30,160	117	4,553	25,490	3.9
Dawn/dusk	10,445	31	1,498	8,916	3.0
Unknown	1,565	1	29	1,535	0.6
By weather conditions					
Clear	137,000	540	20,769	115,691	3.9
Cloudy	41,679	133	6,118	35,428	3.2
Rain	23,195	73	3,606	19,516	3.1
Snow	7,895	18	948	6,929	2.3
Sleet/hail/freezing rain	3,029	5	407	2,617	1.7
Blowing sand/soil/snow	2,146	7	283	1,856	3.3
Fog/smoke/smog	1,383	12	219	1,152	8.7
Severe cross wind	210	0	22	188	0.0
Unknown	544	1	11	532	1.8
By road surface conditions					
Dry	158,427	610	24,089	133,728	3.9
Wet	38,341	128	5,866	32,347	3.3
Snow/slush	9,486	18	1,007	8,461	1.9
Ice	8,708	22	1,150	7,536	2.5
Water (standing or moving)	914	2	146	766	2.2
Loose material on road	510	7	98	405	13.7
Muddy	165	1	13	151	6.1
Unknown	530	1	14	515	1.9

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 3.8. Indiana work zone collisions, 2014–2018
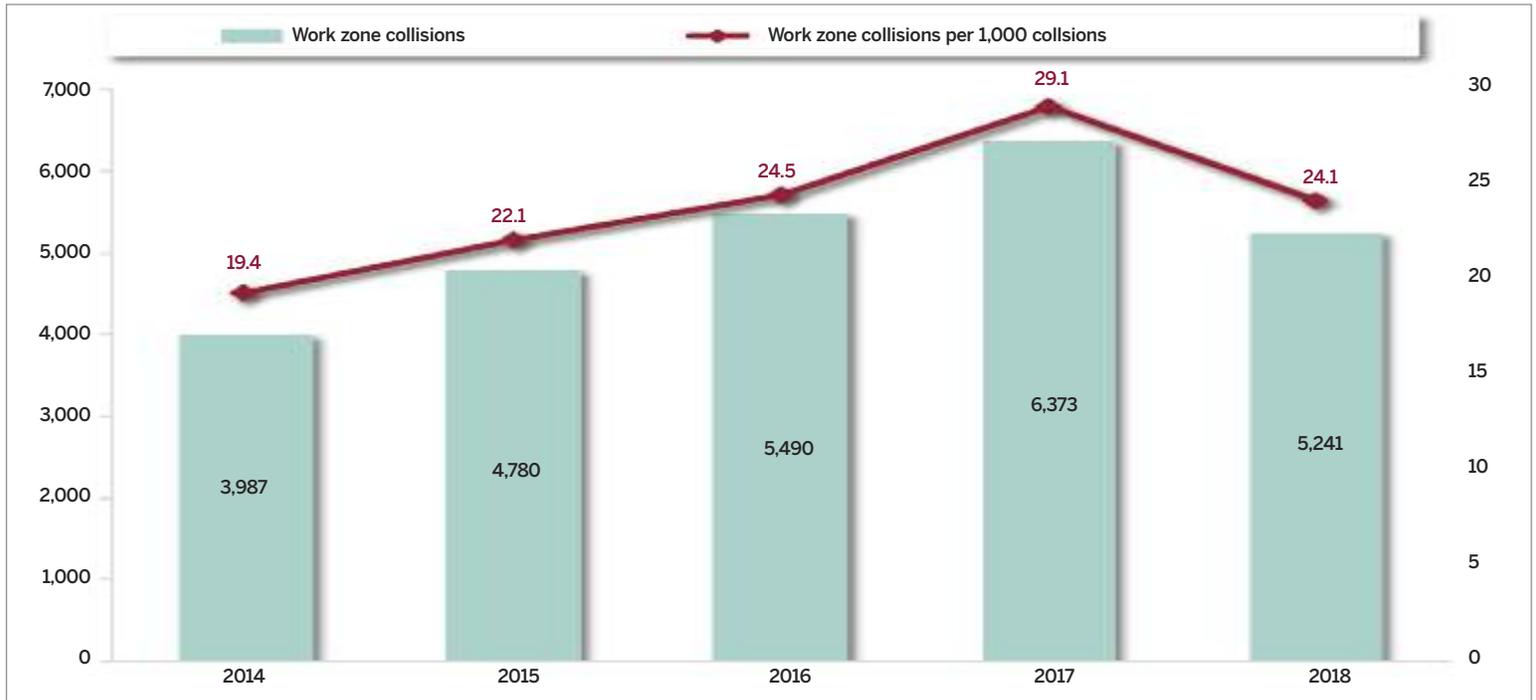
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Table 3.11. Indiana collisions in work zones, by severity and construction type, 2018

	Collisions, by severity				Fatal collisions per 1,000 work zone collisions
	Total	Fatal	Non-fatal	Property damage	
All collisions	**217,081**	**789**	**32,383**	**183,909**	**3.6**
All construction types	5,241	17	790	4,434	3.2
Not in construction zone	211,840	772	31,593	179,475	3.6
Construction zone type					
Lane closure	3,216	9	500	2,707	2.8
Work on shoulder	825	4	138	683	4.8
Cross over/lane shift	560	2	73	485	3.6
Intermittent or moving work	624	2	78	544	3.2
Unknown	16	0	1	15	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 3.9. Indiana work zone collisions, by locale, 2018
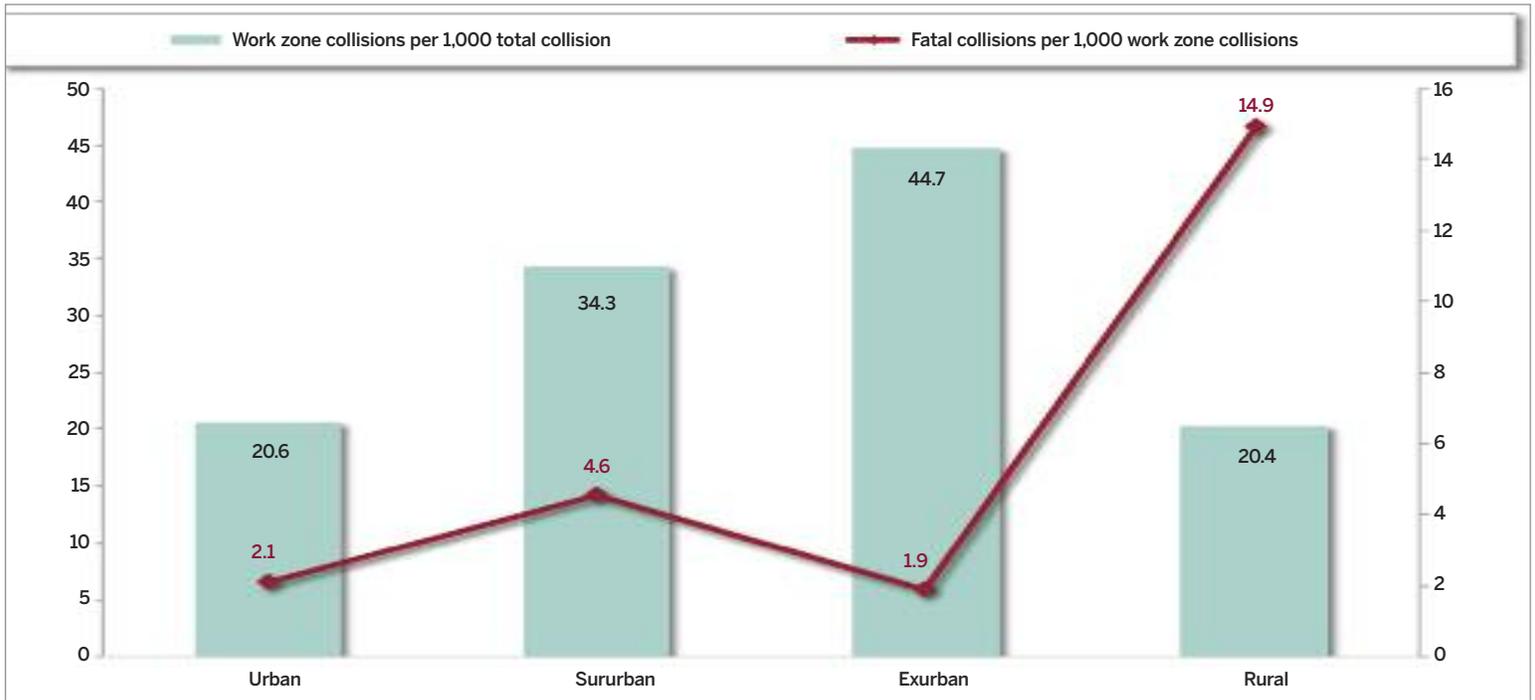
Legend: Work zone collisions per 1,000 total collision (bars) | Fatal collisions per 1,000 work zone collisions (line)

Locale	Work zone collisions per 1,000 total collision	Fatal collisions per 1,000 work zone collisions
Urban	20.6	2.1
Sururban	34.3	4.6
Exurban	44.7	1.9
Rural	20.4	14.9

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Includes only collisions with valid locale reported
2) See glossary for census locale definitions

Figure 3.10. Indiana work zone collisions, by road class, 2018
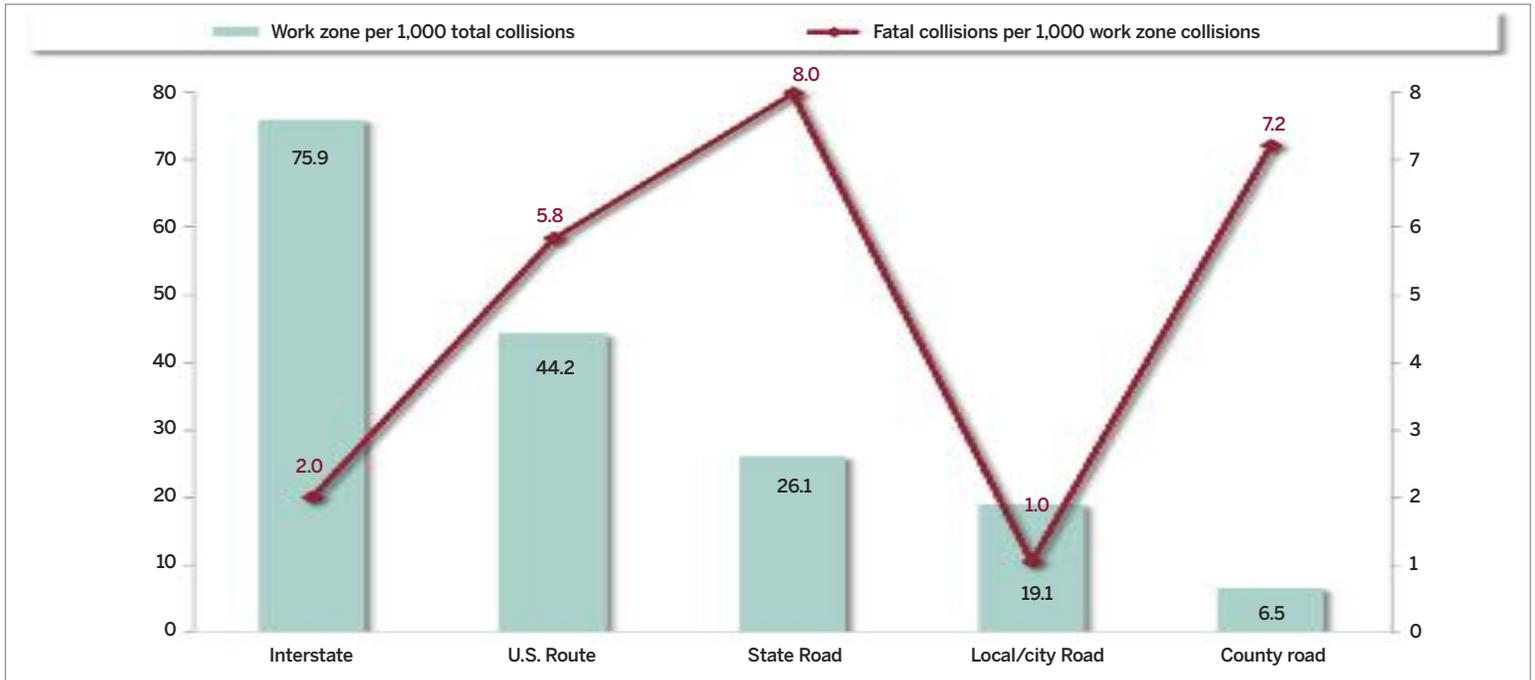
Legend: Work zone per 1,000 total collisions (bars) | Fatal collisions per 1,000 work zone collisions (line)

Road class	Work zone per 1,000 total collisions	Fatal collisions per 1,000 work zone collisions
Interstate	75.9	2.0
U.S. Route	44.2	5.8
State Road	26.1	8.0
Local/city Road	19.1	1.0
County road	6.5	7.2

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Note: Includes only collisions with valid road class reported

Table 3.12. Indiana work zone collisions, by severity and environmental conditions, 2018

	Work zone collisions, by severity				Fatal collisions per 1,000 work zone collisions
	Total	Fatal	Non-fatal	Property damage	
All work zone collisions	5,241	17	790	4,434	3.2
By light conditions					
Daylight	3,912	11	576	3,325	2.8
Dark (lighted)	502	2	91	409	4.0
Dark (not lighted)	607	3	94	510	4.9
Dawn/dusk	210	0	29	181	0.0
Unknown	10	1	0	9	100.0
By weather conditions					
Clear	3,656	12	581	3,063	3.3
Cloudy	996	1	137	858	1.0
Rain	464	3	56	405	6.5
Snow	55	0	7	48	0.0
Fog/smoke/smog	27	0	4	23	0.0
Sleet/hail/freezing rain	20	0	4	16	0.0
Blowing sand/soil/snow	12	0	1	11	0.0
Severe cross wind	7	0	0	7	0.0
Unknown	4	1	0	3	250.0
By road surface conditions					
Dry	4,370	12	684	3,674	2.7
Wet	730	4	93	633	5.5
Ice	46	0	4	42	0.0
Loose material on road	36	0	4	32	0.0
Snow/slush	36	0	3	33	0.0
Water (standing or moving)	10	0	1	9	0.0
Muddy	7	0	1	6	0.0
Unknown	6	1	0	5	166.7

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2018

	Work zone collisions, by severity				Fatal collisions per 1,000 work zone collisions
	Total	Fatal	Non-fatal	Property damage	
All work zone collisions	5,241	17	790	4,434	3.2
Traffic control type					
Lane control	2,538	9	385	2,144	3.5
Traffic control signal	973	2	153	818	2.1
Stop sign	261	4	46	211	15.3
Other regulatory sign/marking	105	1	21	83	9.5
Yield sign	71	0	12	59	0.0
Person directing traffic	61	0	14	47	0.0
No passing zone	32	0	7	25	0.0
Flashing signal/overhead beacon	15	0	5	10	0.0
Railroad crossing	10	0	1	9	0.0
Roundabout intersection	5	0	0	5	N/A
Other	57	0	7	50	0.0
None	1,106	1	138	967	0.9
Unknown	7	0	1	6	0.0

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

INDIANA UNIVERSITY
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MOTORCYCLES

MOTORCYCLES, 2018

Traffic collisions involving motorcycles have declined from 2014 to 2018 (Figure 4.1). In each of those years, there are more multi-vehicle (MV) than single-vehicle (SV) motorcycle collisions. Fatal collisions involving motorcycles increased between 2016 and 2017, but fell from 5 percent of fatal MV and 4 percent of fatal SV in 2017 to 4 percent and 3 percent in 2018, respectively.

Total motorcyclists involved in collisions declined annually from 2014 to 2018 (Table 4.1). From 2017 to 2018, the number of motorcyclists killed decreased by 24 percent, from 147 to 112 motorcyclist fatalities. Meanwhile, the count of motorcyclists with non-fatal injuries declined by 16 percent, from 2,285 to 1,930. Over 70 percent of collision-involved motorcycle riders were injured (67 percent) or killed (4 percent). As shown in Figure 4.2, motorcycle collisions were responsible for 13 percent of overall traffic fatalities in 2018.

Time, day of week, and month

In 2018, the count of collisions involving motorcycles peaked at 3p.m., while the proportion that resulted in fatal and incapacitating injuries peaked at 3a.m. (Figure 4.3). As shown in Table 4.2, in 2018, when considering day of week and time, the likelihood of motorcycle collisions peaked during evening hours and declined during morning hours. Motorcycle collisions were highest on Saturdays and Sundays. Between 2014 and 2018, the spring and summer months of May, June, July, and August had the highest incidence of motorcycle collisions (Table 4.3). Similarly, in 2018, counts of collisions involving motorcycles were highest from May through September, while rates of fatal and incapacitating injuries peaked in March (Figure 4.4).

Vehicle type

Since 2015, Indiana law has defined three different vehicle types on which motorcycle operators and passengers can be riding at the time of a collision (see glossary for definitions). There are two additional categories of vehicles still reported by ARIES that are not officially defined in Indiana law: motorized bicycle and moped. In 2018, 73 percent of operators or passengers were on motorcycles, with the remainder on other two-/three-wheeled vehicles (calculated from Table 4.4). Fatalities on motorcycles decreased 21 percent in 2018, and fatalities on motor-driven cycle class B declined by 42 percent, from 19 to 11.

Alcohol-impairment

In 2018, collisions involving motorcycles, the likelihood of alcohol impairment was generally higher for motorcycle operators than other involved drivers (Table 4.5). However, the rates of motorcycle operator impairment in should be interpreted with caution, and are linked to non-reporting or late reporting of drug and alcohol tests in the March 18, 2019, version of ARIES. In terms of blood alcohol content (BAC) results that were reported in 2018, 60 percent of motorcycle operators in single-vehicle collisions and 34 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 38 percent of collision-involved motorcyclists were wearing helmets in 2018. Among motorcyclists killed or experiencing incapacitating injuries, nearly one-half were not wearing helmets. As illustrated in Table 4.6, from 2014 to 2018, male motorcyclists had higher rates of helmet use than their female counterparts. In 2018, 25 percent of female motorcylclists involved in crashes were wearing helmets and among those who sustained fatal or incapacitating injuries, only 22 percent of females wore helmets.

Local and road class

Overall, motorcyclists involved in collisions in 2018 in densely populated urban (28 percent) were slightly less likely to be wearing helmets compared to motorcyclists in rural (34 percent), suburban (32 percent), and exurban (32 percent) areas (Figure 4.6). Helmet usage is also consistently much lower among those killed in collisions across all locales. Among motorcyclists, 28 percent in urban areas were wearing helmets, 20 percent in rural areas, and 0 percent in suburban and exurban areas.

Collision characteristics

Injury rates in 2018 motorcycle collisions are associated with different collision characteristics (Table 4.7). Motorcycle collisions occurred predominately during clear weather conditions, on straight/level roads not involving road junctions, and on local/city roads. The probability of fatal motorcycle collisions was greatest on U.S. routes (7 percent), at intersections (4 percent), and on curves (4 percent). While 11 percent of all collisions involving motorcycles occurred under dark (not lighted) conditions, 25 percent of fatal collisions occurred under such circumstances (Figure 4.7). When considering road class, 18 percent of all motorcycle collisions occurred on state roads, compared to 27 percent of fatal crashes.

Figure 4.1. Motorcycle-involved collisions in Indiana, by single vehicle (SV) and multi-vehicle (MV) involvement, 2014–2018
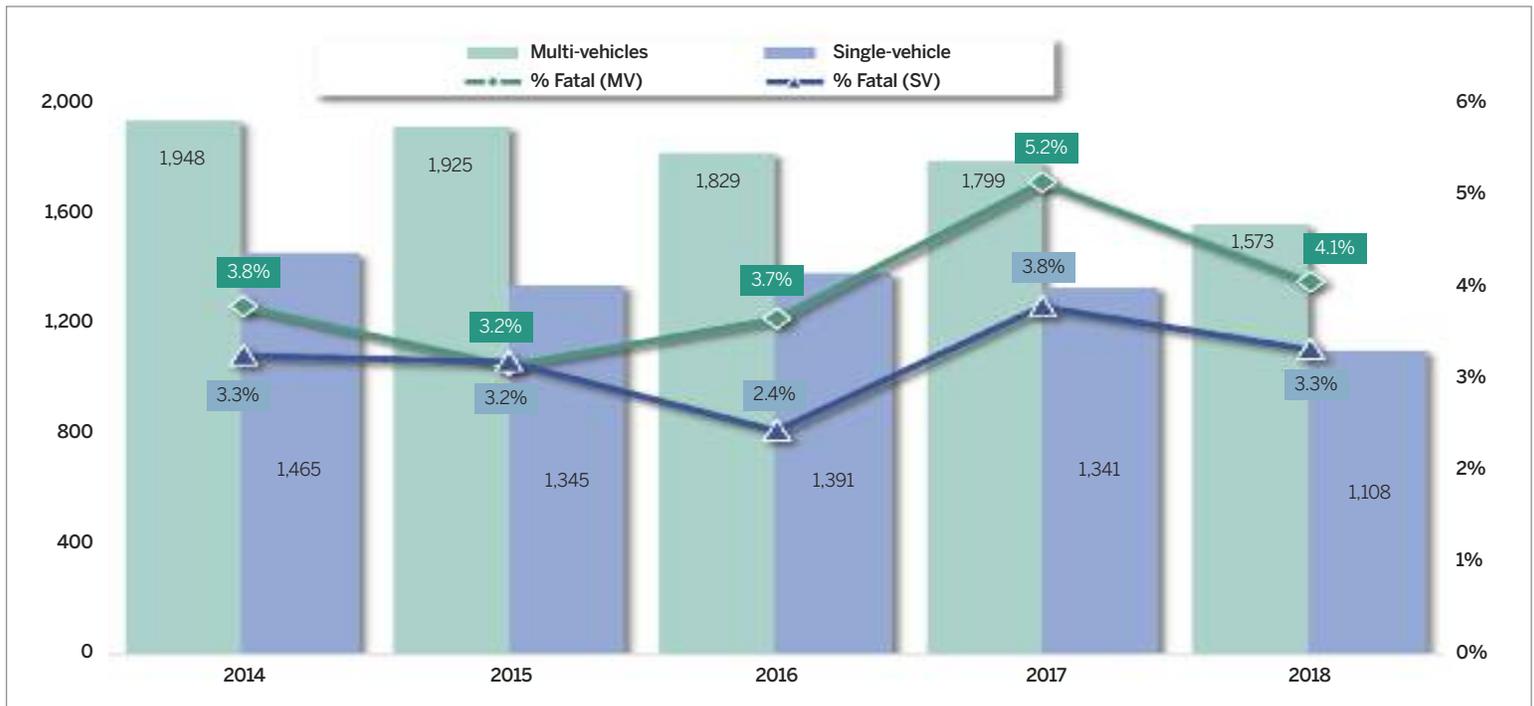
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Table 4.1. Motorcyclists involved in Indiana collisions by injury status, 2014–2018

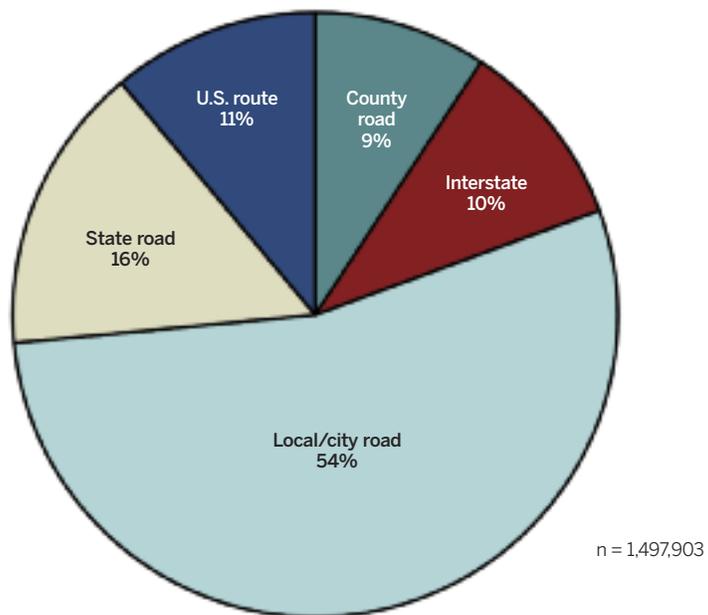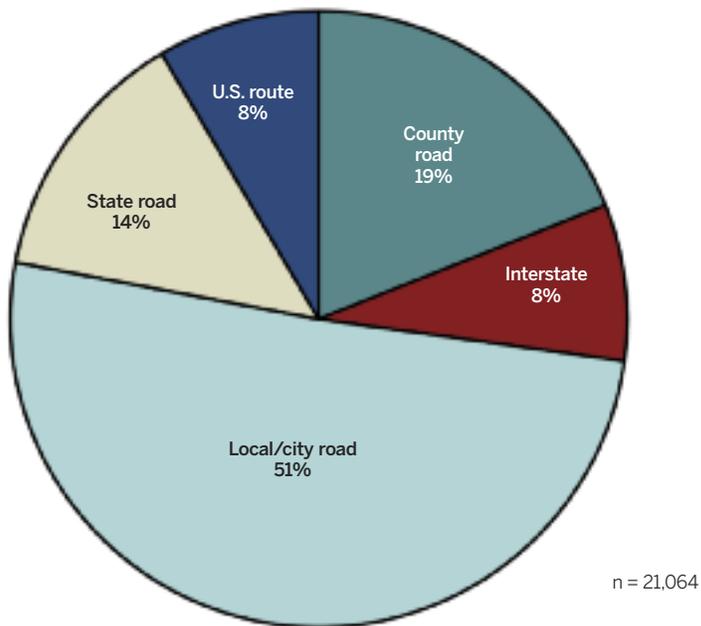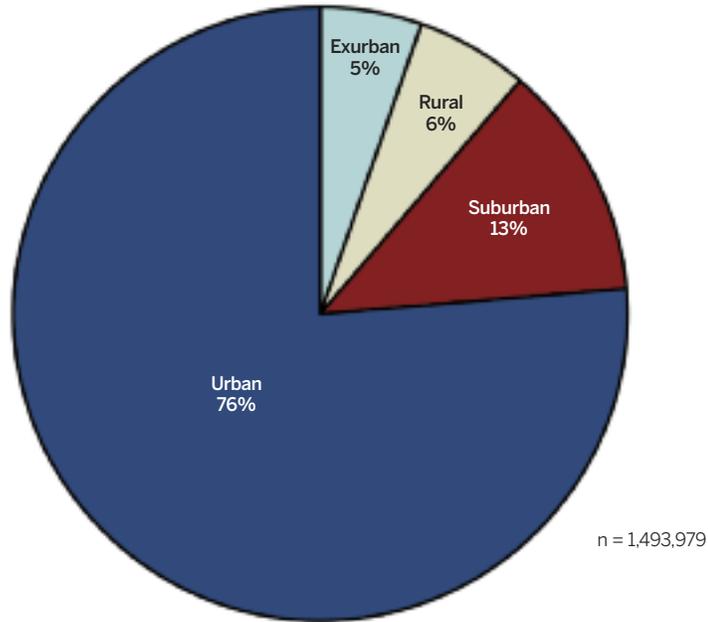| All motorcyclists	2014	2015	2016	2017	2018	Annual rate of change	
						2017-18	2014-18
All motorcyclists	3,691	3,499	3,407	3,402	2,871	-15.6%	-6.1%
Fatal	124	107	100	147	112	-23.8%	-2.5%
Non-fatal injuries	2,676	2,417	2,324	2,285	1,930	-15.5%	-7.8%
Not injured	891	975	983	970	829	-14.5%	-1.8%
Fatality and injury rates							
% fatal	3.4%	3.1%	2.9%	4.3%	3.9%		
% non-fatal injuries	72.5%	69.1%	68.2%	67.2%	67.2%		

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Motorcyclists include operators and passengers on motorcycles, class A and class B motor-driven cycles, and motorized bicycles.
2) Non-fatal injuries include individuals with at least one incapacitating, non-incapacitating, or other injury.
3) Not injured includes ALL individuals involved in collisions reported as NULL values in the injury status code field. Reporting officers are instructed to include all drivers in ARIES, but to include passengers in the crash report only if an injury occurs; therefore, not injured counts of passengers should be interpreted with caution.

Figure 4.2. Motorcycle fatalities as a percent of total traffic fatalities, 2014–2018
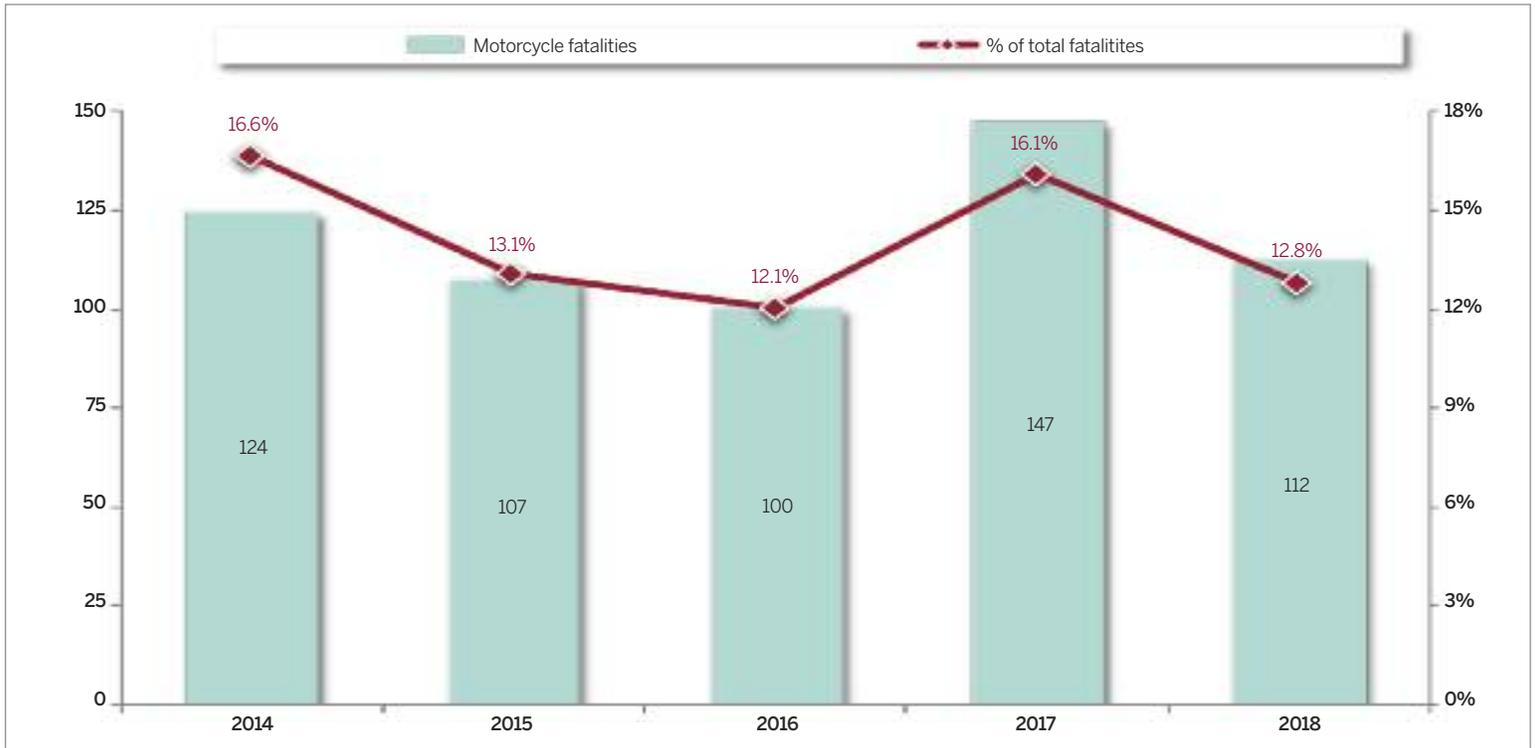
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Figure 4.3. Motorcycle collisions in Indiana by hour of the day, 2018
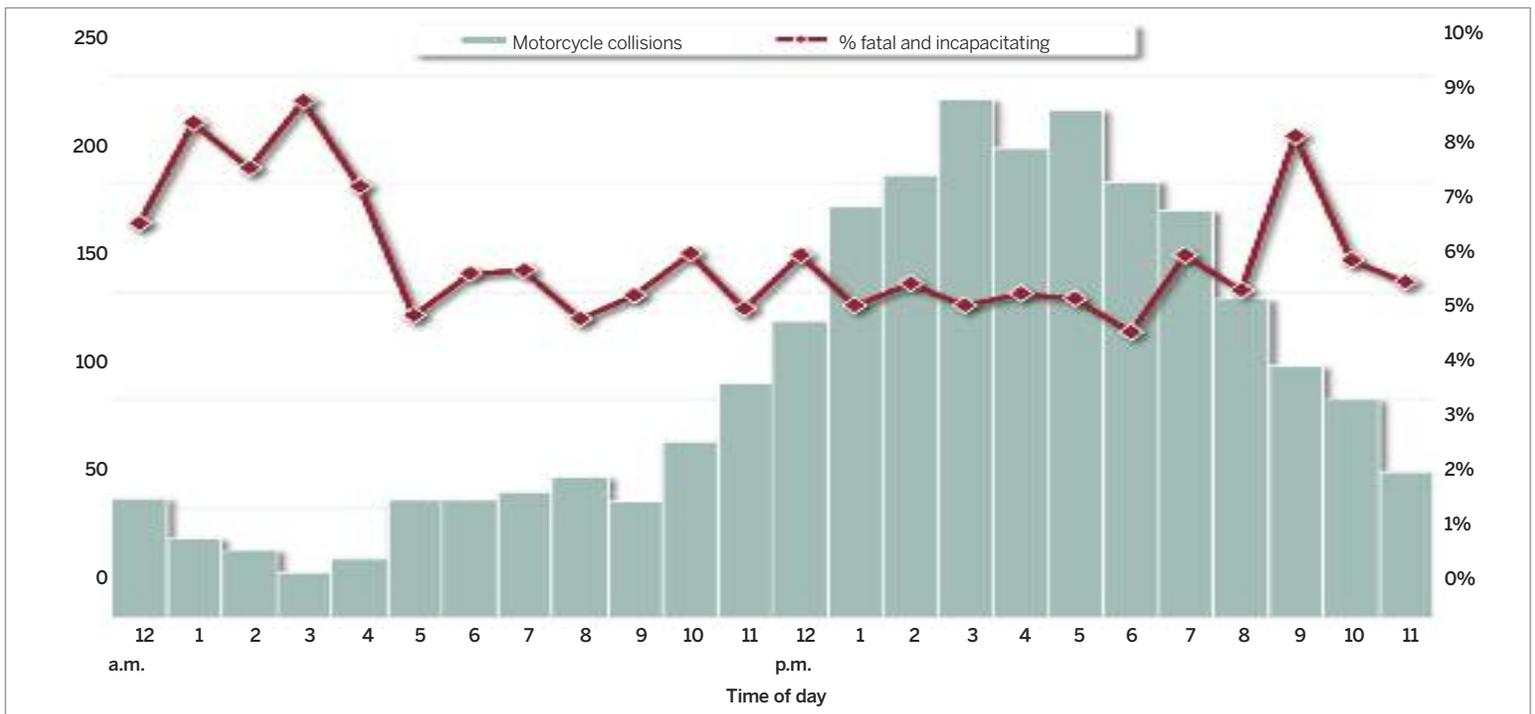
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019
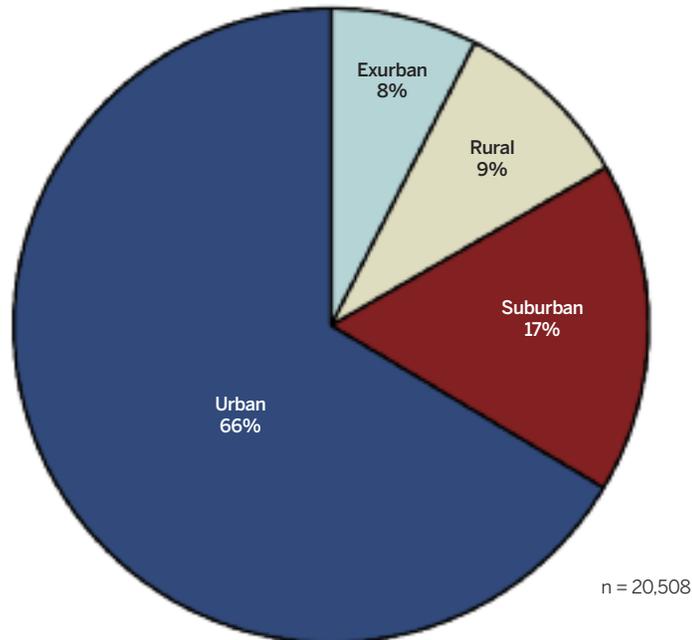
Note: Excludes collisions where hour or injury status was unknown or not reported.

Table 4.2. Motorcycle collisions as a percent of all Indiana collisions, by time of day and day of week, 2018

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% Motorcycle by hour
12a.m.	1.3%	0.6%	0.5%	0.5%	2.2%	1.4%	2.8%	1.5%
1a.m.	1.5%	0.6%	0.4%	1.0%	0.6%	1.1%	2.4%	1.3%
2a.m.	0.9%	2.4%	1.3%	0.7%	0.0%	1.5%	2.1%	1.3%
3a.m.	0.9%	0.0%	0.0%	0.3%	1.3%	1.0%	1.3%	0.8%
4a.m.	1.3%	0.7%	0.5%	1.0%	1.0%	1.5%	0.2%	0.9%
5a.m.	0.7%	1.6%	1.0%	0.8%	1.7%	1.0%	1.3%	1.2%
6a.m.	1.1%	0.6%	0.6%	0.3%	0.8%	1.2%	0.8%	0.7%
7a.m.	0.4%	0.4%	0.3%	0.5%	0.6%	0.5%	1.1%	0.5%
8a.m.	0.4%	1.0%	0.4%	0.3%	0.3%	0.9%	1.4%	0.6%
9a.m.	0.6%	0.4%	0.4%	0.6%	0.6%	0.5%	1.5%	0.6%
10a.m.	1.5%	1.0%	0.4%	0.6%	0.8%	0.7%	1.5%	0.9%
11a.m.	2.1%	0.8%	0.8%	0.7%	0.7%	0.9%	1.2%	1.0%
12p.m.	1.7%	0.8%	0.7%	1.0%	0.9%	0.9%	1.7%	1.1%
1p.m.	2.3%	1.2%	1.2%	1.0%	1.6%	1.3%	2.3%	1.5%
2p.m.	2.5%	1.1%	1.3%	1.1%	1.2%	0.9%	2.6%	1.4%
3p.m.	2.8%	1.3%	1.1%	0.7%	1.2%	1.2%	2.6%	1.4%
4p.m.	2.3%	1.0%	1.0%	1.1%	1.0%	1.2%	1.8%	1.2%
5p.m.	2.2%	1.1%	0.9%	1.1%	1.1%	1.5%	2.2%	1.3%
6p.m.	2.4%	1.0%	0.7%	1.5%	1.6%	1.7%	1.8%	1.5%
7p.m.	1.9%	1.8%	2.4%	2.2%	1.7%	1.3%	2.4%	1.9%
8p.m.	2.3%	1.3%	2.2%	1.5%	1.9%	2.1%	1.8%	1.9%
9p.m.	2.0%	1.2%	1.5%	2.1%	1.7%	1.6%	1.6%	1.7%
10p.m.	1.0%	2.0%	1.6%	1.1%	2.1%	2.0%	2.1%	1.7%
11p.m.	1.1%	1.3%	1.2%	2.1%	1.1%	1.8%	1.7%	1.5%
% Motorcycle by day	**1.8%**	**1.0%**	**0.9%**	**1.0%**	**1.1%**	**1.2%**	**1.9%**	**1.2%**

Low   <   >   High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Table 4.3. Total and motorcycle collisions, by month, 2014–2018

Month	Total collisions					Motorcycle collisions				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Jan	23,537	19,694	19,374	17,274	20,784	14	31	55	48	27
Feb	19,373	19,785	17,785	14,572	16,178	18	22	80	114	49
Mar	15,520	16,436	16,386	16,969	16,974	120	125	149	115	74
Apr	14,203	15,368	17,534	17,026	15,768	315	245	298	299	172
May	15,912	17,366	18,057	19,455	18,416	514	403	363	364	442
Jun	15,379	17,147	17,889	19,007	17,280	512	368	417	506	391
Jul	14,932	17,311	17,691	17,152	17,258	553	520	466	462	430
Aug	15,657	17,108	19,339	17,722	17,848	507	542	437	421	396
Sep	15,747	17,706	18,638	17,960	17,737	477	443	442	414	368
Oct	18,847	19,239	19,487	19,991	20,290	256	327	318	265	218
Nov	19,391	20,482	20,527	20,079	20,105	78	150	159	82	73
Dec	17,293	18,884	21,247	22,074	18,443	49	94	36	50	41
Total	205,791	216,526	223,954	219,281	217,081	3,413	3,270	3,220	3,140	2,681
High	Jan	Nov	Dec	Dec	Jan	Jul	Aug	Jul	Jun	May
Low	Apr	Apr	Mar	Feb	Apr	Jan	Feb	Dec	Jan	Jan

Low   <   >   High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Note: Color-scales are illustrated to show months from low to high for the entire 5-year period, 2014–2018.

Figure 4.4. Motorcycle collisions in Indiana by month, 2018
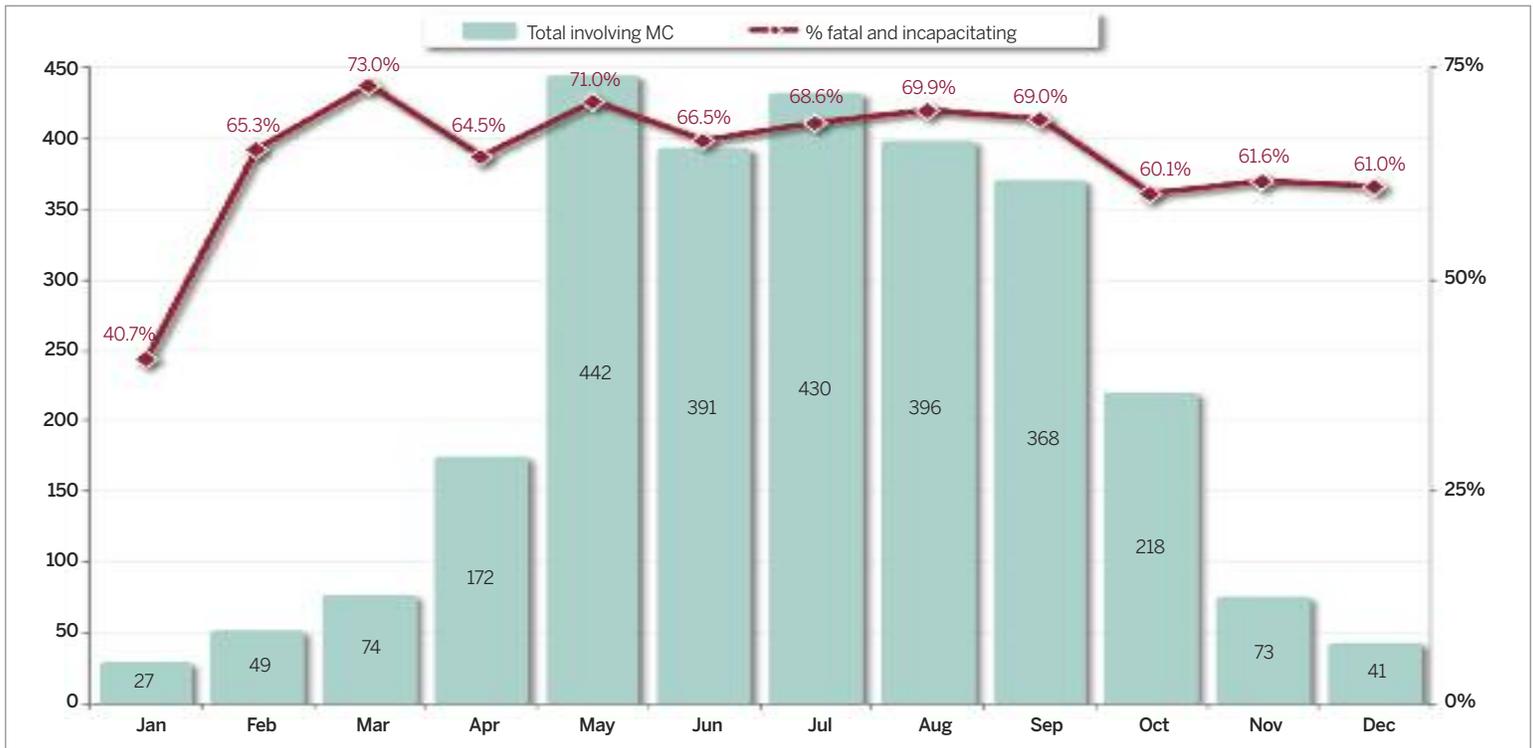
Legend: Total involving MC (bar) — % fatal and incapacitating (line)

Month	Total involving MC	% fatal and incapacitating
Jan	27	40.7%
Feb	49	65.3%
Mar	74	73.0%
Apr	172	64.5%
May	442	71.0%
Jun	391	66.5%
Jul	430	68.6%
Aug	396	69.9%
Sep	368	69.0%
Oct	218	60.1%
Nov	73	61.6%
Dec	41	61.0%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Table 4.4. Motorcyclists involved in Indiana collisions by type of motorized vehicle, 2017–2018

Unit type/Injury group	Count of individuals		Percent change	2018 injury rate, by unit type
	2017	2018	2017–2018	
All motorcyclists	**3,402**	**2,871**	**-15.6%**	
Motorcycle	**2,541**	**2,095**	**-17.6%**	**100%**
Fatal	117	92	-21.4%	4.4%
Injury	1,713	1,398	-18.4%	66.7%
Not injured	711	605	-14.9%	28.9%
Motor driven cycle class B	**434**	**424**	**-2.3%**	**100%**
Fatal	19	11	-42.1%	2.6%
Injury	291	308	5.8%	72.6%
Not injured	124	105	-15.3%	24.8%
Motor driven cycle class A	**263**	**243**	**-7.6%**	**100%**
Fatal	8	8	0.0%	3.3%
Injury	172	158	-8.1%	65.0%
Not injured	83	77	-7.2%	31.7%
Motorized bicycle	**104**	**90**	**-13.5%**	**100%**
Fatal	2	1	-50.0%	1.1%
Injury	61	50	-18.0%	55.6%
Not injured	41	39	-4.9%	43.3%
Moped	**60**	**19**	**-68.3%**	**100%**
Fatal	1	0	-100.0%	0.0%
Injury	48	16	-66.7%	84.2%
Not injured	11	3	-72.7%	15.8%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Motorcyclists include operators and passengers of motorcycles, class A and B motor driven cycles, motorized bicycles, and mopeds.
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, 2018

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	32	563	595		
		0 g/dL	3	12	15		
		0.01-0.07	2	6	8		
		0.08-0.14	0	14	14	60.3%	5.9%
		0.15-0.59	1	20	21		
		Not reported	26	511	537		
	Passenger vehicles	Total operators	191	4,718	4,909		
		0 g/dL	10	244	254		
		0.01-0.07	1	50	51		
		0.08-0.14	2	103	105	52.7%	6.9%
		0.15-0.59	21	214	235		
		Not reported	157	4,107	4,264		
Multi-vehicle	Motorcycles	Total operators	63	562	625		
		0 g/dL	7	15	22		
		0.01-0.07	4	7	11		
		0.08-0.14	3	6	9	34.0%	2.7%
		0.15-0.59	2	6	8		
		Not reported	47	528	575		
	Passenger vehicles	Total operators	249	19,011	19,260		
		0 g/dL	31	466	497		
		0.01-0.07	7	60	67		
		0.08-0.14	3	72	75	33.3%	1.5%
		0.15-0.59	10	197	207		
		Not reported	198	18,216	18,414		

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
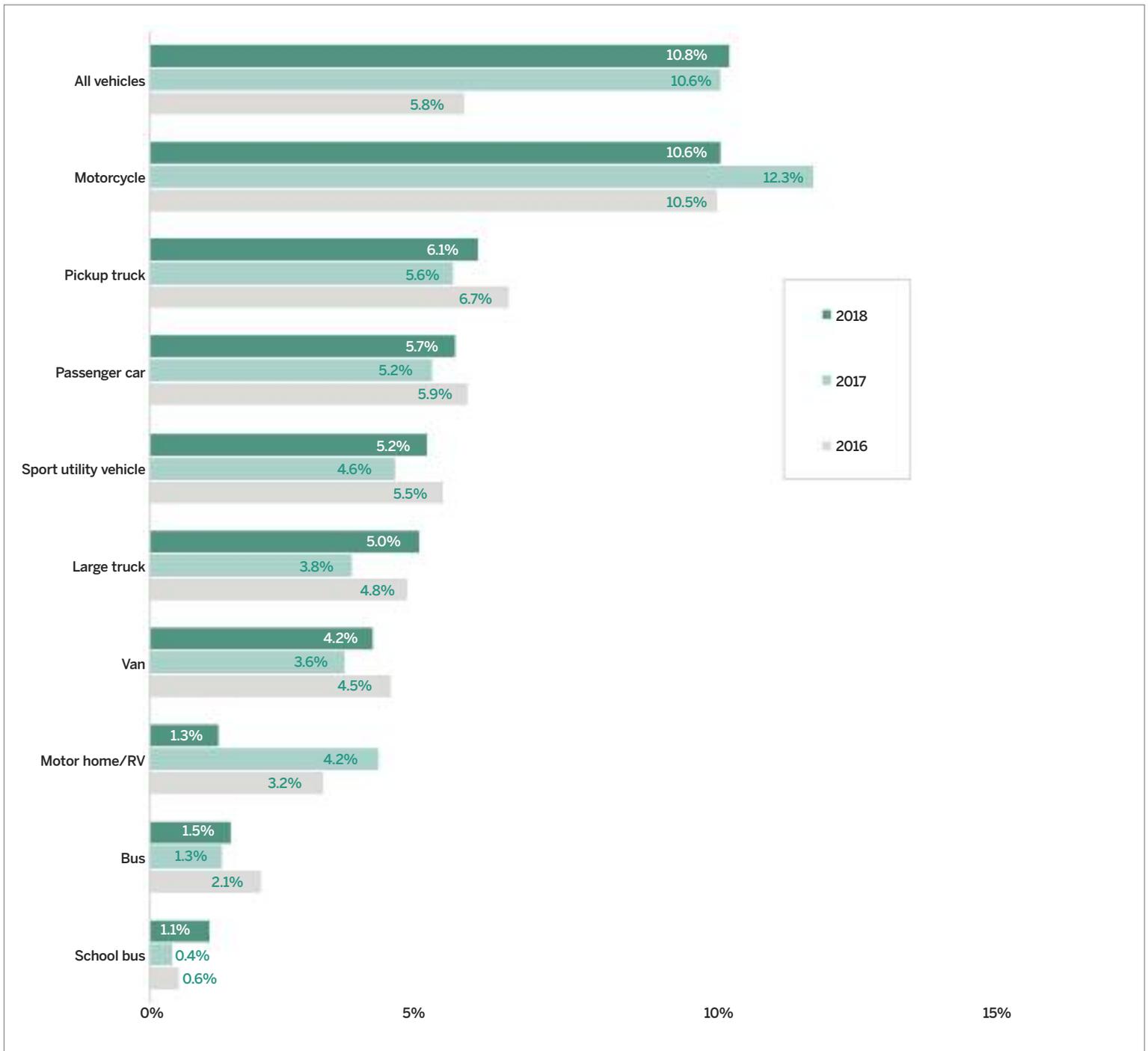1) BAC range in grams per deciliter (g/dL). 0.08 or greater is legally impaired.
2) Includes only the operators of motorcycles and passenger vehicles (passenger car, pickup truck, sport utility vehicle, van).
3) Reported results include only those records in ARIES that have a BAC result (i.e., excludes NULL values).
4) Trends related to Indiana alcohol-impaired crashes should be interpreted with caution. Counts were current as of the March 18, 2019 ARIES data extract and are likely to change as pending BAC test results are finalized and reported into the ARIES crash database.

Figure 4.5. Fatal and incapacitating injuries as a percent of total motorcyclists involved in Indiana collisions, by helmet use and age group, 2018
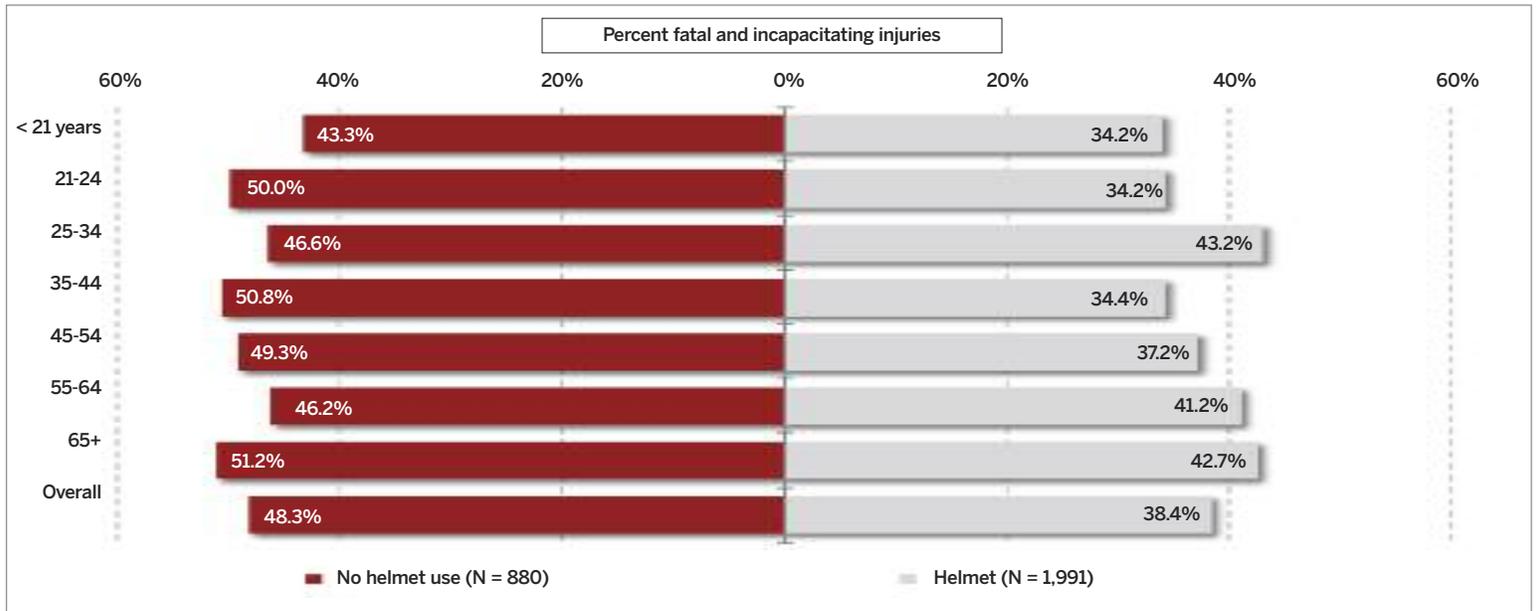
Percent fatal and incapacitating injuries

Age group	No helmet use	Helmet
< 21 years	43.3%	34.2%
21-24	50.0%	34.2%
25-34	46.6%	43.2%
35-44	50.8%	34.4%
45-54	49.3%	37.2%
55-64	46.2%	41.2%
65+	51.2%	42.7%
Overall	48.3%	38.4%

■ No helmet use (N = 880)   ▢ Helmet (N = 1,991)

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Note: Excludes cases with unknown age.
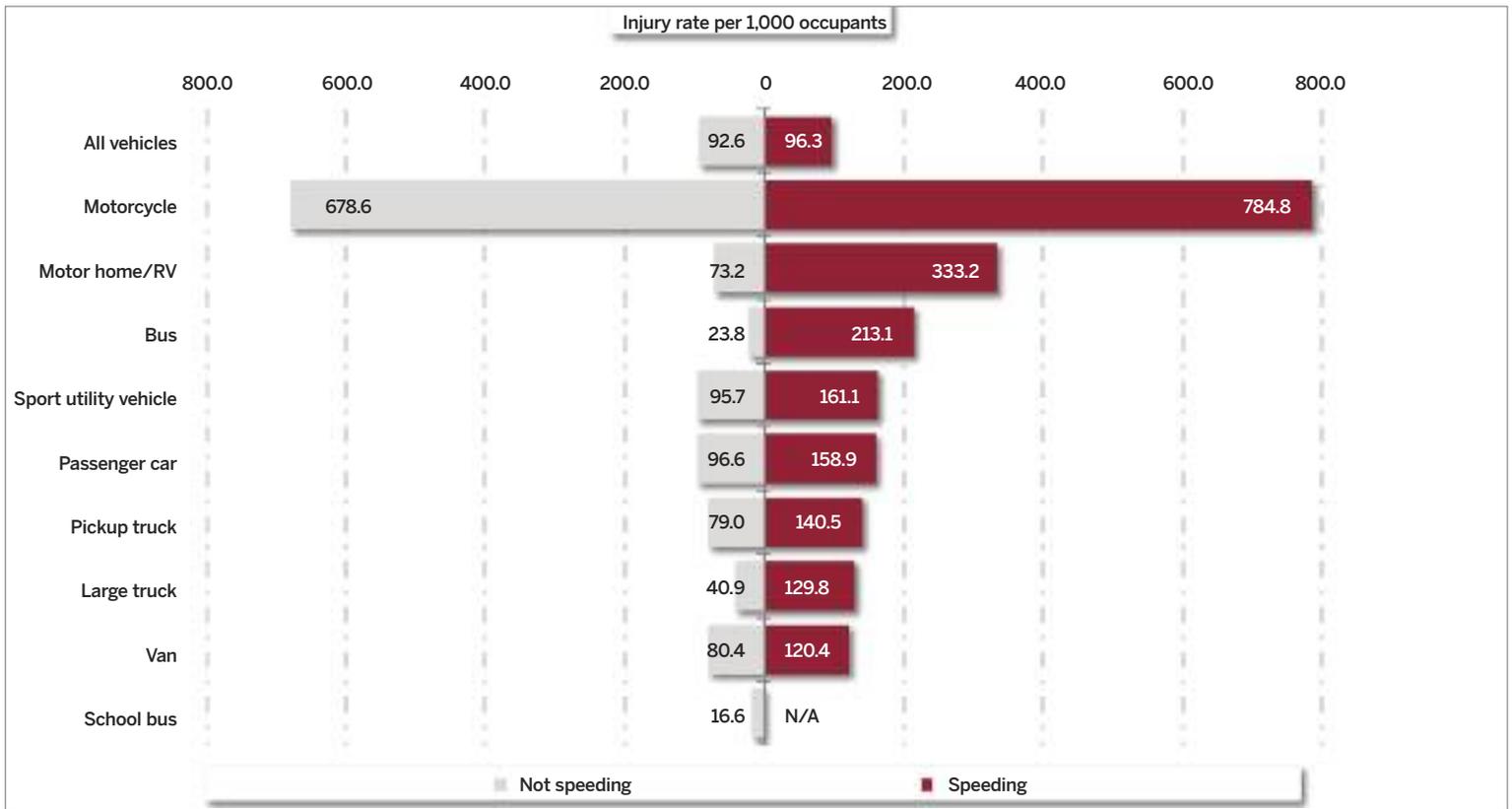
Table 4.6. Helmet usage among motorcyclists involved in Indiana collisions, by age group and gender, 2014–2018

All motorcyclists

Age group	2014 Female	2014 Male	2015 Female	2015 Male	2016 Female	2016 Male	2017 Female	2017 Male	2018 Female	2018 Male
15–20	24.5%	33.9%	45.5%	42.3%	24.2%	50.0%	36.4%	52.8%	32.6%	53.6%
21-24	21.7%	34.9%	37.8%	46.6%	24.3%	48.0%	23.5%	47.3%	25.0%	53.8%
25-34	16.3%	28.9%	21.9%	34.6%	21.9%	30.9%	27.8%	34.0%	22.6%	33.1%
35-44	16.4%	17.4%	19.3%	24.5%	27.0%	25.8%	22.7%	27.9%	18.1%	26.0%
45-54	25.5%	21.3%	24.2%	24.1%	22.9%	21.0%	18.5%	22.8%	20.9%	20.0%
55-64	34.0%	33.2%	44.4%	34.7%	38.7%	32.1%	46.4%	29.7%	30.8%	27.1%
65+	53.8%	31.5%	41.7%	40.4%	43.3%	44.1%	60.0%	51.3%	40.0%	39.6%
All ages	23.1%	27.3%	28.3%	32.7%	28.0%	32.3%	29.0%	33.3%	24.7%	31.7%

Motorcyclists experiencing fatal or incapacating injuries

| Age group	2014 Female	2014 Male	2015 Female	2015 Male	2016 Female	2016 Male	2017 Female	2017 Male	2018 Female	2018 Male
15-20	7.1%	28.2%	40.0%	38.3%	23.5%	52.7%	38.5%	49.4%	27.8%	45.8%
21-24	22.2%	18.4%	28.6%	46.7%	20.8%	51.5%	20.0%	44.6%	25.0%	43.8%
25-34	16.7%	25.9%	18.5%	29.7%	27.3%	27.4%	30.6%	37.1%	20.9%	31.6%
35-44	13.0%	5.6%	14.3%	21.7%	20.4%	24.7%	17.2%	25.0%	17.6%	18.2%
45-54	16.7%	19.0%	19.4%	21.7%	18.0%	20.1%	19.1%	22.2%	14.0%	16.4%
55-64	45.5%	28.1%	50.0%	34.6%	34.9%	30.5%	48.6%	28.4%	43.5%	23.0%
65+	100.0%	27.3%	40.0%	42.9%	35.0%	40.2%	66.7%	46.5%	30.8%	36.0%
All ages	18.9%	20.9%	24.1%	30.2%	24.9%	30.5%	28.9%	31.9%	22.4%	26.7%

Low < > High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Data limited to drivers with valid gender and age reported.
2) Excludes drivers under 15 years old.

Figure 4.6. Helmet usage among motorcyclists in Indiana collisions, by injury status and census locale, 2018

Motorcyclists involved in crashes

28% helmet

34%

32%

32%

Rural areas 12%

Exurban 8%

Suburban 16%

Urban 64%

N = 2,534

Motorcyclists killed in crashes

24% helmet

20%

0%

0%

Rural areas 15%

Exurban 12%

Suburban 24%

Urban 49%

N = 100

Inner pie: Geographic distribution of motorcyclists involved

Outer ring: Helmet use rates, by locale
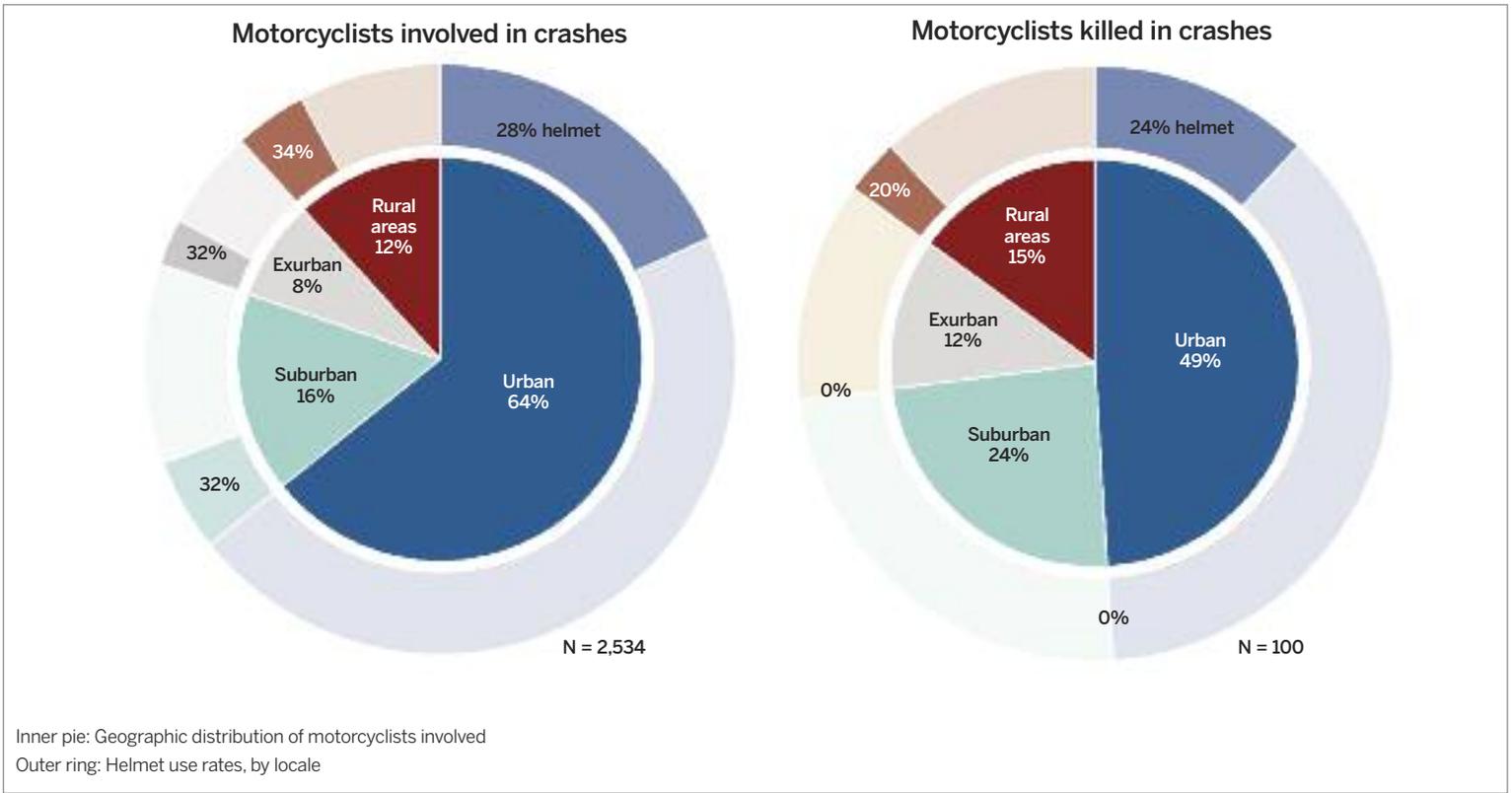
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Note: Excludes cases where locale could not be determined.

Table 4.7. Characteristics of Indiana motorcycle collisions, by severity of collision, 2018

Characteristics	Count of collisions				Probability of collision severity	
	Fatal	Incapacitating	Property damage	Total	Fatal	Incapacitating
Light conditions	**101**	**1,705**	**865**	**2,671**		
Daylight	62	1,206	649	1,917	3.2%	62.9%
Dark (lighted)	11	216	99	326	3.4%	66.3%
Dark (not lighted)	25	213	72	310	8.1%	68.7%
Dawn/dusk	3	70	45	118	2.5%	59.3%
Weather conditions	**101**	**1,708**	**869**	**2,678**		
Clear	79	1,421	699	2,199	3.6%	64.6%
Cloudy or poor visibility	19	216	124	359	5.3%	60.2%
Extreme weather	3	71	46	120	2.5%	59.2%
Road junctions	**101**	**1,708**	**872**	**2,681**		
No junction involved	62	1,093	568	1,723	3.6%	63.4%
Intersections	37	566	281	884	4.2%	64.0%
Interchange/ramp	2	49	23	74	2.7%	66.2%
Road character	**101**	**1,708**	**871**	**2,680**		
Straight (level)	67	1,129	640	1,836	3.6%	61.5%
Curves	21	372	124	517	4.1%	72.0%
Straight (non-level)	12	199	86	297	4.0%	67.0%
Non-roadway	1	8	21	30	3.3%	26.7%
Road class	**100**	**1,666**	**780**	**2,546**		
Local/city	34	860	459	1,353	2.5%	63.6%
State road	27	305	121	453	6.0%	67.3%
U.S. route	17	152	75	244	7.0%	62.3%
County road	17	289	88	394	4.3%	73.4%
Interstate	5	60	37	102	4.9%	58.8%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Excludes collisions where characteristic was unknown or not reported.
2) Selected characteristics are re-grouped from collision characteristics reported in ARIES, as shown below.
   a) Weather conditions:
      Cloudy or poor visibility includes cloudy, fog/smoke/smog, and blowing sand/soil/snow.
      Extreme weather includes rain, severe cross wind, sleet/hail/freezing rain, and snow.
   b) Road junctions:
      Intersectionsincludes five point or more, four-way intersection, T-intersection, traffic circle/roundabout, trail crossing, RR crossing, and Y-intersection.
      Interchange/ramp includes interchange and ramp.
   c) Road character:
      Curves includes curve/grade, curve/hillcrest, and curve/level.
      Straight (non-level) includes straight/grade and straight/hillcrest.

Figure 4.7. Characteristics of Indiana motorcycle collisions, by light and weather conditions, 2018

Light conditions

All collisions

Dawn/dusk
4.4%

Dark
(not lighted)
11.6%

Dark (lighted)
12.2%

Daylight
71.8%

Fatal collisions

Dawn/dusk
3.0%

Dark
(not lighted)
24.8%

Dark (lighted)
10.9%

Daylight
61.4%

Weather conditions

All collisions

Extreme
weather
4.5%

Cloudy
or poor
visisbility
13.4%

Clear
82.1%

Fatal collisions

Extreme
weather
3.0%

Cloudy
or poor
visisbility
18.8%

Clear
78.2%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Figure 4.8. Characteristics of Indiana motorcycle collisions, by road parameters, 2018

Road junctions

All collisions

- Interchange/ramp 2.8%
- Intersections 33.0%
- No junction involved 64.3%

Fatal collisions

- Interchange/ramp 2.0%
- Intersections 36.6%
- No junction involved 61.4%
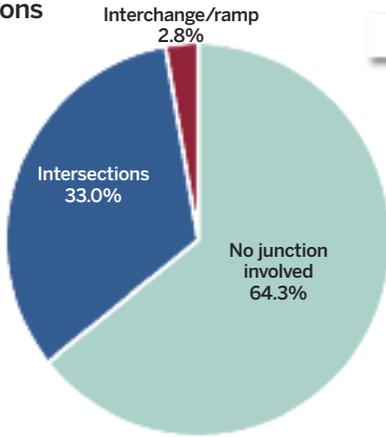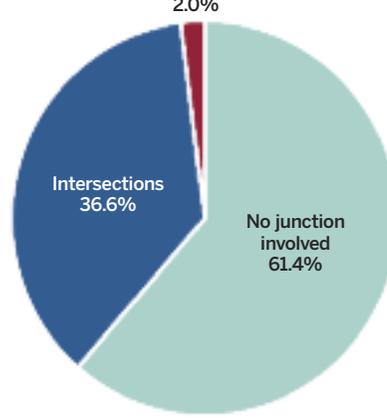
Road character

All collisions

- Non-roadway 1.1%
- Straight (not level) 11.1%
- Curves 19.3%
- Straight (level) 68.5%

Fatal collisions

- Non-roadway 1.0%
- Straight (not level) 11.9%
- Curves 20.8%
- Straight (level) 66.3%
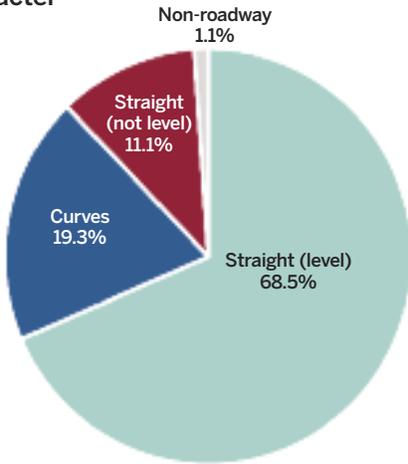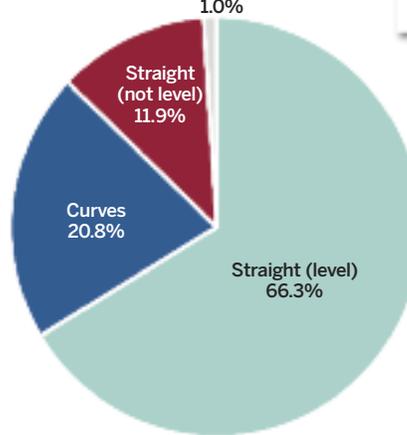
Road class

All collisions
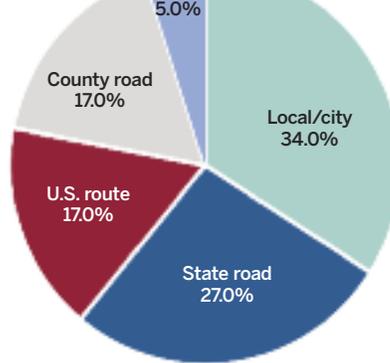
- Interstate 4.0%
- County road 15.5%
- U.S. route 9.6%
- State road 17.8%
- Local/city 53.1%

Fatal collisions

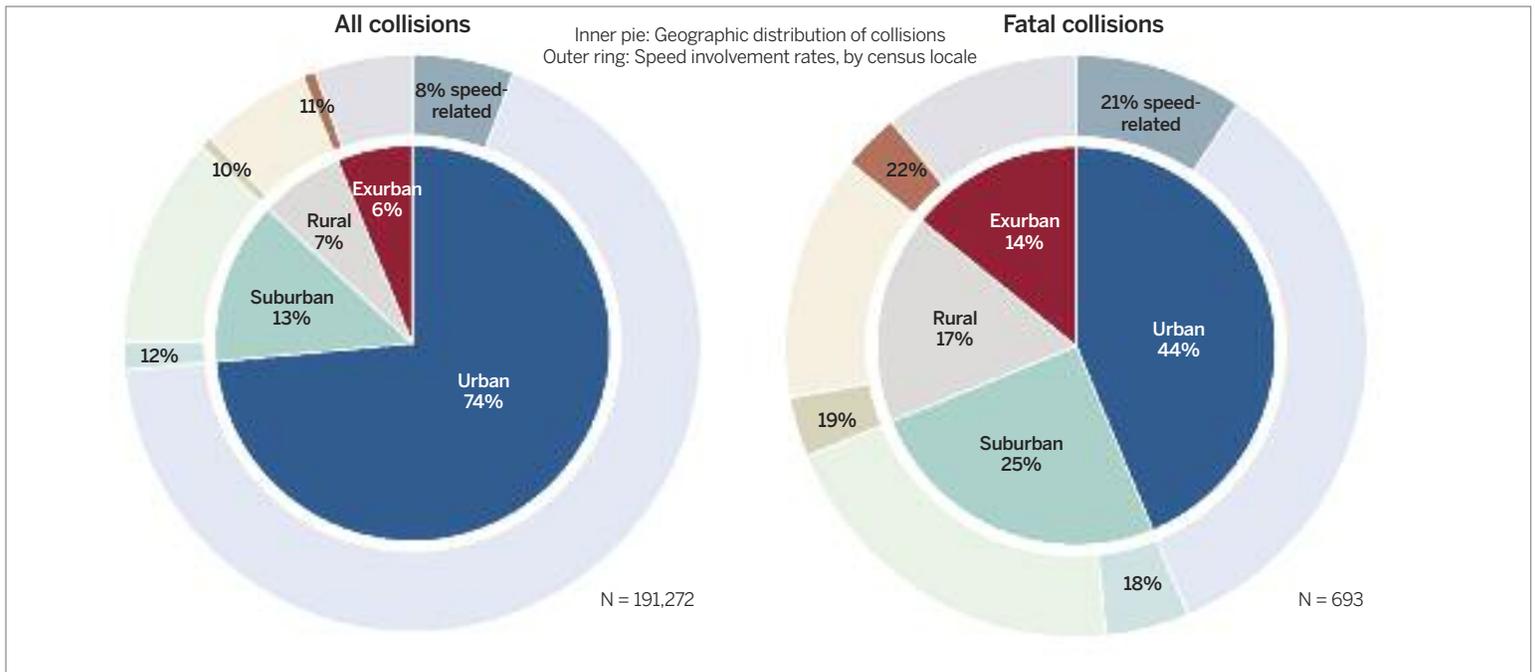- Interstate 5.0%
- County road 17.0%
- U.S. route 17.0%
- State road 27.0%
- Local/city 34.0%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

INDIANA
TRAFFIC SAFETY
FACTS

INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

ALCOHOL

ALCOHOL, 2018

Note: From 2014 to 2018, on average, more than half of all drivers involved in fatal collisions have no blood alcohol content (BAC) results reported in the Indiana State Police Automated Reporting Information Exchange System (ARIES). In 2018, about 60 percent of drivers involved in fatal collisions in Indiana were tested for alcohol yet, at the time of the data extract for this report, the ARIES database included results for only 343 of those 1,228 drivers—just 28 percent. Therefore, it is likely that impairment rates are underestimated due to non-reporting of BAC results in ARIES. Statistics presented here should be interpreted with this in mind.

General trends

In 2018, 83 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 3,990 alcohol-impaired collisions that year, 63 claimed at least one life (Table 5.1). From 2014 to 2018, the number of people killed in crashes with impaired drivers dropped 6 percent annually. The number of fatal collisions involving an alcohol-impaired driver fell nearly 11 percent annually. Nearly 3 out of every 4 people killed in alcohol-impaired collisions in 2018 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 60 percent of drivers involved in fatal collisions in 2018 were reportedly tested for alcohol and/or drugs, compared to only 10 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 25 and 34 years old had the highest rate of testing (69 percent), while drivers 75 years and older had the lowest rate (35 percent). However, among all drivers tested, only 28 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 2014 to 2018, 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 2018, around two-thirds of surviving drivers were tested, compared to fewer than 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 (9 percent) than those who were killed (38 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. The current version of ARIES does not specify the type of drug(s) found during testing. Furthermore, 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 2018 dropped about 5 percent from 2017. The number of impaired drivers in fatal collisions also decreased, falling 35 percent during that time (Table 5.4). Representation of impaired drivers was disproportionately high in some age groups. In 2018, the largest proportion of impaired drivers in fatal collisions was the 25- to 34-year-old age group (33 percent), yet this same group made up just 19 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 2018 (Figure 5.3). Among drivers in fatal collisions, 19 percent of male drivers and 18 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 2014 to 2018, 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 2014 and 2018, the months of 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 January. The highest percentage of non-fatal injuries in alcohol-involved crashes occurred in March.

In 2018, 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). Alcohol-impaired crashes happened most often on Saturdays between 2–3 a.m., while fatal and incapacitating injuries were most likely to happen on Sundays between 3–4 a.m.

Impaired driving by road type and locale

When looking at road types, county roads were overrepresented when examining impaired driving in crashes between 2014 and 2018 (Figure 5.7). During that timeframe, 19 percent of impaired drivers were involved in crashes on county roads versus 9 percent of non-impaired drivers. During this same time period, one-third of drunk drivers in collisions were involved in crashes that happened outside of urban areas, compared to less than one-quarter of non-impaired drivers (Figure 5.8). Seventeen percent of intoxicated drivers were in crashes in suburban areas, 8 percent in exurban areas, and 9 percent in rural areas.
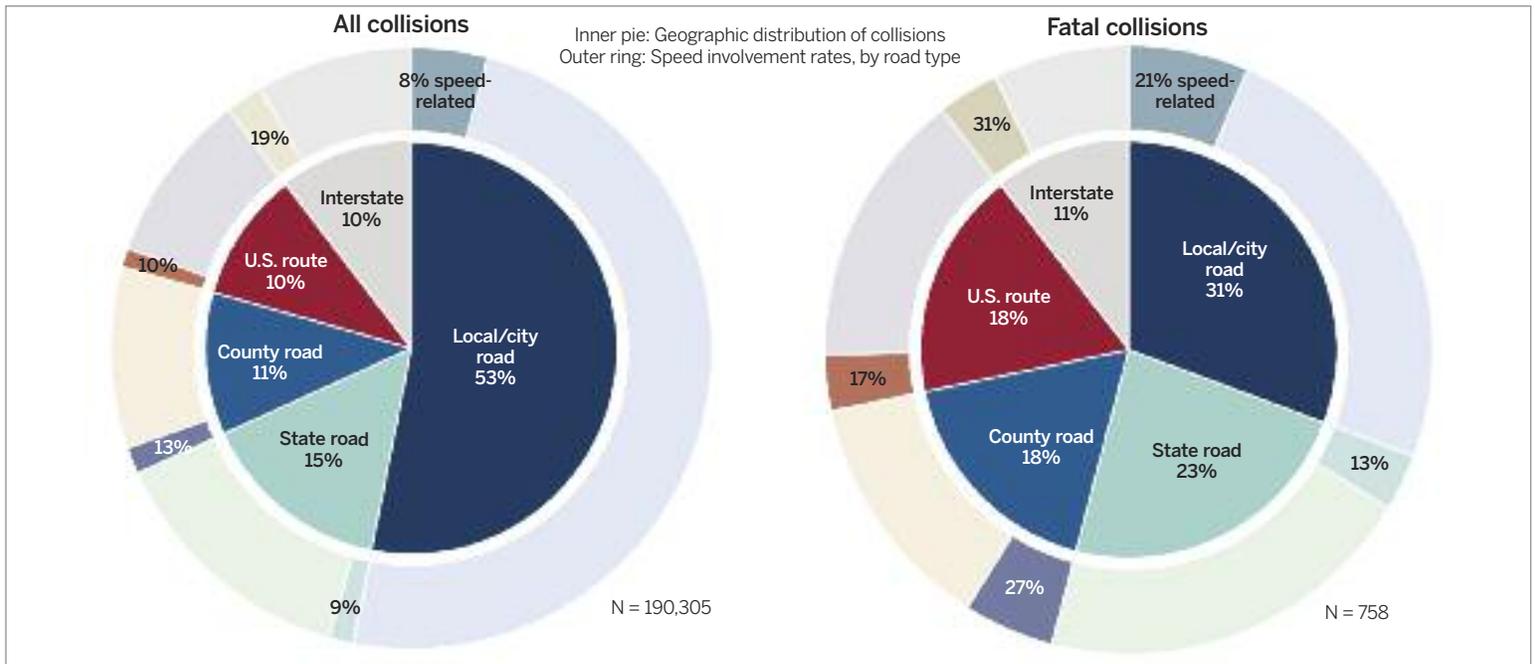
Figure 5.1. Indiana traffic fatalities, by alcohol impairment, 2014–2018
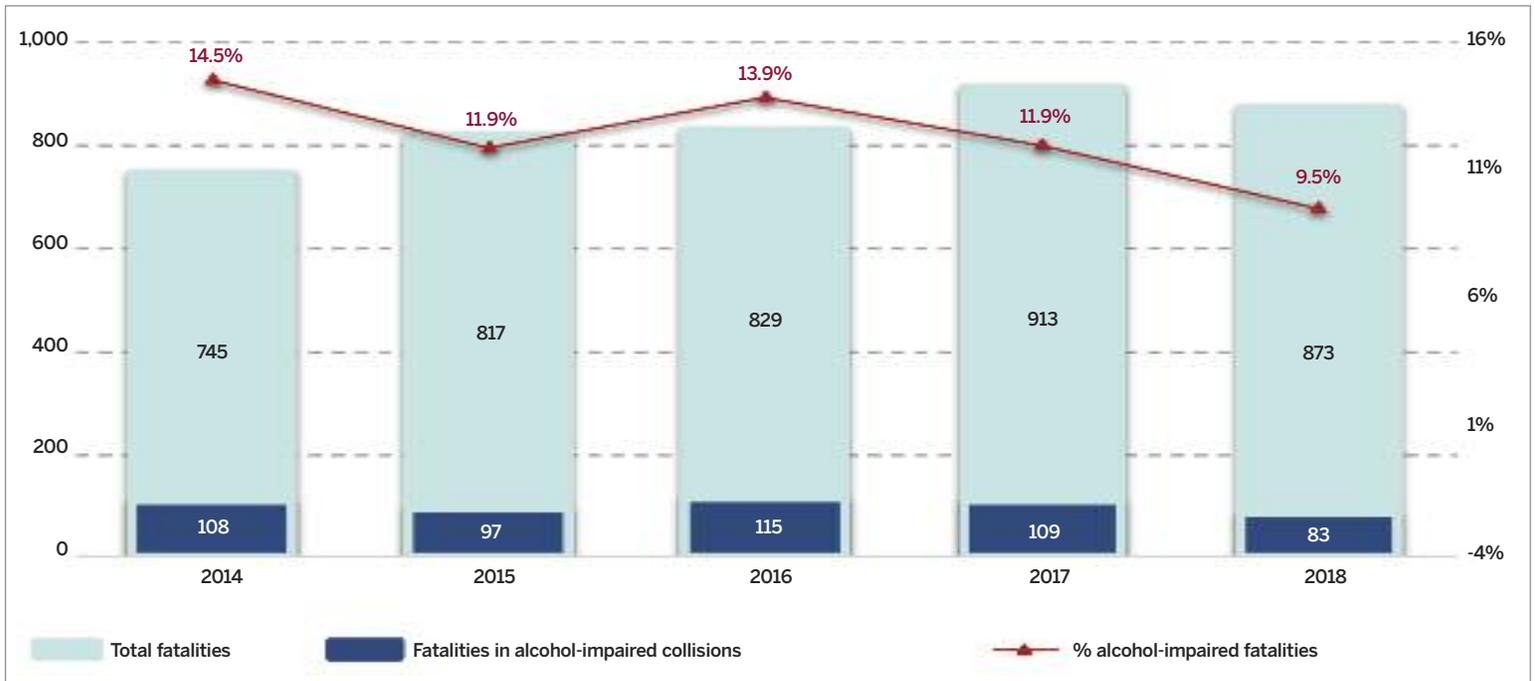
Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Alcohol-impaired fatalities occurred in collisions that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Table 5.1. Indiana collisions and injuries involving alcohol-impaired drivers, 2014–2018

| | 2014 | 2015 | 2016 | 2017 | 2018 | Annual rate of change | |
						2017–18	2014–2018
Collisions involving an alcohol-impaired driver							
Total collisions	4,545	4,790	4,846	4,554	3,990	-12.4%	-3.2%
Fatal	101	90	100	96	63	-34.4%	-11.1%
Injury	1,283	1,319	1,415	1,267	1,046	-17.4%	-5.0%
Property damage	3,161	3,381	3,331	3,191	2,881	-9.7%	-2.3%
Individuals in collisions involving an alcohol-impaired driver							
Total individuals	6,519	7,015	7,235	6,644	5,758	-13.3%	-3.1%
Fatal	108	97	115	109	83	-23.9%	-6.4%
Injured	1,873	1,971	2,169	1,841	1,532	-16.8%	-4.9%
Not injured	4,538	4,947	4,951	4,694	4,143	-11.7%	-2.3%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Individuals injured includes incapacitating, non-incapacitating, possible, refused, and unknown injury status categories.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Figure 5.2. Indiana fatalities in collisions involving an alcohol-impaired driver, by gender, 2014–2018
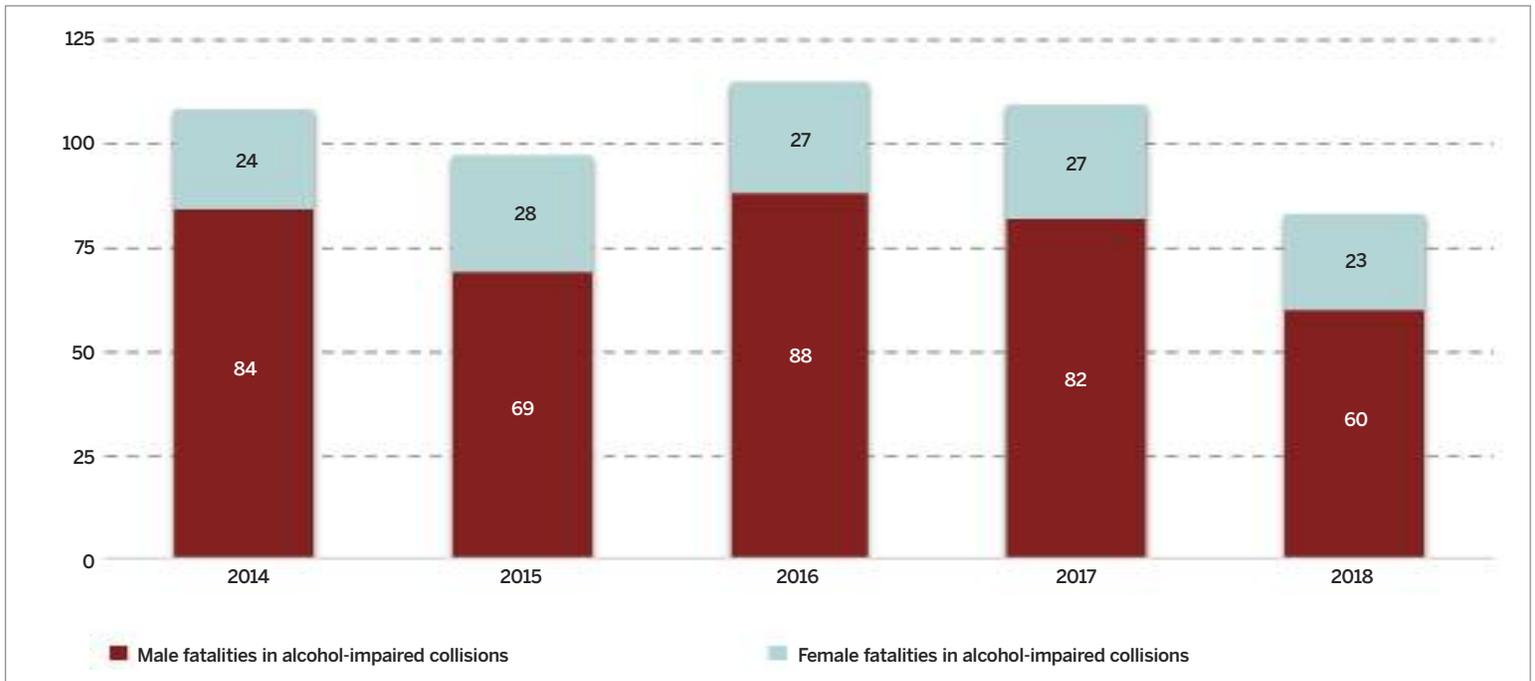
■ Male fatalities in alcohol-impaired collisions ■ Female fatalities in alcohol-impaired collisions

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Alcohol-impaired fatalities occurred in collisions that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Table 5.2. Drivers in Indiana collisions who were tested for alcohol or other substances, by age and collision severity, 2018

| | Count of drivers | | | | | |
| | Fatal collisions | | | Incapacitating collisions | | |
Driver age	Tested	Total	Tested as % total	Tested	Total	Tested as % total
15 to 20	73	126	57.9%	242	3,012	8.0%
21 to 24	57	90	63.3%	321	2,458	13.1%
25 to 34	162	236	68.6%	678	5,381	12.6%
35 to 44	113	204	55.4%	499	4,303	11.6%
45 to 54	128	203	63.1%	385	3,904	9.9%
55 to 64	109	182	59.9%	301	3,427	8.8%
65 to 74	61	117	52.1%	100	2,050	4.9%
75 and older	24	68	35.3%	34	1,207	2.8%
All ages	**727**	**1,226**	**59.3%**	**2,560**	**25,742**	**9.9%**

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Tested includes drivers for whom ARIES indicates an alcohol, drug, or alcohol/drug test was given.
2) Excludes ages younger than 15 and older than 109 years old, and cases with unknown or non-reported age.

Table 5.3. Drivers involved in Indiana fatal collisions, by substance test given and reported results, 2014–2018

	Survived collision					Killed in collision				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Drivers in fatal collisions	602	611	629	669	660	517	536	570	622	568
By test type given										
Alcohol and/or drug	470	439	439	493	448	267	277	269	315	279
None	20	3	0	3	2	32	7	5	5	5
Refused	1	1	2	1	2	0	0	0	0	0
Not reported	111	168	188	172	208	218	252	296	302	284
Tested, as % all	78.1%	71.8%	69.8%	73.7%	67.9%	51.6%	51.7%	47.2%	50.6%	49.1%
By BAC test result										
Alcohol-impaired	27	36	34	29	21	75	55	68	69	43
Not impaired	333	291	306	283	210	110	116	112	104	69
No result reported	242	284	289	357	429	332	365	390	449	456
By drug test result										
Positive	45	53	65	49	47	73	72	83	90	52
Negative	176	188	181	155	86	96	99	98	82	63
Pending	39	26	20	32	64	17	26	15	21	34
No result reported	342	344	363	433	463	331	339	374	429	419
Alcohol-impaired, as % tested	5.7%	8.2%	7.7%	5.9%	4.7%	28.1%	19.9%	25.3%	21.9%	15.4%
Drug-positive, as % tested	9.6%	12.1%	14.8%	9.9%	10.5%	27.3%	26.0%	30.9%	28.6%	18.6%
Alcohol-impaired, as % of drivers with reported results	7.5%	11.0%	10.0%	9.3%	9.1%	40.5%	32.2%	37.8%	39.9%	38.4%
Drug-positive, as % drivers with reported results	20.4%	22.0%	26.4%	24.0%	35.3%	43.2%	42.1%	45.9%	52.3%	45.2%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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, 2014–2018

Driver age	Count of drivers involved					Annual rate of change		% of total
	2014	2015	2016	2017	2018	2017–18	2014–18	2018
All drivers	1,116	1,144	1,198	1,286	1,226	-4.7%	2.4%	100%
15 to 20	88	116	111	120	126	5.0%	9.4%	10.3%
21 to 24	115	103	130	112	90	-19.6%	-5.9%	7.3%
25 to 34	222	217	228	239	236	-1.3%	1.5%	19.2%
35 to 44	182	196	190	208	204	-1.9%	2.9%	16.6%
45 to 54	230	191	190	242	203	-16.1%	-3.1%	16.6%
55 to 64	137	174	182	185	182	-1.6%	7.4%	14.8%
65 to 74	84	82	93	102	117	14.7%	8.6%	9.5%
75 and older	58	65	74	78	68	-12.8%	4.1%	5.5%
Impaired drivers	102	91	102	98	64	-34.7%	-11.0%	100%
15 to 20	4	4	8	3	3	0.0%	-6.9%	4.7%
21 to 24	11	14	26	15	7	-53.3%	-10.7%	10.9%
25 to 34	32	27	23	35	21	-40.0%	-10.0%	32.8%
35 to 44	21	19	19	22	14	-36.4%	-9.6%	21.9%
45 to 54	22	13	15	11	11	0.0%	-15.9%	17.2%
55 to 64	9	11	10	8	6	-25.0%	-9.6%	9.4%
65 to 74	3	1	1	4	1	-75.0%	-24.0%	1.6%
75 and older	0	2	0	0	1	100%	NA	1.6%

Low <   <   >   > High

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Impairment rates are underestimated due to under reporting of BAC results in ARIES.
2) Forty percent of drivers involved in 2018 fatal collisions have no reported BAC results, either because they were not tested or test results were not yet reported in ARIES at the time of the data extract.
3) Impaired drivers are those with BAC of 0.08 g/dL or greater reported in ARIES.
4) Excludes ages under 15 and over 109 years and cases with unknown or non-reported age.

Figure 5.3. Alcohol impairment among drivers in Indiana fatal collisions, by gender, 2018
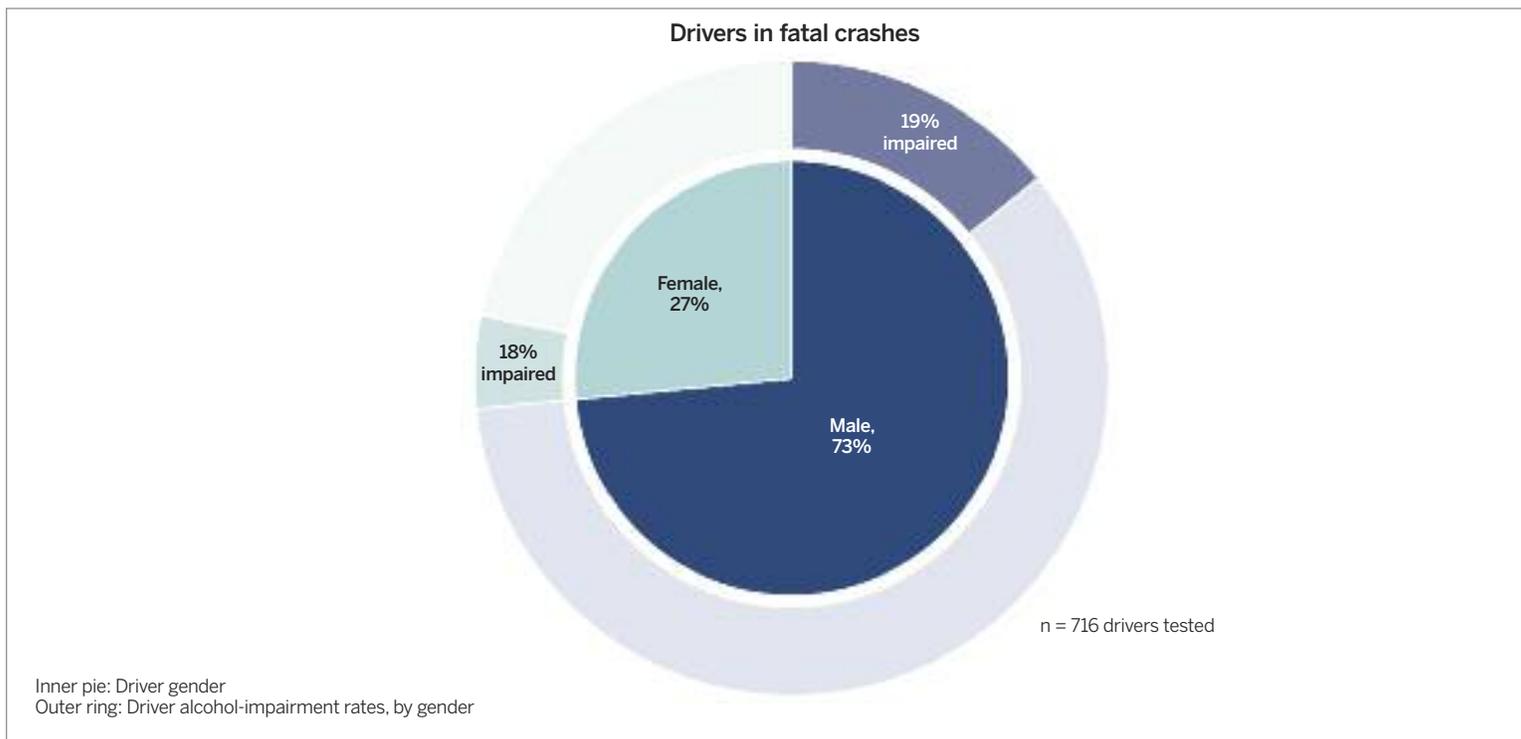
Drivers in fatal crashes

19%
impaired

Female,
27%

18%
impaired

Male,
73%

n = 716 drivers tested

Inner pie: Driver gender
Outer ring: Driver alcohol-impairment rates, by gender

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Alcohol-impaired includes drivers with a reported BAC of 0.08 g/dL or higher.
2) Limited to drivers tested for blood alcohol content with valid BAC results reported.

Figure 5.4. Indiana BMV license status of drivers involved in fatal collisions, by alcohol impairment, 2014–2018

Non-impaired drivers

1%   0%
5%
94%

n = 1,432,192
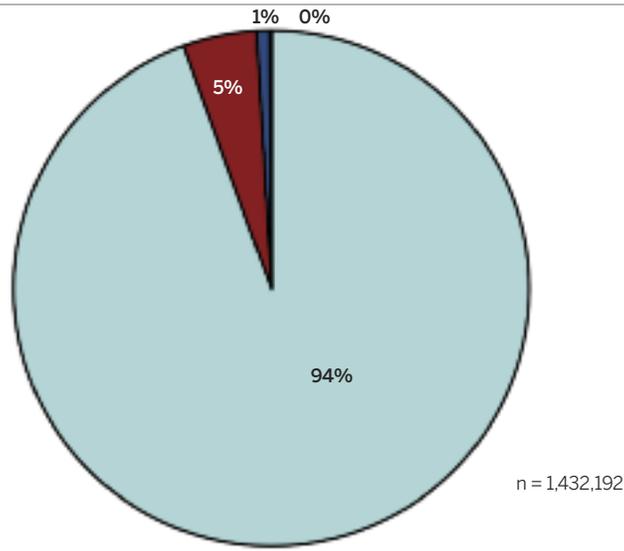
☐ Valid/conditional   ■ Suspended/invalid/revoked

■ Unlicensed/canceled/fraudulent   ☐ Habitual traffic violator

Impaired drivers
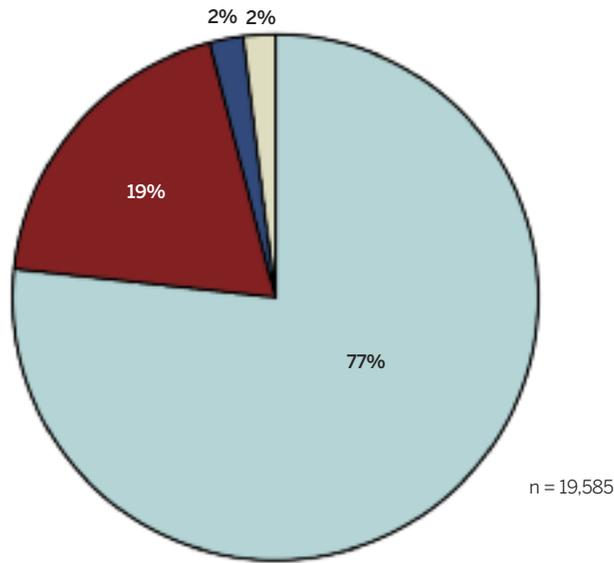
2% 2%
19%
77%

n = 19,585

☐ Valid/conditional   ■ Suspended/invalid/revoked

■ Unlicensed/canceled/fraudulent   ☐ Habitual traffic violator

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) 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).
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Figure 5.5. Fatalities and injuries in Indiana collisions involving an alcohol-impaired driver, by month, 2014–2018
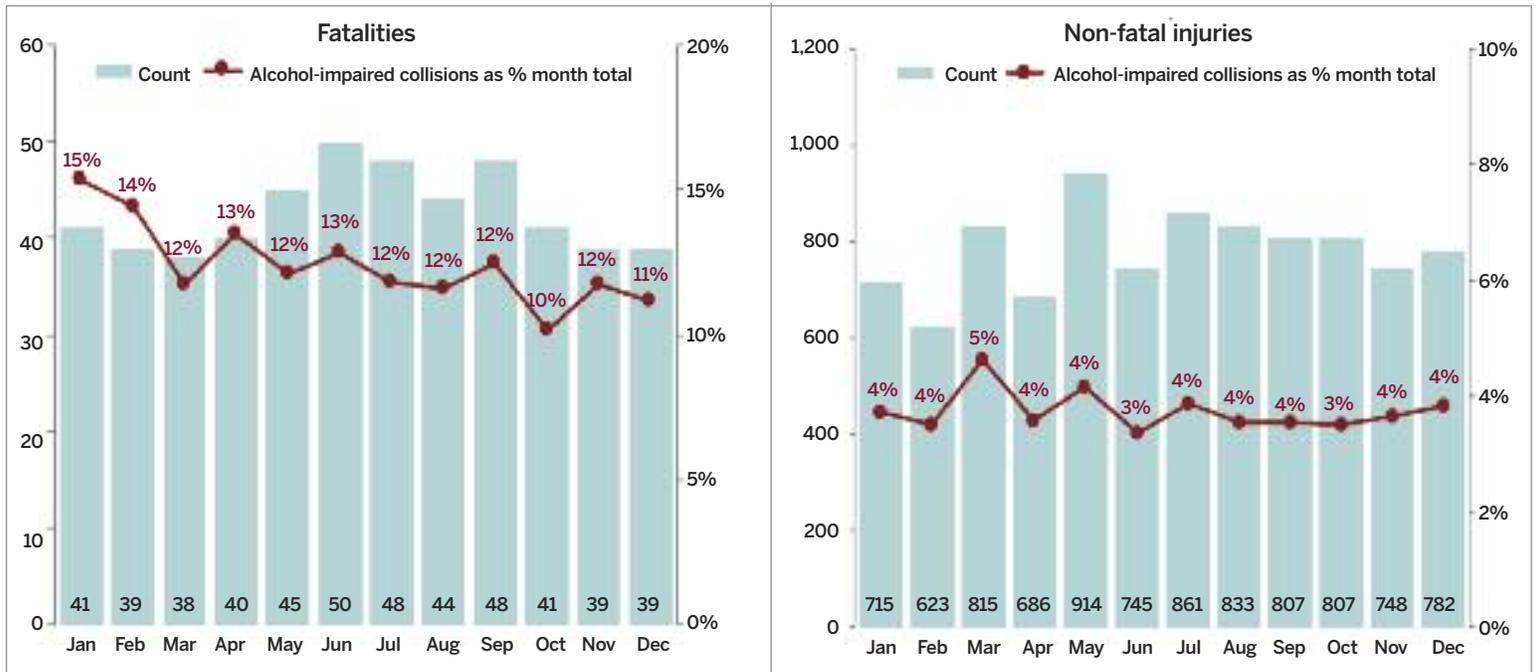
Fatalities

Count — Alcohol-impaired collisions as % month total

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
41	39	38	40	45	50	48	44	48	41	39	39
15%	14%	12%	13%	12%	13%	12%	12%	12%	10%	12%	11%

Non-fatal injuries

Count — Alcohol-impaired collisions as % month total

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
715	623	815	686	914	745	861	833	807	807	748	782
4%	4%	5%	4%	4%	3%	4%	4%	4%	3%	4%	4%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Non-fatal injuries include incapacitating, non-incapacitating, possible, refused treatment, and unknown injury status categories.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Figure 5.6. Indiana fatal and incapacitating injuries in collisions, by alcohol-involvement, hour and day of week, 2018
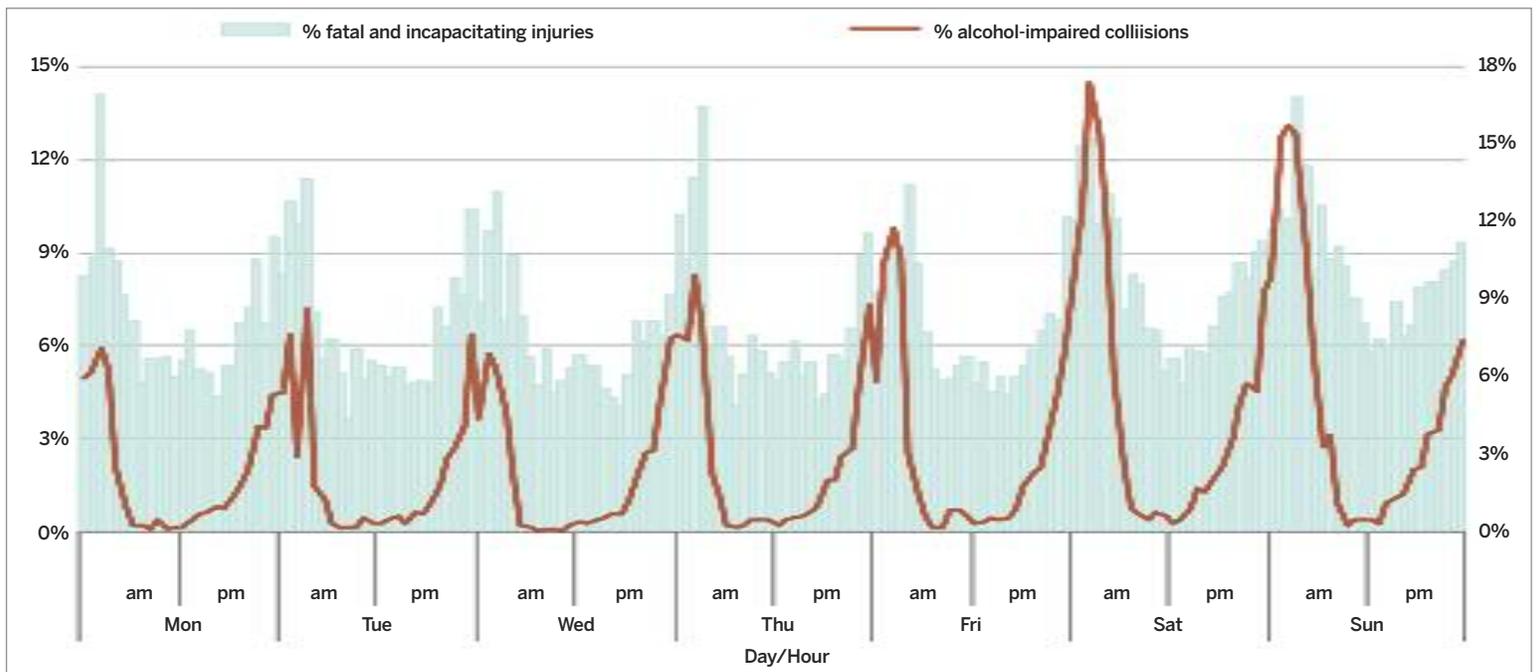
% fatal and incapacitating injuries   % alcohol-impaired colliisions

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

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.
3) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Figure 5.7. Drivers in Indiana collisions, by road class and alcohol impairment, 2014–2018

Non-impaired drivers

U.S. route
11%

County
road
9%

Interstate
10%

State road
16%

Local/city road
54%

n = 1,497,903

Impaired drivers

U.S. route
8%

County
road
19%

State road
14%

Interstate
8%

Local/city road
51%

n = 21,064

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Excludes drivers in collisions with unknown road class.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

Figure 5.8. Drivers in Indiana collisions, by census locale and alcohol impairment, 2014–2018

Non-impaired drivers

Exurban
5%

Rural
6%

Suburban
13%

Urban
76%

n = 1,493,979

Impaired drivers

Exurban
8%

Rural
9%

Suburban
17%

Urban
66%

n = 20,508

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Excludes drivers in collisions with unknown locale.
2) Impairment rates are underestimated due to under reporting of BAC results in ARIES.

INDIANA TRAFFIC SAFETY FACTS

INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

SPEED

SPEED, 2018

A collision is defined as speed-related in Indiana ARIES data if any of the following conditions is met: Unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision; or a vehicle driver is issued a speeding citation. In 2018, 19,604 speed-related collisions occurred in Indiana, 7 percent more than in 2017 (Figure 6.1).

From 2014 to 2018, speed-related collisions declined 6 percent annually (Table 6.1). In 2018, 20 percent of all fatal collisions involved speeding. Speed-related fatal collisions decreased by 14 percent between from 2017, from 186 to 160. Nine percent of all 2018 collisions were speed-related. Considering the conditions used to define speed involvement, 5 percent (11,468) of all 2018 collisions involved speeding too fast for weather conditions and 4 percent (8,038) involved unsafe speed. Less than 1 percent (1,780) of collisions in 2018 were linked to a speed-related citation.

There were 30,794 persons involved in speed-related collisions in 2018—9 percent of all individuals in collisions (Table 6.2). Of these, 181 were killed (21 percent of all fatalities) and 6,448 suffer non-fatal injuries (13 percent of all non-fatal injuries). The rate of fatal injuries per 1,000 involved in speed-related collisions declined from 7.2 in 2017 to 5.9 in 2018 (Figure 6.2).

Vehicle type

In 2018, 10.8 percent of vehicles in collisions were speeding—a rate higher than both the 2016 and 2017 rates (Figure 6.3). Among vehicle types, motorcycles remained the most likely to have been speeding at the time of collision (11 percent in 2018). In 2018, 96 of every 1,000 occupants riding in speeding vehicles in collisions suffered an injury, compared to 93 of every 1,000 in vehicles not speeding (Figure 6.4).

Age and gender

As Table 6.3 illustrates, between 2014 and 2018, the relative proportion of speed-related crashes to all crashes decreases with increasing driver age. Among drivers involved in collisions, young males are the most likely to be speeding. In 2018, 13 percent of male drivers and 10 percent of female drivers in the 15- to 20-year old age group were speeding at the time of the collision. Only 4 percent of male drivers and 3 percent of female drivers in the 75 and over age group were speeding in collisions in 2018.

Alcohol-impaired

Since 2014, in Indiana, the number of legally impaired drivers (i.e., blood alcohol content of 0.08 g/dL or higher) involved in speed-related collisions fell from 842 in 2016 to a five-year low of 685 in 2018 (Figure 6.5). The proportion of drivers involved in speed-related collisions that were also impaired at the time of collision declined from 4.3 in 2017 to 3.7 in 2018. Four percent of speeding drivers in the 25- to 34-year old age group were impaired in 2018. In contrast, only 2 percent of non-speeding drivers in the same age group were impaired (Table 6.4).

Restraint use

Between 2014 and 2018, as shown in Figure 6.6, restraint use rates among passenger vehicle occupants involved in speed-related collisions were consistently lower than among individuals in collisions that were not speed-related. The rate of restraint use among those who sustained non-fatal injuries in speed-related collisions, was roughly 84 percent over the five-year period. During the same time period, the average rate of restraint use among occupants who sustained non-fatal injuries in collisions that were not speed related was 90 percent. The rate of restraint use among individuals involved in speed-related collisions decreases as the severity of injury increases. During 2014-2018, on average 40 percent of individuals killed in speed-related collisions were restrained, compared with an average rate of 50 percent restraint use among vehicle occupants killed in collisions that were not speed-related.

Month and time of day

Between 2014 and 2018, the winter months of December, January, and February had the highest incidence of speed-related collisions (Table 6.5). As shown in Table 6.6, in 2018, the likelihood of speed involvement in collisions peaked during early morning hours, declined during late morning and afternoon hours, and then steadily increased from evening into early morning. Wednesdays and weekends (Saturday and Sunday) carried a higher probability of speed involvement.

Locale and road class

The distribution of speed-related collisions varies by U.S. census locale (Figure 6.7). While the majority (74 percent) of total collisions in 2018 occurred in urban areas, fatal speed-related crashes were common in exurban (22 percent) areas. Considering road classes, state roads, county roads, and U.S. routes account for a disproportionate share of fatal collisions—relative to their share of total collisions (Figure 6.8). In 2018, 53 percent of total collisions occurred on local/city roads. However, 31 percent of fatal collisions happened on local/city roads where 21 percent were speed-related. While 11 percent of fatal collisions occurred on interstates, 31 percent involved speed.

Figure 6.1. Indiana speed-related collisions, 2014–2018
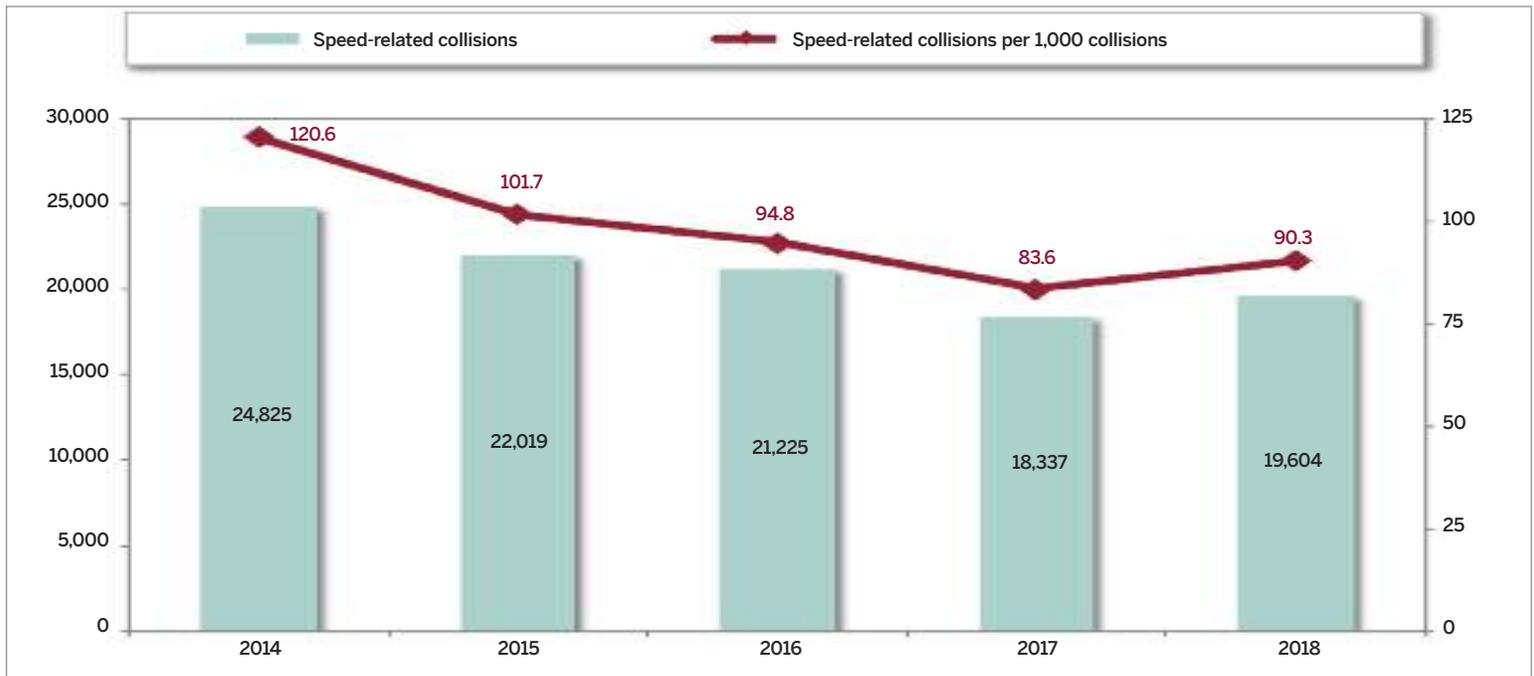
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Table 6.1. Indiana collisions, by speed involvement, speed-related criteria, and collision severity, 2014–2018

Speed involvement criteria / Collision severity	Count of collisions					Annual rate of change	
	2014	2015	2016	2017	2018	2017–18	2014–18
Total collisions	205,791	216,526	223,954	219,281	217,081	-1.0%	1.3%
Fatal	704	752	776	836	789	-5.6%	2.9%
Non-fatal	33,864	34,472	35,342	34,234	32,383	-5.4%	-1.1%
Property damage	171,223	181,302	187,836	184,211	183,909	-0.2%	1.8%
All speed-related collisions	24,825	22,019	21,225	18,337	19,604	6.9%	-5.7%
Fatal	184	204	201	186	160	-14.0%	-3.4%
Non-fatal	5,126	4,710	4,594	4,241	4,181	-1.4%	-5.0%
Property damage	19,515	17,105	16,430	13,910	15,263	9.7%	-6.0%
Speed-related as % of total	12.1%	10.2%	9.5%	8.4%	9.0%	8.0%	-7.0%
Fatal	26.1%	27.1%	25.9%	22.2%	20.3%	-8.9%	-6.1%
Non-fatal	15.1%	13.7%	13.0%	12.4%	12.9%	4.2%	-3.9%
Property damage	11.4%	9.4%	8.7%	7.6%	8.3%	9.9%	-7.6%
Speed too fast for weather conditions	17,370	13,716	12,344	9,819	11,468	16.8%	-9.9%
Fatal	40	51	45	31	34	9.7%	-4.0%
Non-fatal	2,773	2,227	1,953	1,669	1,865	11.7%	-9.4%
Property damage	14,557	11,438	10,346	8,119	9,569	17.9%	-10.0%
Unsafe speed	7,446	8,173	8,754	8,377	8,038	-4.0%	1.9%
Fatal	148	156	153	158	128	-19.0%	-3.6%
Non-fatal	2,305	2,425	2,601	2,497	2,248	-10.0%	-0.6%
Property damage	4,993	5,592	6,000	5,722	5,662	-1.0%	3.2%
Speed-related citation	2,558	2,370	1,998	1,750	1,780	1.7%	-8.7%
Fatal	9	13	15	10	12	20.0%	7.5%
Non-fatal	717	679	626	592	559	-5.6%	-6.0%
Property damage	1,832	1,678	1,357	1,148	1,209	5.3%	-9.9%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Table 6.2. Individuals involved in Indiana collisions, by speed involvement and injury status, 2014–2018

Speed involvement / injury status	Count of individuals					% 2018 total	Annual rate of change	
	2014	2015	2016	2017	2018		2017–18	2014–18
All individuals	331,015	351,314	364,355	358,086	352,122	100.0%	-1.7%	1.6%
Speed-related	38,608	34,363	33,146	28,959	30,794	100.0%	6.3%	-5.5%
Fatal	201	228	217	209	181	0.6%	-13.4%	-2.6%
Non-fatal injury	7,507	7,262	6,986	6,436	6,448	20.9%	0.2%	-3.7%
Not injured	30,900	26,873	25,943	22,314	24,165	78.5%	8.3%	-6.0%
Not speed-related	292,407	316,951	331,209	329,127	321,328	100.0%	-2.4%	2.4%
Fatal	544	589	612	704	692	0.2%	-1.7%	6.2%
Non-fatal injury	41,068	44,213	45,637	44,490	41,823	13.0%	-6.0%	0.5%
Not injured	250,795	272,149	284,960	283,933	278,813	86.8%	-1.8%	2.7%
% Speed-related	11.7%	9.8%	9.1%	8.1%	8.7%	-	8.1%	-6.9%
Fatal	27.0%	27.9%	26.2%	22.9%	20.7%	-	-9.4%	-6.4%
Non-fatal injury	15.5%	14.1%	13.3%	12.6%	13.4%	-	5.7%	-3.6%
Not injured	11.0%	9.0%	8.3%	7.3%	8.0%	-	9.5%	-7.7%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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, 2014–2018
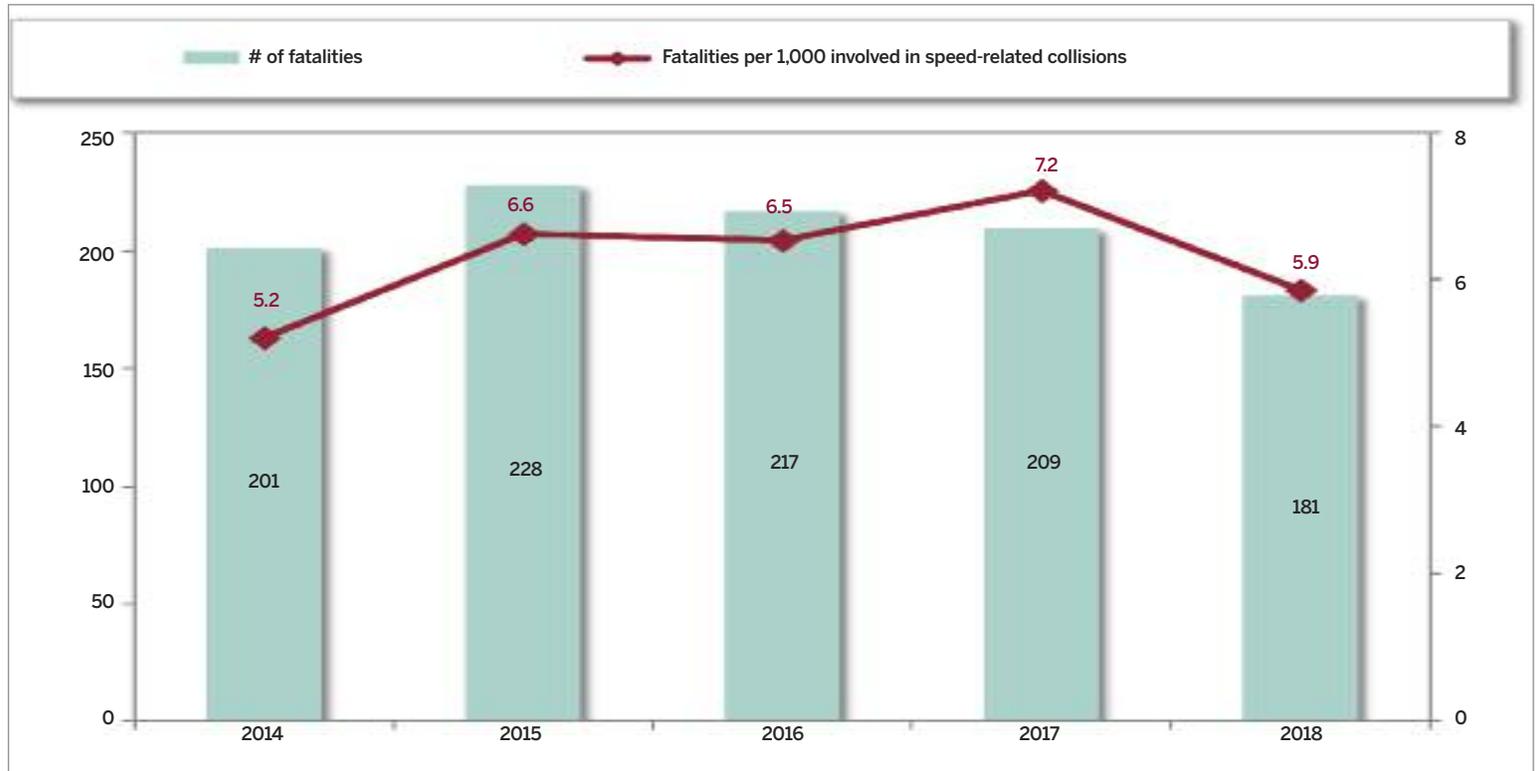
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Figure 6.3. Vehicles speeding as a percent of all vehicles involved in Indiana collisions, by vehicle type, 2016–2018

Vehicle type	2018	2017	2016
All vehicles	10.8%	10.6%	5.8%
Motorcycle	10.6%	12.3%	10.5%
Pickup truck	6.1%	5.6%	6.7%
Passenger car	5.7%	5.2%	5.9%
Sport utility vehicle	5.2%	4.6%	5.5%
Large truck	5.0%	3.8%	4.8%
Van	4.2%	3.6%	4.5%
Motor home/RV	1.3%	4.2%	3.2%
Bus	1.5%	1.3%	2.1%
School bus	1.1%	0.4%	0.6%

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 6.4. Injury rates per 1,000 occupants involved in Indiana collisions, by vehicle unit type and speed involvement, 2018

Injury rate per 1,000 occupants

Vehicle	Not speeding	Speeding
All vehicles	92.6	96.3
Motorcycle	678.6	784.8
Motor home/RV	73.2	333.2
Bus	23.8	213.1
Sport utility vehicle	95.7	161.1
Passenger car	96.6	158.9
Pickup truck	79.0	140.5
Large truck	40.9	129.8
Van	80.4	120.4
School bus	16.6	N/A

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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.

Table 6.3. Drivers speeding as a percent of all drivers involved in Indiana collisions, by age group and gender, 2014–2018

Age group	2014		2015		2016		2017		2018	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
15-20	12.0%	16.0%	10.5%	14.9%	10.5%	14.0%	9.0%	12.7%	9.7%	12.8%
21-24	12.4%	15.7%	10.0%	13.6%	9.4%	12.7%	8.5%	11.3%	9.3%	12.0%
25-34	11.1%	14.7%	8.8%	11.9%	8.3%	11.2%	7.4%	9.7%	8.3%	11.0%
35-44	10.0%	12.5%	7.9%	10.3%	7.6%	9.6%	6.8%	8.4%	7.0%	9.7%
45-54	9.2%	11.6%	7.5%	9.5%	6.5%	8.5%	5.9%	7.5%	6.7%	8.5%
55-64	8.0%	10.4%	6.2%	8.3%	5.9%	7.3%	5.1%	6.7%	5.7%	7.2%
65-74	5.6%	8.1%	4.8%	6.9%	4.4%	5.9%	4.2%	5.7%	4.2%	5.7%
75 +	3.6%	6.0%	3.6%	4.8%	3.0%	4.6%	3.2%	4.2%	3.0%	4.3%
All ages	9.9%	12.7%	8.1%	10.7%	7.6%	9.9%	6.8%	8.8%	7.3%	9.5%

Low < > High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Data limited to drivers with valid gender and age reported.
2) Excludes drivers under 15 years old.

Figure 6.5. Drivers in vehicles that were speeding in Indiana collisions, by alcohol impairment, 2014–2018
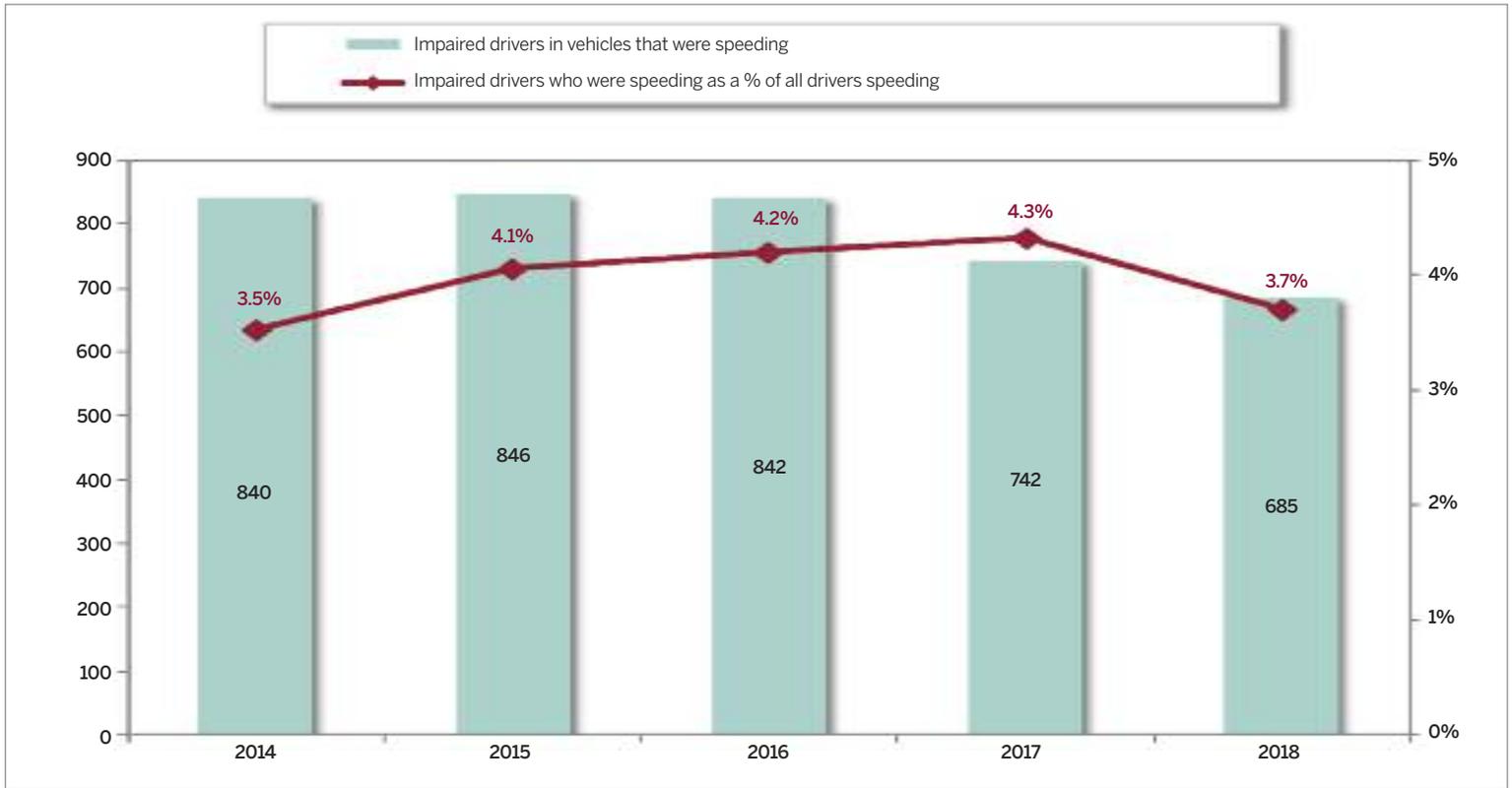
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Notes:
1) Alcohol-impaired includes drivers with blood alcohol count (BAC) of 0.08 g/dL or higher.
2) When considering the reported decreases in 2015 alcohol-impaired drivers, it is important to note that these numbers are likely to increase once BAC results reported after the March 18, 2019 extract are analyzed.

Table 6.4. Drivers involved in Indiana collisions, by age, speed involvement, and alcohol impairment, 2018

Age group	Not speeding			Speeding		
	Non-impaired	Impaired	% impaired	Non-impaired	Impaired	% impaired
15-20	37,321	139	0.4%	4,741	49	1.0%
21-24	29,927	513	1.7%	3,533	125	3.4%
25-34	62,748	995	1.6%	6,671	264	3.8%
35-44	50,836	654	1.3%	4,664	129	2.7%
45-54	45,840	507	1.1%	3,825	67	1.7%
55-64	41,101	364	0.9%	2,844	53	1.8%
65-74	23,759	107	0.4%	1,268	7	0.5%
75 +	12,967	24	0.2%	505	2	0.4%
Total	304,499	3,303	1.1%	28,051	696	2.4%

Low   <   >   High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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 injury status and speed involvement, 2014–2018
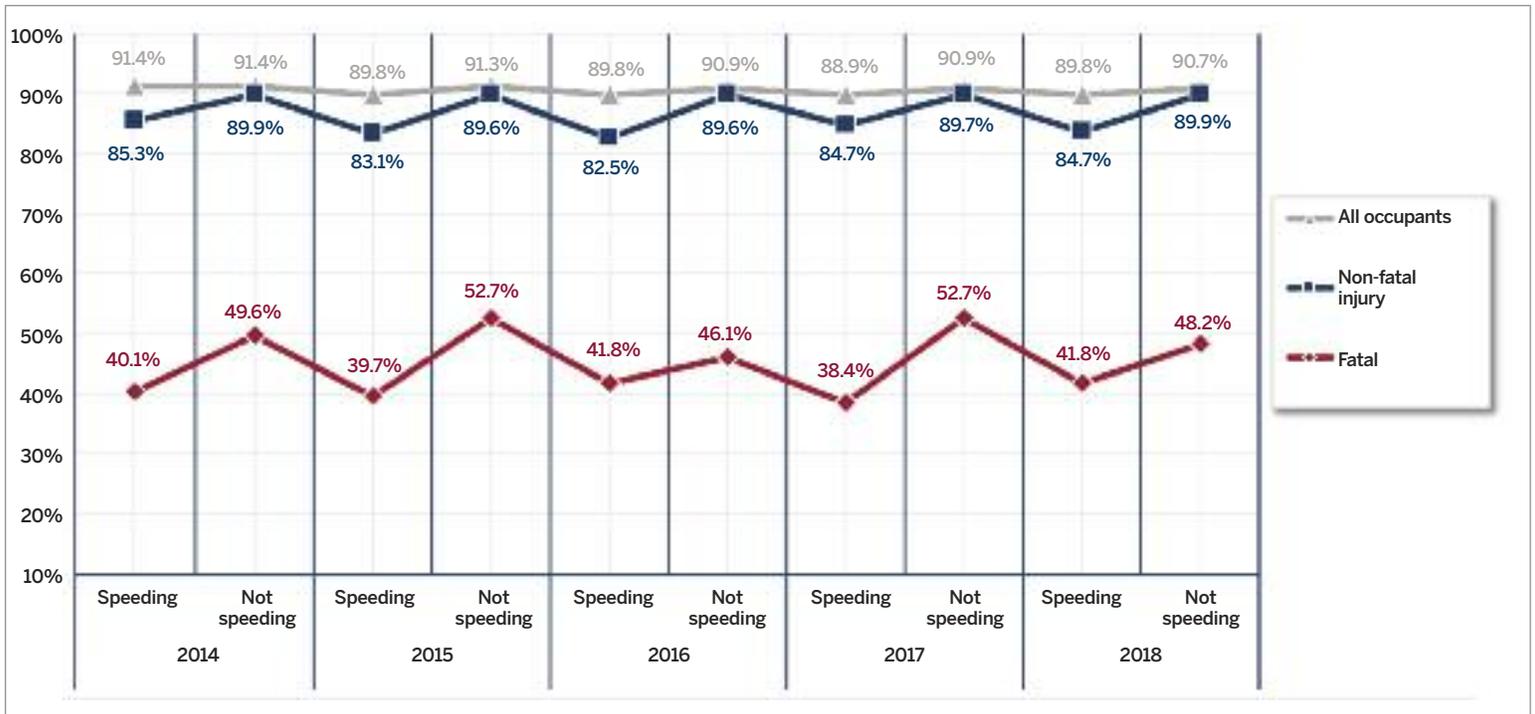
Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Table 6.5. Total and speed-related traffic collisions, by month, 2014–2018

Month	Total collisions					Speed-related collisions				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Jan	23,537	19,694	19,374	17,274	20,784	7,683	4,708	3,609	2,478	4,349
Feb	19,373	19,785	17,785	14,572	16,178	4,324	4,723	2,908	1,109	2,366
Mar	15,520	16,436	16,386	16,969	16,974	2,165	1,925	1,402	1,682	1,863
Apr	14,203	15,368	17,534	17,026	15,768	928	866	1,541	1,127	994
May	15,912	17,366	18,057	19,455	18,416	872	1,074	1,103	1,215	1,055
Jun	15,379	17,147	17,889	19,007	17,280	931	1,273	1,031	1,125	977
Jul	14,932	17,311	17,691	17,152	17,258	825	1,039	1,153	1,020	1,041
Aug	15,657	17,108	19,339	17,722	17,848	1,034	1,013	1,303	1,001	1,060
Sep	15,747	17,706	18,638	17,960	17,737	889	1,124	1,155	1,041	1,055
Oct	18,847	19,239	19,487	19,991	20,290	1,313	1,173	1,135	1,372	1,224
Nov	19,391	20,482	20,527	20,079	20,105	2,236	1,552	1,225	1,193	1,940
Dec	17,293	18,884	21,247	22,074	18,443	1,625	1,549	3,660	3,974	1,680
Total	205,791	216,526	223,954	219,281	217,081	24,825	22,019	21,225	18,337	19,604
High	Jan	Nov	Dec	Dec	Jan	Jan	Feb	Dec	Dec	Jan
Low	Apr	Apr	Mar	Feb	Apr	Jul	Apr	Jun	Aug	Jun

Low   <   >   High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Note: Color-scales are illustrated to show months from low to high for the entire 5-year period, 2014–2018.

Table 6.6. Speed-related collisions as a percent of all Indiana collisions, by time of day and day of week, 2018

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% Speed-related by hour
12a.m.	11.9%	17.9%	16.7%	13.6%	14.2%	11.4%	12.5%	13.7%
1a.m.	13.5%	13.5%	14.6%	11.8%	18.8%	11.5%	14.1%	13.9%
2a.m.	13.4%	17.0%	18.6%	18.5%	15.7%	11.8%	14.6%	15.2%
3a.m.	14.8%	10.5%	13.5%	18.3%	16.4%	12.0%	13.2%	14.2%
4a.m.	11.8%	11.6%	11.6%	21.3%	10.8%	12.2%	13.3%	13.5%
5a.m.	13.4%	13.9%	11.9%	20.0%	15.6%	10.0%	12.7%	14.3%
6a.m.	13.1%	12.2%	11.4%	22.2%	13.9%	9.0%	14.0%	14.1%
7a.m.	15.9%	10.8%	9.9%	20.1%	10.8%	7.4%	16.4%	12.6%
8a.m.	18.3%	11.2%	10.5%	20.7%	12.6%	8.5%	15.1%	13.5%
9a.m.	12.8%	10.9%	13.0%	14.9%	9.6%	8.1%	10.1%	11.3%
10a.m.	12.6%	10.1%	9.7%	9.5%	6.9%	7.8%	8.7%	9.1%
11a.m.	8.0%	8.2%	7.3%	6.3%	6.6%	6.5%	9.2%	7.4%
12p.m.	7.0%	6.7%	6.2%	5.6%	6.5%	6.6%	7.4%	6.6%
1p.m.	6.2%	6.1%	5.7%	5.6%	5.9%	8.5%	7.1%	6.5%
2p.m.	6.0%	7.2%	6.1%	5.1%	5.0%	7.9%	8.0%	6.5%
3p.m.	7.7%	6.4%	5.9%	5.5%	6.6%	7.3%	8.0%	6.7%
4p.m.	7.1%	6.4%	5.5%	5.5%	6.2%	7.6%	10.5%	6.8%
5p.m.	9.0%	6.5%	5.9%	6.0%	6.1%	6.9%	9.7%	6.8%
6p.m.	9.4%	9.3%	6.4%	5.8%	5.8%	6.3%	9.9%	7.3%
7p.m.	9.1%	8.6%	6.5%	7.1%	7.0%	7.3%	8.7%	7.7%
8p.m.	10.5%	9.3%	6.4%	8.5%	7.1%	8.9%	10.1%	8.7%
9p.m.	9.8%	13.8%	7.0%	9.5%	6.6%	8.7%	9.5%	9.2%
10p.m.	13.6%	11.9%	12.0%	8.5%	10.5%	11.0%	10.1%	11.0%
11p.m.	13.6%	13.5%	16.2%	12.5%	11.9%	9.4%	11.7%	12.3%
% Speed-related by day	10.0%	9.1%	8.1%	10.4%	8.2%	7.9%	10.0%	9.0%

Low   <   >   High

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 6.7. Distribution of total and fatal crashes and rates of speed involvement, by census locale, 2018

Inner pie: Geographic distribution of collisions
Outer ring: Speed involvement rates, by census locale

All collisions

8% speed-related
11%
10%
Exurban 6%
Rural 7%
Suburban 13%
12%
Urban 74%
N = 191,272

Fatal collisions

21% speed-related
22%
Exurban 14%
Rural 17%
19%
Suburban 25%
Urban 44%
18%
N = 693

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

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

Figure 6.8. Distribution of total and fatal crashes and rates of speed involvement, by road type, 2018

Inner pie: Geographic distribution of collisions
Outer ring: Speed involvement rates, by road type

All collisions

8% speed-related
19%
Interstate 10%
10%
U.S. route 10%
County road 11%
13%
State road 15%
Local/city road 53%
9%
N = 190,305

Fatal collisions

21% speed-related
31%
Interstate 11%
U.S. route 18%
17%
County road 18%
Local/city road 31%
State road 23%
13%
27%
N = 758

Source: Indiana State Police Automated Reporting and Information Exchange System (ARIES), as of March 18, 2019

Note: Includes collisions where valid road class was reported.

INDIANA
TRAFFIC SAFETY
FACTS

INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

DATA SOURCES AND REFERENCES

DATA SOURCES

Data in this publication come from the following sources:

- Indiana State Police Automated Reporting Information Exchange System (ARIES), current as of March 18, 2019

- Indiana Bureau of Motor Vehicles, current as of March 4, 2019

- Indiana Department of Transportation, county level VMT (2017), current as of March 5, 2019

- 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, 2014–2018, provided by the Indiana Business Research Center, Indiana University, current as of August 12, 2019, accessed at www.stats.indiana.edu/population/popTotals/2018_cntyest.asp

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INDIANA STANDARD CRASH REPORT AND GLOSSARY

INDIANA OFFICER'S STANDARD CRASH REPORT

INDIANA OFFICER'S STANDARD CRASH REPORT
Electronic Version

Page | of

Local ID

| Date of Crash | Day of Week | Actual Local Time | County | Township | # Motor Vehicles | # Injured | # Dead | # Commercial Vehicles | # Deer |

| Road Crash Occurred On | Nearest/Intersecting Road/MileMarker/Interchange | If not an intersection, number of feet from | Direction | Road Classification |

| Inside Corporate Limits? | City/Town or Nearest City/Town | Property? | Crash Latitude | Crash Longitude |

| Driver #1 | Driver #2 | Driver #3 | Driver #4 |

Driver Contributing Circumstances
(Primary Cause, Vehicle 1, Vehicle 2, Vehicle 3, Vehicle 4)
- Alcoholic Beverages
- Illegal Drugs
- Prescription Drugs
- Driver Asleep or Fatigued
- Driver Illness
- Unsafe Speed
- Failure to Yield
- Disregard Signal
- Left of Center
- Improper Passing
- Improper Turning
- Improper Lane Usage
- Following Too Closely
- Unsafe Backing
- Overcorrecting
- Ran off Road
- Wrong Way on One Way
- Pedestrian's Action
- Passenger Distraction
- Restriction Violation
- Jackknifing
- Cell Phone Usage
- Other Telematics
- Driver Distracted
- Speed/Weather Conditions
- Other
- None

Vehicle Contributing Circumstances
(Primary Cause, Vehicle 1, Vehicle 2, Vehicle 3, Vehicle 4)
- Engine Failure or Defective
- Accelerator Failure or Defective
- Brake Failure or Defective
- Tire Failure or Defective
- Headlight(s) Defective or Not On
- Other Lights Defective
- Steering Failure
- Window/Windshield Defective
- Oversized/Overweight Load
- Insecure/Leaky Load
- Tow Hitch Failure
- Other
- None

Environment Contributing Circumstances
- Glare
- Roadway Surface
- Holes/Ruts in Surface
- Shoulder Defective
- Road Under Construction
- Severe Crosswinds
- Obstruction Not Marked
- Lane Marking Obscured
- View Obstructed
- Animal/Object in Roadway
- Traffic Ctl Inop/Missing/Obscure
- Utility Work
- Other
- None

Area Information
- Hit and Run
- School Zone
- Rumble Strips
- Locality
- Light Condition
- Weather Conditions
- Surface Condition
- Type of Median
- Type of Roadway Junction
- Road Character
- Roadway Surface
- Construction | If Yes, Construction Type
- Traffic Control Devices
- Traffic Control Device Operational?

Total Estimate of all damage in the Crash:

Was this crash the result of aggressive driving?

| Other Property Damage (1) | State Property | Owner's Name and Address |
| Other Property Damage (2) | State Property | Owner's Name and Address |

Witness/Other Participant
- Witness / Other Participant | # | Name
- Address etc.
- Phone # | Location at Time of Crash
- Witness / Other Participant | # | Name
- Address etc.
- Phone # | Location at Time of Crash

Non-Motorist
- (Last Name, First Name, MI)
- Non-Motorist Type | Non-Motorist Action
- Apparent Physical Condition
- Cited? | Direction
- Street/Highway
- Traffic Control? | If yes, was traffic control operational?

Local ID

Type of Crash				

Time Notified	Time Arrived	Other Location of Investigation		

Assisting Officer	ID No.	Agency	Investigation Complete?	Photos Taken?
Assisting Officer	ID No.	Agency	Date of Report	
Investigating Officer	ID No.	Agency	Reviewing Officer	

Narrative

UNIT INFORMATION

Local ID

Page ___ of ___

Driver's Name (Last, First, MI)	Safety Equipment Used
Address (Street, City, State, Zip)	Safety Equipment Effective?
	Ejection/Trapped

Date of Birth	Age	Gender	EMS No.	Inersed Attn	Driver Injury Status

Driver's License #	Lic Type	CDL Class	Lic State	Nature of Most Severe Injury

Apparent Physical Status
- [ ] Normal
- [ ] Had Been Drinking
- [ ] Handicapped
- [ ] Ill
- [ ] Asleep/Fatigued
- [ ] Drugs/Medication
- [ ] Unknown

Restrictions
- [ ] Glasses/Contact Lenses
- [ ] Outside Rearview Mirror
- [ ] Daylight Driving
- [ ] Automatic Transmission
- [ ] Special Controls
- [ ] Employment Only
- [ ] Motorcycle Only
- [ ] To/From Employment
- [ ] Employer's Vehicle Only
- [ ] State-Owned Vehicles
- [ ] MP Chauffeurs Taxi Only
- [ ] Power Steering
- [ ] Special Restrictions
- [ ] Probation OWI
- [ ] Probation HTO
- [ ] None

Location of Most Severe Injury

If Cited?	IC Codes
[ ] Infraction	
[ ] Misdemeanor	
[ ] Felony	

Test Given: **NONE**

Type Given: [ ] Blood [ ] Urine [ ] Breath [ ] SFST [ ] PBT

Alcohol Results
PBT
Certified Test
[ ] Pending
Drug Results

Veh #	Color	Vehicle Year	Make	Model	Style
# Occupants	Lic Year	License #		License State	
# Axles	Speed Limit	Insured By		Phone Number	

Initial Impact Area
- [ ] Undercarriage
- [ ] Trailer
- [ ] None
- [ ] Unknown

Front / Rear
[ ] [ ] [ ]
[ ] [ ] [ ]
[ ] [ ] [ ]
[ ] [ ] [ ]

Vehicle Identification #

Registered Owner's Name (Last, First, MI)   [ ] Same as Driver

Address (Street, City, State, Zip)

Areas Damaged (Multiples)
- [ ] Undercarriage
- [ ] Trailer
- [ ] None
- [ ] Unknown

Front / Rear
[ ] [ ] [ ]
[ ] [ ] [ ]
[ ] [ ] [ ]
[ ] [ ] [ ]

Vehicle Use

Towed?	To	Reason
	By	
	Lic State	Lic Year	Registered Owner's Name (Last, First, MI) [ ] Same as Driver

Emergency Run?   Fire?   NO

License #	Address (Street, City, State, Zip)

Vehicle Type

Veh Year	Make	
	Lic State	Lic Year	Registered Owner's Name (Last, First, MI) [ ] Same as Driver

Pre Crash Vehicle Action

License #	Address (Street, City, State, Zip)

Direction of Travel

Veh Year | Make

Commercial Vehicle: Carrier's Name and Address

Type of Primary/Secondary Roadway

One Way Traffic	Two Way Traffic	
[ ] One Lane	[ ] Two Lanes	[ ] Private Drive
[ ] Two Lanes	[ ] Multi-Lane Divided (3 or more)	[ ] Alley
[ ] Multi Lanes (3 or more)	[ ] Multi Lane Undivided 2 way left turn	
	[ ] Multi-Lane Undivided (3 or more)	

HAZMAT Proper Shipping Name:	State DOT #	Event Collision With
US DOT #	ICC #	CMV Inspection	If Yes	
Gross Vehicle Weight Rating	Cargo Body Type	
HAZMAT Placard	HAZMAT Release of Cargo	HAZMAT 4-Digit ID#	Hazard Class #	

GLOSSARY

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

Alcohol Involvement/Alcohol-related
The terms "alcohol-related" or "alcohol-involved" do not indicate that a crash or fatality was caused by the presence of alcohol.

NHTSA defines a fatal crash as alcohol-related or alcohol-involved if at least one driver or nonoccupant (such as a pedestrian or pedalcyclist) involved in the crash is determined to have had a Blood Alcohol Concentration (BAC) of 0.01 gram per deciliter (g/dL) or higher. NHTSA defines a nonfatal crash as alcohol-related or alcohol-involved if police indicate on the police accident report that there is evidence of alcohol present. The code does not necessarily mean that a driver or nonoccupant was tested for alcohol.

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

Alcohol-impaired
A collision in which any vehicle driver involved has a BAC test result at or above 0.08 g/dL.

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

Weekend

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

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