INDIANA
TRAFFIC SAFETY
FACTS

INDIANA CRASH FACTS 2023

INDIANA UNIVERSITY
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INDIANA CRASH FACTS 2023

An Indiana Traffic Safety Facts publication

An electronic copy of this document can be accessed via the PPI traffic safety project website (go.iu.edu/trafficsafety), 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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INTRODUCTION

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 annual crash data. These statistics are used to inform the public, practitioners, and state and national policy makers on matters of road safety. They also serve as the analytical foundation of traffic safety program planning and design in Indiana. A more complete explanation of the ICJI goal-setting process is provided in Chapter 1 Problem Identification.

This report—Indiana Crash Facts 2023—is one of two annual traffic safety publications produced by PPI. The analysis is organized in eight chapters—problem identification, collisions, non-motorists, motorcycles, impaired driving, speed, children and young drivers, and county comparisons. Several additional aspects of traffic collisions are addressed within these chapters including occupant protection, collisions with deer, and work zones. Many of the data and analytical elements under each topic are based on guidelines provided by the U.S. National Highway Traffic Safety Administration (NHTSA).

Data

The principal data used to analyze Indiana traffic collisions comes from the Automated Reporting Information Exchange System (ARIES) maintained by the Indiana State Police with assistance from LexisNexis Coplogic Solutions. The data used to create this report was downloaded on April 12, 2024. The ARIES database is populated from the Indiana Officer's Standard Crash Report, completed by all local and state law enforcement officers. The more than 200 data items for each collision reported 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; and information on drivers, passengers, pedestrians, pedalcyclists, and animal-drawn vehicle occupants involved in the collision.

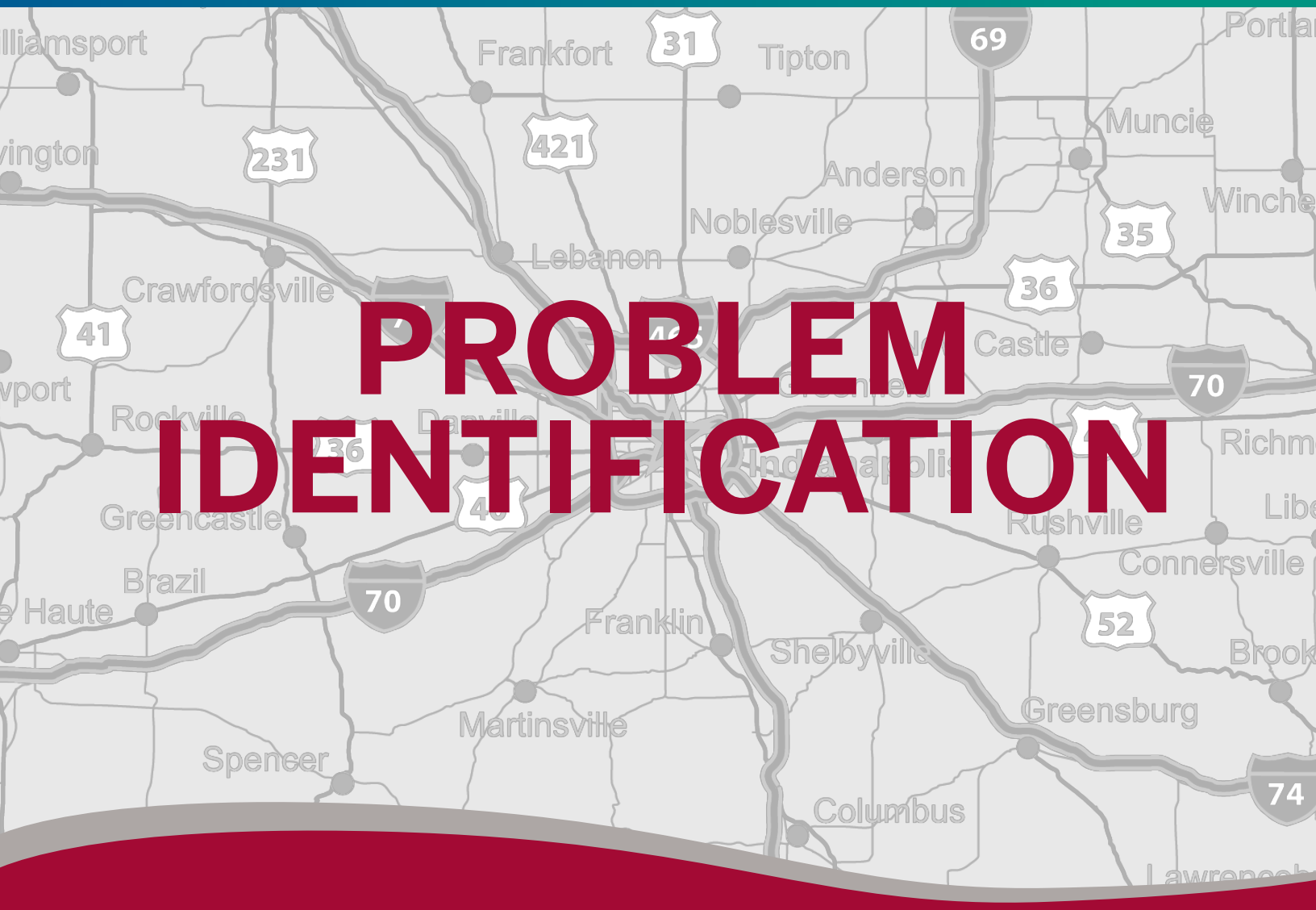
Several additional data sources were used to complete the analysis, including license and registration data from the Indiana Bureau of Motor Vehicles, vehicle miles travelled from the Indiana Department of Transportation (INDOT), restraint survey data from the Purdue University Center for Road Safety, and population estimates and urban areas data from the U.S. Census Bureau. The Indiana Business Research Center provides assistance in accessing population estimates.

Data discrepancies may exist between the 2023 Indiana traffic safety reports and previous traffic safety publications for several reasons that are described below.

- The ARIES database is dynamic. Some records were updated with new or corrected information after data was downloaded for the previous analyses.
- Individuals coded as person type—other who did not suffer a fatality were excluded from the analyses prior to the 2022 reports. However, for records created in ARIES 6, the coding for injured passengers was changed to "other." The research team incorporated this change starting with the 2022 reports. This change will be most obvious for comparisons with the 2021 report and in categories with high proportions of passengers. such as motorcycles and child safety.
- With the current effort, the project team adjusted the definitions of incapacitating and non-incapacitating injuries to better match the definitions used by ICJI . Previously, the analysis utilized the injury status code identified by each reporting officer. The definition of incapacitating injuries has been adjusted to include only individuals with non-fatal injuries for which one of the following codes was chosen in injury nature data field—severed, internal, severe burn, severe bleeding, fracture/dislocation, crush injury, unconsciousness, and paralysis. The definition of non-incapacitating injuries includes individuals who do not meet the criteria for fatal or incapacitating and who were coded for injury status as incapacitating, non-incapacitating, possible, not reported, unknown, or refused [treatment] or coded for injury nature as minor burn, abrasion, minor bleeding, complaint of pain, none visible, or other. No injury is defined as any person with null responses in both the injury status and injury nature data fields. This change in definitions, principally, reduces the number of individuals identified as having incapacitating injuries and increases the number of individuals identified as having non-incapacitating injuries.
- For previous reports, a data protocol for ARIES 6 data extracts made it difficult to identify collisions in which a driver received a speeding citation. This challenge has been resolved. The change increases the number of collisions identified as speed-related and will be most obvious for comparisons with the 2020–22 reports.
- The research team also has changed the methodologies for calculating restraint and helmet use in consultation with ICJI. Previously, unknown restraint or helmet use status were treated as unrestrained and no helmet use. Starting with the 2023 reports, restraint and helmet use are calculated using only vehicle occupants with known restraint or helmet use status. Readers should be careful interpreting these results as an increasing number of records for occupants in collisions are missing restraint and helmet status.
- The U.S. Census Bureau changed the definitions of urban and rural substantially following the 2020 Census. Previously, urban areas were required to have at least 2,500 population and/or meet a number of other criteria. After the 2020 Census, the minimum population for urban areas was increased to 5,000 population. This change reduces the area within the state identified as urban, suburban, and exurban, because small towns that had 2010 populations greater than 2,500 but less than 5,000 are now classified as rural. Previously, each town over 2,500 population was classified as urban and had suburban and exurban areas surrounding them. For this reason, readers should take care in comparing collisions and injuries within particular locale types from previous reports.

[1]Indiana County Profiles 2023 is published under separate cover.

INDIANA TRAFFIC SAFETY FACTS



PROBLEM IDENTIFICATION

PROBLEM IDENTIFICATION, 2023

The Traffic Safety Division of the Indiana Criminal Justice Institute develops a set of benchmarks to assess the state of traffic safety in Indiana as part of the Triennial Indiana Highway Safety Plan (HSP3). These benchmarks correspond to priority program areas established by the National Highway Traffic Safety Administration and target fatal and injury collisions as they relate to overall injuries, impaired driving, seat belt use, young drivers, motorcycle safety, dangerous driving, child passenger safety, and non-motorist injuries in collisions. Within each area, ICJI establishes specific annual data-driven goals and performance measures that address Indiana's traffic safety problem areas with a particular focus on underserved and overrepresented groups. The most recent plan, covering 2024–26, sets an annual 2% reduction goal for each fatality measure. For more details on specific goals, please refer to the ICJI Triennial Indiana Highway Safety Plan—FY 2024–FY 2026.

ICJI also works closely with INDOT to ensure consistency in goal setting between the HSP3—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. Under current NHTSA requirements, the targets in the Triennial Highway Safety Plan and the Strategic Highway Safety Plan are not required to match, but ICJI has continued this practice to maintain consistency.

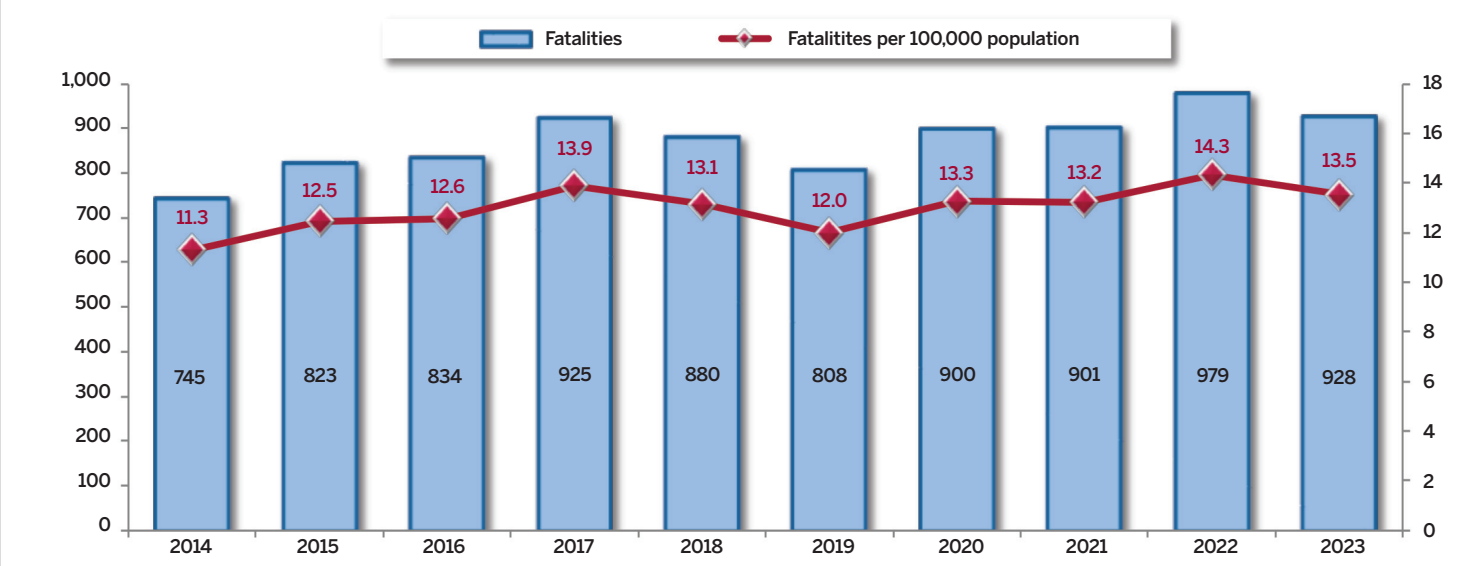
This chapter includes general discussions of the goals identified in the ICJI Triennial Indiana Highway Safety Plan with corresponding baseline measures from the most recent complete year of Indiana crash data—as well as historical data—in ARIES. The chapters that follow provide additional detail on these topics.

GOAL: Reduce fatalities and serious bodily injuries

In Indiana, traffic fatality rates rose generally from 12.0 per 100,000 population in 2019 to 14.3 in 2022 (Figure 1.1). The 2023 Indiana fatality rate was 13.5 per 100,000 population—marking a slight decline from the 10-year high in 2022. There were 928 traffic deaths in 2023, a decline from the 10-year high of 979 in 2022.

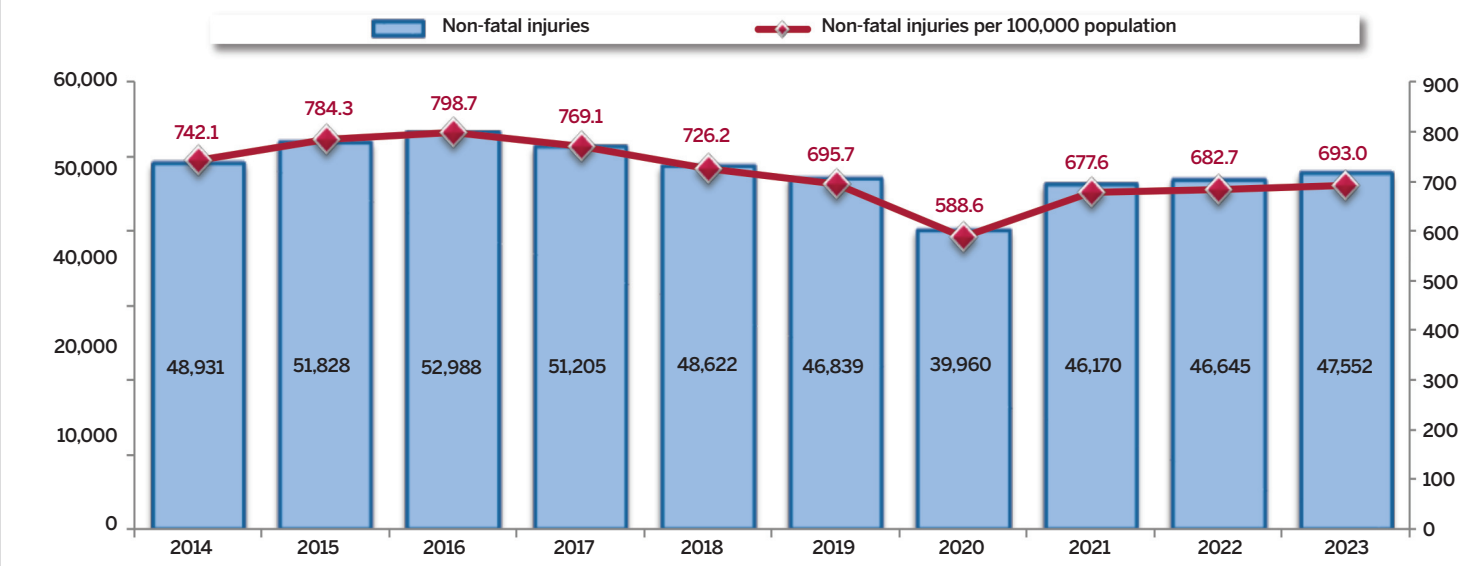
Non-fatal injuries in collisions rose from 46,645 in 2022 to 47,552 in 2023 (Figure 1.2). The rate of non-fatal traffic injuries increased slightly in 2023 (693 per 100,000) from 2022 (683 per 100,000). While the 2021–23 non-fatal injury rates are higher than in 2020, they are lower than the rates from 2014–19.

Figure 1.1. Individuals killed in collisions in Indiana, 2014–23



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2023 county population estimates, downloaded March 14, 2024.

Figure 1.2. Individuals with non-fatal injuries in collisions in Indiana, 2014–23

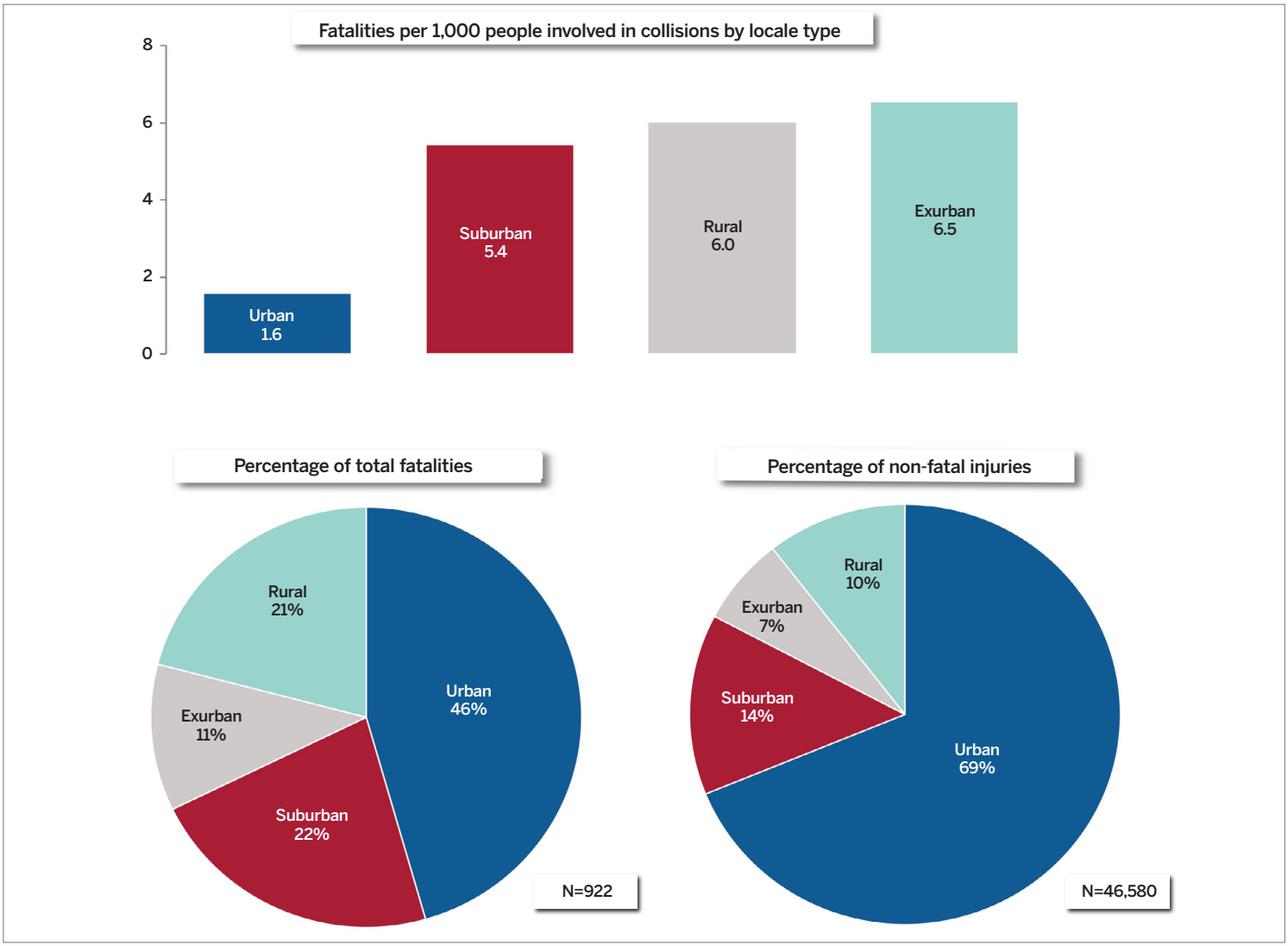


Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2023 county population estimates, downloaded March 14, 2024.

Note: Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury methodologies and definitions.

In 2023, fatalities were more likely than less severe traffic injuries to occur in non-urban areas. Fifty-four percent of all traffic fatalities occurred in suburban, exurban, and rural areas, compared to 31% of non-fatal injuries (Figure 1.3). The suburban, exurban, and rural rates of fatalities per 1,000 people involved in collisions were 5.4, 6.0, and 6.5 per 1,000, respectively, compared to 1.6 per 1,000 in urban areas. Forty-six percent of fatalities and 69% of non-fatal injuries occurred in urban areas.

Figure 1.3. Fatality rates, fatalities, and non-fatal injuries in collisions in Indiana by census locale, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

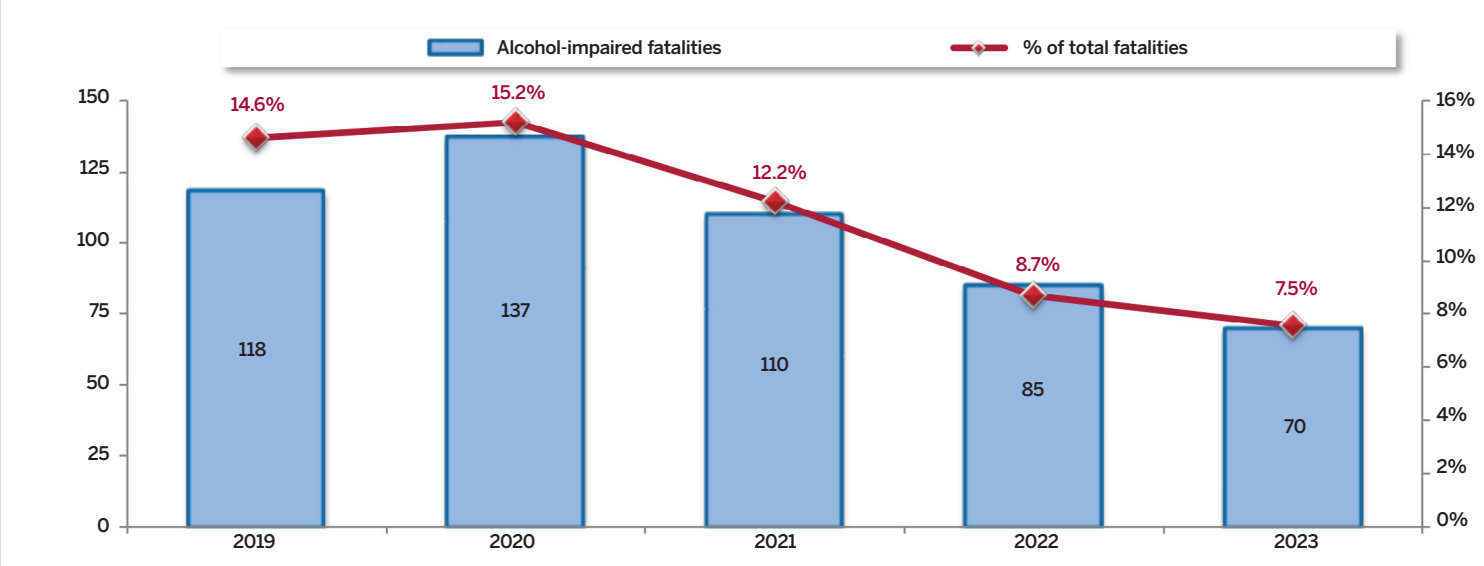
Notes:
1) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. Suburban, exurban, and rural areas were created by the research team based on the 2020 urban boundaries. See the glossary for a complete explanation.
2) Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury methodologies and definitions.
3) Excludes fatalities and injuries for which census locale could not be determined.
4) Percentages may add to more or less than 100% due to rounding.

GOAL: Reduce impaired driving

In 2023, 70 people died in crashes that involved one or more alcohol-impaired drivers (Figure 1.4). The proportion of Indiana traffic fatalities that involved an impaired driver dropped year-over-year from 15% in 2020 to 8% in 2023. According to the most recent publication available utilizing the NHTSA's Fatality Analysis Reporting System, 29% of all Indiana traffic fatalities in 2022 involved an alcohol-impaired driver.[2,3]

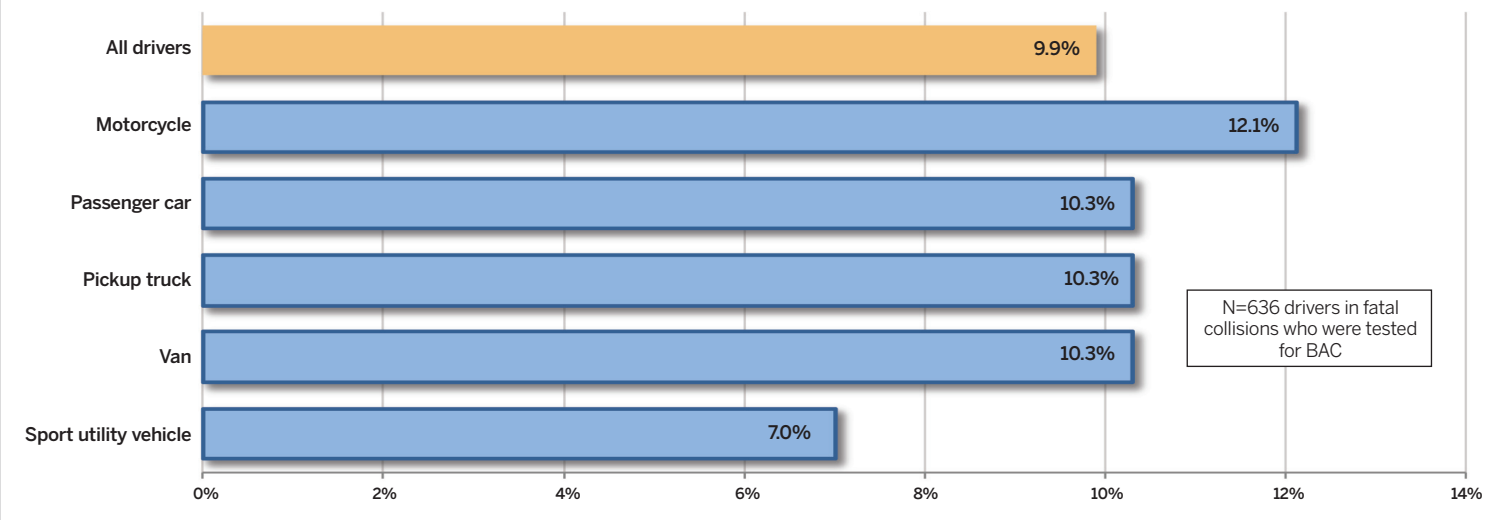
Overall, 10% of drivers in fatal collisions with reported BAC results were legally impaired. However, rates of driver alcohol impairment varied by vehicle type. Among drivers in 2023 fatal crashes who had BAC test results reported in ARIES, motorcycle operators had the highest proportion of alcohol-impaired in collisions among drivers of motorcycles and passenger vehicles (Figure 1.5).

Figure 1.4. Alcohol-impaired traffic fatalities as a percent of all fatalities in collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Figure 1.5. Alcohol-impaired drivers as a percent of all drivers in fatal collisions who were tested for BAC in Indiana by vehicle type, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes only passenger vehicles (passenger cars, pickup trucks, sport utility vehicles, and vans) and motorcycles (motorcycles, Class A and Class B motor driven cycles, mopeds, and motorized bicycles). Non-motorists and other vehicle types are excluded.
2) Excludes drivers in fatal collisions who were not tested.
3) Alcohol-impaired drivers are those with a recorded BAC of 0.08 g/dL. Drivers with recorded BAC results higher than 0.59g/dL are not counted as impaired.

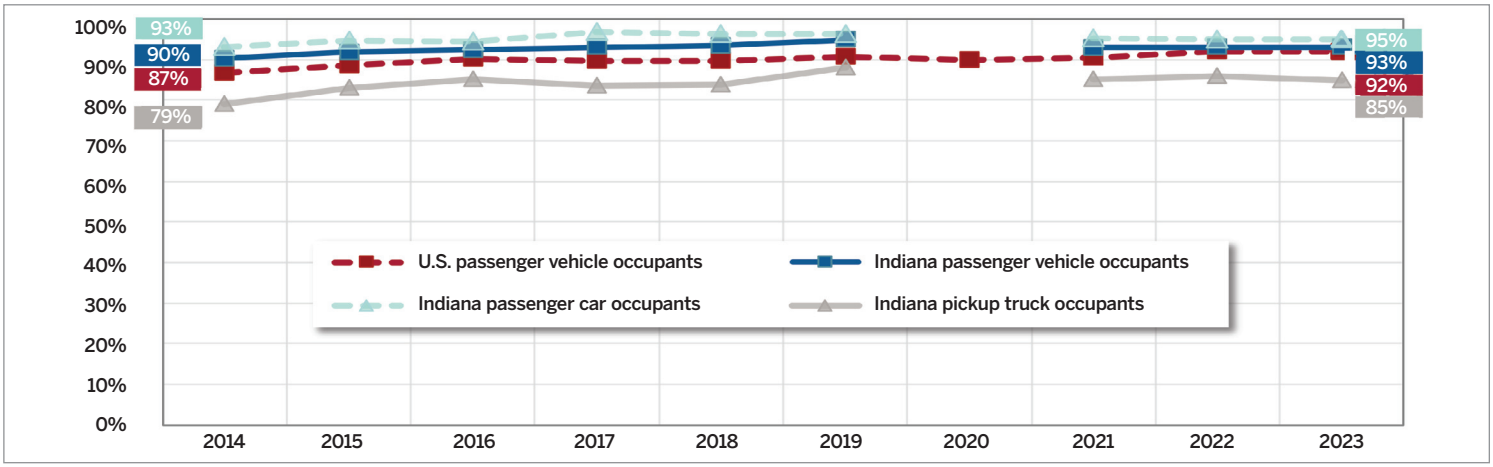
[2]NHTSA National Center for Statistics and Analysis, 2024.
[3]NHTSA estimates BACs when alcohol tests are unknown.

GOAL: Increase seat belt use

Indiana observational studies of seat belt use—conducted annually by ICJI and the Purdue University Center for Road Safety—show that Indiana's overall seat belt use rates have exceeded national rates for at least 10 years.[4] Between 2014 and 2023, Indiana's observational rate of seat belt use among passenger-vehicle occupants remained consistent at 93% on average, a rate that was one percentage point higher than the most recently reported national rate (Figure 1.6). The observed seat belt use rates for pickup truck occupants in Indiana lagged rates for passenger car occupants from 2014–23.

In 2023, restraint use among individuals in passenger-vehicle collisions varied by injury severity and locale type. Overall, passenger-vehicle occupants involved in collisions in urban (94%), suburban (94%), and exurban (93%) areas were slightly more likely to be restrained than people in rural areas (90%) (Figure 1.7). Restraint use was consistently much lower among those killed in collisions for all types of locales. Among passenger-vehicle occupants, individuals killed in rural collisions (36%) were restrained less often than individuals killed in urban (46%), suburban (49%), and exurban areas (57%).

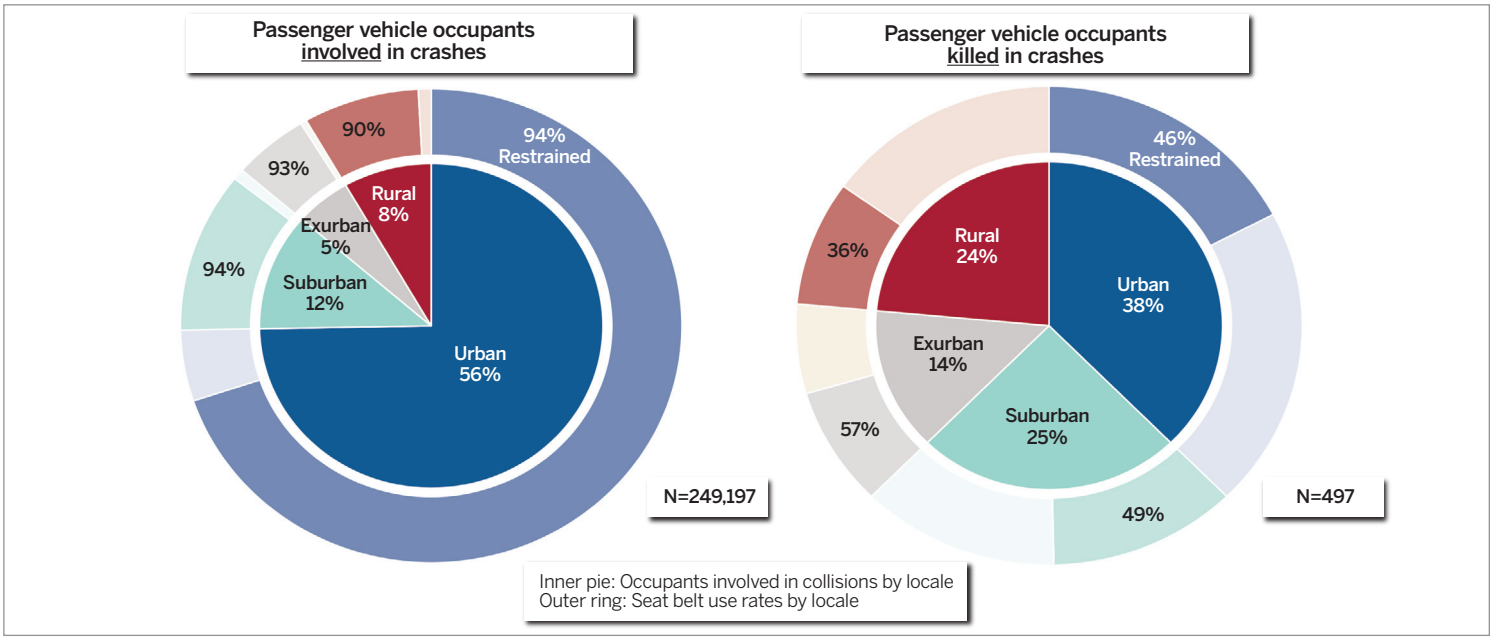
Figure 1.6. Comparison of observed seat belt usage rates in Indiana and the U.S. by vehicle type, 2014–23



Sources: Indiana—Purdue University Center for Road Safety, 2023; and U.S.—NHTSA National Center for Statistics and Analysis, 2024.

Notes:
1) Car and pickup truck restraint usage rates are specific to Indiana only.
2) The annual observational seat belt survey was not conducted for Indiana in 2020.

Figure 1.7. Restraint use among passenger vehicle occupants in collisions in Indiana by injury status and census locale, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded, April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2010 census generally by density and size. Suburban, exurban, and rural areas were created by the research team based on the 2010 urban boundaries. See the Glossary for a complete explanation.
2) Occupant restraints include seat belts as well as child restraints.
3) Passenger vehicles include vehicles reported as a passenger cars, pickup trucks, sport utility vehicles, or vans.
4) Excludes cases for which census locale could not be determined.
5) Only individuals for which restraint status is known are included in the calculation.

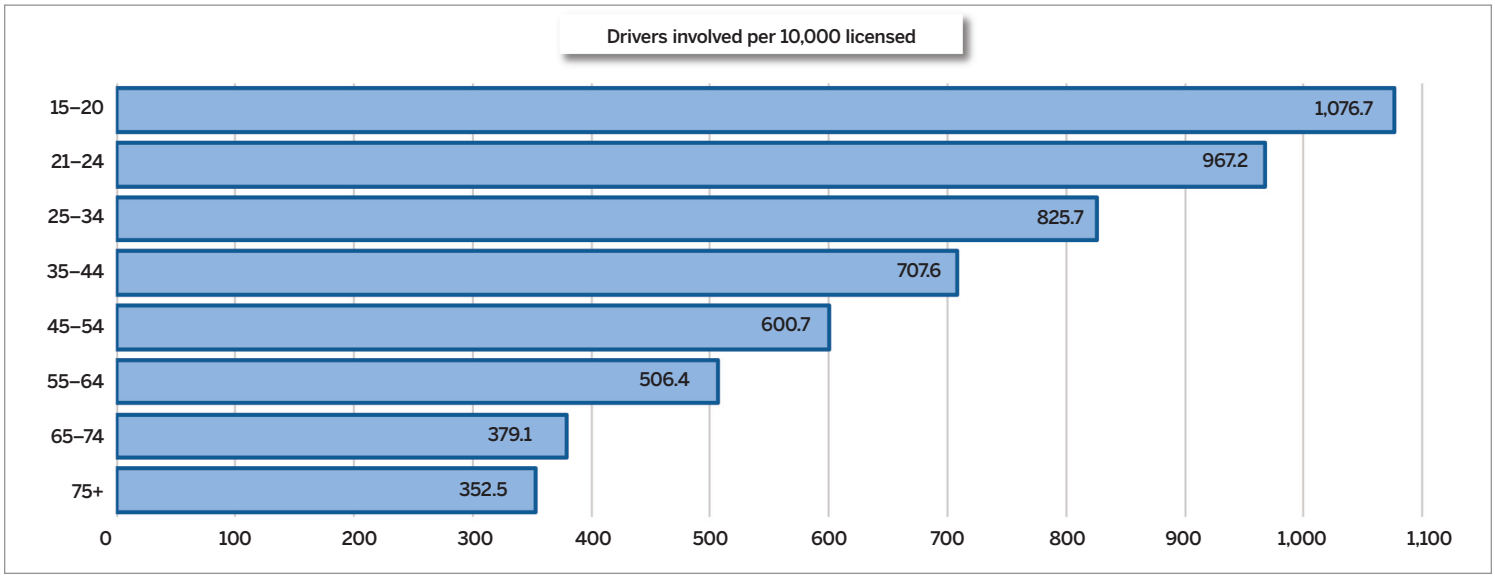
[4]An Indiana observational seat belt use survey was not conducted in 2020.

GOAL: Reduce young driver involvement in fatal crashes

In 2023 and consistent with previous years, young drivers ages 15 to 20 were involved in collisions at a higher rate than any other age group (Figure 1.8). The rate for young drivers was more than three times higher than the lowest rate—for drivers ages 75 and older. Research shows this dramatic difference, in part, reflects a lack of experience and the increased novelty-seeking and risk-taking behaviors typical at this stage of adolescent development.[5]

Young drivers in collisions decreased from 41,288 in 2022 to 40,438 in 2023. During this same period, young drivers killed in collisions, however, increased from 48 in 2022 to 64 in 2023, a five-year high (Figure 1.9). The fatality rate per 100,000 young, licensed drivers also reached a five-year high in 2023 at 18.0.

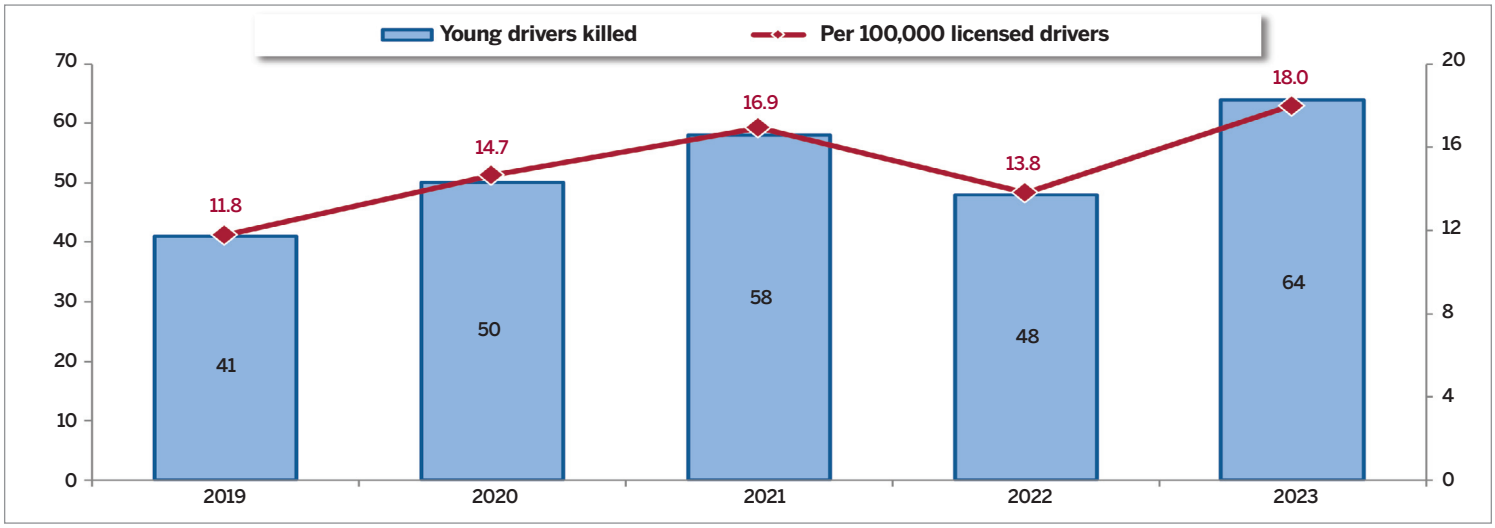
Figure 1.8. Drivers in collisions per 10,000 licensed drivers in Indiana by age group, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024.

Note: Excludes drivers younger than 15 and older than 109 years and cases of unknown or invalid age.

Figure 1.9. Young drivers killed in collisions in Indiana, 2019–23



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024.

Notes:
1) Young drivers include drivers ages 15–20.
2) Non-motorist vehicle types—pedestrians, pedalcyclists, and animal-drawn vehicles—are excluded.

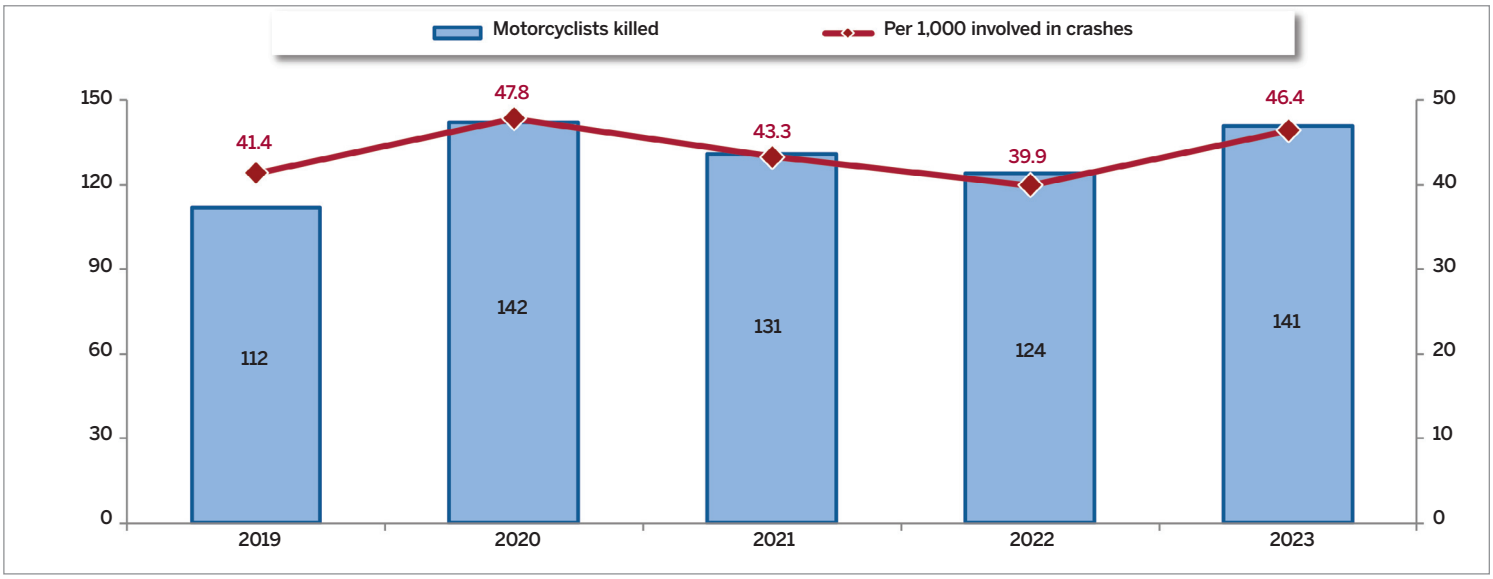
[5]Kirley, B. B., Robison, K. L., Goodwin, A. H., Harmon, K. J. O'Brien, N. P., West, A., Harrell, S. S., Thomas, L., & Brookshire, K., 2023.

GOAL: Reduce motorcyclist fatalities and unhelmeted fatalities

There were 141 motorcyclist fatalities in Indiana in 2023, an increase from 124 in 2022 and just slightly less than the 5-year high in 2020 (142) (Figure 1.10). The fatality rate per 1,000 motorcyclists involved in collisions also increased from 39.9 in 2022 to 46.4 in 2023. Both rates were below the five-year high in 2020 (47.8).

Indiana law requires helmets only for operators and passengers younger than 18 and operators with a motorcycle learner's permit. In 2023, 38% of motorcyclists in collisions were wearing helmets. A smaller proportion of motorcyclists killed in crashes (33%) were wearing helmets (Figure 1.11).

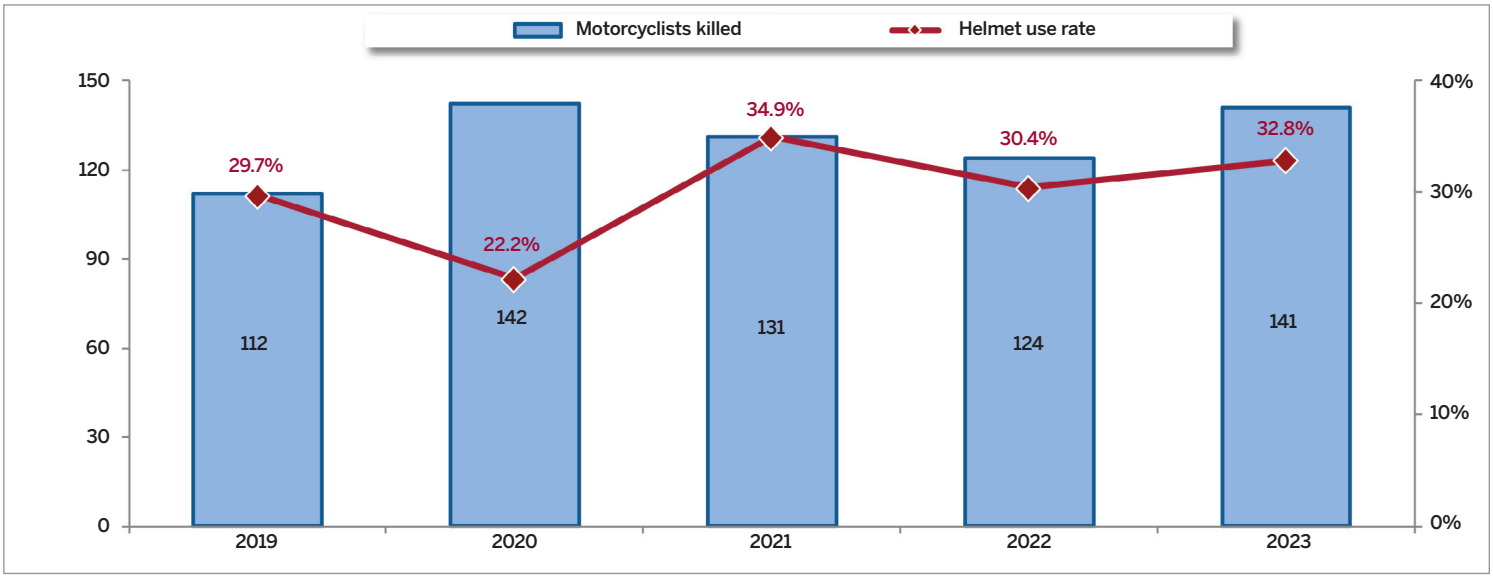
Figure 1.10. Motorcyclists killed in collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

Figure 1.11. Helmet use by motorcyclists killed in collisions in Indiana, 2019–23



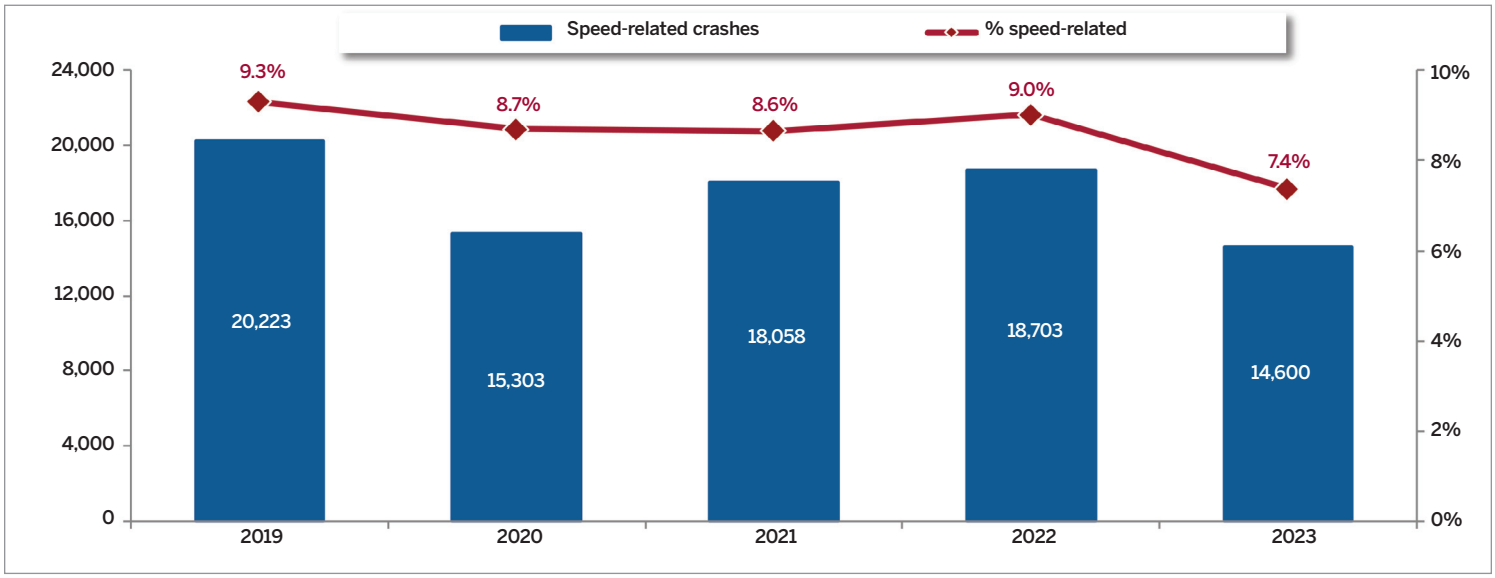
Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles.
2) Only helmet, no helmet and none entries for safety equipment use are used to calculate helmet use.

GOAL: Reduce drivers speeding in crashes

Speed-related collisions decreased from 18,703 in 2022 to 14,600 in 2023 (Figure 1.12). Fatal collisions that involved a speeding driver decreased from 259 in 2022 to 230 in 2023. In 2023, 7% of collisions were speed-related compared to 26% of fatal collisions (Figures 1.12 and 1.13).

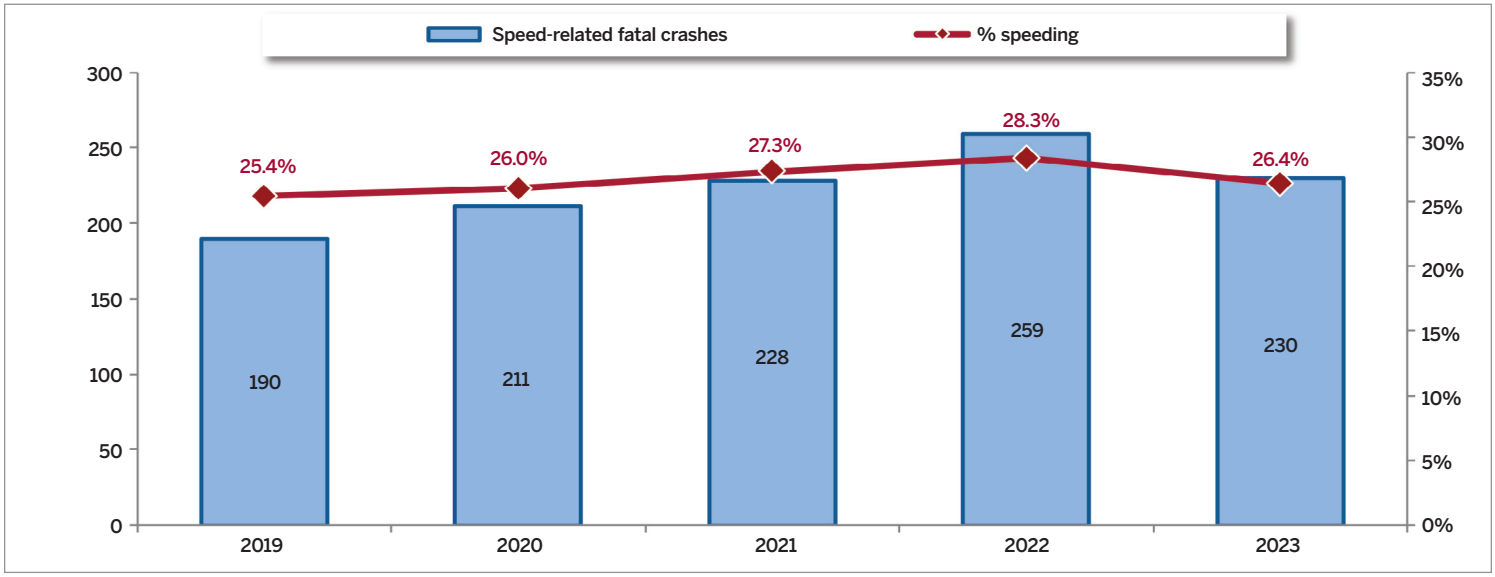
Figure 1.12. Speed-related collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: A collision is identified as speed-related if the crash report lists unsafe speed or speed too fast for weather conditions as the primary or contributing factor of the collision, or if a vehicle driver is issued a speeding citation.

Figure 1.13. Fatal speed-related collisions in Indiana 2019–23



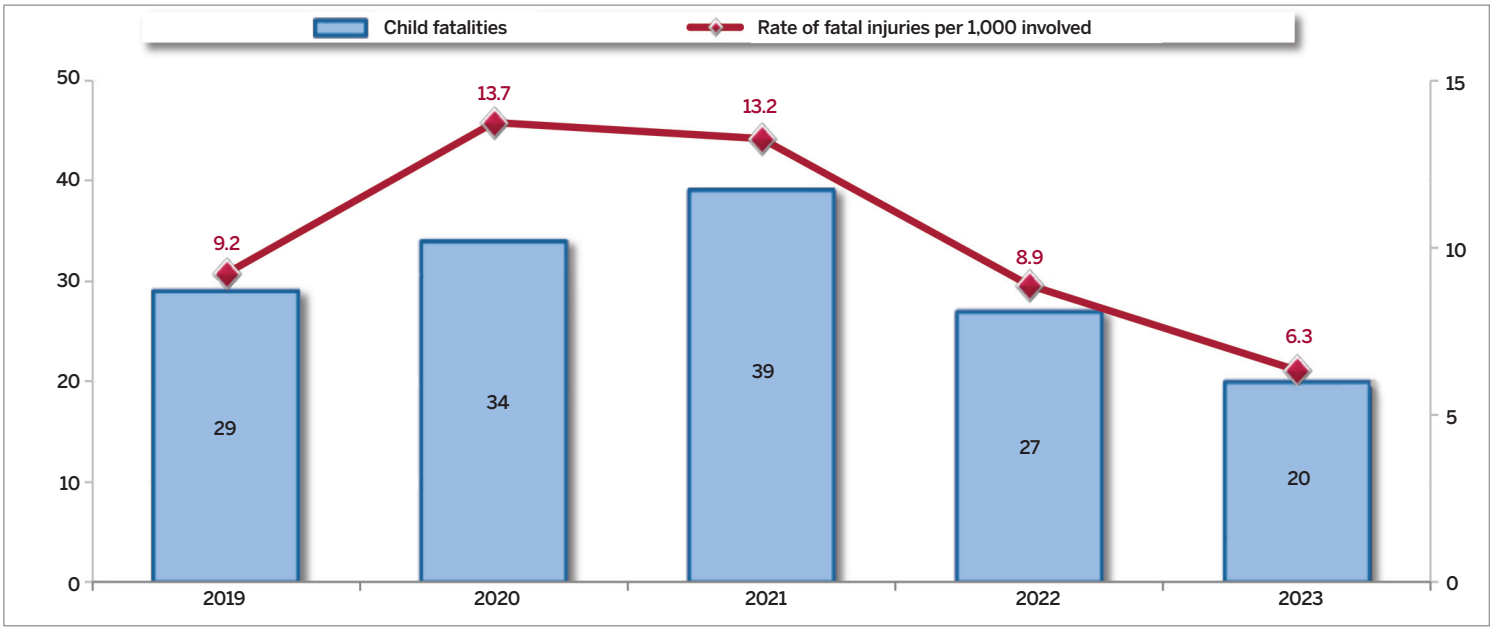
Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: A collision is identified as speed-related if the crash report lists unsafe speed or speed too fast for weather conditions as the primary or contributing factor of the collision, or if a vehicle driver is issued a speeding citation.

GOAL: Reduce fatalities and serious injuries among children

Children killed in crashes decreased from 27 in 2022 to 20 in 2023 (Figure 1.14). The rate of fatal injuries per 1,000 children involved in collisions also declined year-over-year between 2020 and 2023, from 13.7 to 6.3.

Figure 1.14. Child fatalities and fatal injury rates per 1,000 children involved in collisions in Indiana, 2019–23



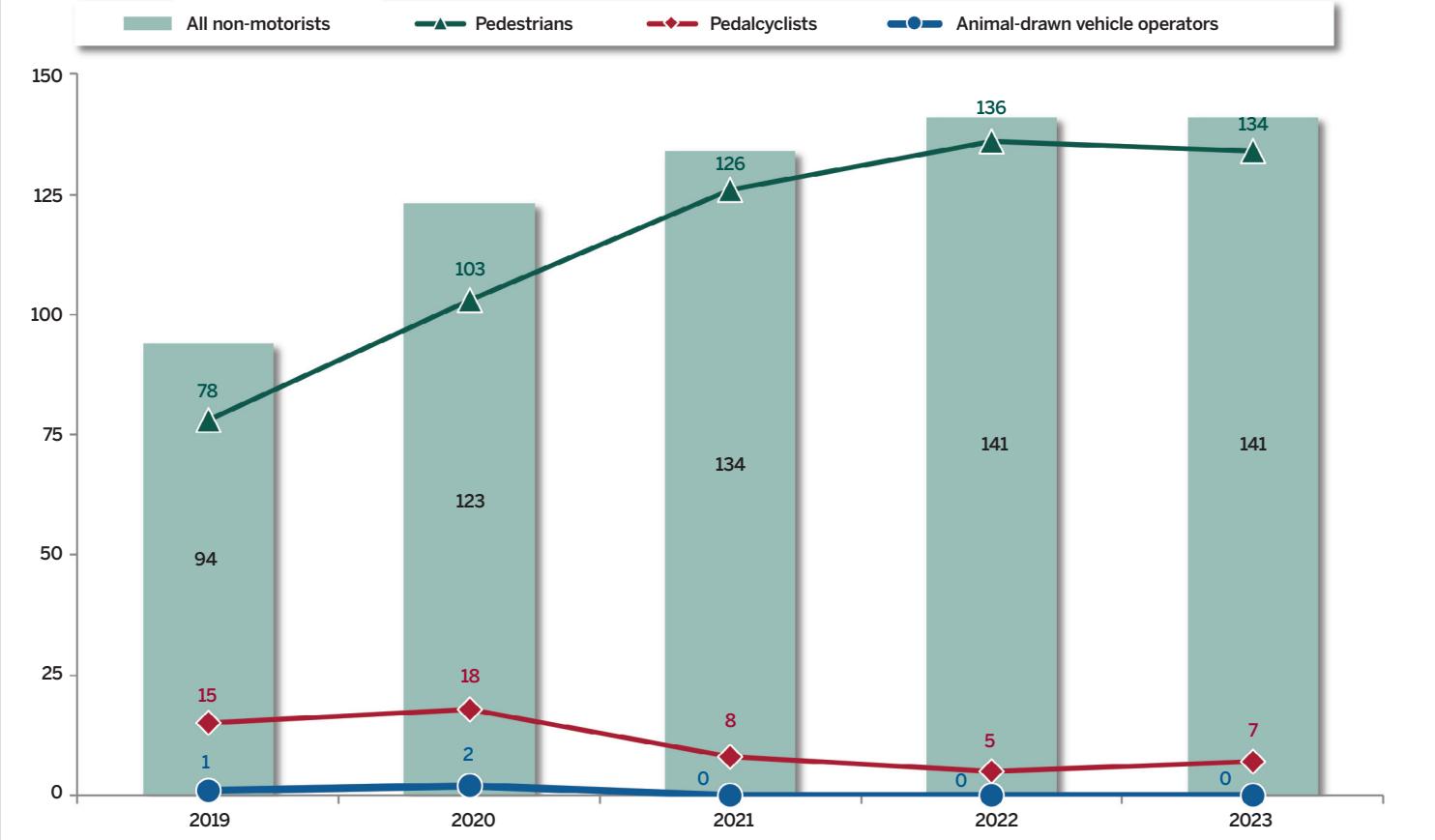
Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Includes all individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See Glossary for a full explanation.

GOAL: Reduce fatalities among non-motorists

In 2023, 141 non-motorists—pedestrians, pedalcyclists, and animal-drawn vehicle operators—were killed in collisions. The same number of non-motorists were killed in 2022. Non-motorist fatalities in 2022 and 2023 were higher than in the three previous years. Among non-motorists, pedestrians account for most fatalities. The number of pedestrian fatalities increased from 2019–23, while the number of pedalcyclist fatalities generally decreased. No animal-drawn vehicle operators were killed in collisions in 2021–23.

Figure 1.15. Non-motorists fatalities in collisions by person type, 2019–23



Source: Analysis provided by the Indiana University Public Policy using data downloaded from the Indiana State Police Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.

INDIANA TRAFFIC SAFETY FACTS

COLLISIONS

COLLISIONS, 2023

In 2023, 198,247 traffic collisions occurred in Indiana, a 4% decrease from 2022 (Table 2.1). Fatal collisions decreased 5%, from 914 in 2022 to 871 in 2023 (Table 2.1 and Figure 2.1). Incapacitating collisions increased 4%, from 3,965 in 2022 to 4,105 in 2023. Non-incapacitating collisions increased by 1%, and property damage-only collisions decreased by 6%.

The rate of fatal collisions per 1,000 collisions was the same in 2022 and 2023 (4.4) but remained below the five-year high of 4.6 in 2020 (Figure 2.1). The five-year lows for fatal collisions and the rate of fatal collisions per 1,000 collisions were set in 2019.

Injuries

In 2023, less than 1% of collisions were classified as fatal and 2% as incapacitating (Table 2.2). Among individuals in collisions—including drivers, injured occupants, pedalcyclists, pedestrians, and animal-drawn vehicle operators—less than 1% were killed and 1% suffered incapacitating injuries. Among types of individuals in collisions, drivers had the lowest proportions of fatalities and incapacitating injuries at less than 1% fatalities and 1% incapacitating injuries. At 6% each, higher proportions of pedalcyclists and pedestrians were killed than drivers and vehicle passengers. Substantially higher proportions of pedestrians (17%) and animal-drawn vehicle operators (14%) sustained incapacitating injuries than drivers, pedalcyclists (5%), and vehicle passengers (8%).

Vehicles

In 2023, 94% of vehicles in collisions were passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans (Figure 2.2). Large trucks, excluding pickup trucks, made up 5% of vehicles in collisions. Motorcycles, buses, school buses, and recreational vehicles each comprised less than 1%. The mix of vehicles in collisions was similar in 2021 and 2022.

Non-motorists

Crashes involving pedestrians increased to a five-year high of 2,186 in 2023 (Figure 2.3). The rate of pedestrian collisions per 1,000 collisions was 11.0, also a five-year high. The fewest number of pedestrian crashes occurred in 2020, and the lowest rate of pedestrian collisions was in 2019.

In 2023, pedalcyclist collisions declined considerably to a five-year low of 117, continuing the trend of annual declines from 2019 –23. The rate of pedalcyclist collisions also reached a five-year low in 2023. The most pedalcyclist collisions occurred in 2019, while the highest rate per 1,000 collisions was in 2020.

Month, day of the week, and time of day

In 2023, the most collisions occurred in the late fall and winter months—October and November (Table 2.3). However, the most fatal collisions occurred in July and October. There were considerable differences between 2022 and 2023 for particular months. In 2023, collisions decreased during all months except March. Substantially fewer collisions occurred in the winter months—January, February, and December. Fatal collisions increased in February, April, July, and September through November. There were fewer fatal collisions in the remaining months with fatal collisions decreasing by 20 or more in March, August, and December.

As in 2022, collisions in 2023 were most common on Thursdays and Fridays. By day and hour, collisions were most prevalent on weekdays from 3–5:59 p.m., with the highest number occurring on Thursdays and Fridays during this time (Table 2.4). Fatal collisions also were the most common on Thursdays and Fridays. However, by day and hour the most fatalities occurred on Tuesdays and Fridays 3–5:59 p.m. and Fridays 6–8:59 p.m. Fatal collisions made up the highest proportion of all collisions on Sundays. By day, and hour, the highest proportions of fatal collisions occurred on Saturdays from midnight–5:59 a.m. and on Sundays from 3–5:59 a.m.

Daytime collisions were consistently higher than nighttime collisions for each month in 2023. There were 11,331 daytime crashes on average monthly compared to 5,189 nighttime crashes (Figure 2.4). The monthly average for fatal crashes also was slightly higher during the day (37) than at night (35) (Figure 2.5). Fatal collisions during daytime hours peaked in July. Fatal collisions were highest during nighttime hours in July and October. Daytime and nighttime fatal collisions occurred least often in December. Fatal daytime and nighttime collisions were equal in June and July.

Collision type

Hit-and-run collisions were the most prevalent collision type from 2019 to 2023, making up 14% of all crashes in 2023 (Figure 2.6). Speed-related collisions were the next most common type during the same five-year period, making up 7% of crashes in 2023. Hit-and-run collisions were most prevalent in February, March, June, July, and December (Table 2.5). Speed-related collisions were especially frequent among all crashes during January and March.

Speed-related collisions occurred most often between midnight–5:59 a.m. for all days of the week except Friday (Table 2.6). On Fridays, the most speed-related collisions occurred from 6–11:59 p.m. Aggressive driving collisions occurred most often on Wednesdays and Sundays from midnight–11:59 am and Thursdays from 6–11:59 pm. Hit-and-run and alcohol-impaired crashes peaked on Saturdays and Sundays from midnight–5:59 a.m. Distracted collisions—any type were highest from noon–5:59 p.m. all days of the week. These collisions also were elevated 6–11:59 a.m. on Sundays.

Primary factor

Driver-related factors were identified as the primary factor in 84% of all collisions and 94% of fatal collisions (Table 2.7). Among all driver-related factors, unsafe driver actions were the most common primary factors for total collisions and fatal collisions. Within this subcategory, failure to yield the right of way and following too closely were again listed most often as the primary factor in all collisions. Failure to yield the right of way and unsafe speed were identified most often in crash reports as the primary factors in fatal collisions.

The rate of fatal collisions per 1,000 collisions was considerably higher among primary factors attributed to driver actions (4.9 per 1,000) than those attributed primarily to vehicle factors (2.8 per 1,000) or environmental factors (1.2 per 1,000) (Table 2.7 and Figure 2.7). The following driver factors had fatal collision rates per 1,000 collisions that were higher than the average rate for all collisions (4.4 per 1,000):

- Influenced by pedestrian action: 123.1
- Wrong way on a one-way road: 26.6
- Left of center: 25.3
- Unsafe speed: 24.5
- Driver illness: 21.2
- Left of center: 35.2
- Failure to maintain lane: 11.9
- Ran off road: 10.5
- Overcorrecting/oversteering: 10.3
- Disregarding signal or sign: 7.3
- Speed too fast for weather conditions: 5.2
- Improper passing: 5.2

Census locale and road class

In 2023, collisions in urban areas accounted for 71% of all collisions and 46% of fatal collisions. Collisions in non-urban areas—suburban, exurban, and rural—comprised only 29% of all collisions but made up the majority (54%) of fatal collisions (Figure 2.8). The rates of fatal collisions per 1,000 collisions were much higher in non-urban areas—suburban (8.0), exurban (8.0), and rural (8.9)—than in urban areas (2.9).

In 2023, more than half of collisions and greater than one-third of fatal collisions occurred on local/city roads. However, the rate of fatal collisions per 1,000 collisions was lowest on those roads at 2.4 (Figure 2.9). The rates of fatal collisions were highest on county roads (8.5), U.S. routes (7.6), and state roads (7.0).

Road parameters and manner of collision

In 2023, most collisions and fatal collisions occurred on roads away from intersections (Table 2.8). The highest fatal collision rate per 1,000 collisions among all road parameters occurred at railroad crossings. The rate of fatal collisions on curved roads was higher than the rate on straight roads. Hillcrests accounted for the highest fatal collision rate for straight roads, and the highest rate for curved roads was on level segments. Most collisions in 2023 occurred on asphalt roads. However, the highest rate of fatal collisions occurred on gravel roads.

Rear-end crashes accounted for the largest proportion (23%) of all crashes in 2023 while running off the road accounted for the largest proportion (34%) of fatal collisions (Table 2.9). Manners of collision that resulted in a higher-than-average fatal collision rate per 1,000 crashes (4.4 per 1,000), included:

- Head-on collisions: 21.1
- Running off the road: 12.7
- Non-collisions: 10.9
- Collisions with objects in the road: 10.3
- Right-angle collisions: 5.6

Traffic control type and environmental condition

Data availability for traffic control types has dropped precipitously since the implementation of ARIES 6. In 2023, 85% of collision records lacked this data. As such, readers should interpret the results reported here with caution.

In 2023, among collisions for which traffic control type was available, 55% of collisions involved the presence of a traffic control measure, such as a stop sign or a no-passing zone (Table 2.10). The following traffic controls had fatal collision rates that were higher than the average rate of 4.4 fatal collisions per 1,000 collisions:

- No passing zone: 16.9
- Other regulatory sign/marking: 10.0

In 2023, 66% of collisions occurred during daylight conditions, while crashes in the dark on unlit roads had the highest fatal collision rate per 1,000 collisions (Table 2.11). Most collisions occurred during clear weather; however, the highest rates of fatal collisions were in fog/smoke/smog and severe crosswinds. Most collisions occurred on dry surfaces. However, the highest fatal collision rate per 1,000 collisions were on roads with loose material on the road.

Deer

Collisions with deer increased modestly year-over-year since 2020 to a five-year high of 17,495 in 2023 (Figure 2.10). The rate of collisions with deer per 1,000 collisions also reached a five-year high of 88.2 in 2023. Eight collisions involving deer resulted in one or more fatalities in 2023. For each of the years between 2019 and 2023, less than 0.1% of collisions involving deer resulted in a fatality. Map 8.10 in the Counties chapter shows the number of collisions with deer by county.

Work zones

Work zone collisions increased from 6,364 in 2022 to a five-year high of 7,481 in 2023 (Figure 2.11). The work zone collision rate per 1,000 collisions also increased to a five-year high of 37.7 in 2023. The five-year lows for collisions and work zone collision rates per 1,000 collisions were in 2020. However, the highest fatality rate per 1,000 work zone collisions was in 2020 at 4.9 and the lowest rate was in 2023 at 4.0. Map 8.11 in the Counties chapter shows the number of collisions in work zones by county.

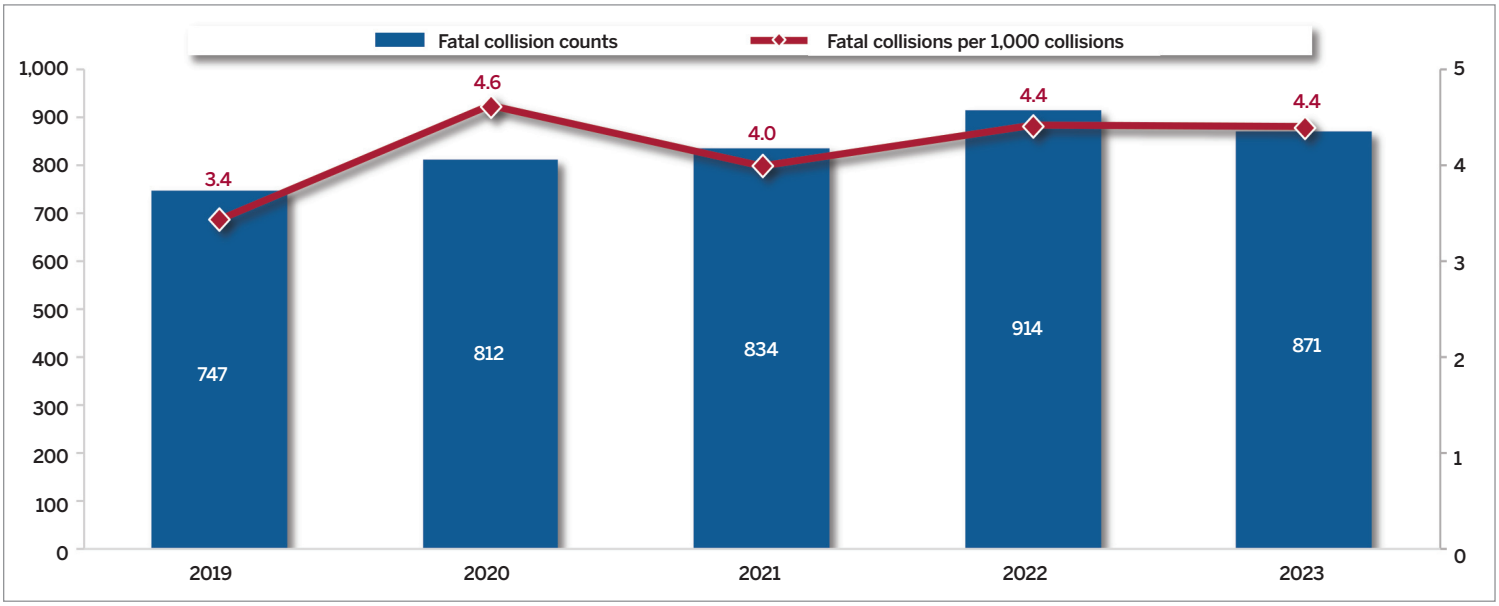
Table 2.1. Collisions in Indiana by severity, 2019–23

	2019	2020	2021	2022	2023	Annual rate of change	
						2022–23	2019–23
All collisions	**217,605**	**175,952**	**208,823**	**207,330**	**198,247**	**-4.4%**	**-2.3%**
Fatal	747	812	834	914	871	-4.7%	3.9%
Incapacitating	3,089	3,369	3,868	3,965	4,105	3.5%	7.4%
Non-incapacitating	28,693	23,794	27,799	29,788	30,108	1.1%	1.2%
Property damage only	185,076	147,977	176,322	172,663	163,163	-5.5%	-3.1%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: See the glossary for updated injury definitions and methodologies.

Figure 2.1. Fatal collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

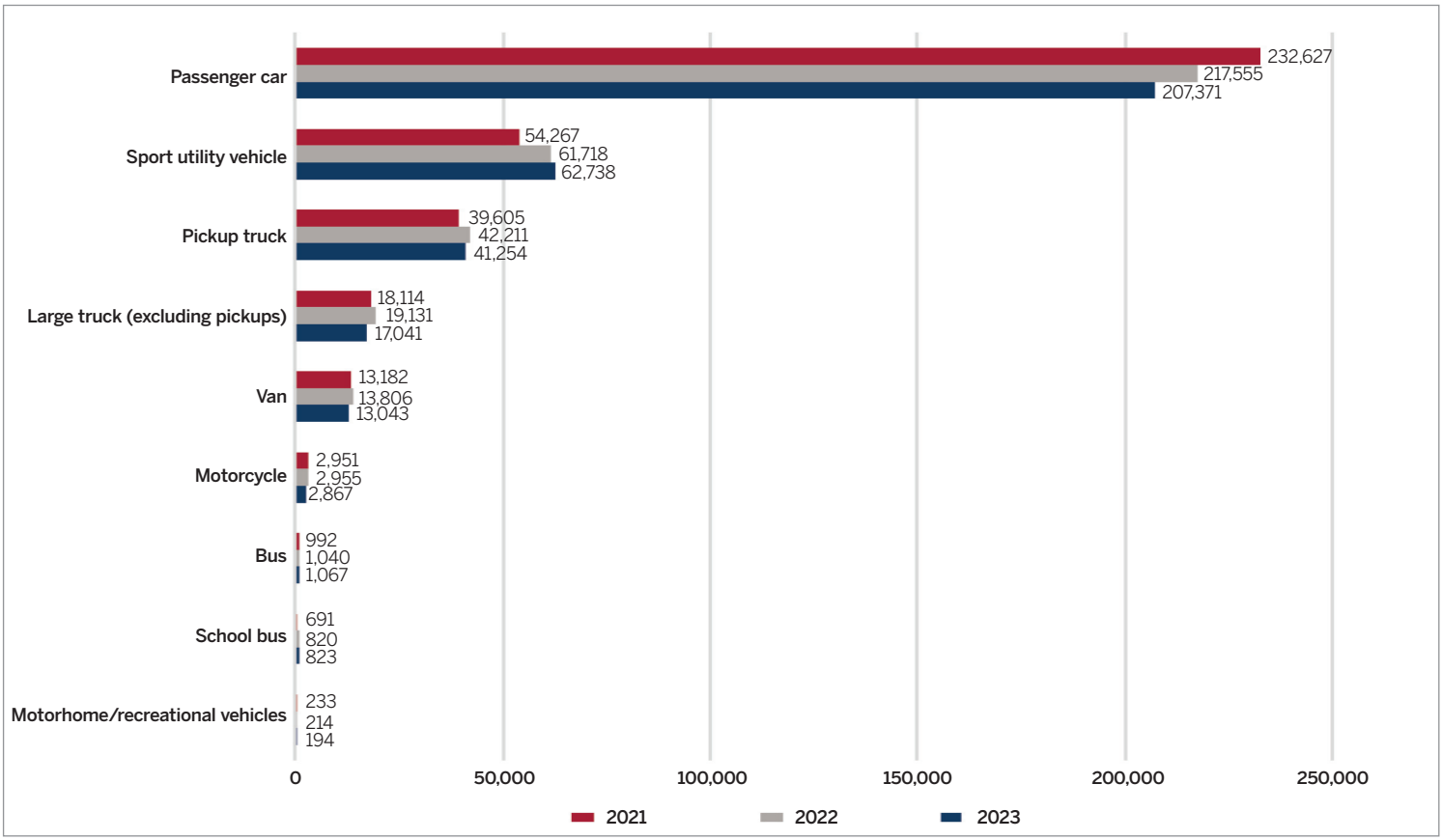
Table 2.2. Collisions and injuries in Indiana by person type and injury severity, 2023

	Fatal	Incapacitating	Non-incapacitating	Property damage only/no injury	Total	% fatal	% incapacitating
Collisions	**871**	**4,105**	**30,108**	**163,163**	**198,247**	**0.4%**	**2.1%**
Injuries	**928**	**4,743**	**42,809**	**309,579**	**358,059**	**0.3%**	**1.3%**
Driver	627	3,459	31,025	309,359	344,470	0.2%	1.0%
Injured occupants	160	899	10,067	77	11,203	1.4%	8.0%
Pedalcyclist	7	6	74	31	118	5.9%	5.1%
Pedestrian	134	378	1,643	106	2,261	5.9%	16.7%
Animal-drawn vehicle operator	0	1	0	6	7	0.0%	14.3%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.
2) See the glossary for updated injury definitions and methodologies.

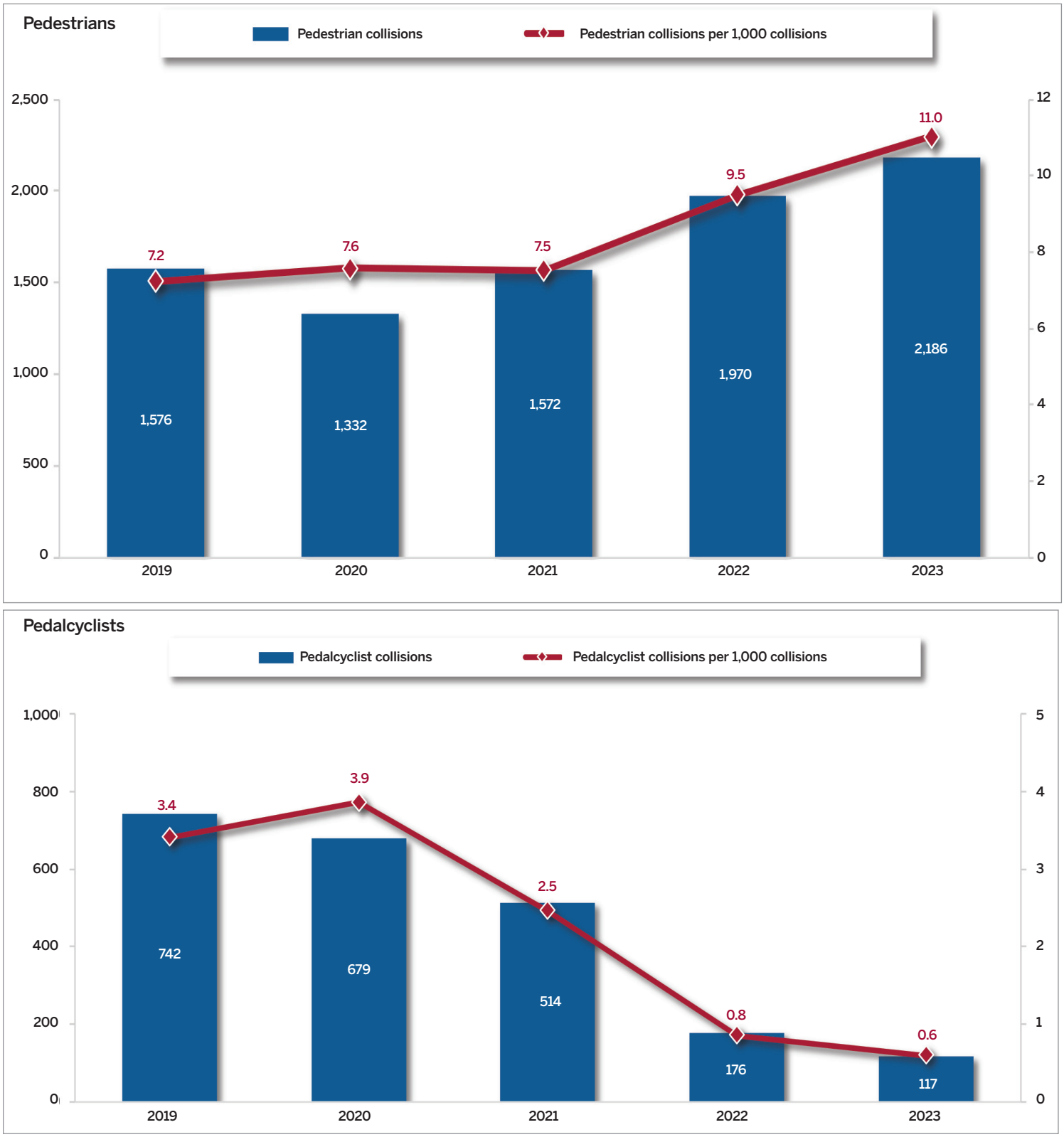
Figure 2.2. Vehicles in collisions in Indiana, 2021–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcycles include vehicles classified as motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bikes.
2) For this analysis, buses are defined as large motor vehicles with drivers that seat nine or more persons. School buses are considered separately.
3) Large trucks are trucks over 10,000 pound gross vehicle weight rating, including single unit trucks and truck tractors. Large pickup trucks are excluded from this category to eliminate double counting.
4) Excludes animal-drawn vehicles (non-motor vehicle), farm vehicles, combination vehicles, pedestrians, bicycles, unknown, and missing vehicle types.

Figure 2.3. Pedestrians and pedalcyclists in collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.

Table 2.3. Collisions in Indiana by month, 2022–23

Month	Total collisions			Fatal collisions			% change 2022–23	
	2022	2023	Change	2022	2023	Change	Fatal	Total
Jan	17,922	16,096	-1,826	74	59	-15	-10.2%	-20.3%
Feb	16,728	13,799	-2,929	50	57	7	-17.5%	14.0%
Mar	15,300	16,020	720	82	59	-23	4.7%	-28.0%
Apr	15,487	15,475	-12	56	71	15	-0.1%	26.8%
May	18,009	17,427	-582	81	80	-1	-3.2%	-1.2%
Jun	16,680	16,492	-188	88	78	-10	-1.1%	-11.4%
Jul	16,050	15,749	-301	92	94	2	-1.9%	2.2%
Aug	17,307	16,980	-327	101	78	-23	-1.9%	-22.8%
Sep	16,949	16,249	-700	74	83	9	-4.1%	12.2%
Oct	18,955	18,778	-177	85	89	4	-0.9%	4.7%
Nov	19,180	18,723	-457	61	73	12	-2.4%	19.7%
Dec	18,763	16,459	-2,304	70	50	-20	-12.3%	-28.6%
Total	**207,330**	**198,247**	**-9,083**	**914**	**871**	**-43**	**-4.4%**	**-4.7%**

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Color scale is applied across 2022 and 2023 for total and fatal collisions.

Table 2.4. Total and fatal collisions in Indiana by day of the week and time of day, 2023

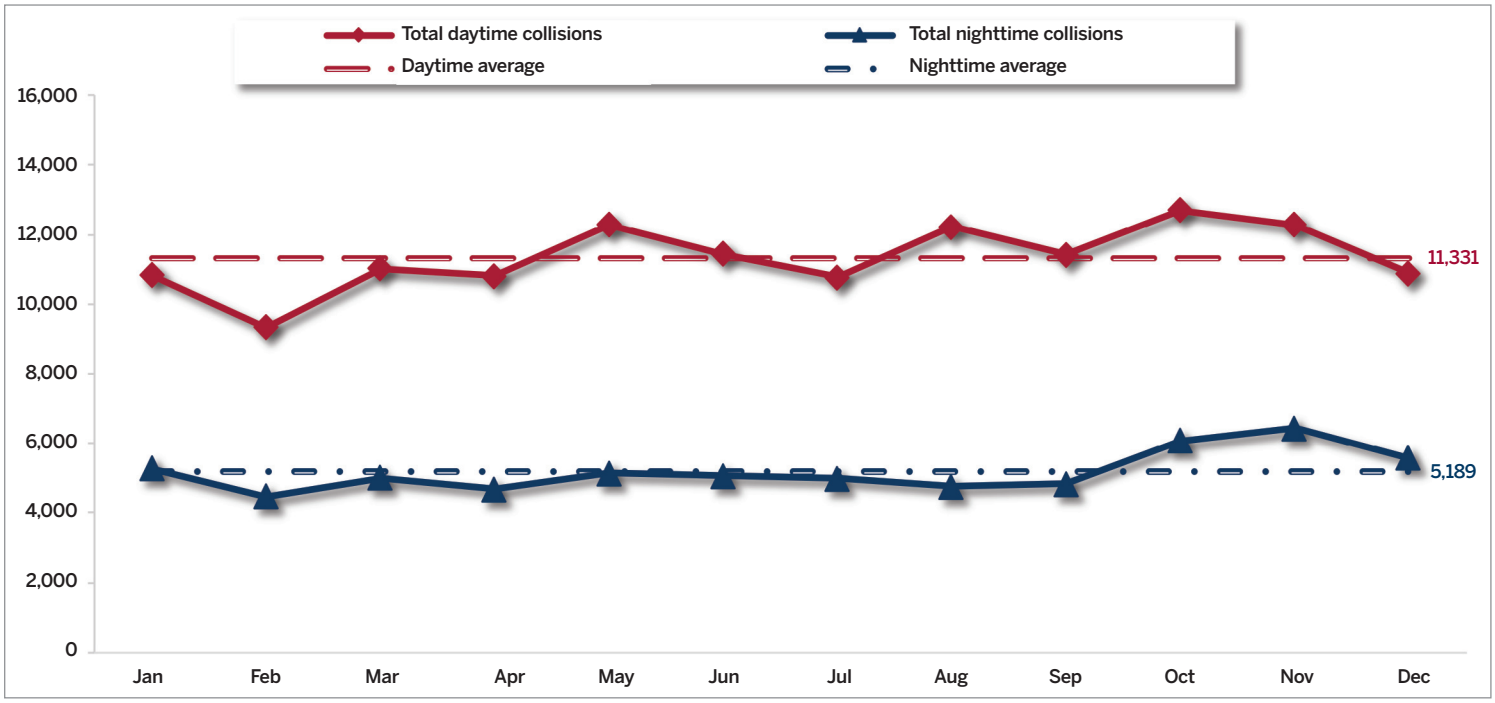
Day of the week	Time of day								All hours
	Midnight–2:59 a.m.	3–5:59 a.m.	6–8:59 a.m.	9–11:59 a.m.	Noon–2:59 p.m.	3–5:59 p.m.	6–8:59 p.m.	9–11:59 p.m.	
Total collisions	**8,722**	**10,576**	**27,811**	**26,299**	**35,762**	**46,105**	**27,683**	**15,289**	**198,247**
Sunday	2,094	1,651	1,543	2,649	4,080	3,957	3,457	1,885	21,316
Monday	905	1,457	4,678	3,700	4,973	6,951	3,574	1,734	27,972
Tuesday	896	1,427	5,064	3,855	5,032	7,344	3,840	1,809	29,267
Wednesday	855	1,503	5,000	4,114	5,267	7,383	3,934	1,844	29,900
Thursday	1,026	1,478	4,935	3,910	5,481	7,844	4,127	2,158	30,959
Friday	1,088	1,533	4,510	4,360	6,148	8,121	4,677	2,940	33,377
Saturday	1,858	1,527	2,081	3,711	4,781	4,505	4,074	2,919	25,456
Fatal collisions	**75**	**99**	**76**	**93**	**122**	**157**	**142**	**107**	**871**
Sunday	18	22	6	12	13	20	26	15	132
Monday	7	13	10	13	18	21	21	10	113
Tuesday	7	9	12	13	11	28	26	15	121
Wednesday	7	11	14	9	27	19	11	10	108
Thursday	7	12	11	13	15	15	23	14	110
Friday	6	13	15	24	15	32	14	20	139
Saturday	23	19	8	9	23	22	21	23	148
% fatal	**0.9%**	**0.9%**	**0.3%**	**0.4%**	**0.3%**	**0.3%**	**0.5%**	**0.7%**	**0.4%**
Sunday	0.86%	1.33%	0.39%	0.45%	0.32%	0.51%	0.75%	0.80%	0.62%
Monday	0.77%	0.89%	0.21%	0.35%	0.36%	0.30%	0.59%	0.58%	0.40%
Tuesday	0.78%	0.63%	0.24%	0.34%	0.22%	0.38%	0.68%	0.83%	0.41%
Wednesday	0.82%	0.73%	0.28%	0.22%	0.51%	0.26%	0.28%	0.54%	0.36%
Thursday	0.68%	0.81%	0.22%	0.33%	0.27%	0.19%	0.56%	0.65%	0.36%
Friday	0.55%	0.85%	0.33%	0.55%	0.24%	0.39%	0.30%	0.68%	0.42%
Saturday	1.24%	1.24%	0.38%	0.24%	0.48%	0.49%	0.52%	0.79%	0.58%

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Data limited to collisions for which day and time were reported.
2) Color scale is applied across days and times for total collisions and percent fatal.

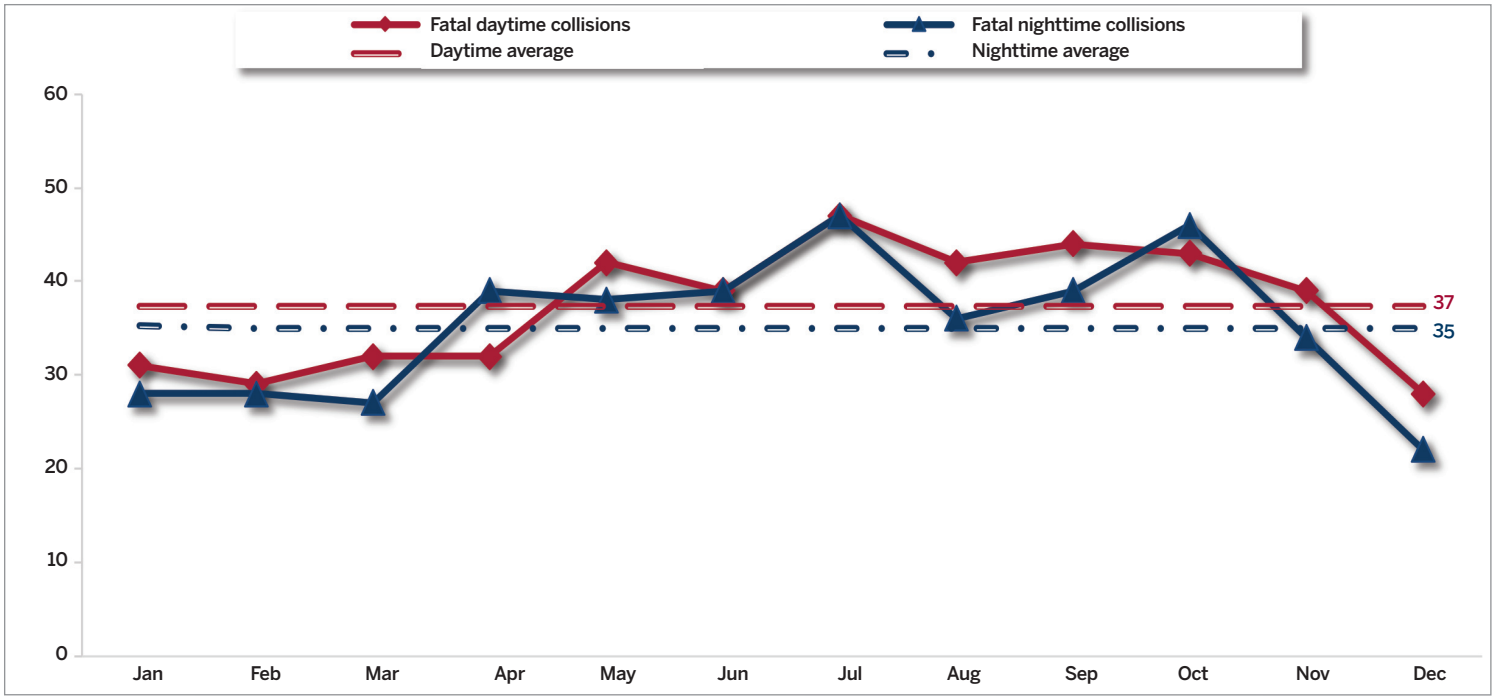
Figure 2.4. Collisions in Indiana by month and day/night, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

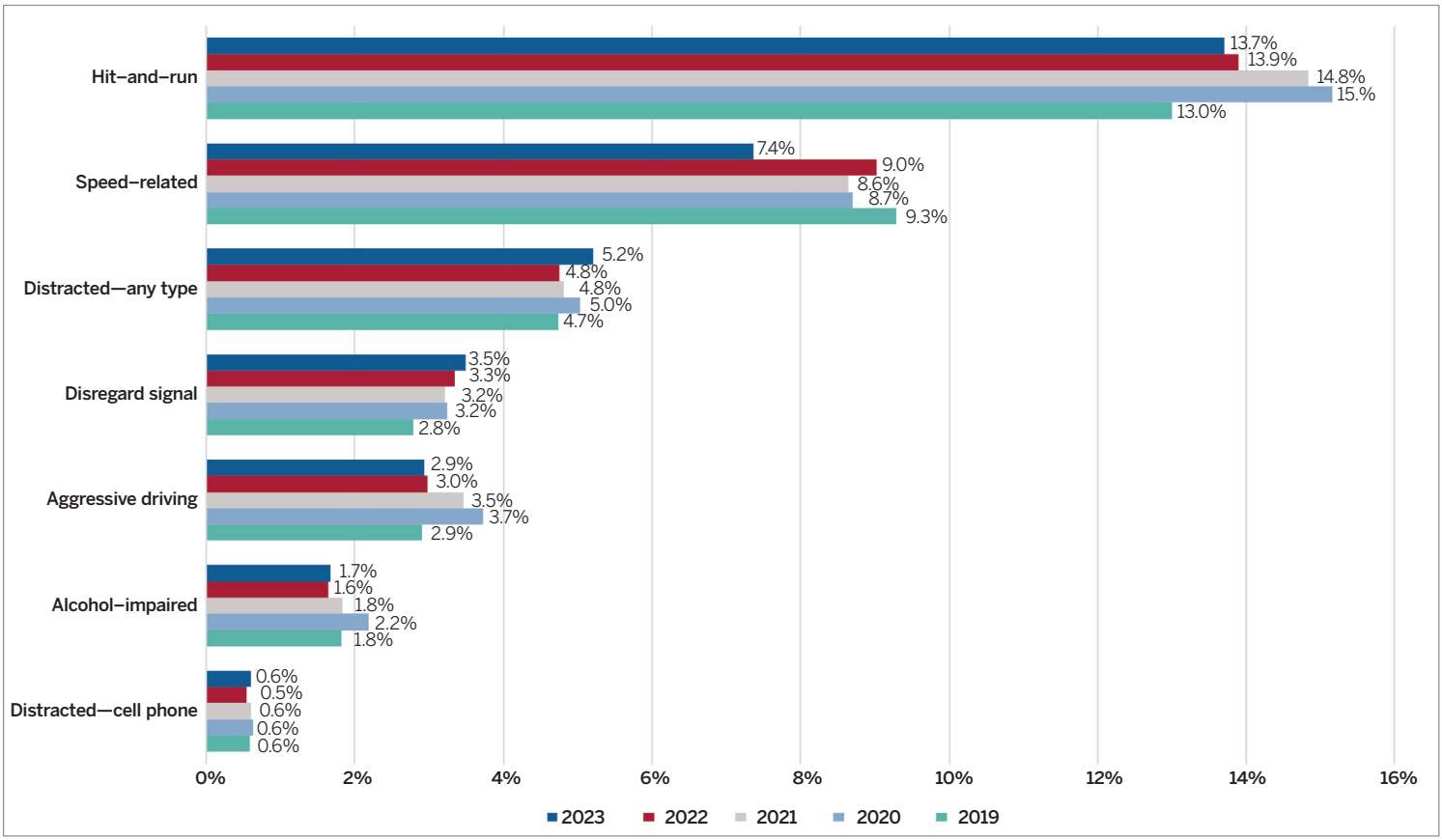
Figure 2.5. Fatal collisions in Indiana by month and day/night, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

Figure 2.6. Collisions in Indiana by collision circumstance, 2019–23



Source: Analysis provided by the Indiana Universary Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) See glossary for definitions of alcohol-impaired, aggressive driving, speed-related, disregard signal, hit-and-run, distracted—any type, and distracted—cell phone collisions.
2) Collision circumstances are not mutually exclusive. Percents for collision circumstances will not sum to 100%.

Table 2.5. Collisions in Indiana by month and collision circumstance, 2023

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	16,096	291	1.8	449	2.8	2,175	13.5	502	3.1	2,204	13.7	688	4.3	85	0.5
Feb	13,799	256	1.9	436	3.2	984	7.1	493	3.6	1,954	14.2	711	5.2	84	0.6
Mar	16,020	267	1.7	464	2.9	1,679	10.5	569	3.6	2,284	14.3	786	4.9	79	0.5
Apr	15,475	308	2.0	466	3.0	911	5.9	541	3.5	2,139	13.8	851	5.5	104	0.7
May	17,427	275	1.6	612	3.5	1,000	5.7	598	3.4	2,406	13.8	999	5.7	117	0.7
Jun	16,492	276	1.7	527	3.2	1,026	6.2	540	3.3	2,260	13.7	911	5.5	111	0.7
Jul	15,749	282	1.8	503	3.2	1,018	6.5	581	3.7	2,307	14.6	871	5.5	75	0.5
Aug	16,980	251	1.5	503	3.0	1,106	6.5	612	3.6	2,428	14.3	1,017	6.0	109	0.6
Sep	16,249	278	1.7	479	2.9	956	5.9	603	3.7	2,261	13.9	884	5.4	100	0.6
Oct	18,778	277	1.5	510	2.7	1,334	7.1	673	3.6	2,471	13.2	931	5.0	114	0.6
Nov	18,723	249	1.3	414	2.2	1,074	5.7	629	3.4	2,139	11.4	857	4.6	103	0.6
Dec	16,459	296	1.8	446	2.7	1,337	8.1	578	3.5	2,324	14.1	822	5.0	101	0.6
Total	**198,247**	**3,306**	**1.7**	**5,809**	**2.9**	**14,600**	**7.4**	**6,919**		**27,177**	**13.7**	**10,328**	**5.2**	**1,182**	**0.6**

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

Table 2.6. Collisions in Indiana by day, hour, and collision circumstance, 2023

Day	Time	All collisions	Alcohol–impaired		Aggressive driving		Speed–related		Disregard signal		Hit–and–run		Distracted—any type		Distracted—cell phone	
		Total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total	Count	As % of day/time total
Sun	Midnight–5:59 a.m.	3,924	417	10.6	300	7.6	540	13.8	96	2.4	1,094	27.9	158	4.0	34	0.9
	6–11:59 a.m.	4,193	65	1.6	116	2.8	552	13.2	194	4.6	580	13.8	229	5.5	21	0.5
	Noon–5:59 p.m.	7,950	76	1.0	236	3.0	667	8.4	359	4.5	1,167	14.7	435	5.5	45	0.6
	6 p.m.–11:59 p.m.	5,334	213	4.0	249	4.7	500	9.4	186	3.5	974	18.3	254	4.8	50	0.9
Mon	Midnight–5:59 a.m.	2,747	84	3.1	92	3.3	222	8.1	40	1.5	438	15.9	92	3.3	13	0.5
	6–11:59 a.m.	8,774	27	0.3	135	1.5	607	6.9	312	3.6	852	9.7	427	4.9	35	0.4
	Noon–5:59 p.m.	12,113	85	0.7	239	2.0	634	5.2	421	3.5	1,365	11.3	720	5.9	70	0.6
	6 p.m.–11:59 p.m.	5,423	139	2.6	193	3.6	434	8.0	192	3.5	831	15.3	249	4.6	36	0.7
Tue	Midnight–5:59 a.m.	2,755	53	1.9	87	3.2	235	8.5	49	1.8	371	13.5	99	3.6	17	0.6
	6–11:59 a.m.	8,939	24	0.3	157	1.8	497	5.6	320	3.6	892	10.0	470	5.3	39	0.4
	Noon–5:59 p.m.	12,919	81	0.6	307	2.4	593	4.6	408	3.2	1,457	11.3	723	5.6	67	0.5
	6 p.m.–11:59 p.m.	5,720	125	2.2	196	3.4	387	6.8	205	3.6	863	15.1	267	4.7	32	0.6
Wed	Midnight–5:59 a.m.	2,624	62	2.4	232	8.8	245	9.3	62	2.4	372	14.2	80	3.0	22	0.8
	6–11:59 a.m.	8,873	24	0.3	592	6.7	615	6.9	321	3.6	939	10.6	422	4.8	37	0.4
	Noon–5:59 p.m.	13,077	54	0.4	642	4.9	684	5.2	396	3.0	1,451	11.1	763	5.8	69	0.5
	6 p.m.–11:59 p.m.	5,958	120	2.0	413	6.9	425	7.1	210	3.5	933	15.7	280	4.7	35	0.6
Thu	Midnight–5:59 a.m.	3,015	74	2.5	204	6.8	226	7.5	65	2.2	430	14.3	98	3.3	19	0.6
	6–11:59 a.m.	8,731	38	0.4	560	6.4	589	6.7	336	3.8	943	10.8	427	4.9	32	0.4
	Noon–5:59 p.m.	13,602	74	0.5	695	5.1	740	5.4	429	3.2	1,568	11.5	725	5.3	68	0.5
	6 p.m.–11:59 p.m.	6,532	181	2.8	456	7.0	482	7.4	232	3.6	998	15.3	285	4.4	44	0.7
Fri	Midnight–5:59 a.m.	3,386	110	3.2	151	4.5	301	8.9	67	2.0	477	14.1	119	3.5	27	0.8
	6–11:59 a.m.	9,722	35	0.4	195	2.0	562	5.8	362	3.7	973	10.0	476	4.9	43	0.4
	Noon–5:59 p.m.	14,756	91	0.6	328	2.2	934	6.3	466	3.2	1,682	11.4	885	6.0	103	0.7
	6 p.m.–11:59 p.m.	7,846	270	3.4	287	3.7	723	9.2	257	3.3	1,330	17.0	383	4.9	75	1.0
Sat	Midnight–5:59 a.m.	3,757	317	8.4	246	6.5	504	13.4	97	2.6	904	24.1	125	3.3	22	0.6
	6–11:59 a.m.	6,609	50	0.8	163	2.5	548	8.3	244	3.7	742	11.2	305	4.6	31	0.5
	Noon–5:59 p.m.	10,286	106	1.0	265	2.6	552	5.4	326	3.2	1,268	12.3	520	5.1	48	0.5
	6 p.m.–11:59 p.m.	7,371	311	4.2	335	4.5	602	8.2	267	3.6	1,283	17.4	312	4.2	48	0.7
Sun	(Total)	21,401	771	3.6	901	4.2	2,259	10.6	835	3.9	3,815	17.8	1,076	5.0	150	0.7
Mon	(Total)	29,057	335	1.2	659	2.3	1,897	6.5	965	3.3	3,486	12.0	1,488	5.1	154	0.5
Tue	(Total)	30,333	283	0.9	747	2.5	1,712	5.6	982	3.2	3,583	11.8	1,559	5.1	155	0.5
Wed	(Total)	30,532	260	0.9	1,879	6.2	1,969	6.4	989	3.2	3,695	12.1	1,545	5.1	163	0.5
Thu	(Total)	31,880	367	1.2	1,915	6.0	2,037	6.4	1,062	3.3	3,939	12.4	1,535	4.8	163	0.5
Fri	(Total)	35,710	506	1.4	961	2.7	2,520	7.1	1,152	3.2	4,462	12.5	1,863	5.2	248	0.7
Sat	(Total)	28,023	784	2.8	1,009	3.6	2,206	7.9	934	3.3	4,197	15.0	1,262	4.5	149	0.5
		206,936	**3,306**	**1.6**	**8,071**	**3.9**	**14,600**	**7.1**	**6,919**	**3.3**	**27,177**	**13.1**	**10,328**	**5.0**	**1,182**	**0.6**

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

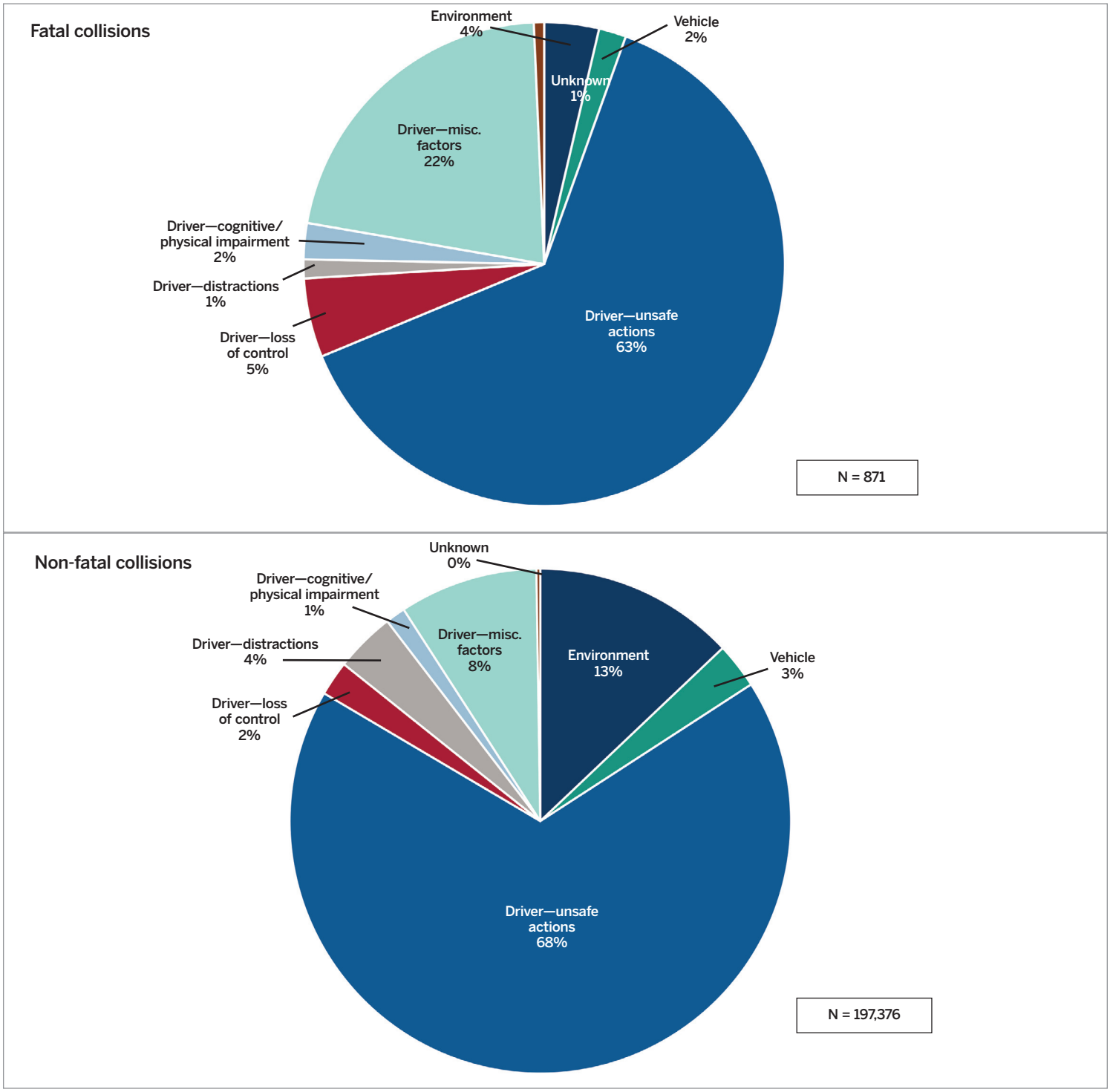
Table 2.7. Collisions in Indiana by severity and primary factor, 2023

Primary factor	Collisions, by severity				Fatal collisions per 1,000 collisions
	Total	Fatal	Non–fatal	Property damage	
Driver: Unsafe actions	**133,882**	**551**	**24,604**	**108,727**	**4.1**
Failure to yield right of way	33,857	118	9,048	24,691	3.5
Following too closely	30,747	25	4,810	25,912	0.8
Unsafe backing	15,173	6	395	14,772	0.4
Unsafe lane movement	12,110	27	1,404	10,679	2.2
Failure to maintain lane	7,964	95	1,518	6,351	11.9
Improper turning	7,870	5	714	7,151	0.6
Disregard signal/regulatory sign	7,667	56	2,880	4,731	7.3
Unsafe speed	4,447	109	1,439	2,899	24.5
Speed too fast for weather conditions	4,432	23	837	3,572	5.2
Improper lane usage	4,377	8	433	3,936	1.8
Left of center	2,373	60	733	1,580	25.3
Improper passing	2,105	11	256	1,838	5.2
Under steering/under correcting	490	1	59	430	2.0
Wrong way on one-way	263	7	77	179	26.6
Driver failed to dim lights	7	0	1	6	0.0
Driver: Loss of control	**4,444**	**46**	**1,028**	**3,370**	**10.4**
Overcorrecting/oversteering	2,828	29	675	2,124	10.3
Ran off road	1,616	17	353	1,246	10.5
Driver: Distractions	**7,649**	**11**	**1,472**	**6,166**	**1.4**
Unspecified distraction	7,000	9	1,316	5,675	1.3
Cell phone/other electronic device	649	2	156	491	3.1
Driver: Cognitive/physical impairment	**2,544**	**21**	**953**	**1,570**	**8.3**
Driver asleep or fatigued	1,695	3	523	1,169	1.8
Driver illness	849	18	430	401	21.2
Driver: Miscellaneous factors	**17,806**	**188**	**3,336**	**14,282**	**10.6**
Other—unspecified	17,164	109	2,835	14,220	6.4
Influenced by pedestrian action	642	79	501	62	123.1
Driver factors (all)	**166,325**	**817**	**31,393**	**134,115**	**4.9**
Environmental factors	**25,636**	**32**	**1,877**	**23,727**	**1.2**
Vehicle factors	**5,788**	**16**	**845**	**4,927**	**2.8**
Unknown	**498**	**6**	**98**	**394**	**12.0**
All collisions	**198,247**	**871**	**34,213**	**163,163**	**4.4**

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12,2024.

Note: Fatal collision rate is calculated per 1,000 total collisions attributed to each primary collision factor.

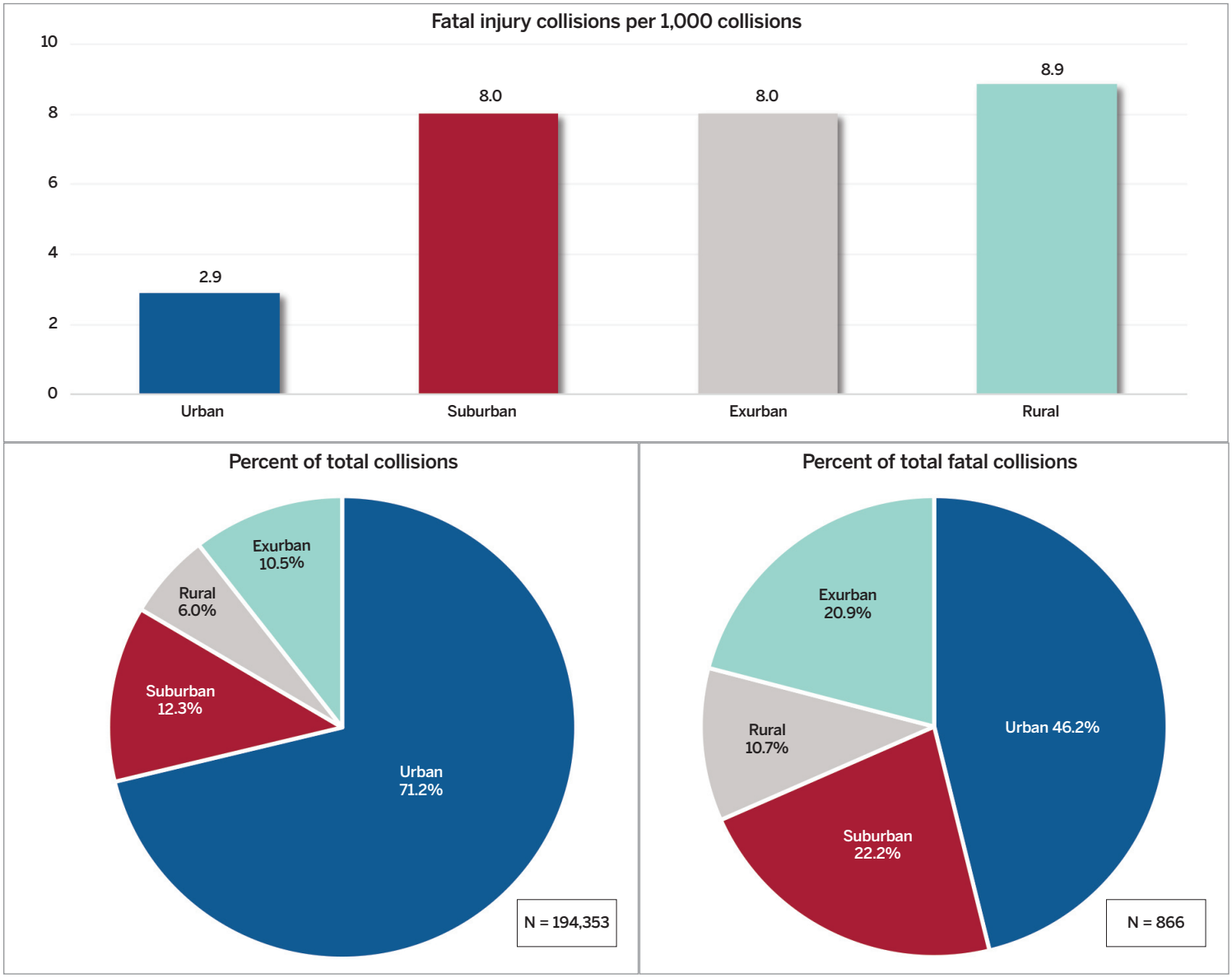
Figure 2.7. Collisions in Indiana by severity and primary factor, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) See Table 2.7 for definitions of specific factor categories related to driver actions.
2) Non-fatal collisions include collisions classified as incapacitating, non-incapacitating, and property damage only. See the glossary for the updated injury definitions and methodologies.
3) Limited to collisions for which the primary factor is known.

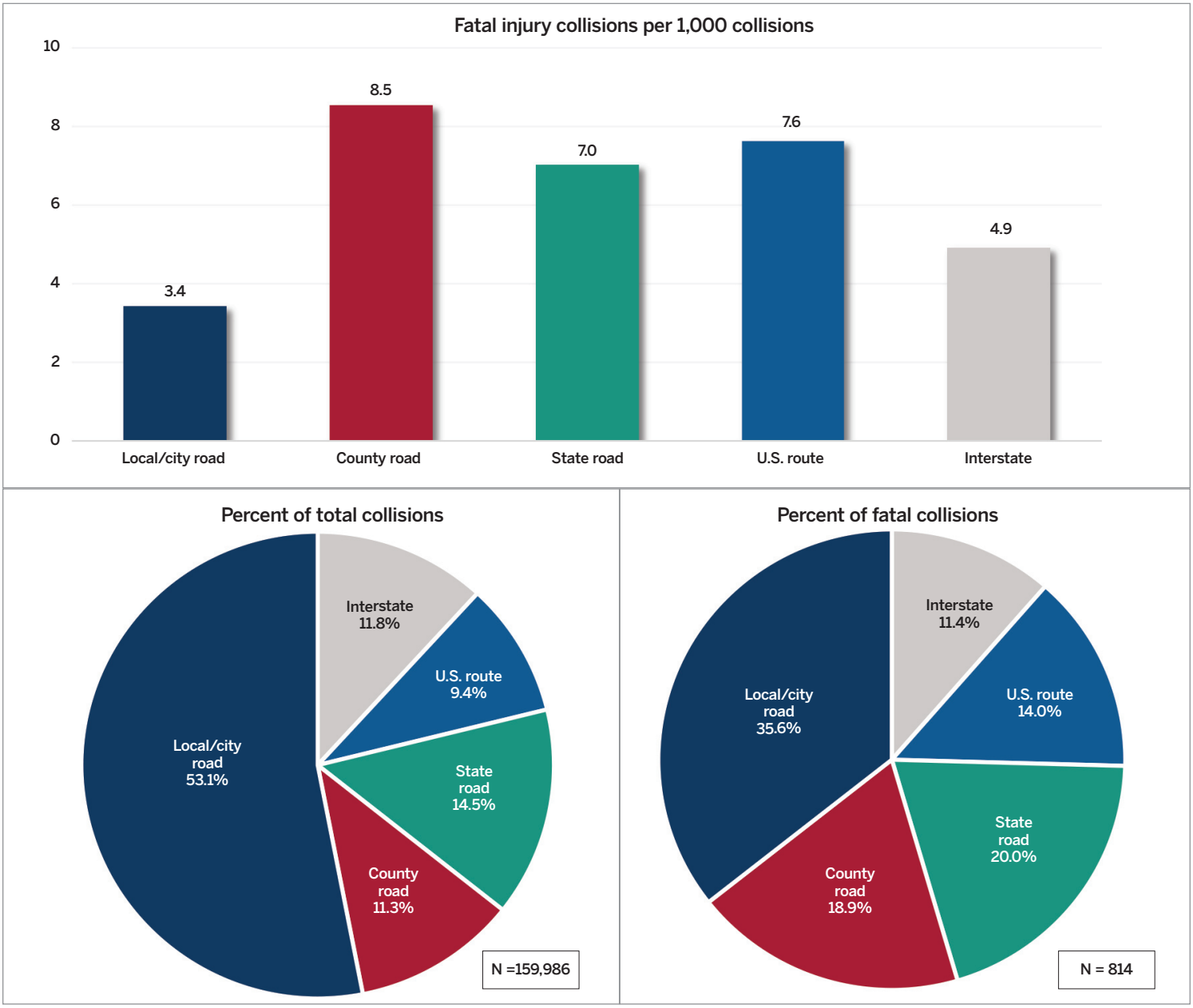
Figure 2.8. Fatal injury rates and distribution of collisions in Indiana by census locale, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. Suburban, exurban, and rural areas were created by the research team based on the 2020 urban boundaries. See the glossary for a complete explanation.
2) Includes only collisions where valid census locale was identified.
3) Fatal injury collision rate is calculated per 1,000 total collisions in each census locale type.

Figure 2.9. Fatal injury rates and distribution of collisions in Indiana by road class, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Excludes private drives and unknown road class.

Table 2.8. Collisions in Indiana by severity and road parameter, 2023

	Total	Collisions by severity			Fatal collisions per 1,000 collisions
		Fatal	Non–fatal	Property damage	
Total collisions	**198,247**	**871**	**34,213**	**163,163**	**4.4**
By junction type					
No junction involved	119,466	588	16,713	102,165	4.9
Four-way intersection	48,339	172	11,886	36,281	3.6
T-intersection	20,225	67	4,019	16,139	3.3
Ramp	3,578	11	541	3,026	3.1
Traffic circle/roundabout	2,908	2	279	2,627	0.7
Interchange	1,804	9	365	1,430	5.0
Y-intersection	856	6	181	669	7.0
Five-point or more	501	1	103	397	2.0
Railroad crossings	518	15	102	401	29.0
Trail crossings	51	0	24	27	0.0
Unknown	1	0	0	1	1.0
By road character					
Straight	**35,594**	**127**	**5,850**	**29,617**	**3.6**
Level	27,293	54	4,207	23,032	2.0
Graded	6,497	56	1,269	5,172	8.6
Hillcrest	1,804	17	374	1,413	9.4
Curve	**145,704**	**621**	**24,973**	**120,110**	**4.3**
Level	5,842	35	1,040	4,767	6.0
Graded	124,910	534	21,347	103,029	4.3
Hillcrest	14,952	52	2,586	12,314	3.5
Mixed character	**4,584**	**28**	**1,075**	**3,481**	**6.1**
Non-roadway crash	**11,596**	**92**	**2,202**	**9,302**	**7.9**
Unknown	**769**	**3**	**113**	**653**	**3.9**
Roadway surface type					
Asphalt	173,441	780	30,355	142,306	4.5
Concrete	21,945	66	3,516	18,363	3.0
Gravel	2,025	17	231	1,777	8.4
Other	784	8	110	666	10.2
Unknown	52	0	1	51	0.0

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12,2024.

Notes:
1) Fatal collision rate is calculated per 1,000 total collisions associated with each road parameter.
2) Mixed roadway character indicates that more than one roadway character response was selected for vehicles in a single collision.

Table 2.9. Collisions in Indiana by severity and manner of collision, 2023

Manner of collision	Total	Collisions by severity			Fatal collisions per 1,000 collisions
		Fatal	Non–fatal	Property damage	
Total collisions	**198,247**	**871**	**34,213**	**163,163**	**4.4**
Rear-end	44,801	81	7,688	37,032	1.8
Right-angle	27,617	155	8,346	19,116	5.6
Ran off road	23,063	294	6,023	16,746	12.7
Same direction sideswipe	25,389	19	1,853	23,517	0.7
Backing	16,577	9	484	16,084	0.5
Collision with deer	16,056	4	502	15,550	0.2
Left turn	11,482	30	2,769	8,683	2.6
Opposite direction sideswipe	4,659	6	563	4,090	1.3
Head-on	4,453	94	1,720	2,639	21.1
Right turn	3,537	3	489	3,045	0.8
Collision with object in road	2,807	29	368	2,410	10.3
Left/right turn	2,153	2	349	1,802	0.9
Non-collision	1,554	17	422	1,115	10.9
Collision with animal—other	1,340	5	106	1,229	3.7
Rear to rear	747	2	74	671	2.7
Other	11,389	111	2,332	8,946	9.7
Unknown	623	10	125	488	16.1

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

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

Table 2.10. Collisions in Indiana by severity and traffic control type, 2023

Traffic control type	Total	Collisions by severity			Fatal collisions per 1,000 collisions
		Fatal	Non–fatal	Property damage	
Total collisions	**198,247**	**871**	**34,213**	**163,163**	**4.4**
Traffic control signal	7,988	10	1,673	6,305	1.3
Lane control	3,853	17	624	3,212	4.4
Stop sign	3,185	9	717	2,459	2.8
Yield sign	606	0	56	550	0.0
Roundabout intersection	167	0	19	148	0.0
Other regulatory sign/marking	100	1	16	83	10.0
No passing zone	59	1	10	48	16.9
Flashing overhead beacon	25	0	3	22	0.0
Person directing traffic	28	0	11	17	0.0
Railroad crossing	16	0	2	14	0.0
Other	70	0	10	60	0.0
None	13,253	21	1,637	11,595	1.6
Unknown	168,897	812	29,435	138,650	4.8

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Fatal collision rate is calculated per 1,000 total collisions associated with each traffic control type.
2) Unknown includes null responses. Because of the extreme number of unknown responses, readers should interpret these results with caution.

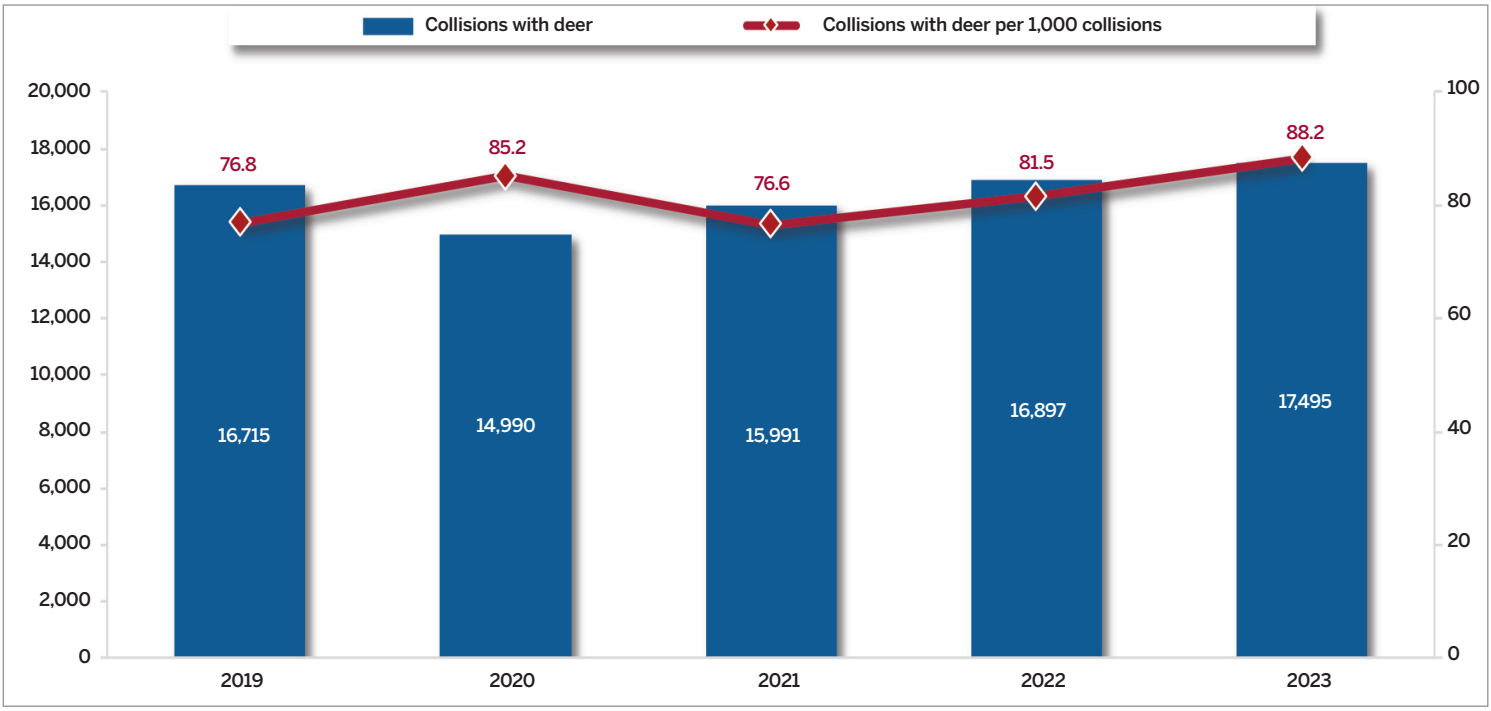
Table 2.11. Collisions in Indiana by severity and environmental condition, 2023

	Total	Collisions by severity			Fatal collisions per 1,000 collisions
		Fatal	Non–fatal	Property damage	
All collisions	**198,247**	**871**	**34,213**	**163,163**	**4.4**
By light conditions					
Daylight	130,035	441	22,987	106,607	3.4
Dark—not lighted	28,906	246	4,417	24,243	8.5
Dark—lighted	27,710	125	5,065	22,520	4.5
Dawn/dusk	10,346	50	1,720	8,576	4.8
Unknown	1,250	9	24	1,217	7.2
By weather conditions					
Clear	139,528	632	24,173	114,723	4.5
Cloudy	32,072	130	5,412	26,530	4.1
Rain	19,708	84	3,520	16,104	4.3
Snow	4,013	7	607	3,399	1.7
Sleet/hail/freezing rain	857	3	143	711	3.5
Blowing sand/soil/snow	573	2	96	475	3.5
Fog/smoke/smog	1,173	11	214	948	9.4
Severe cross wind	270	2	47	221	7.4
Unknown	53	0	1	52	0.0
By road surface conditions					
Dry	161,408	732	27,837	132,839	4.5
Wet	30,323	123	5,374	24,826	4.1
Snow/slush	2,804	4	378	2,422	1.4
Ice	2,530	6	397	2,127	2.4
Water—standing or moving	659	2	124	533	3.0
Loose material on road	357	4	92	261	11.2
Muddy	114	0	11	103	0.0
Unknown	52	0	0	52	0.0

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

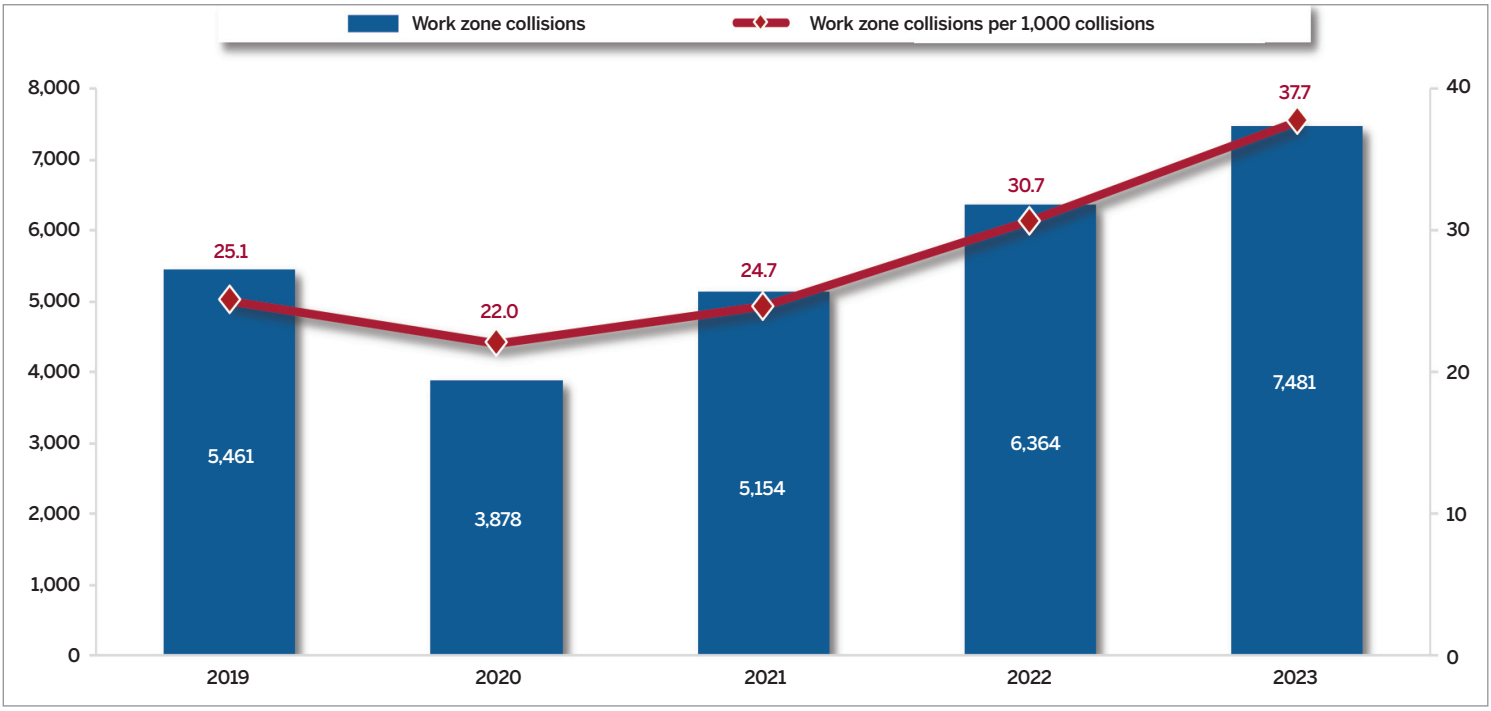
Notes:
1) Fatal collision rate is calculated per 1,000 total collisions associated with each environmental condition.
2) Unknown includes unknown and null responses.

Figure 2.10. Collisions with deer in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Figure 2.11. Work zone collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

INDIANA TRAFFIC SAFETY FACTS

NON-MOTORISTS

NON-MOTORISTS, 2023

Less than 1% of individuals involved in collisions between 2019 and 2023 were non-motorists (Table 3.1). During this period, pedestrians accounted for 78% of the non-motorists involved in collisions and pedalcyclists accounted for 19%. Animal-drawn vehicle operators made up less than 3% of non-motorists in collisions during these five years.

Pedalcyclists involved in collisions generally declined annually between 2019 and 2023 to a new five-year low of 118 in 2023. This pattern of steady annual decline began in 2013. The number of pedestrians involved in collisions increased year-over-year starting in 2020 to a peak of 2,261 and a five-year high in 2023 (Figure 3.1 and Table 3.1).

While pedestrians and pedalcyclists represented less than 1% of people involved in traffic collisions, they made up 15% of traffic fatalities. Fatalities among non-motorists in collisions remained the same in 2022 and 2023 (141). The number of fatalities increased by two for pedalcyclists and decreased by two for pedestrians. The pedestrian fatality rate decreased from 7% in 2022 to 6% in 2023 (Figure 3.2). However, the pedalcyclists fatality rate more than doubled from 2.8% to 5.9% between 2022 and 2023.

Pedestrians who sustained incapacitating injuries increased 12% from 2022 to 2023, while pedalcyclists who sustained incapacitating injuries decreased by 71%. There were seven animal-drawn vehicle operators involved in collisions in 2023, with no deaths and one individual with an incapacitating injury reported. In 2022, there were 22 operators involved in collisions with no deaths, two individuals with incapacitating injuries, and two with non-incapacitating injuries.

Age and gender

In 2023, the largest numbers of pedalcyclists involved in crashes were ages 25–34 and under age 15 (Table 3.2). The highest number in 2022 was for ages 25–34, and the highest numbers in 2019–21 were for the under-age 15 group. Fewer pedalcyclists were involved in collisions in 2022 than 2023 in all age groups except ages 75+.

The largest numbers of pedestrians in collisions were ages 25–34 (Table 3.2) in all years from 2020–23. In 2019, pedestrians ages 55–64 were in collisions most often. More pedestrians were involved in collisions in 2023 than in 2022 across age cohorts with the exception that pedestrians ages 15–20 were involved in the same number of collisions in both years.

In 2023, the mean age of pedalcyclists killed or incapacitated in collisions in 2023 was 44.8. The same year, pedalcyclists ages 65–74 were most likely (50%) to suffer fatal or incapacitating injuries as the result of a collision (Table 3.3). Among children and young adults, pedalcyclists ages 15–20 experienced a higher rate of fatal or incapacitating injuries than pedalcyclists ages <15 and ages 21–24. The rate of fatal or incapacitating injuries was higher in 2023 than in the previous four years for pedalcyclists ages 65–74 and ages 15–20.

The mean age of pedestrians killed or incapacitated in collisions in 2023 was 41.3. The likelihood of fatal or incapacitating injuries generally increased by age cohort until peaking for pedestrians ages 55–64 (Table 3.3). At least 30% of pedestrians in collisions—experienced fatal or incapacitating injuries—in all age groups starting with ages 35–44. The rate of fatal and incapacitating injuries for collisions was higher in 2023 than in the previous four years for all age cohorts except ages 25–34 and 45–54. For 25–34-year-olds, the rate of fatal and incapacitating pedestrian injuries peaked in 2021 for the five-year period. For 45–54-year-olds, the rate of fatal and incapacitating injuries was highest in 2022 but was only 0.1% higher than in 2023.

Between 2019 and 2023, 81% of pedalcyclists and 63% of pedestrians involved in collisions were male (Table 3.4). In 2023, male pedalcyclists ages 20 and under accounted for 25% of crashes, while male pedestrians in these cohorts accounted for 17% of crashes. Male pedalcyclists in each of five cohorts—ages < 15, ages 15–20, ages 25–34, ages 35–44, and ages 45–54—each accounted for more than 11% of crashes. Only male pedestrians ages 25–34 accounted for this level of crashes.

Month, day of the week, and time of day

In 2023, pedalcyclists were involved in collisions most often on Tuesdays, followed by Mondays and Thursdays (Table 3.5). The same year, pedestrians were involved in collisions most often on Thursdays and Fridays. Sixty-eight percent of pedalcyclists and more than 57% of pedestrians were involved in collisions that occurred noon–8:59 p.m. Pedalcyclists and pedestrians were involved in crashes most often from 3–5:59 p.m. or what is generally considered to be rush hour.

In 2023, there were 200 or more non-motorists involved in collisions in May and each of the months between July and November (Figure 3.3). These months accounted for 58% of non-motorists involved in collisions during the year. Non-motorists involved in collisions dipped to the lowest numbers in the winter months—January through March and December.

In 2023, pedalcyclists were involved in 20 or more collisions in May, July, and August (Table 3.6). The same year, the most fatal and incapacitating injuries among pedalcyclists occurred in July and August. In 2022, pedalcyclists were involved in 20 or more collisions across a broader range of months—May, June, July, August, and October—with the most fatal and incapacitating collisions occurring in May, July, and August. In 2023, the most animal-drawn vehicle operators were involved in crashes in January. In 2022, these non-motorists were involved most often in collisions in July.

Census locale

In 2023, 94% of crashes involving pedalcyclists and 86% of crashes involving pedestrians occurred in urban areas (Figure 3.4). Most crashes involving animal-drawn vehicle operators occurred in rural areas.

Non-motorist action and attributability

In 2023, the most common pedalcyclist action in crashes was being on a roadway (Table 3.7). The next most common action was crossing at an intersection. The same year, the most common pedestrian actions in crashes were crossing at an intersection and crossing the road at a location that was not an intersection. Crossing at a location other than an intersection, crossing at an intersection, and riding on the roadway were associated most often with the attribution of a crash to the pedalcyclist. Not crossing at an intersection, walking on the shoulder, and walking against traffic were associated most often with the attribution of a collision to the pedestrian.

Alcohol impairment

In 2023, 23 pedestrians and no pedalcyclists were involved in collisions with alcohol-impaired drivers (BAC results greater than 0.08 g/dL) (Table 3.8). These numbers are similar to those in 2022. No pedalcyclists and three pedestrians sustained fatal injuries in 2023. No pedalcyclists and five pedestrians were reported with fatal injuries in 2022.

Only a small proportion of non-motorists in collisions were identified as alcohol-impaired in 2023— 1% of pedestrians and no pedalcyclists (Table 3.9). Pedestrians who sustained fatal injuries between 2019 and 2023 period were more likely to be alcohol-impaired than pedestrians who sustained

non-fatal injuries or who were not injured. In 2023, more than 10% of pedestrians who were killed were also alcohol-impaired. The fatality rate for alcohol-impaired pedestrians was greater in 2019 at 15%, in 2022 at 13%, and in 2020 at 11%, than in 2023. The rate in 2021 was substantially lower at 5%. There were no fatalities reported for alcohol-impaired pedalcyclists in crashes in 2019, 2022, or 2023.

From 2019–23, at least 1% of alcohol-impaired pedestrians were identified as crossing at a non-intersection location, walking against traffic, walking in the roadway, or walking with traffic (Table 3.10). One percent of alcohol-impaired pedalcyclists were identified as crossing at a non-intersection location during the same period.

Speed

For the five-year period 2019–23, 2% of pedalcyclists were involved in speed-related collisions (Figure 3.5). Four pedalcyclists were involved in speed-related collisions in 2023, a five-year low. No pedalcyclists involved in these crashes in 2023 sustained fatal or incapacitating injuries. In the previous four years, there were pedalcyclists in collisions who sustained fatal or incapacitating injuries.

From 2019–23, 5% of crashes involving pedestrians were speed-related (Figure 3.5). The number of pedestrians involved in speed-related collisions ticked up from 87 in 2022 to 106 in 2023. In 2023, 33% of pedestrians in these crashes sustained fatal or incapacitating injuries. This injury rate was lower than in 2020 and 2021, but higher than in 2019 and 2022.

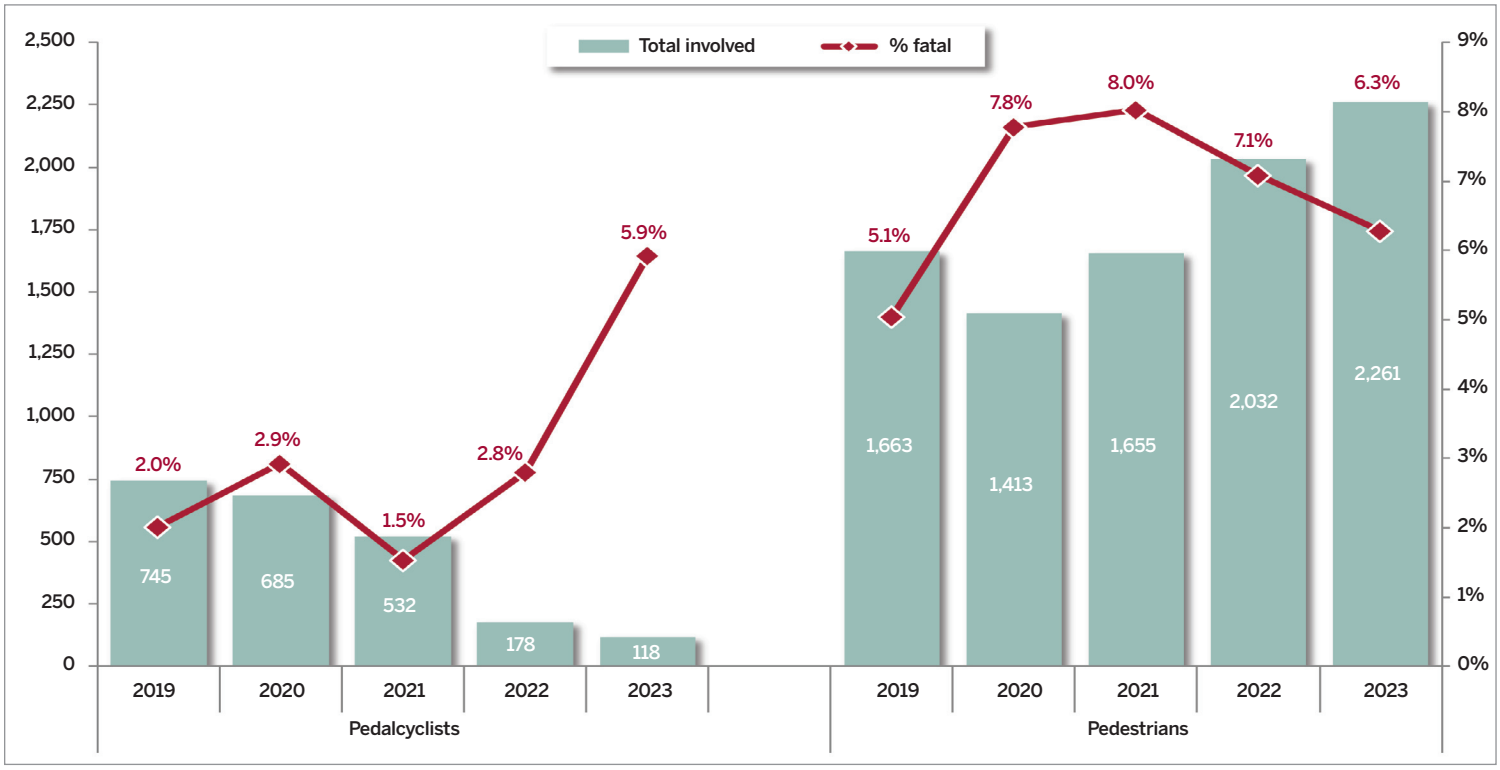
Table 3.1. Individuals in collisions in Indiana by person type and injury status, 2019–23

	2019	2020	2021	2022	2023	Annual rate of change	
						2022–23	2019–23
All individuals	**351,119**	**276,570**	**343,839**	**364,375**	**358,059**	**-1.7%**	**0.5%**
Fatal	808	900	901	979	928	-5.2%	3.5%
Incapacitating	3,571	3,922	4,524	4,616	4,743	2.8%	7.4%
Non-incapacitating	43,268	36,038	41,646	42,029	42,809	1.9%	-0.3%
Not injured	303,472	235,710	296,768	316,751	309,579	-2.3%	0.5%
All non-motorists	**2,508**	**2,203**	**2,261**	**2,232**	**2,386**	**6.9%**	**-1.2%**
Fatal	94	123	134	141	141	0.0%	10.7%
Incapacitating	329	306	371	360	385	6.9%	4.0%
Non-incapacitating	1,543	1,270	1,331	1,508	1,717	13.9%	2.7%
Not injured	542	504	425	223	143	-35.9%	-28.3%
Non-motorists as percent of total	**0.7%**	**0.8%**	**0.7%**	**0.6%**	**0.7%**	**8.8%**	**-1.7%**
Fatal	11.6%	13.7%	14.9%	14.4%	15.2%	5.5%	6.9%
Incapacitating	9.2%	7.8%	8.2%	7.8%	8.1%	4.1%	-3.1%
Non-incapacitating	3.6%	3.5%	3.2%	3.6%	4.0%	11.8%	3.0%
Not injured	0.2%	0.2%	0.1%	0.1%	0.0%	-34.4%	-28.7%
Pedalcyclists	**745**	**685**	**522**	**178**	**118**	**-33.7%**	**-36.9%**
Fatal	15	18	8	5	7	40.0%	-17.3%
Incapacitating	68	81	61	21	6	-71.4%	-45.5%
Non-incapacitating	478	406	330	111	74	-33.3%	-37.3%
Not injured	184	180	123	41	31	-24.4%	-35.9%
Pedestrians	**1,663**	**1,413**	**1,655**	**2,032**	**2,261**	**11.3%**	**8.0%**
Fatal	78	103	126	136	134	-1.5%	14.5%
Incapacitating	257	224	305	337	378	12.2%	10.1%
Non-incapacitating	1,045	848	982	1,395	1,643	17.8%	12.0%
Not injured	283	238	242	164	106	-35.4%	-21.8%
Animal-drawn vehicle operators	**100**	**105**	**84**	**22**	**7**	**-68.2%**	**-48.6%**
Fatal	1	2	0	0	0	N/A	-100.0%
Incapacitating	4	1	5	2	1	-50.0%	-29.3%
Non-incapacitating	20	16	19	2	0	-100.0%	-100.0%
Not injured	75	86	60	18	6	-66.7%	-46.8%

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.
2) See the glossary for the updated injury definitions and methodologies.

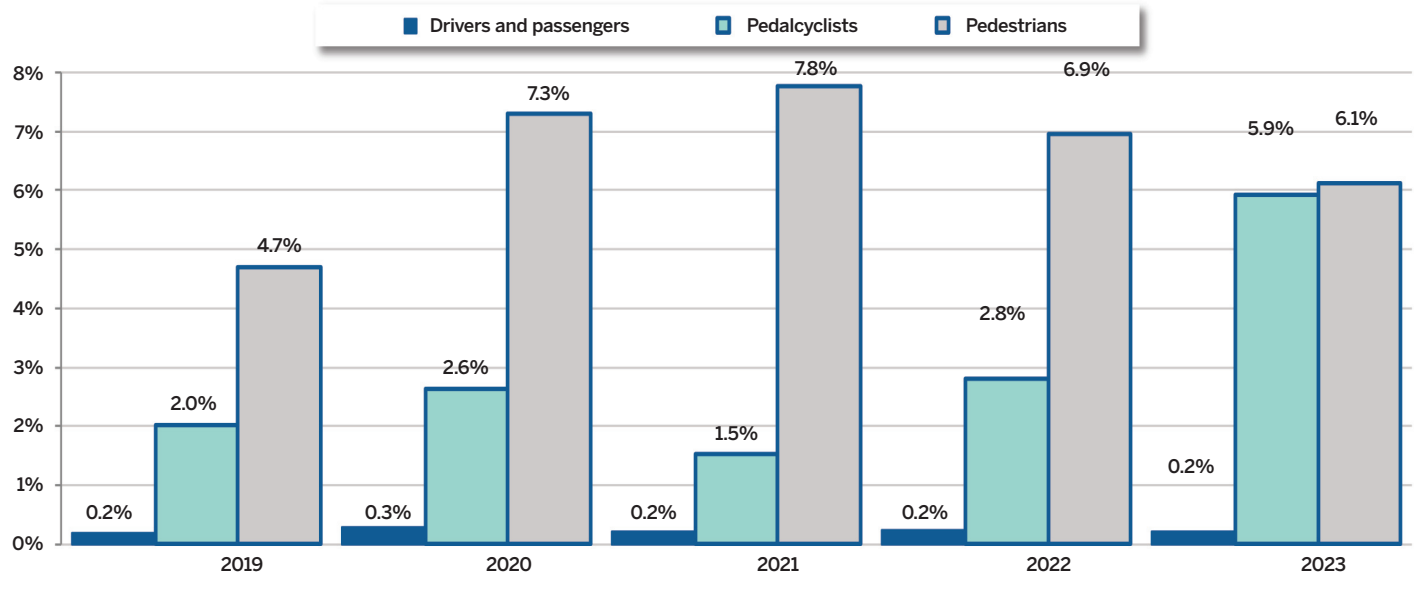
Figure 3.1. Non-motorists in collisions in Indiana and fatality rate by person type, 2019–23



Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.

Figure 3.2. Fatalities as a percent of all involved in collisions in Indiana by person type, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Vehicle occupants include drivers and passengers.

Table 3.2. Non-motorists in collisions in Indiana by age group, 2019–23

	Individuals					Annual rate of change	
	2019	2020	2021	2022	2023	2022–23	2019–23
Pedalcyclists							
<15	126	131	96	25	19	-24.0%	-37.7%
15–20	122	115	84	24	16	-33.3%	-39.8%
21–24	80	39	39	8	6	-25.0%	-47.7%
25–34	123	92	69	38	20	-47.4%	-36.5%
35–44	78	79	64	26	17	-34.6%	-31.7%
45–54	88	95	71	20	18	-10.0%	-32.7%
55–64	71	86	58	21	8	-61.9%	-42.1%
65–74	48	32	31	12	10	-16.7%	-32.4%
75+	9	16	10	4	4	0.0%	-18.4%
All ages	**745**	**685**	**522**	**178**	**118**	**-33.7%**	**-36.9%**
Pedestrians							
<15	209	149	218	297	300	1.0%	9.5%
15–20	183	165	203	276	276	0.0%	10.8%
21–24	104	112	120	143	183	28.0%	15.2%
25–34	245	248	272	339	393	15.9%	12.5%
35–44	227	209	235	272	311	14.3%	8.2%
45–54	209	169	188	223	253	13.5%	4.9%
55–64	258	195	220	242	245	1.2%	-1.3%
65–74	146	112	140	162	176	8.6%	4.8%
75+	82	54	53	64	102	59.4%	5.6%
All ages	**1,663**	**1,413**	**1,649**	**2,018**	**2,239**	**11.0%**	**7.7%**

Low < < > > High

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Excludes invalid ages.

Table 3.3. Non-motorists with fatal and incapacitating injuries in collisions in Indiana by age, 2019–23

	Individuals				
	2019	2020	2021	2022	2023
Pedalcyclists					
<15	10.3%	11.5%	12.5%	20.0%	5.3%
15–20	9.0%	11.3%	7.1%	4.2%	18.8%
21–24	11.3%	10.3%	12.8%	13%	0.0%
25–34	8.1%	14.1%	8.7%	7.9%	10.0%
35–44	10.3%	16.5%	18.8%	15.4%	0.0%
45–54	14.8%	15.8%	19.7%	20.0%	5.6%
55–64	15.5%	19.8%	13.8%	19.0%	12.5%
65–74	14.6%	15.6%	16.1%	16.7%	50.0%
75+	11.1%	25.0%	10.0%	50.0%	0.0%
All ages	**11.1%**	**14.5%**	**13.2%**	**14.6%**	**11.0%**
Pedestrians					
<15	16.3%	18.8%	22.0%	13.5%	21.3%
15–20	13.1%	15.2%	21.2%	16.3%	23.9%
21–24	16.3%	23.2%	21.7%	19.6%	27.3%
25–34	22.9%	27.0%	29.8%	27.1%	28.5%
35–44	21.1%	23.0%	29.8%	26.8%	32.5%
45–54	23.0%	26.6%	28.7%	30.5%	30.4%
55–64	22.9%	24.1%	26.8%	27.7%	40.0%
65–74	24.0%	23.2%	24.3%	26.5%	33.0%
75+	17.1%	27.8%	26.4%	26.6%	32.4%
All ages	**20.1%**	**23.1%**	**26.0%**	**23.4%**	**29.4%**

Low < < > > High

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Excludes invalid ages.

Table 3.4. Non-motorists involved in collisions in Indiana by person type, age group, and gender, 2019–23

Pedalcyclists

	2019		2020		2021		2022		2023	
Age group	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15	13.5%	3.5%	14.9%	4.2%	15.0%	3.3%	9.0%	5.1%	13.6%	2.5%
15–20	13.7%	2.4%	12.8%	3.9%	11.7%	4.4%	12.4%	1.1%	11.9%	1.7%
21–24	7.5%	3.2%	4.2%	1.5%	5.4%	2.1%	2.8%	1.7%	5.1%	0.0%
25–34	13.6%	3.0%	11.1%	2.3%	11.3%	1.9%	17.5%	3.4%	14.4%	2.5%
35–44	8.3%	2.2%	9.8%	1.8%	10.0%	2.3%	11.9%	2.8%	12.7%	1.7%
45–54	9.7%	2.2%	11.1%	2.8%	11.3%	2.3%	10.2%	1.1%	13.6%	1.7%
55–64	7.9%	1.6%	10.7%	1.9%	9.0%	2.1%	10.7%	1.1%	6.8%	0.0%
65–74	6.1%	0.4%	3.8%	0.9%	4.6%	1.3%	6.2%	0.6%	6.8%	1.7%
75+	1.1%	0.1%	1.6%	0.7%	1.2%	0.8%	2.3%	0.0%	1.7%	1.7%
All ages	81.4%	18.6%	80.0%	20.0%	79.5%	20.5%	83.1%	16.9%	86.4%	13.6%

Pedestrians

	2019		2020		2021		2022		2023	
Age group	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15	8.2%	4.3%	6.6%	3.9%	8.9%	4.3%	9.9%	4.8%	8.9%	4.4%
15–20	6.0%	5.1%	7.7%	4.0%	8.5%	3.9%	9.4%	4.3%	8.4%	3.9%
21–24	3.7%	2.6%	5.0%	2.9%	4.3%	3.0%	4.4%	2.7%	5.1%	3.0%
25–34	9.2%	5.5%	10.9%	6.7%	10.8%	5.7%	11.3%	5.6%	11.8%	5.8%
35–44	8.2%	5.5%	9.0%	5.8%	9.5%	4.7%	9.1%	4.4%	9.1%	4.8%
45–54	7.7%	4.9%	7.2%	4.8%	7.3%	4.1%	7.0%	4.0%	7.5%	3.8%
55–64	8.5%	7.0%	8.5%	5.3%	8.4%	5.0%	7.8%	4.2%	7.0%	4.0%
65–74	5.3%	3.5%	3.9%	4.0%	4.7%	3.7%	4.9%	3.1%	4.6%	3.3%
75+	2.3%	2.6%	2.0%	1.8%	1.7%	1.5%	1.8%	1.3%	2.6%	2.0%
All ages	59.0%	41.0%	60.7%	39.3%	64.1%	35.9%	65.5%	34.5%	64.9%	35.1%

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Excludes unknown gender and invalid ages.

Table 3.5. Non–motorists involved in collisions in Indiana by person type, time of day, and day of week, 2023

Pedalcyclists

Time of day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total by time of day	% by time of day
Midnight–2:59 a.m.	1	0	0	0	0	0	0	1	0.8%
3–5:59 a.m.	0	1	1	0	0	0	0	2	1.7%
6–8:59 a.m.	0	1	3	0	4	2	1	11	9.3%
9–11:59 a.m.	1	0	4	2	3	0	6	16	13.6%
Noon–2:59 p.m.	1	5	3	3	5	2	2	21	17.8%
3–5:59 p.m.	3	5	5	5	3	5	6	32	27.1%
6–8:59 p.m.	2	7	5	3	5	5	0	27	22.9%
9–11:59 p.m.	0	2	3	1	1	0	1	8	6.8%
Total	8	21	24	14	21	14	16	118	100%
% by day	6.8%	17.8%	20.3%	11.9%	17.8%	11.9%	13.6%	100%	

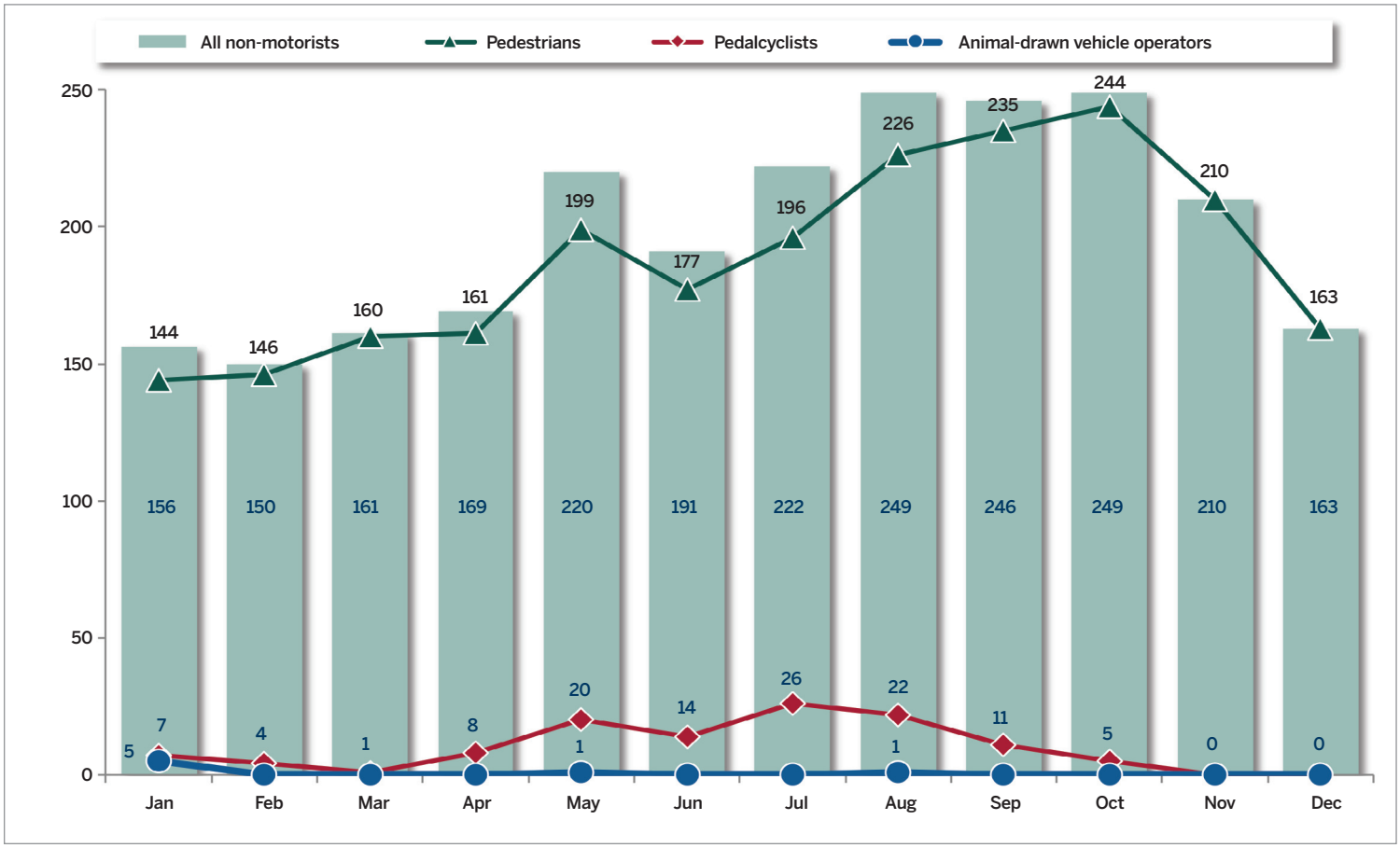
Pedestrians

Time of day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total by time of day	% by time of day
Midnight–2:59 a.m.	42	22	5	10	31	23	46	179	3.7%
3–5:59 a.m.	58	20	16	27	34	23	24	202	4.2%
6–8:59 a.m.	15	68	113	119	159	80	28	582	12.1%
9–11:59 a.m.	39	68	86	98	99	119	88	597	12.4%
Noon–2:59 p.m.	79	129	108	110	126	128	97	777	16.2%
3–5:59 p.m.	83	158	124	145	214	179	125	1028	21.4%
6–8:59 p.m.	145	141	148	134	136	123	110	937	19.5%
9–11:59 p.m.	44	36	72	36	82	115	118	503	10.5%
Total	505	642	672	679	881	790	636	4,805	100%
% by day	10.5%	13.4%	14.0%	14.1%	18.3%	16.4%	13.2%	100%	

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Data limited to collisions with valid dates and times reported.

Figure 3.3. Non-motorists in collisions in Indiana by person type and month, 2023



Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.

Table 3.6. Non-motorists in collisions in Indiana by month and injury status, 2022–23

Pedalcyclists

Month	Total collisions			Fatal collisions			% change 2022–23	
	2022	2023	Change	2022	2023	Change	Total	Fatal and incapacitating
Jan	6	7	1	4	5	1	16.7%	25.0%
Feb	4	4	0	3	3	0	0.0%	0.0%
Mar	9	1	-8	2	0	-2	-88.9%	-100.0%
Apr	3	8	5	1	3	2	166.7%	N/A
May	25	20	-5	15	8	-7	-20.0%	-46.7%
Jun	24	14	-10	10	4	-6	-41.7%	-60.0%
Jul	23	26	3	9	14	5	13.0%	55.6%
Aug	33	22	-11	10	13	3	-33.3%	30.0%
Sep	17	11	-6	7	3	-4	-35.3%	-57.1%
Oct	24	5	-19	9	3	-6	-79.2%	-66.7%
Nov	6	0	-6	2	0	-2	-100.0%	N/A
Dec	4	0	-4	1	0	-1	-100.0%	N/A
Total	**178**	**118**	**-60**	**73**	**56**	**-17**	**-33.7%**	**-23.3%**

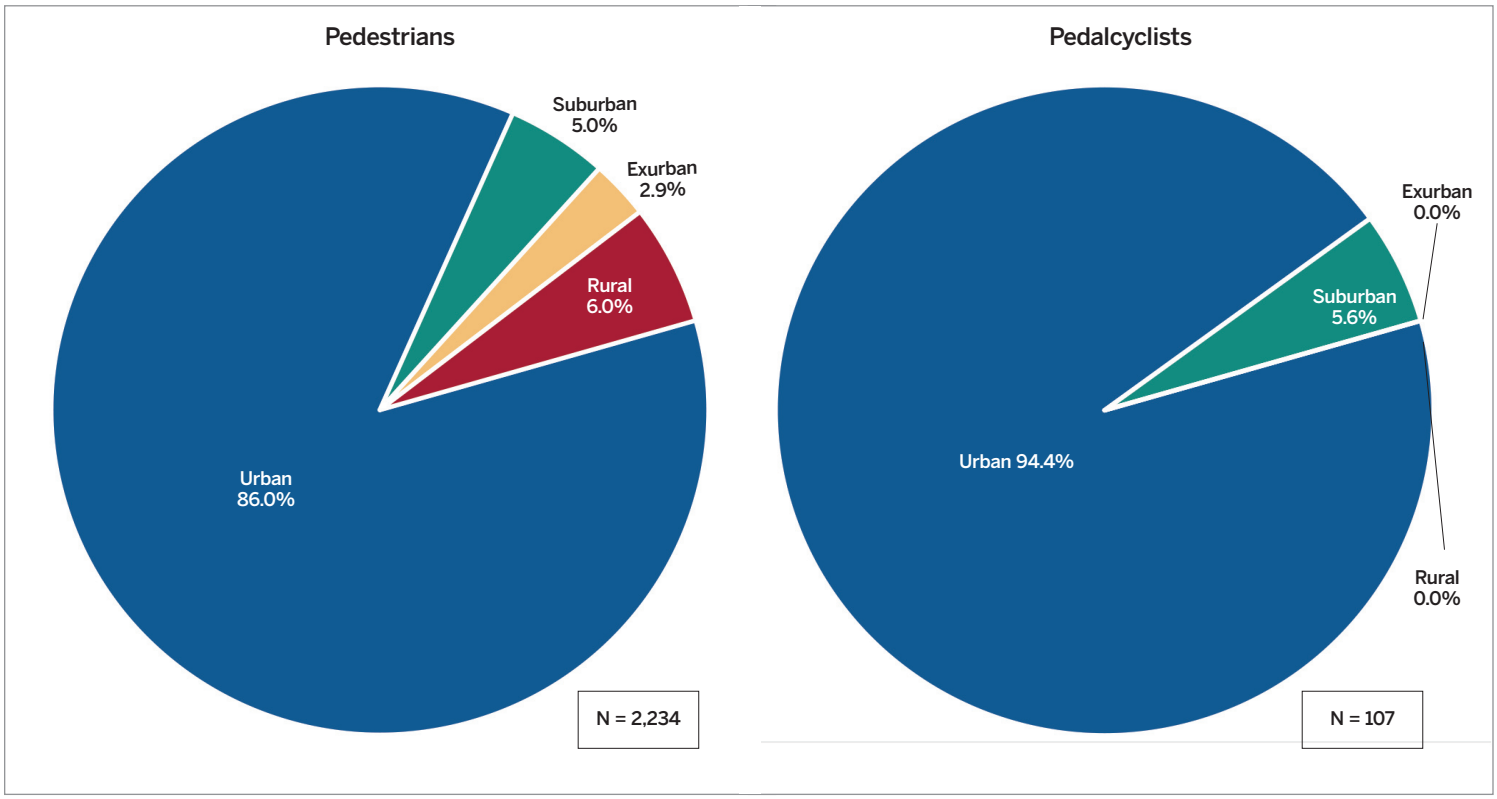
Pedestrians

Month	Total collisions			Fatal collisions			% change 2022–23	
	2022	2023	Change	2022	2023	Change	Total	Fatal and incapacitating
Jan	112	144	32	45	54	9	28.6%	20.0%
Feb	106	146	40	42	49	7	37.7%	16.7%
Mar	139	160	21	59	61	2	15.1%	3.4%
Apr	120	161	41	52	53	1	34.2%	1.9%
May	180	199	19	53	61	8	10.6%	15.1%
Jun	194	177	-17	58	41	-17	-8.8%	-29.3%
Jul	185	196	11	59	72	13	5.9%	22.0%
Aug	217	226	9	63	73	10	4.1%	15.9%
Sep	259	235	-24	76	58	-18	-9.3%	-23.7%
Oct	223	244	21	70	78	8	9.4%	11.4%
Nov	143	210	67	47	67	20	46.9%	42.6%
Dec	154	163	9	53	45	-8	5.8%	-15.1%
Total	**2,032**	**2,261**	**229**	**677**	**712**	**35**	**11.3%**	**5.2%**

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Incapacitating injuries include non-fatal injuries for which one of the following codes was chosen in injury nature data field—severed, internal, severe burn, severe bleeding, fracture/dislocation, crush injury, unconsciousness, and paralysis. See the glossary for updated injury definitions and methodologies.

Figure 3.4. Non-motorists In collisions in Indiana by census locale, 2023



Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024, and U.S. Census Bureau, 2020 TIGER/line shapefiles—Urban areas.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are defined in the 2020 census generally by density and size. The research team created suburban, exurban, and rural areas based on the 2020 urban boundaries. See the glossary for a complete explanation.
3) Includes only collisions for which census locale could be determined.

Table 3.7. Non-motorists involved in collisions in Indiana by person type, action, and attributability, 2023

Pedalcyclists

Action	Total involved	# attributable to pedalcyclist	% attributable to pedalcyclist
Against traffic	1	0	0.0%
Crossing at intersection	28	16	57.1%
Crossing not at intersection	3	3	100.0%
Moving	6	3	50.0%
Not in roadway	2	1	50.0%
On designated non-motorist lane	8	1	12.5%
On roadway	47	25	53.2%
On shoulder	1	0	0.0%
With traffic	4	1	25.0%
Other	11	3	27.3%
Unknown	7	3	42.9%
Total	**118**	**56**	**47.5%**

Pedestrians

Action	Total involved	# attributable to pedestrian	% attributable to pedestrian
Against traffic	81	39	48.1%
Crossing at intersection	737	239	32.4%
Crossing not at intersection	340	209	61.5%
Getting in or out of vehicle	25	8	32.0%
Getting off or on a school bus	2	0	0.0%
Moving	317	79	24.9%
Not in roadway	21	0	0.0%
On designated non-motorist lane	7	1	14.3%
On roadway	61	27	44.3%
On shoulder	12	6	50.0%
Standing	139	26	18.7%
With traffic	144	34	23.6%
Working	37	4	10.8%
Other	286	89	31.1%
Unknown	52	20	38.5%
Total	**2,261**	**781**	**34.5%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) A vehicle or non-motorist is attributable to the occurrence of a collision when a contributing circumstance for that vehicle matches the collision primary factor.

Table 3.8. Non-motorists in collisions in Indiana by person type, injury status, and driver alcohol impairment, 2019–23

	2019			2020			2021			2022			2023		
	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired
Pedalcyclists	**745**	**4**	**0.5%**	**685**	**2**	**0.3%**	**522**	**3**	**0.6%**	**178**	**0**	**0.0%**	**118**	**0**	**0.0%**
Fatal	15	2	13.3%	18	0	0.0%	8	0	0.0%	5	0	0%	7	0	0.0%
Incapacitating	68	0	0.0%	81	0	0.0%	61	2	3.3%	21	0	0.0%	6	0	0.0%
Non-incapacitating	478	2	0.4%	406	2	0.5%	330	1	0.3%	111	0	0.0%	74	0	0.0%
Not injured	184	0	0.0%	180	0	0.0%	123	0	0.0%	41	0	0.0%	31	0	0.0%
Pedestrians	**1,663**	**28**	**1.7%**	**1,413**	**29**	**2.1%**	**1,655**	**24**	**1.5%**	**2,032**	**24**	**1.2%**	**2,261**	**23**	**1.0%**
Fatal	78	4	5.1%	103	10	9.7%	126	3	2.4%	136	5	3.7%	134	3	2.2%
Incapacitating	257	5	1.9%	224	9	4.0%	305	7	2.3%	337	8	2.4%	378	7	1.9%
Non-incapacitating	1,045	16	1.5%	848	8	0.9%	982	13	1.3%	1,395	11	0.8%	1,643	13	0.8%
Not injured	283	3	1.1%	238	2	0.8%	242	1	0.4%	164	0	0.0%	106	0	0.0%

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) The alcohol-impaired category represents the number of non-motorists involved in collisions with drivers having a reported BAC of 0.08 g/dL or higher. Drivers reported with a BAC greater than 0.59 g/dL are not treated as impaired.
3) Non-incapacitating injuries include those not classified as fatal or incapacitating. See the glossary for the updated injury definitions and methodologies.

Table 3.9. Impaired non-motorists in collisions in Indiana by person type and injury status, 2019–23

	2019			2020			2021			2022			2023		
	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired	Total involved	Alcohol-impaired	% impaired
Pedalcyclists	**745**	**4**	**0.5%**	**685**	**2**	**0.3%**	**522**	**3**	**0.6%**	**178**	**0**	**0.0%**	**118**	**0**	**0.0%**
Fatal	15	2	13.3%	18	0	0.0%	8	0	0.0%	5	0	0%	7	0	0.0%
Incapacitating	68	0	0.0%	81	0	0.0%	61	2	3.3%	21	0	0.0%	6	0	0.0%
Non-incapacitating	478	2	0.4%	406	2	0.5%	330	1	0.3%	111	0	0.0%	74	0	0.0%
Not injured	184	0	0.0%	180	0	0.0%	123	0	0.0%	41	0	0.0%	31	0	0.0%
Pedestrians	**1,663**	**28**	**1.7%**	**1,413**	**29**	**2.1%**	**1,655**	**24**	**1.5%**	**2,032**	**24**	**1.2%**	**2,261**	**23**	**1.0%**
Fatal	78	4	5.1%	103	10	9.7%	126	3	2.4%	136	5	3.7%	134	3	2.2%
Incapacitating	257	5	1.9%	224	9	4.0%	305	7	2.3%	337	8	2.4%	378	7	1.9%
Non-incapacitating	1,045	16	1.5%	848	8	0.9%	982	13	1.3%	1,395	11	0.8%	1,643	13	0.8%
Not injured	283	3	1.1%	238	2	0.8%	242	1	0.4%	164	0	0.0%	106	0	0.0%

Low < > High

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) The alcohol-impaired category represents the number of non-motorists involved in collisions with a reported BAC of 0.08 g/dL or higher. BAC results greater than 0.59 g/dL are treated as invalid.
3) Non-incapacitating injuries include those not classified as fatal or incapacitating. See the glossary for the updated injury definitions and methodologies.

Table 3.10. Alcohol-impaired non-motorists involved in collisions in Indiana by person type and non-motorist action, 2019–23

Pedalcyclists

Action	Total involved	# attributable to pedalcyclist	% attributable to pedalcyclist
Against traffic	76	0	0.0%
Crossing at intersection	764	3	0.4%
Crossing not at intersection	164	2	1.2%
Moving	201	0	0.0%
Not in roadway	74	0	0.0%
On designated non-motorist lane	79	0	0.0%
On roadway	367	1	0.3%
On shoulder	50	0	0.0%
With traffic	134	0	0.0%
Standing	1	0	0.0%
Other	107	1	0.9%
Unknown	231	1	0.4%
Total	**2,248**	**8**	**0.4%**

Pedestrians

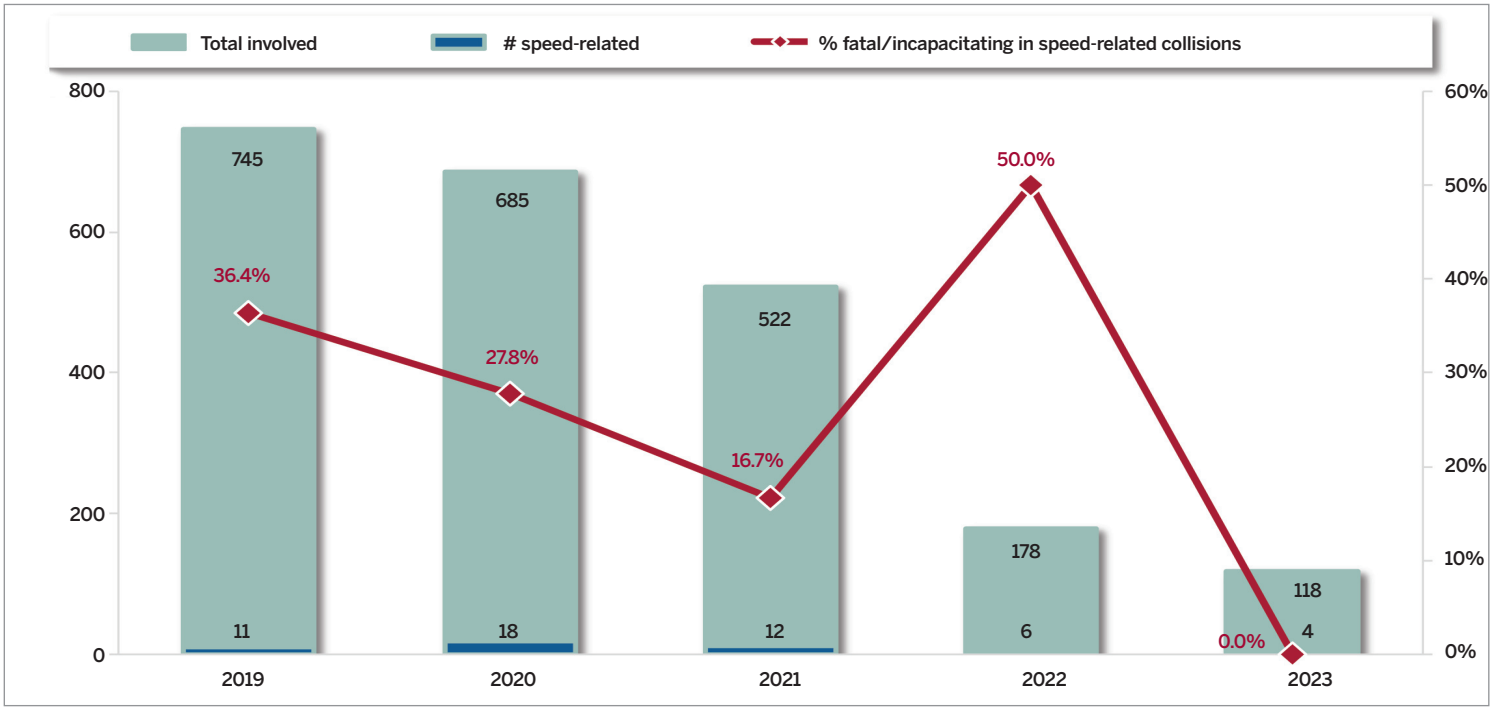
Action	Total involved	# attributable to pedestrian	% attributable to pedestrian
Against traffic	250	6	2.4%
Crossing at intersection	2,276	8	0.4%
Crossing not at intersection	1,366	34	2.5%
Getting in or out of vehicle	133	1	0.8%
Moving	953	2	0.2%
Not in roadway	370	1	0.3%
On designated non-motorist lane	78	0	0.0%
On roadway	741	12	1.6%
On shoulder	121	1	0.8%
Standing	518	1	0.2%
With traffic	425	6	1.4%
Working	148	0	0.0%
Other	1,109	8	0.7%
Unknown	527	1	0.2%
Total	**9,015**	**81**	**0.9%**

Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

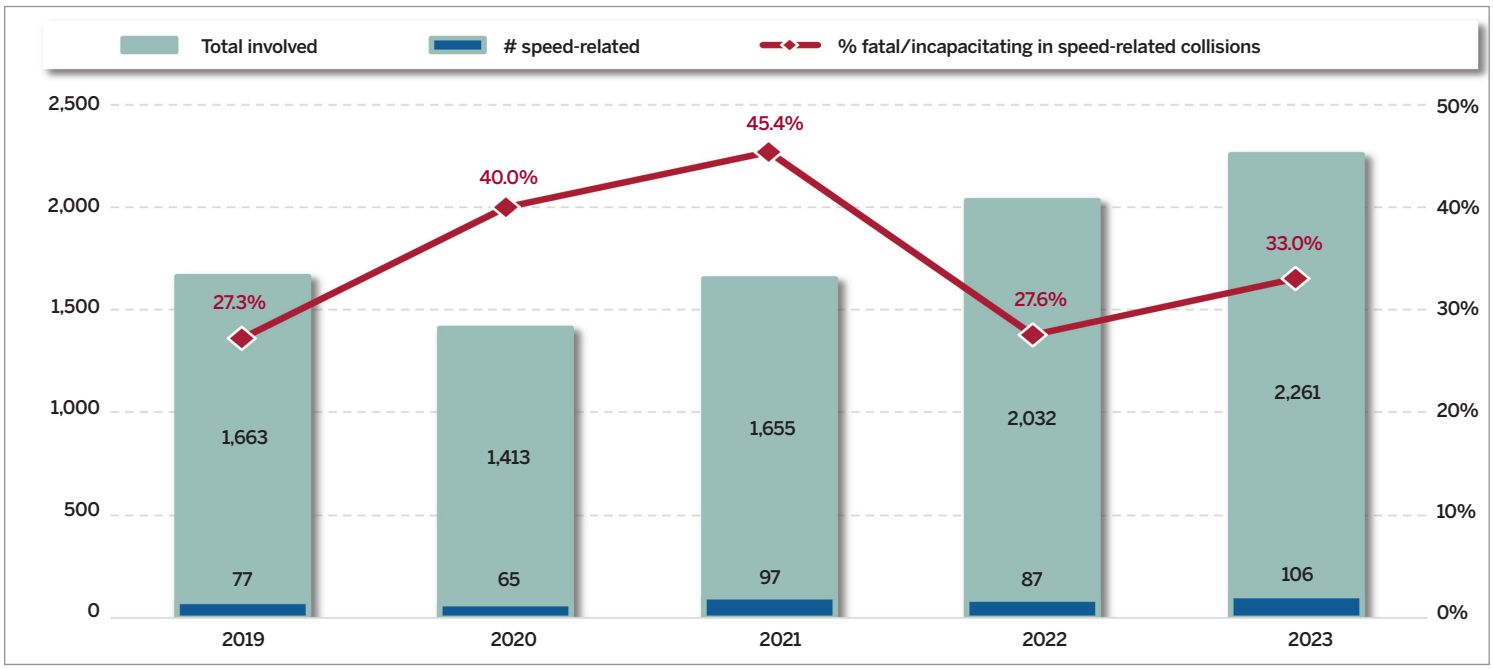
Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Alcohol-impaired is defined as a reported BAC of 0.08 g/dL or higher. BAC results greater than 0.59 g/dL are treated as invalid.

Figure 3.5. Non-motorists in collisions in Indiana by person type, speed involvement, and fatal/incapacitating injury rate, 2019–23

Pedalcyclists



Pedestrians



Source: Analysis provided by the Indiana University Public Policy using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded.
2) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
3) Non-incapacitating injuries include those not classified as fatal or incapacitating. See the glossary for updated injury definitions and methodologies.

INDIANA TRAFFIC SAFETY FACTS

MOTORCYCLES

MOTORCYCLES, 2023

Motorcycle-involved collisions decreased slightly from 2,888 in 2022 to 2,790 in 2023 (Table 4.1). In each year, 2019–23, there were more multiple-vehicle (MV) motorcycle-involved collisions than single-vehicle (SV) collisions (Figure 4.1). In 2023, that were 1,156 single-vehicle and 1,634 multiple-vehicle collisions involving motorcycles. Fatal single-vehicle motorcycle-involved collisions increased from 43 to 59 from 2022 to 2023 and from 4% to 5% of all single-vehicle collisions, respectively. While fatal multiple-vehicle collisions decreased slightly from 82 in 2022 to 81 in 2023, the proportion of fatal multiple-vehicle collisions to all multiple-vehicle collisions rose from 4.7% to 5.0%.

Overall, motorcyclists involved in collisions decreased from 3,106 in 2022 to 3,040 in 2023 (Table 4.2). In 2023, 141 motorcyclists were killed in collisions, and 2,084 individuals sustained non-fatal injuries. Fatalities increased 14% and non-fatal injuries decreased by 1% from 2022 to 2023. In 2023, 73% of motorcycle riders in collisions were either injured (68.6%) or killed (4.6%). Motorcycle collisions accounted for over 15% of all traffic fatalities in the same year (Figure 4.2).

Time, day of week, and month

In 2023, motorcycle collisions occurred most often in the hours from 2–7:59 p.m., peaking from 3–3:59 p.m. (Figure 4.3). The proportion of motorcycle collisions that resulted in fatal and incapacitating injuries was highest in the hours from 2–2:59 a.m., 10–10:59 p.m., and 11–11:59 p.m.

Generally, motorcycle collisions accounted for the biggest proportions of all hourly collisions from 6–10:59 p.m. and 1–1:59 a.m. The proportion of motorcycle collisions declined generally during the early morning hours (2–7:59 a.m.) and then increased until early evening (Table 4.3). Motorcycles comprised the smallest proportion of all collisions—less than 1%—during the 4–4:59 a.m. hour and the hours from 6–10:59 a.m. Motorcycle collisions and the proportion of motorcycle collisions were highest on Saturdays and Sundays.

Between 2019 and 2023, motorcycle-involved collisions occurred most often in the summer months, June to August (Table 4.4). In 2023, motorcycle collisions followed this general trend, with elevated numbers of collisions occurring in May through September, peaking in July. The highest monthly proportions of motorcycle collisions with fatal or incapacitating injuries were in March, June, and July (Figure 4.4).

Vehicle type

In 2023, 81% of motorcycle operators and passengers involved in collisions were on motorcycles, with the remaining 19% being on other two-or-three-wheeled vehicles (Table 4.5). Motorcyclists in collisions who were riding motorcycles increased slightly from 2022 to 2023. Over the same period, the number of motorcyclists in collisions who were riding motorized bicycles and mopeds increased more substantially, while the number who were riding Class A motor-driven cycles and Class B motor-driven cycles decreased. Fatalities among riders on motorcycles increased from 107 in 2022 to 126 in 2023. Non-fatal motorcycle injuries among riders on motorcycles increased only slightly from 1,676 in 2022 to 1,680 in 2023. Moped operators and passengers who sustained fatal and non-fatal injuries grew from 2022 to 2023, and motorized bicycle operators and passengers who sustained fatal and non-fatal injuries also increased. Riders who sustained injuries in collisions while riding Class A and Class B motor-driven cycles decreased over the same period.

Alcohol impairment

Among motorcycle collisions in 2023 that resulted in fatal or incapacitating injuries and for which driver blood alcohol content (BAC) results were recorded in ARIES, 82% of motorcycle operators in single-vehicle crashes and 48% of motorcycle operators in multiple-vehicle crashes were impaired (BAC of 0.08 g/dL or more). Motorcycle operators involved in fatal and incapacitating crashes with reported BAC results were slightly less likely to be impaired (65%) than passenger vehicle drivers (73%) (Table 4.6).

Helmet use

Motorcyclist helmet use generally is associated with lower injury and fatality rates in collisions (Figure 4.5). In 2023, 34% of motorcyclists who were not wearing helmets either died or had incapacitating injuries, while 26% of motorcyclists who were wearing helmets died or had incapacitating injuries. The proportion of fatal and incapacitating injuries was greater for motorcyclists who were not wearing helmets for all age groups except those ages of 25–34 years.

From 2019–23, male motorcyclists had higher rates of helmet use than their female counterparts in all years except 2020 (Table 4.7). In 2023, 31% of male and 27% of female motorcyclists who sustained fatal or incapacitating injuries were wearing helmets. Male motorcyclists in the 45–54 age group and female motorcyclists in the 35–44 age group had the lowest rates of helmet use in all collisions, 22% and 24%, respectively. The lowest rates of helmet use among motorcyclists who sustained fatal or incapacitating injuries were females in the 45–54 and 35–44 age groups as well as male motorcyclists in the 45–54 and the 55–64 age groups.

In 2023, motorcyclists were involved and killed in collisions most often in urban areas (Figure 4.6). Motorcyclists in rural (37%), suburban (38%), and exurban (37%) collisions were slightly more likely to wear a helmet than motorcyclists in urban (35%) collisions. Motorcyclists who were killed in suburban (18%) and rural (25%) collisions were less likely to be wearing a helmet than those killed in urban (41%) and exurban (40%) collisions.

Collision characteristics

Motorcycle collisions and the probability of injury vary depending on light, weather, and road conditions at the time of a crash (Table 4.8 and Figure 4.7). Motorcycle collisions occurred predominantly during daylight hours, in clear weather, on curved roads, and at locations that were not intersections or highway interchanges. The probability of a fatal motorcycle collision was greatest in dark, unlit conditions, during cloudy or extreme weather, on mixed road types, and away from intersections or highway interchanges. Motorcycle collisions—overall and fatal—occurred predominantly on local/city roads (Figure 4.8). The highest probability of a fatal collision, however, was on state roads.

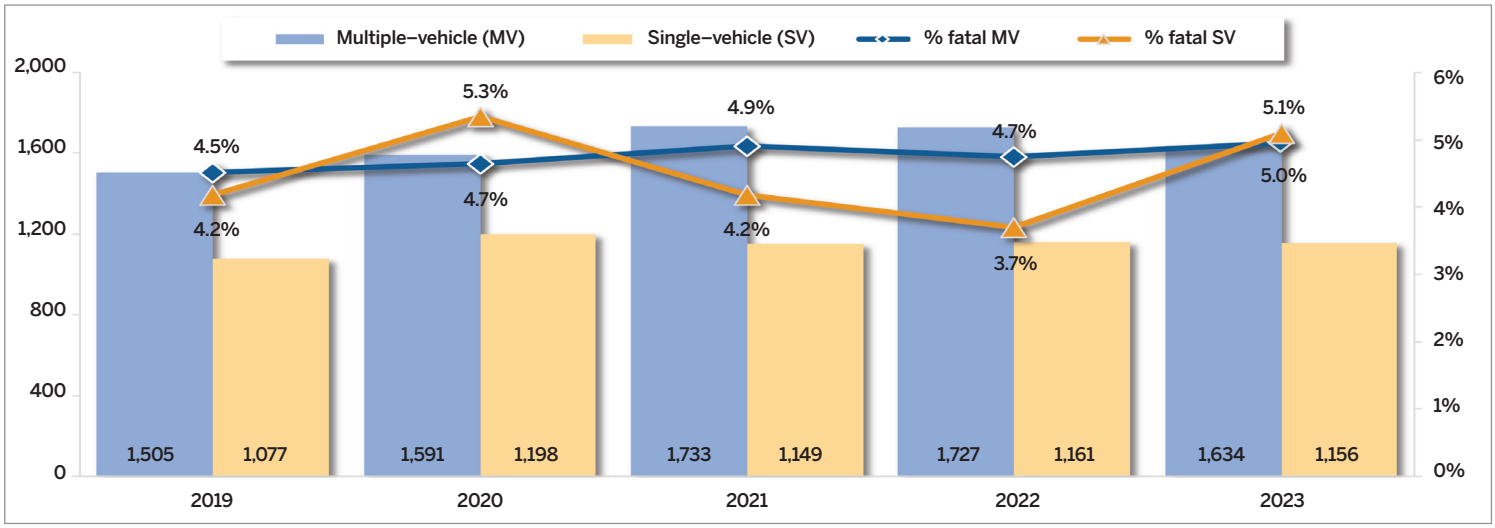
Table 4.1. Motorcycle registrations and motorcyclist fatalities and injuries in collisions in Indiana, 2019–23

	2019	2020	2021	2022	2023	Annual rate of change	
						2022–23	2019–23
Motorcycle registrations	**228,713**	**234,014**	**240,533**	**231,298**	**226,497**	**-2.1%**	**-0.2%**
Collisions	**2,582**	**2,789**	**2,882**	**2,888**	**2,790**	**-3.4%**	**2.0%**
Fatal collisions	113	138	133	125	140	12.0%	5.5%
Non-fatal injury collisions	1,627	1,779	1,829	1,954	1,929	-1.3%	4.3%
Property damage only collisions	842	872	920	809	721	-10.9%	-3.8%
Motorcyclists in collisions	**2,705**	**2,968**	**3,025**	**3,106**	**3,040**	**-2.1%**	**3.0%**
Fatalities	112	142	131	124	141	13.7%	5.9%
Non-fatal injuries	1,823	1,988	2,005	2,109	2,084	-1.2%	3.4%
Per 100,000 motorcycle registrations							
Collisions	**1,128.9**	**1,191.8**	**1,198.2**	**1,248.6**	**1,231.8**	**-1.3%**	**2.2%**
Fatal collisions	49.4	59.0	55.3	54.0	61.8	14.4%	5.8%
Non-fatal injury collisions	711.4	760.2	760.4	844.8	851.7	0.8%	4.6%
Property damage only collisions	368.1	372.6	382.5	349.8	318.3	-9.0%	-3.6%
Motorcyclists in collisions	**1,182.7**	**1,268.3**	**1,257.6**	**1,342.9**	**1,342.2**	**-0.1%**	**3.2%**
Fatalities	49.0	60.7	54.5	53.6	62.3	16.1%	6.2%
Non-fatal injuries	797.1	849.5	833.6	911.8	920.1	0.9%	3.7%

Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Registered vehicles, downloaded March 26, 2024.

Notes:
1) Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury methodologies and definitions.

Figure 4.1. Motorcycle-involved collisions in Indiana by single-vehicle and multiple-vehicle involvement, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.

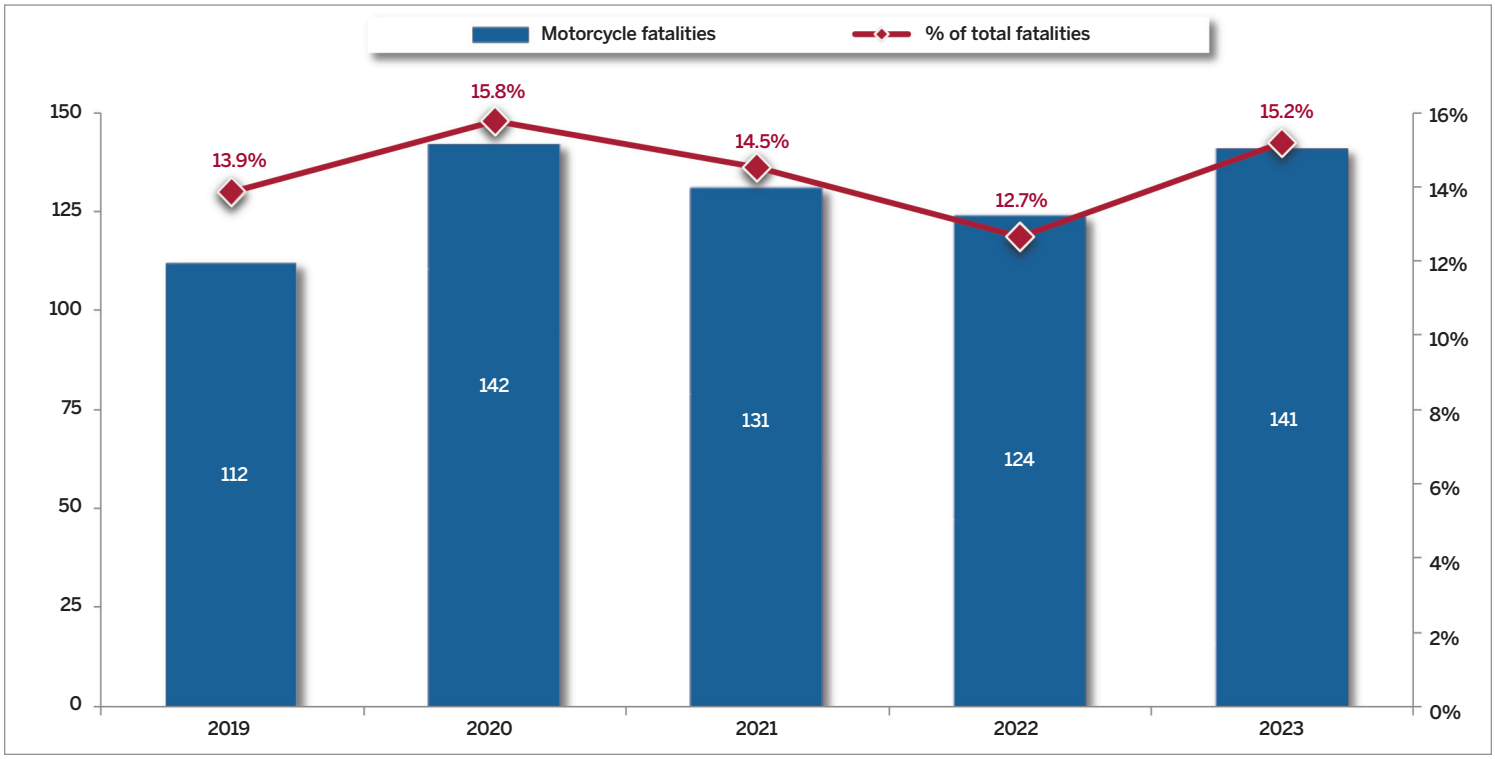
Table 4.2. Motorcyclists in collisions in Indiana by injury status, 2019–23

All motorcyclists	2019	2020	2021	2022	2023	Annual rate of change	
						2022–23	2019–23
All motorcyclists	**2,705**	**2,968**	**3,025**	**3,106**	**3,040**	**-2.1%**	**3.0%**
Fatal	112	142	131	124	141	13.7%	5.9%
Non-fatal	1,823	1,988	2,005	2,109	2,084	-1.2%	3.4%
Not injured	770	838	889	873	815	-6.6%	1.4%
Fatality and injury rates							
% fatal	4.1%	4.8%	4.3%	4.0%	4.6%	16.2%	2.9%
% non-fatal injuries	67.4%	67.0%	66.3%	67.9%	68.6%	1.0%	0.4%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers on motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury methodologies and definitions.
3) Not injured includes all individuals involved in collisions reported as null values in the injury status and injury nature fields. 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.

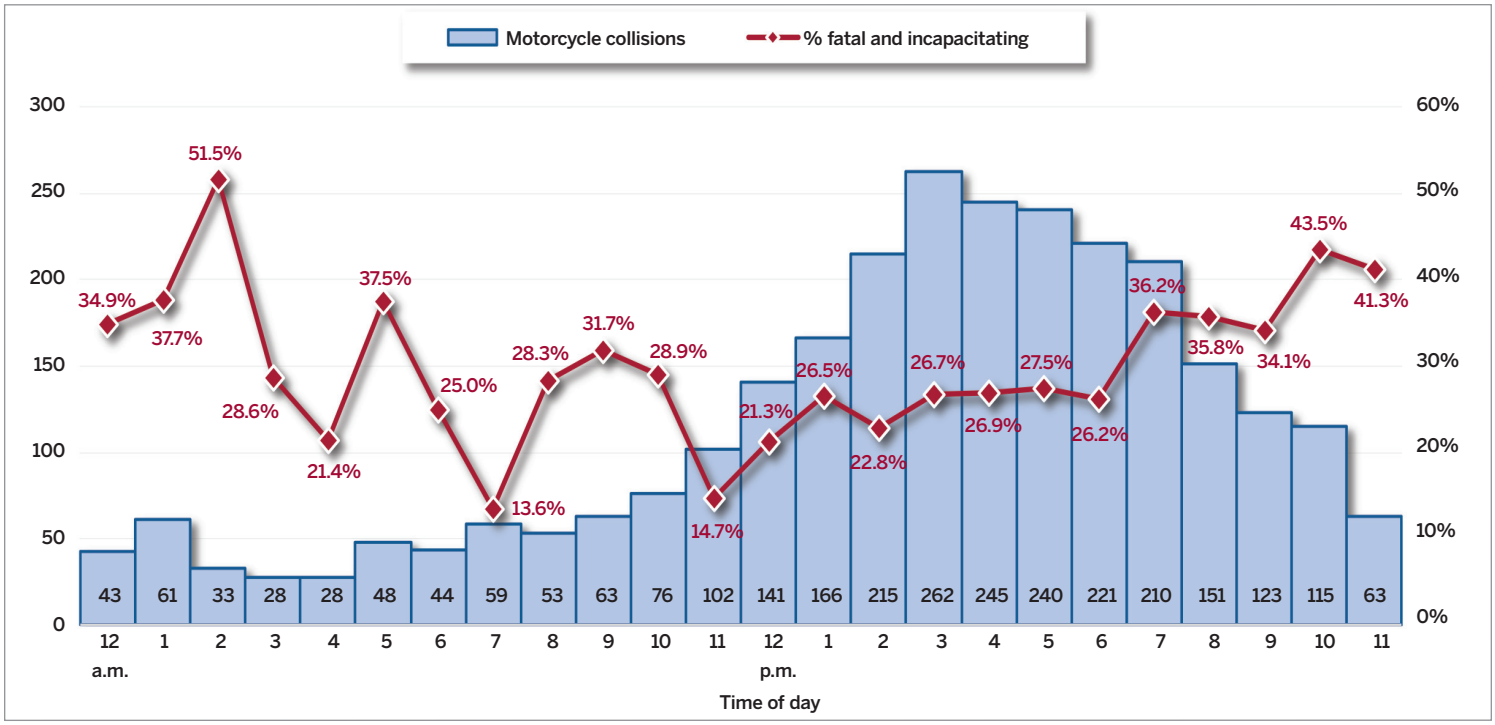
Figure 4.2. Motorcyclist fatalities as a percent of all fatalities in collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.

Figure 4.3. Motorcycle collisions in Indiana by hour of the day, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Excludes collisions for which hour was unknown or not reported.

Table 4.3. Motorcycle collisions as a percent of all collisions in Indiana by time of day and day of week, 2023

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% motorcycle by hour
12 a.m.	2.0%	1.8%	1.0%	1.3%	1.2%	1.0%	1.0%	1.4%
1 a.m.	2.3%	2.0%	1.3%	2.0%	3.1%	1.8%	1.8%	2.0%
2 a.m.	1.0%	0.8%	3.3%	1.2%	0.6%	1.6%	1.1%	1.3%
3 a.m.	0.9%	0.3%	1.1%	0.9%	2.0%	1.3%	0.7%	1.0%
4 a.m.	1.5%	0.7%	0.7%	0.5%	1.5%	0.7%	0.9%	0.9%
5 a.m.	0.4%	0.8%	1.3%	0.7%	1.1%	1.5%	1.3%	1.0%
6 a.m.	0.6%	0.3%	0.3%	1.0%	0.9%	0.6%	0.6%	0.6%
7 a.m.	0.7%	0.3%	0.7%	0.4%	0.7%	0.5%	0.4%	0.5%
8 a.m.	0.4%	0.4%	0.8%	0.7%	0.3%	0.5%	0.9%	0.6%
9 a.m.	1.4%	0.7%	0.8%	0.4%	0.6%	1.1%	0.9%	0.8%
10 a.m.	1.0%	0.8%	0.8%	0.9%	0.6%	0.9%	1.4%	0.9%
11 a.m.	2.3%	0.9%	0.8%	0.8%	0.6%	0.7%	1.6%	1.0%
12 p.m.	2.0%	1.0%	1.0%	0.8%	1.1%	0.8%	1.9%	1.2%
1 p.m.	1.8%	0.7%	1.2%	1.7%	1.3%	1.3%	2.7%	1.5%
2 p.m.	2.4%	1.3%	1.3%	1.7%	1.3%	1.3%	3.1%	1.7%
3 p.m.	2.8%	1.5%	1.5%	1.3%	1.2%	1.4%	3.1%	1.7%
4 p.m.	3.6%	1.1%	1.3%	1.3%	1.0%	1.6%	2.6%	1.6%
5 p.m.	2.6%	1.1%	1.5%	1.3%	1.4%	1.5%	2.3%	1.6%
6 p.m.	2.7%	1.3%	1.5%	1.4%	2.1%	1.7%	2.7%	1.9%
7 p.m.	3.0%	2.8%	2.2%	2.1%	2.1%	1.9%	3.0%	2.4%
8 p.m.	3.3%	1.3%	1.4%	2.5%	1.9%	1.7%	2.5%	2.1%
9 p.m.	1.9%	1.1%	2.3%	2.1%	1.9%	1.6%	2.3%	1.9%
10 p.m.	2.6%	2.1%	2.9%	1.5%	1.6%	2.6%	2.4%	2.3%
11 p.m.	1.2%	1.5%	1.8%	1.2%	1.5%	2.1%	2.0%	1.7%
% motorcycle by day	**2.1%**	**1.1%**	**1.3%**	**1.2%**	**1.2%**	**1.3%**	**2.1%**	**1.4%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Excludes collisions for which hour was unknown or not reported.
3) Color scale applies to all days/times.

Table 4.4. Total and motorcycle collisions in Indiana by month, 2019–23

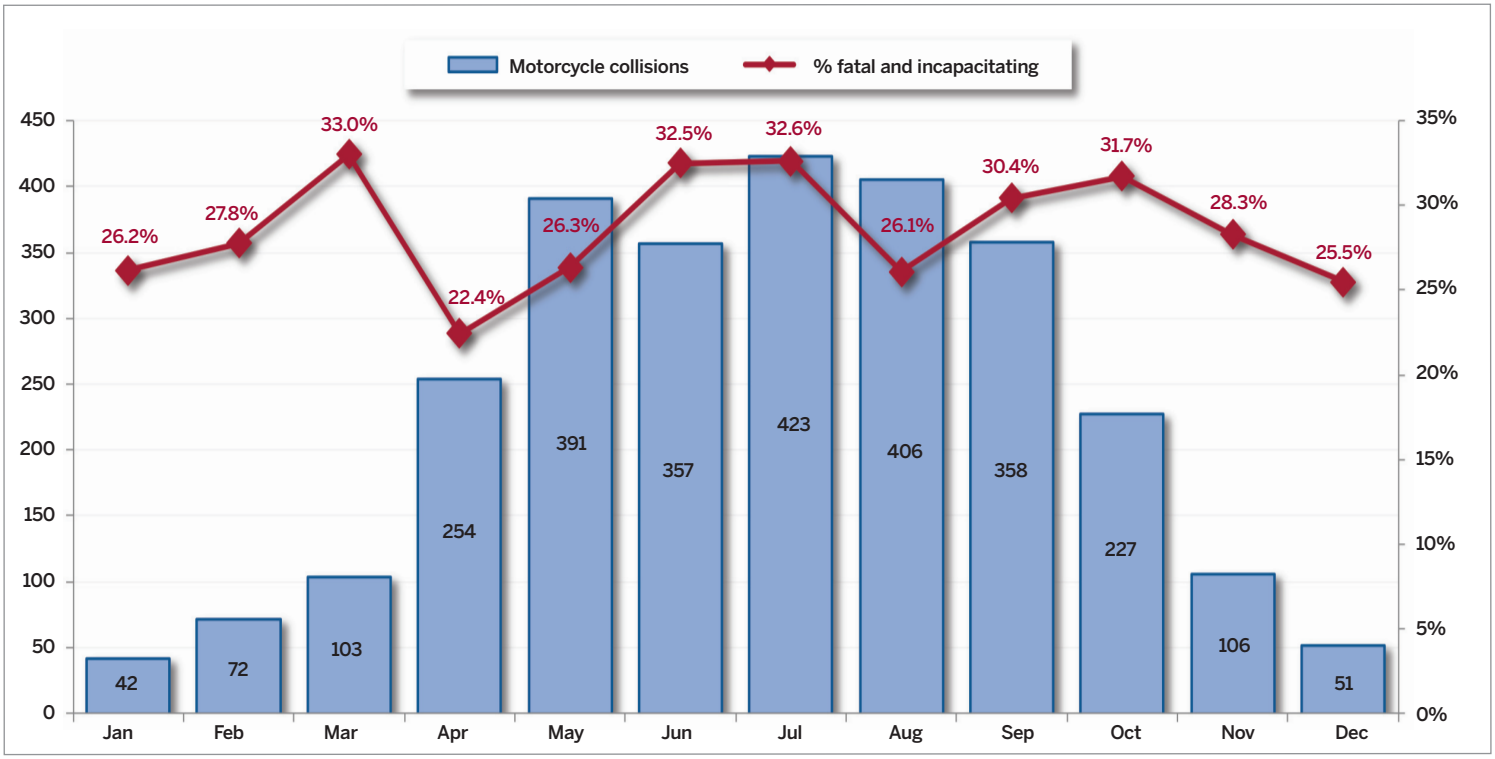
Month	Total collisions					Motorcycle collisions				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Jan	19,459	15,787	15,691	17,922	16,096	34	37	34	29	42
Feb	16,982	16,853	15,931	16,728	13,799	28	55	21	31	72
Mar	15,967	11,815	14,561	15,300	16,020	85	94	175	145	103
Apr	16,389	8,013	16,039	15,487	15,475	197	136	274	197	254
May	18,331	12,251	17,424	18,009	17,427	322	319	349	393	391
Jun	17,687	14,580	17,729	16,680	16,492	387	456	426	486	357
Jul	17,655	15,454	17,539	16,050	15,749	406	418	421	441	423
Aug	18,092	15,430	17,821	17,307	16,980	426	448	404	383	406
Sep	17,526	15,211	17,718	16,949	16,249	370	375	386	395	358
Oct	20,157	17,696	20,487	18,955	18,778	218	230	225	250	227
Nov	20,542	16,899	19,730	19,180	18,723	55	179	102	103	106
Dec	18,818	15,963	18,153	18,763	16,459	54	42	65	35	51
Total	217,605	175,952	208,823	207,330	198,247	2,582	2,789	2,882	2,888	2,790
High	Nov	Oct	Oct	Nov	May	Aug	Jun	Jun	Jun	Jul
Low	Mar	Apr	Mar	Mar	Feb	Feb	Jan	Feb	Jan	Jan

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Color scales apply separately to all months for the entire 5-year period, 2019–23, for total collisions and motorcycle collisions.

Figure 4.4. Motorcycle collisions in Indiana by month, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.

Table 4.5. Motorcyclists in collisions in Indiana by type of motorized vehicle, 2022–23

	Count of individuals		Percent change	2023 injury rate by unit type
	2022	2023	2022–23	
All motorcyclists	**3,106**	**3,040**	**-2.1%**	**N/A**
Motorcycle	**2,449**	**2,457**	**0.3%**	**100%**
Fatal	107	126	17.8%	5.1%
Injury	1,676	1,680	0.2%	68.4%
Not injured	666	651	-2.3%	26.5%
Class B motor-driven cycle	**169**	**107**	**-36.7%**	**100%**
Fatal	4	2	-50.0%	1.9%
Injury	114	71	-37.7%	66.4%
Not injured	51	34	-33.3%	31.8%
Class A motor-driven cycle	**216**	**159**	**-26.4%**	**100%**
Fatal	8	4	-50.0%	2.5%
Injury	117	92	-21.4%	57.9%
Not injured	91	63	-30.8%	39.6%
Motorized bicycle	**40**	**54**	**35.0%**	**100%**
Fatal	0	1	N/A	1.9%
Injury	20	37	85.0%	68.5%
Not injured	20	16	-20.0%	29.6%
Moped	**232**	**263**	**13.4%**	**100%**
Fatal	5	8	60.0%	3.0%
Injury	182	204	12.1%	77.6%
Not injured	45	51	13.3%	19.4%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles, motorized bicycles, and mopeds. See the glossary for unit type definitions.
2) Injuries include those defined as incapacitating and non-incapacitating. See the glossary for updated injury methodologies and definitions.

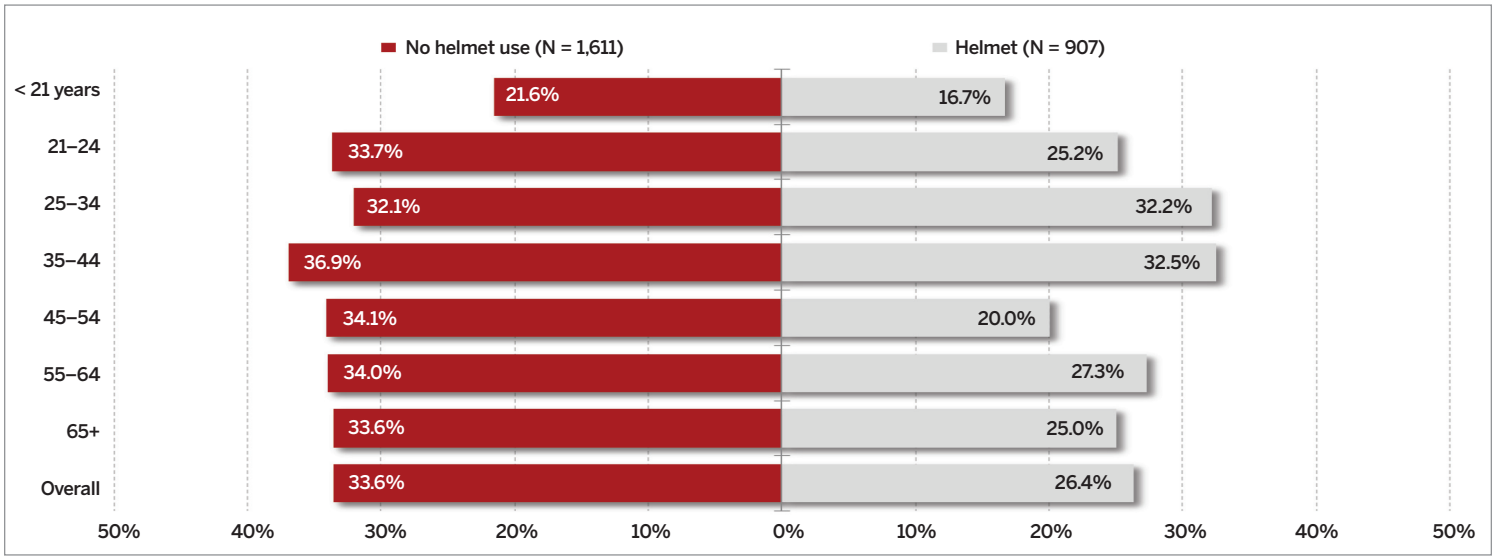
Table 4.6. Alcohol blood content (BAC) of motorcycle and passenger vehicle drivers in fatal and incapacitating collisions in Indiana by vehicle type and number of vehicles, 2023

Collision by type	Vehicles involved	BAC range	Fatal	Incapacitating	Operators	All operators, impaired as percent of:	
						Reported results	All
Single–vehicle	Motorcycles	**Total operators**	**58**	**324**	**382**	**81.8%**	**4.7%**
		0 g/dL	0	1	1		
		0.01-0.07	0	3	3		
		0.08-0.14	3	9	12		
		0.15 & above	0	6	6		
		Not reported	55	305	360		
	Passenger vehicles	**Total operators**	**375**	**1,327**	**1,702**	**77.0%**	**6.1%**
		0 g/dL	9	17	26		
		0.01-0.07	1	4	5		
		0.08-0.14	18	44	62		
		0.15 & above	10	32	42		
		Not reported	337	1,230	1,567		
Multi–vehicle	Motorcycles	**Total operators**	**78**	**376**	**458**	**47.6%**	**2.2%**
		0 g/dL	4	5	9		
		0.01-0.07	0	2	2		
		0.08-0.14	4	3	7		
		0.15 & above	1	2	3		
		Not reported	73	364	437		
	Passenger vehicles	**Total operators**	**651**	**4,336**	**4,987**	**70.4%**	**2.5%**
		0 g/dL	11	23	34		
		0.01-0.07	5	14	19		
		0.08-0.14	12	53	65		
		0.15 & above	16	45	61		
		Not reported	607	4,201	4,808		

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes only the operators of motorcycles (motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles) and passenger vehicles (passenger car, pickup truck, sport utility vehicle, and van). See the glossary for unit type definitions.
2) BAC 0.08 g/dL or greater is legally impaired. BAC values greater than 0.59g/dL are excluded from the analysis.
3) Reported results include only those records with a valid BAC result (i.e., excludes null values).

Figure 4.5. Fatal and incapacitating injuries as a percent of all motorcyclists in collisions in Indiana by helmet use and age group, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles, motorized bicycles, and mopeds. See the glossary for unit type definitions.
2) Calculations for unhelmeted motorcyclists include individuals coded as no helmet or none.
3) Excludes cases with unknown age.

Table 4.7. Motorcyclist helmet use in collisions in Indiana by age group and gender, 2019–23

All motorcyclists

	2019		2020		2021		2022		2023	
Age group	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15–20	68.8%	33.3%	53.5%	33.3%	55.9%	47.6%	63.6%	39.1%	63.0%	46.2%
21–24	60.1%	23.8%	44.1%	37.0%	57.6%	21.4%	55.6%	45.5%	61.4%	47.1%
25–34	45.7%	36.9%	36.9%	46.3%	42.6%	37.1%	44.5%	42.9%	39.7%	30.9%
35–44	30.1%	32.0%	28.5%	35.1%	25.7%	26.9%	28.5%	28.6%	30.8%	23.6%
45–54	34.6%	34.3%	27.9%	33.8%	30.5%	33.3%	25.5%	34.7%	21.9%	29.4%
55–64	32.4%	57.6%	32.2%	44.0%	30.7%	37.2%	28.1%	41.5%	24.3%	34.1%
65+	49.1%	55.6%	45.6%	54.5%	48.6%	33.3%	41.0%	37.5%	37.5%	40.0%
All ages	41.9%	37.2%	35.3%	39.5%	38.1%	33.8%	37.9%	37.2%	36.4%	32.5%

Motorcyclists experiencing fatal or incapacitating injuries

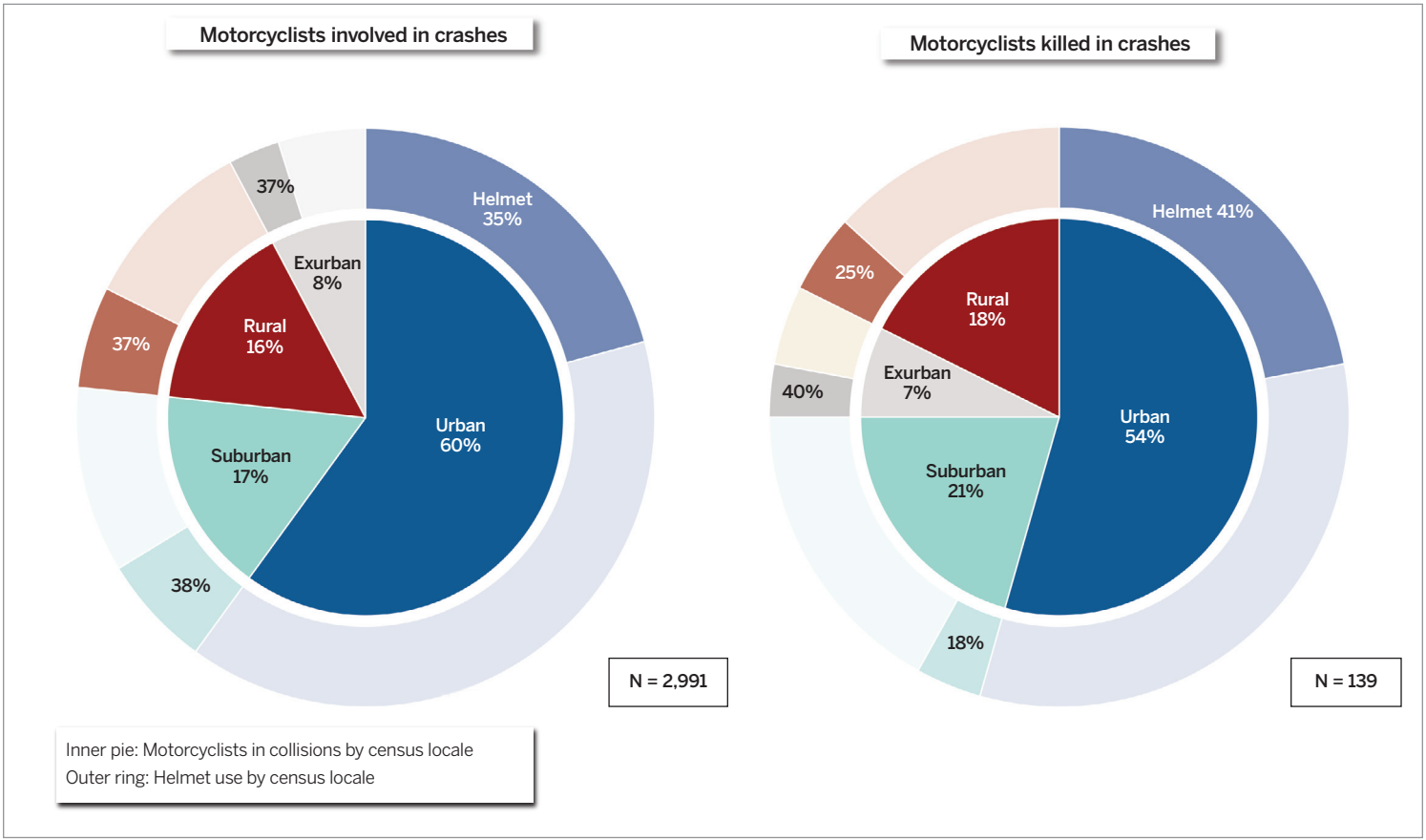
	2019		2020		2021		2022		2023	
Age group	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15–20	67.9%	50.0%	45.2%	50.0%	65.9%	0.0%	60.7%	40.0%	53.8%	66.7%
21–24	50.0%	20.0%	41.7%	33.3%	61.3%	0.0%	46.4%	60.0%	52.5%	60.0%
25–34	42.7%	56.3%	30.3%	37.5%	36.2%	26.3%	37.6%	26.3%	39.4%	33.3%
35–44	21.2%	8.3%	23.7%	41.2%	22.7%	15.0%	24.3%	23.8%	28.5%	14.3%
45–54	28.0%	21.4%	21.1%	36.7%	21.2%	31.3%	22.2%	33.3%	16.5%	5.3%
55–64	25.0%	33.3%	23.7%	22.2%	20.4%	50.0%	20.0%	54.5%	20.0%	31.3%
65+	34.5%	75.0%	45.7%	100.0%	35.3%	50.0%	42.9%	57.1%	28.8%	50.0%
All ages	33.9%	34.4%	28.8%	37.3%	32.1%	28.2%	32.5%	35.8%	31.1%	26.9%

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles , motorized bicycles, and mopeds. See the glossary for unit type definitions.
2) Helmet, no helmet, and none are included in the totals for helmet use calculations.
3) Data limited to operators and injured passengers with a valid gender and age.
4) Excludes operators and injured passengers under 15 years old.
5) Color scales apply to both genders and all years for motorcyclists in collisions and motorcyclists experiencing fatal or incapacitating injuries.

Figure 4.6. Helmet usage among motorcyclists collisions in Indiana by injury status and census locale, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. Suburban, exurban, and rural areas were created by the research team based on the 2020 urban boundaries. See the glossary for a complete explanation.
2) Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles, motorized bicycles, and mopeds. See the glossary for unit type definitions.
3) Helmet, no helmet, and none are included in the totals used for helmet use calculations.
4) Excludes cases where census locale could not be determined.

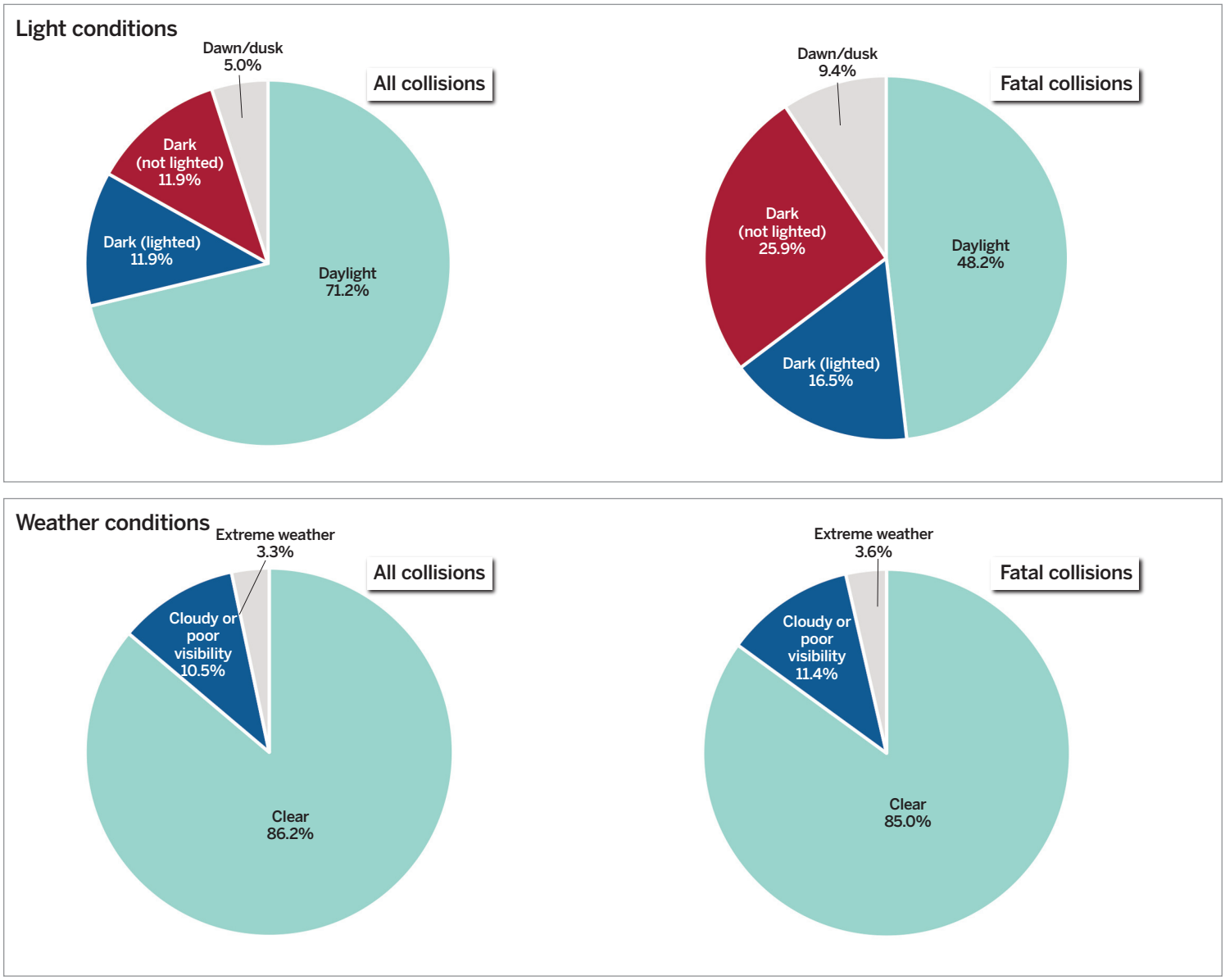
Table 4.8. Characteristics of motorcycle collisions in Indiana by severity, environmental condition, and road parameter, 2023

Characteristics	Count of collisions				Probability of collision severity	
	Fatal	Non–fatal	Property damage	Total	Fatal	Non–fatal
Light conditions	**139**	**1,929**	**718**	**2,786**		
Daylight	67	1,391	527	1,985	3.4%	70.1%
Dark (lighted)	23	214	94	331	6.9%	64.7%
Dark (not lighted)	36	230	65	331	10.9%	69.5%
Dawn/dusk	13	94	32	139	9.4%	67.6%
Weather conditions	**140**	**1,929**	**721**	**2,790**		
Clear	119	1,668	617	2,404	5.0%	69.4%
Cloudy or poor visibility	16	203	75	294	5.4%	69.0%
Extreme weather	5	58	29	92	5.4%	63.0%
Road junctions	**140**	**1,929**	**721**	**2,790**		
No junction involved	86	1,048	425	1,559	5.5%	67.2%
Intersections	52	833	273	1,158	4.5%	71.9%
Interchange/ramp	2	48	23	73	2.7%	65.8%
Road character	**140**	**1,928**	**720**	**2,788**		
Straight (level)	8	190	117	315	2.5%	60.3%
Straight (non-level)	13	151	38	202	6.4%	74.8%
Curved	93	1,315	480	1,888	4.9%	69.7%
Mixed	6	39	16	61	9.8%	63.9%
Non-roadway	20	233	69	322	6.2%	72.4%
Road class	**136**	**1,748**	**562**	**2,446**		
Interstate	7	104	43	154	4.5%	67.5%
U.S. route	12	145	51	208	5.8%	69.7%
State road	30	313	61	404	7.4%	77.5%
Local/city	65	877	343	1,285	5.1%	68.2%
County road	22	309	64	395	5.6%	78.2%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcycles include motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles. See the glossary for unit type definitions.
2) Excludes collisions for which characteristic was unknown or not reported.
3) Mixed roadway character indicates more than on roadway character response was selected for vehicles in a single collision.
4) Selected characteristics are regrouped 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:
      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.

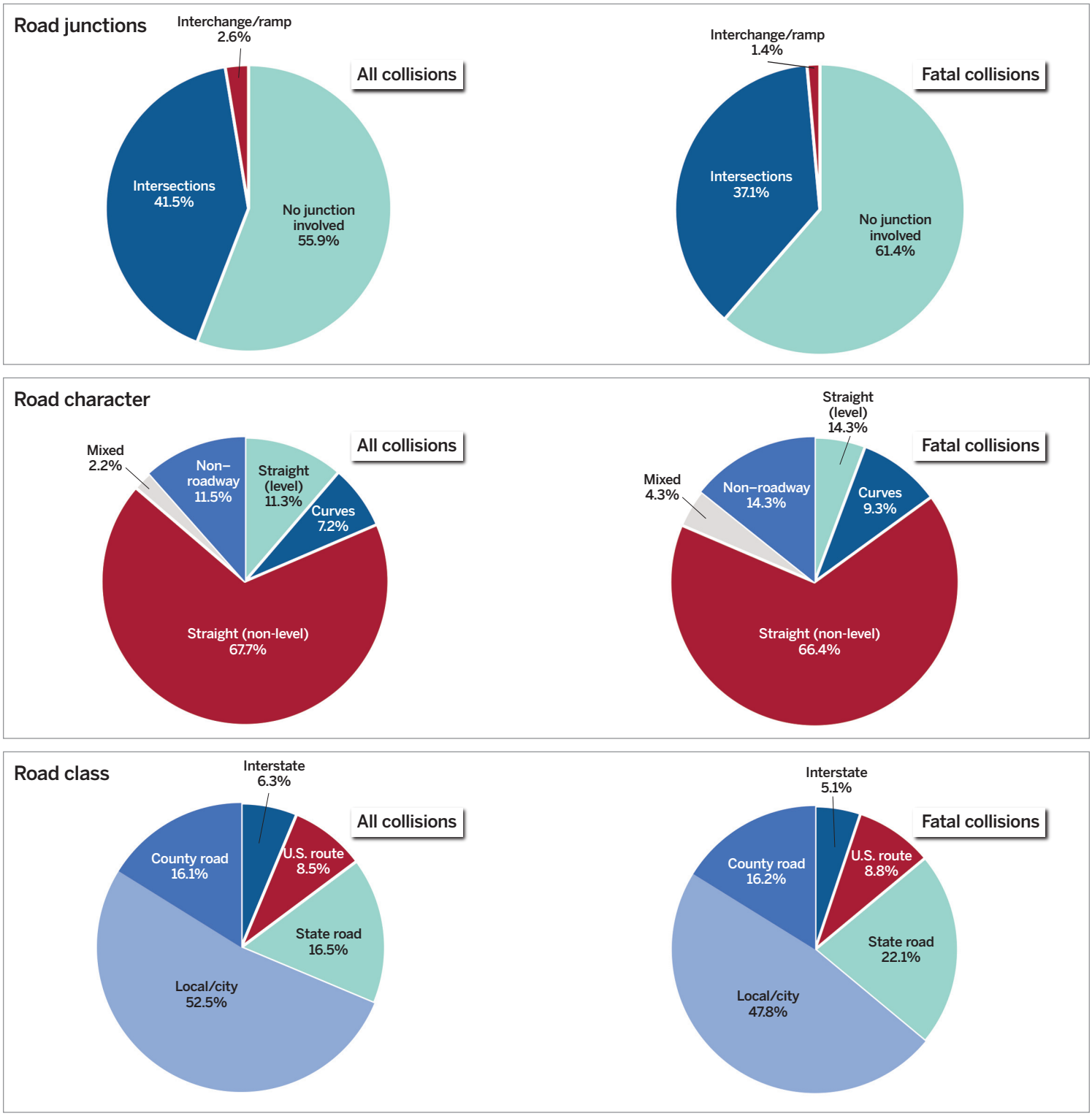
Figure 4.7. Motorcycle collisions in Indiana by light and weather condition, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Refer to notes in Table 4.8.

Figure 4.8. Motorcycle collisions in Indiana by road parameter, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Refer to notes in Table 4.8.

INDIANA TRAFFIC SAFETY FACTS

IMPAIRED DRIVING

IMPAIRED DRIVING, 2023

In 2023, 70 people died in collisions in which at least one driver was legally impaired by alcohol (i.e., BAC at or above 0.08 g/dL) (Figure 5.1). Of the 3,306 alcohol-impaired collisions that year, 64 claimed at least one life (Table 5.1). From 2022 to 2023, fatal collisions involving an alcohol-impaired driver declined 3%. In the same period, the number of individuals killed in crashes with an alcohol-impaired driver declined slightly, by 0.5%. The annual rates of change were similar for 2019–23. Fatal alcohol-impaired collisions declined 4% annually, and fatalities in alcohol-impaired collisions declined 1%.

Blood alcohol and drug testing rates

Indiana law requires police officers to 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. In 2023, 57% of drivers involved in fatal collisions were tested for alcohol and/or drugs (Table 5.2). Twenty-two percent of drivers in incapacitating collisions were tested, a higher proportion than in 2022. Of the drivers involved in fatal collisions, those between 21 and 24 years old had the highest rate of testing, while drivers 75 years and older had the lowest rate.

Testing rates for drivers' alcohol impairment in fatal collisions also varied by the severity of driver injuries. Generally, surviving drivers were tested more often than those who were killed (Table 5.3). In 2023, 68% of surviving drivers in fatal collisions were tested, compared to 43% of those who died. However, drivers who were killed and for whom BAC results were reported had a higher rate of impairment (77%) than drivers who survived (58%). In 2022 and 2023, the proportion of drivers with reported results who were positive for drugs was lower than for drivers with reported results who were alcohol-impaired. This relationship, however, was reversed for the three preceding years.

Often, testing results are missing in the ARIES database. Among drivers in fatal collisions who were tested for alcohol in 2023, only 12% had BAC results in the ARIES database as of early April 2024 (Table 5.3). In 2023, only 41% of the drivers in fatal collisions who were tested for drugs had recorded results. This can be due to delays in the analysis of the tests themselves and in officers returning to collision records in ARIES to record results.

Driver age and gender

In 2023, 65 drivers in fatal collisions were alcohol-impaired. Impaired drivers in fatal collisions decreased 21% from 2022 to 2023 and 14% annually from 2019 to 2023 (Table 5.4). In 2023, drivers ages 25–34 and 35–44 constituted the largest proportions of all drivers in fatal collisions as well as the largest proportions of impaired drivers in fatal collisions. Impaired drivers ages 35–44 made up 29% of impaired drivers in fatal collisions, and impaired drivers ages 25–34 made up 26%.

In 2023, male drivers were far more likely than female drivers to have been involved in fatal collisions, accounting for 3 out of every 4 drivers in fatal crashes (Figure 5.2). The gender split for alcohol impairment in fatal collisions was similar with 6% of male drivers and 2% of female drivers identified as impaired in the same year. Additionally, three-quarters of people killed in alcohol-related collisions in 2023 were male (Figure 5.3).

Month, day of week, and time of day

Alcohol-impaired fatalities and injuries vary by month, day of week, and time of day. For 2019–23, the highest aggregated fatality counts in alcohol-impaired collisions occurred in May and June (Figure 5.4). Fatalities in alcohol-impaired collisions made up the biggest proportion of all fatalities in May, April, and March. Non-fatal injuries in alcohol-impaired collisions were highest for the five-year period in September and October. Non-fatal injuries in alcohol-involved crashes made up the biggest proportion of all non-fatal injuries in January and March.

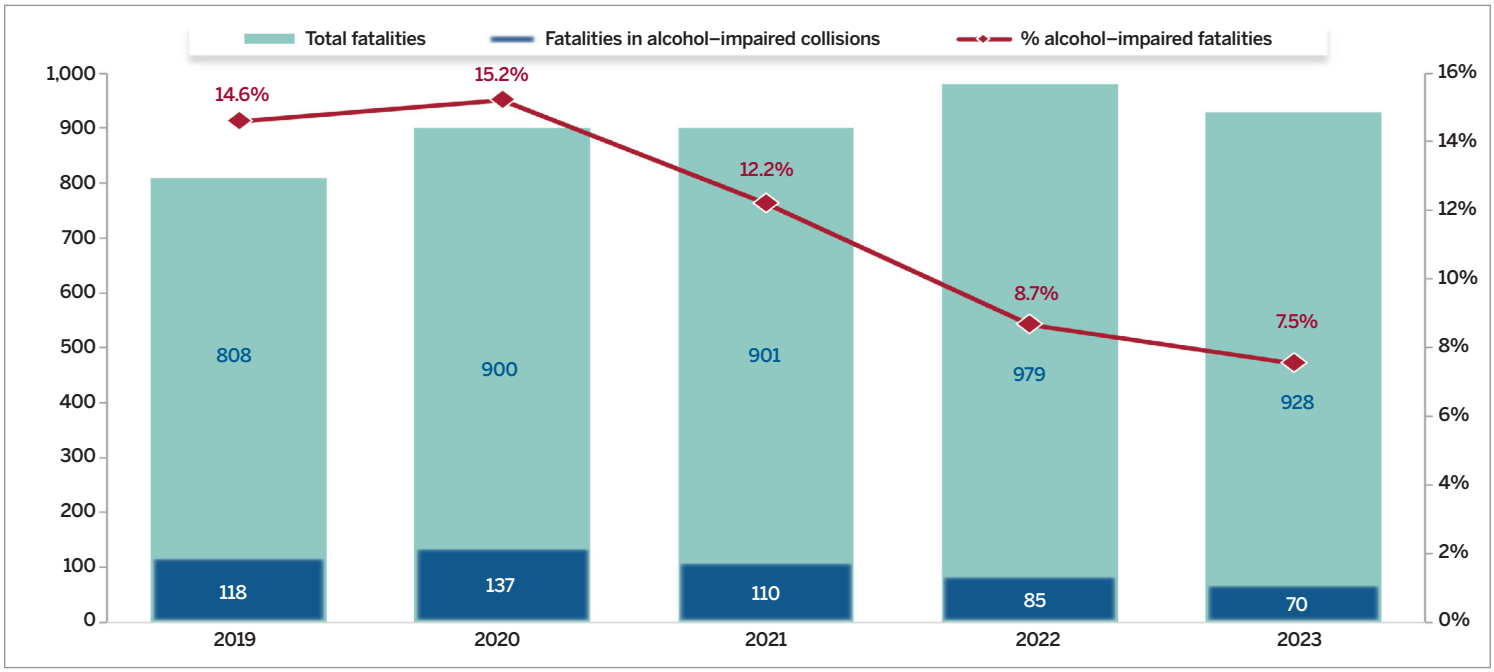
In 2023, alcohol-impaired collisions were highest for the hours from Saturdays from 9 p.m. to Sundays 3:59 a.m. and Fridays from 10 p.m. to Saturdays 3:59 a.m. (Figure 5.5). The highest numbers of fatal and incapacitating injuries in alcohol-impaired collisions followed a similar pattern with the addition of Sundays from 8–8:59 p.m. Figure 5.6 shows that alcohol-impaired collisions consistently account for an outsized proportion of fatal and incapacitating injuries compared to non-alcohol-impaired collisions, with only two exceptions during hours of the day for which no fatal or incapacitating injuries were recorded.

Census locale and road type

In 2023, a higher proportion of fatal crashes occurred outside urban areas (54%) than inside urban areas (46%). However, the proportion of fatal collisions that were alcohol-impaired was highest in urban areas (14%) (Figure 5.7). The proportions of fatal collisions that were alcohol-impaired were lower in suburban (10%), exurban (9%), and rural (8%) areas.

The same year, higher proportions of fatal collisions that were alcohol-impaired were on local/city and county roads than on highways of all types. Seventeen percent of fatal collisions on local/city roads were alcohol-impaired; 14% of fatal collisions on county roads were alcohol-impaired (Figure 5.8). The proportion of fatal collisions that were alcohol-impaired on interstates, U.S. routes, and state highways was lower at 7% each.

Figure 5.1. Fatalities in collisions in Indiana by alcohol impairment, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.

Table 5.1. Alcohol-impaired collisions and injuries in Indiana, 2019–23

	2019	2020	2021	2022	2023	Annual rate of change	
						2022–23	2019–23
Collisions involving an alcohol-impaired driver							
Total collisions	**3,949**	**3,845**	**3,825**	**3,402**	**3,306**	**-2.8%**	**-4.3%**
Fatal	116	119	98	81	64	-21.0%	-13.8%
Injury	1,044	1,009	986	964	933	-3.2%	-2.8%
Property damage	2,789	2,717	2,741	2,357	2,309	-2.0%	-4.6%
Individuals in collisions involving an alcohol-impaired driver							
Total individuals	**5,734**	**5,508**	**5,727**	**5,494**	**5,467**	**-0.5%**	**-1.2%**
Fatal	118	137	110	85	70	-17.6%	-12.2%
Injured	1,540	1,467	1,455	1,308	1,332	1.8%	-3.6%
Not injured	4,076	3,904	4,162	4,101	4,065	-0.9%	-0.1%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Impaired drivers are those with a BAC of 0.08 g/dL or greater reported in ARIES. BAC results greater than 0.59 g/dL are treated as invalid.
2) Injured includes injuries identified as incapacitating and non-incapacitating. See the glossary for updated injury definitions and methodologies.

Table 5.2. Drivers in fatal and incapacitating collisions who were tested for alcohol or other substances in Indiana by age, 2023

	Count of drivers					
	Fatal collisions			Incapacitating collisions		
Driver age	Tested	Total	Tested as % total	Tested	Total	Tested as % total
15–20	90	141	63.8%	171	724	23.6%
21–24	80	121	66.1%	148	580	25.5%
25–34	151	235	64.3%	362	1,506	24.0%
35–44	152	233	65.2%	318	1,189	26.7%
45–54	113	195	57.9%	218	965	22.6%
55–64	97	175	55.4%	177	829	21.4%
65–74	55	117	47.0%	87	503	17.3%
75+	30	82	36.6%	41	294	13.9%
Unknown	1	60	1.7%	0	270	0.0%
All ages	**769**	**1,359**	**56.6%**	**1,522**	**6,860**	**22.2%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Tested includes drivers given an alcohol, drug, or alcohol/drug test.
2) Excludes ages under 15 and over 109 years.

Table 5.3. Drivers in fatal collisions in Indiana by substance test given and reported results, 2019–23

	Surviving					Killed				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Drivers in fatal collisions	**620**	**646**	**730**	**807**	**735**	**560**	**600**	**613**	**674**	**627**
By test type given										
Alcohol and/or drug	447	469	520	579	497	286	284	327	331	272
Alcohol	439	456	510	574	492	279	278	324	330	271
Drug	347	386	431	455	402	273	263	315	323	257
None	18	37	87	147	164	17	54	124	303	322
Refused	0	5	2	4	6	0	0	0	1	0
Not reported	155	135	121	77	68	257	262	162	39	33
Tested, as a % of all	**72.1%**	**72.6%**	**71.2%**	**71.7%**	**67.6%**	**51.1%**	**47.3%**	**53.3%**	**49.1%**	**43.4%**
By BAC test result										
Alcohol-impaired	31	38	21	24	25	85	81	78	58	39
Not impaired	309	263	196	33	18	121	115	77	23	11
No result reported	99	155	293	517	449	73	82	169	249	221
By drug test result										
Positive	75	88	102	58	51	121	111	130	74	54
Negative	225	224	236	145	102	117	104	117	73	62
Pending	7	14	10	2	1	2	3	3	4	1
No result reported	40	60	83	250	248	33	45	65	172	140
Alcohol-impaired, as a % of tested	**7.1%**	**8.3%**	**4.1%**	**4.2%**	**5.1%**	**30.5%**	**29.1%**	**24.1%**	**17.6%**	**14.4%**
Drug-positive, as a % of tested	**21.6%**	**22.8%**	**23.7%**	**12.7%**	**12.7%**	**44.3%**	**42.2%**	**41.3%**	**22.9%**	**21.0%**
Alcohol-impaired, as a % of drivers with reported results	**9.1%**	**12.6%**	**9.7%**	**42.1%**	**58.1%**	**41.3%**	**41.3%**	**50.3%**	**71.6%**	**78.0%**
Drug-positive, as a % of drivers with reported results	**25.0%**	**28.2%**	**30.2%**	**28.6%**	**33.3%**	**50.8%**	**51.6%**	**52.6%**	**50.3%**	**46.6%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Alcohol-impaired: BAC of 0.08 g/dL or higher. BAC results greater than 0.59 g/dL are treated as invalid and as no result reported.
2) Drug-positive: Reported as positive and recorded in ARIES. ARIES does not currently specify drug type(s).
3) Alcohol-impaired and drug-positive are not mutually exclusive. Drivers can be one, the other, or both.

Table 5.4. Drivers in fatal collisions in Indiana by alcohol impairment and driver age, 2019–23

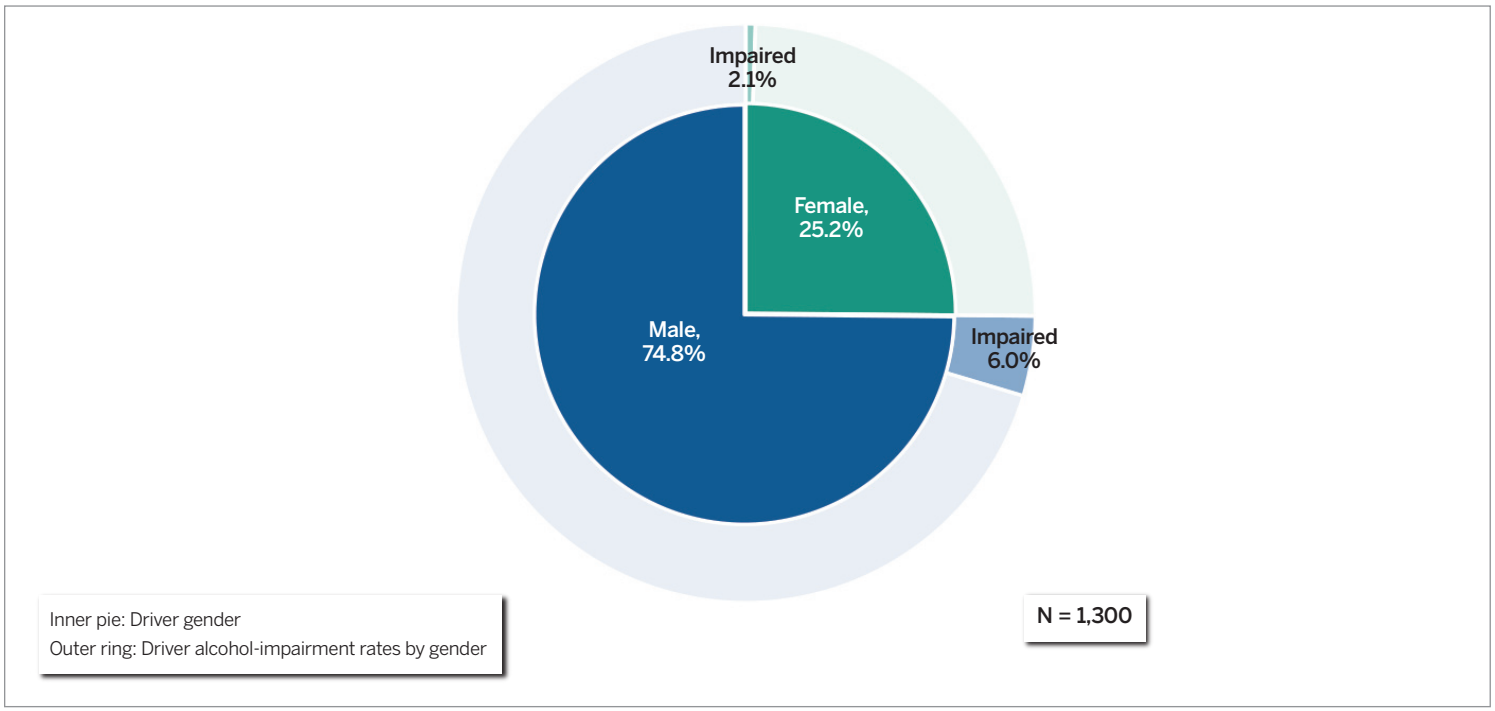
	Count of drivers involved					Annual rate of change		% of total
Driver age	2019	2020	2021	2022	2023	2022–23	2019–23	2023
All drivers	**1,176**	**1,232**	**1,307**	**1,437**	**1,299**	**-9.6%**	**2.5%**	**100%**
15–20	94	113	123	112	141	25.9%	10.7%	10.9%
21–24	97	101	115	117	121	3.4%	5.7%	9.3%
25–34	239	266	285	317	235	-25.9%	-0.4%	18.1%
35–44	198	196	238	240	233	-2.9%	4.2%	17.9%
45–54	191	208	189	230	195	-15.2%	0.5%	15.0%
55–64	174	182	188	202	175	-13.4%	0.1%	13.5%
65–74	104	108	108	137	117	-14.6%	3.0%	9.0%
75+	79	58	61	82	82	0.0%	0.9%	6.3%
Impaired drivers	**118**	**121**	**100**	**82**	**65**	**-20.7%**	**-13.8%**	**100%**
15–20	3	5	6	2	4	100.0%	7.5%	6.2%
21–24	19	13	10	7	11	57.1%	-12.8%	16.9%
25–34	27	31	36	30	17	-43.3%	-10.9%	26.2%
35–44	24	23	23	16	19	18.8%	-5.7%	29.2%
45–54	25	26	14	15	10	-33.3%	-20.5%	15.4%
55–64	12	17	8	7	3	-57.1%	-29.3%	4.6%
65–74	8	4	2	4	1	-75.0%	-40.5%	1.5%
75+	0	2	1	1	0	-100.0%	N/A	0.0%

Low < < > > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Impaired drivers are those with BAC of 0.08 g/dL or greater. BAC results greater than 0.59 g/dL are treated as invalid.
2) Excludes ages under 15 and over 109 years and cases with unknown or unreported age.
3) Color scale applies to all ages among all drivers and among impaired drivers.

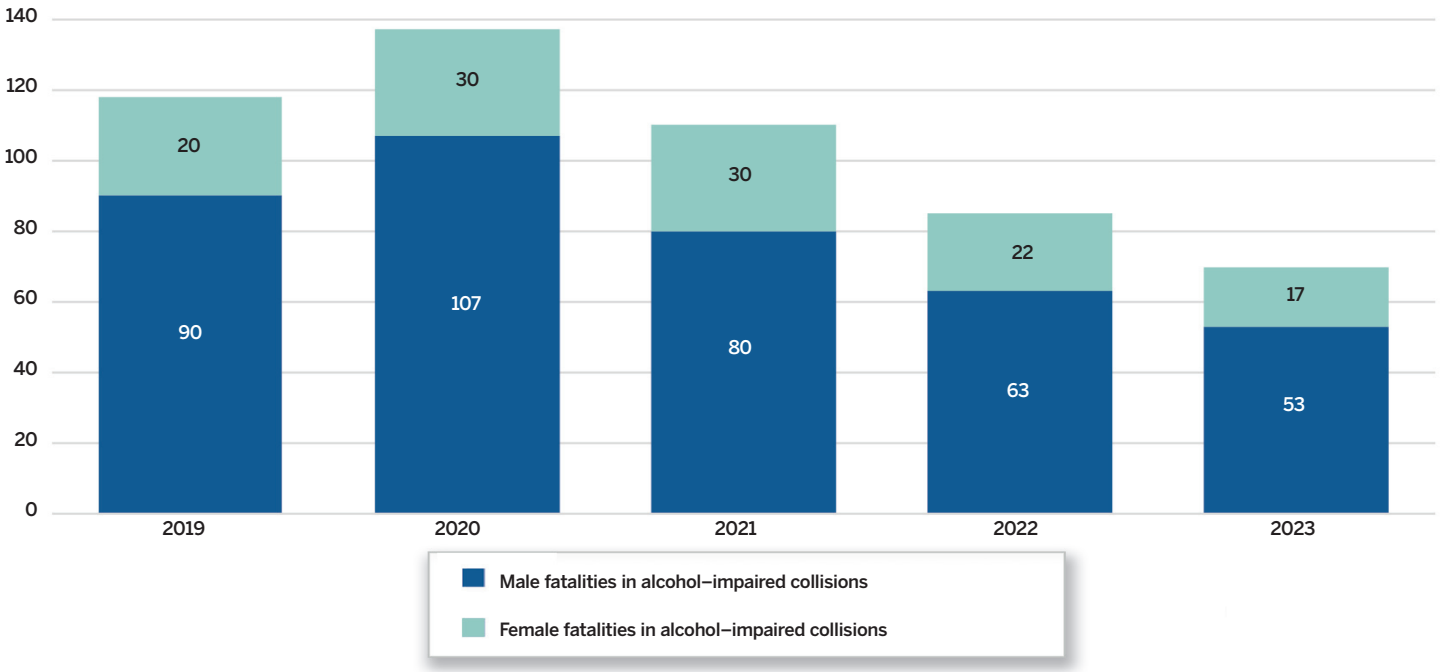
Figure 5.2. Drivers in fatal collisions in Indiana by alcohol impairment and gender, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024

Notes:
1) Impaired drivers are those with a BAC of 0.08 g/dL or greater. BAC results greater than 0.59 g/dL are treated as invalid.
2) The denominator for percentage impaired by gender includes drivers in fatal collisions who were tested and shown not to be impaired, drivers who were tested and for whom results were not available, drivers with invalid test results, and drivers who were not tested.

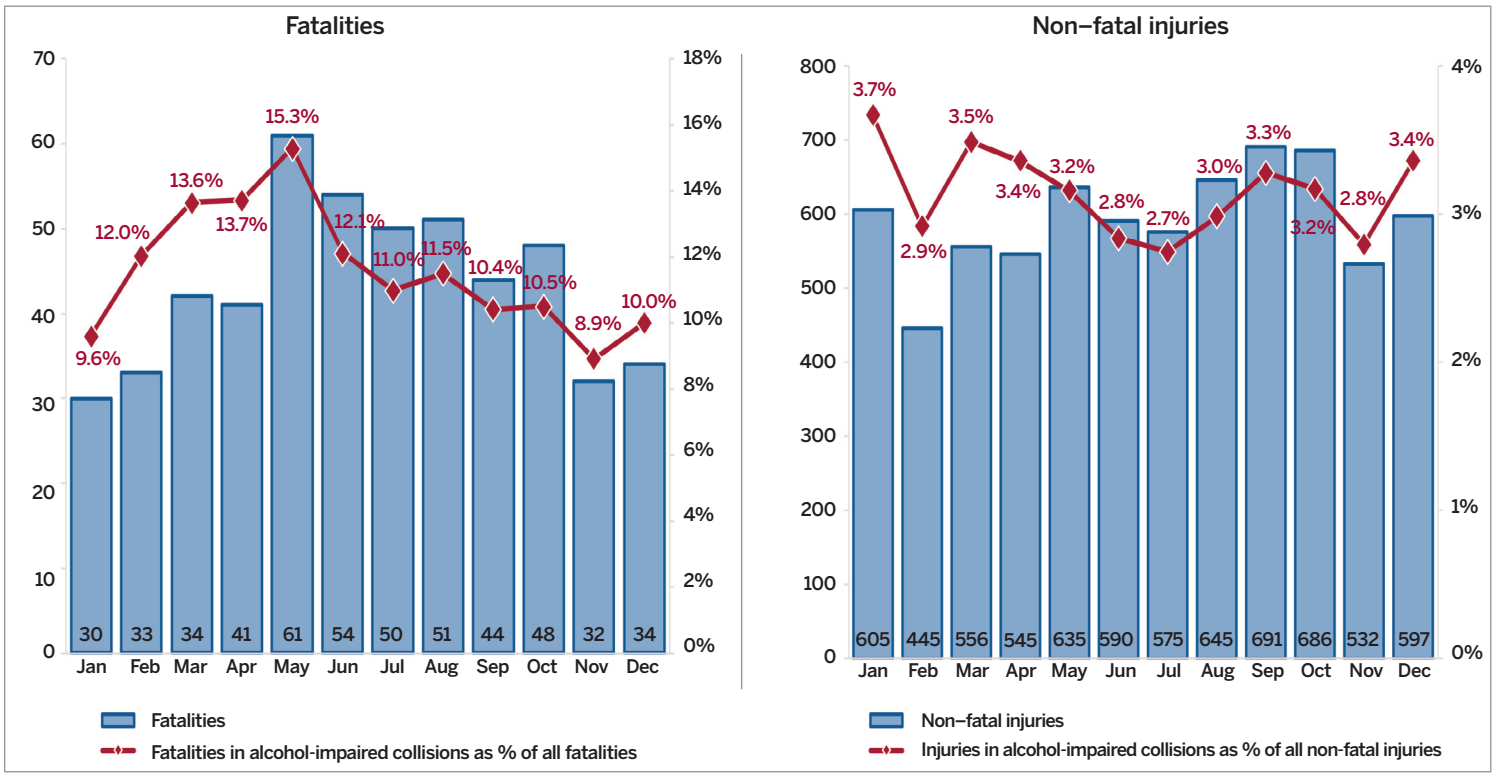
Figure 5.3. Fatalities in alcohol-impaired collisions in Indiana by gender, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.

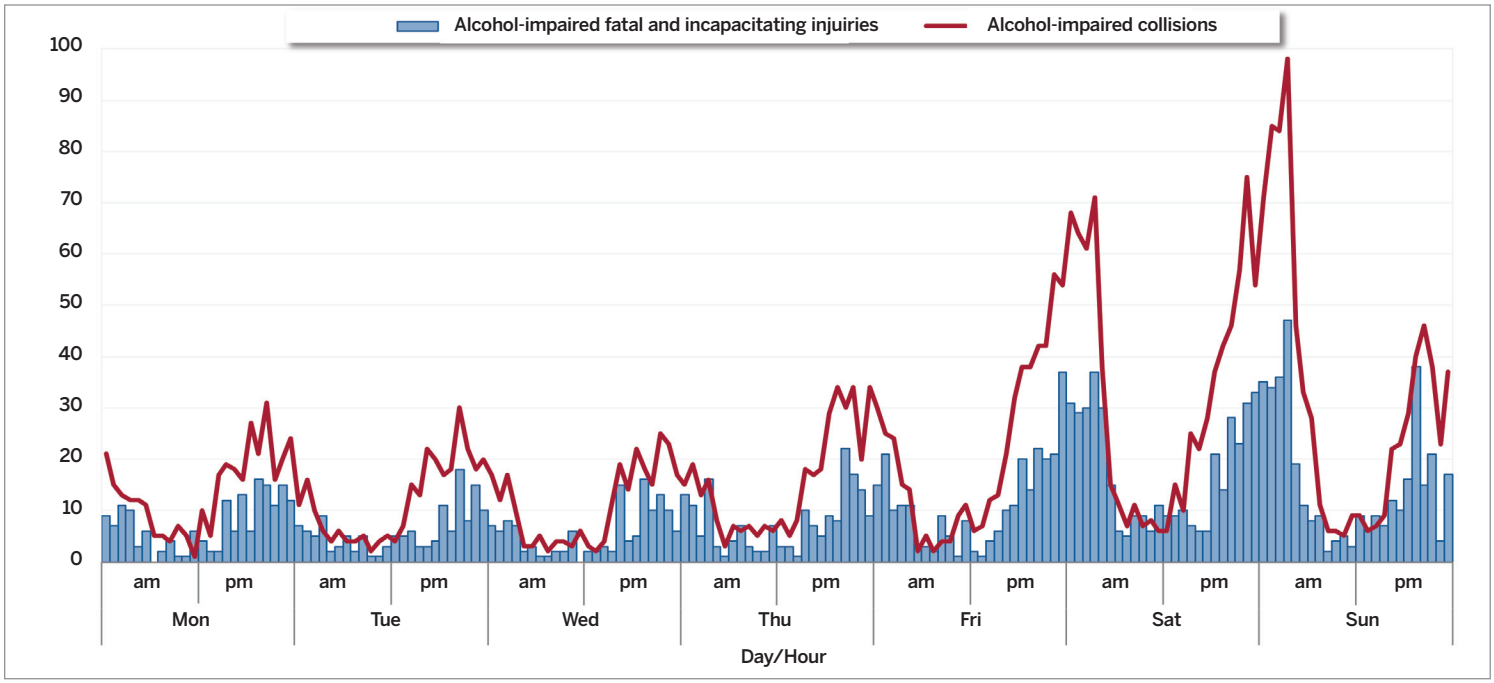
Figure 5.4. Fatalities and non-fatal injuries in alcohol-impaired collisions in Indiana by month, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Impaired drivers are those with a BAC of 0.08 g/dL or greater reported in ARIES. BAC results greater than 0.59 g/dL are treated as invalid.
2) Non-fatal injuries include incapacitating and non-incapacitating injuries. See the glossary for the updated injury definitions.

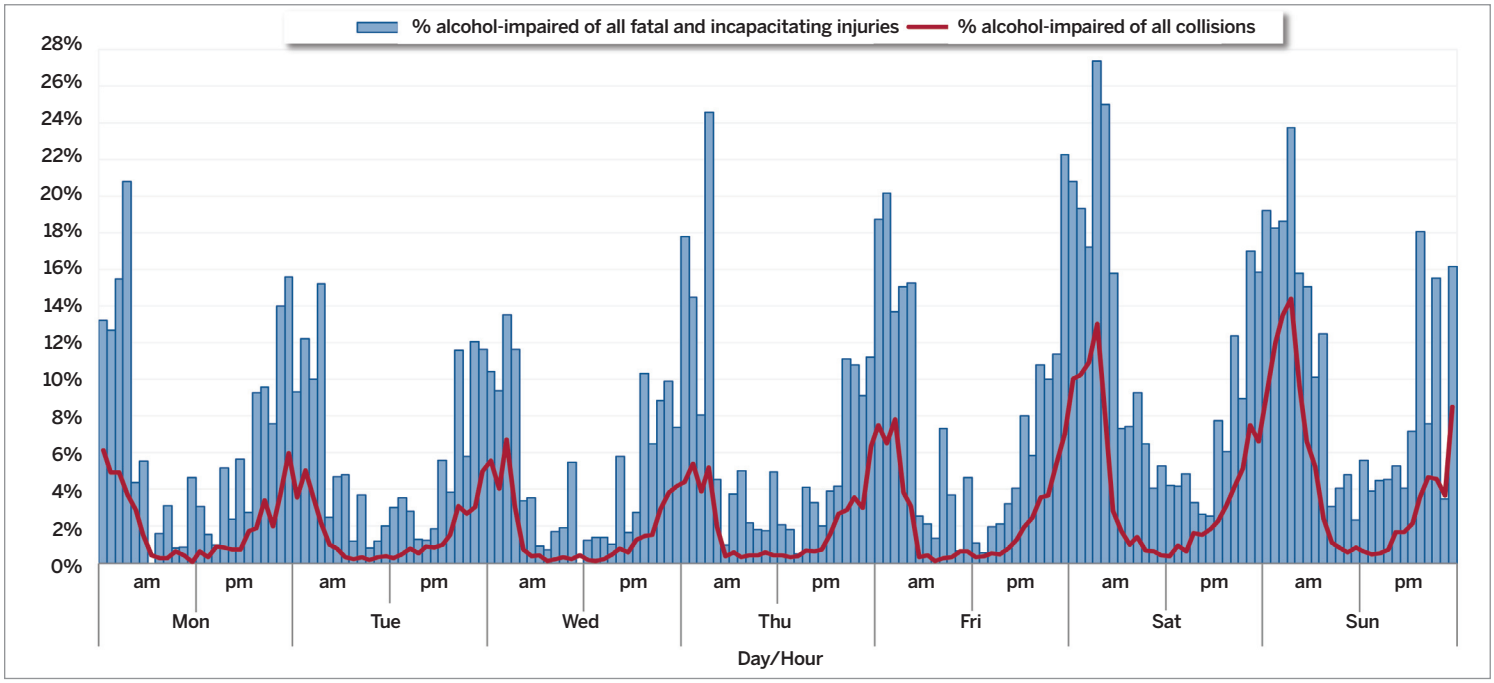
Figure 5.5. Fatal and incapacitating injuries in alcohol-impaired collisions in Indiana by day of week and time of day, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Alcohol-impaired collisions are collisions that involved one or more alcohol-impaired drivers with a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.

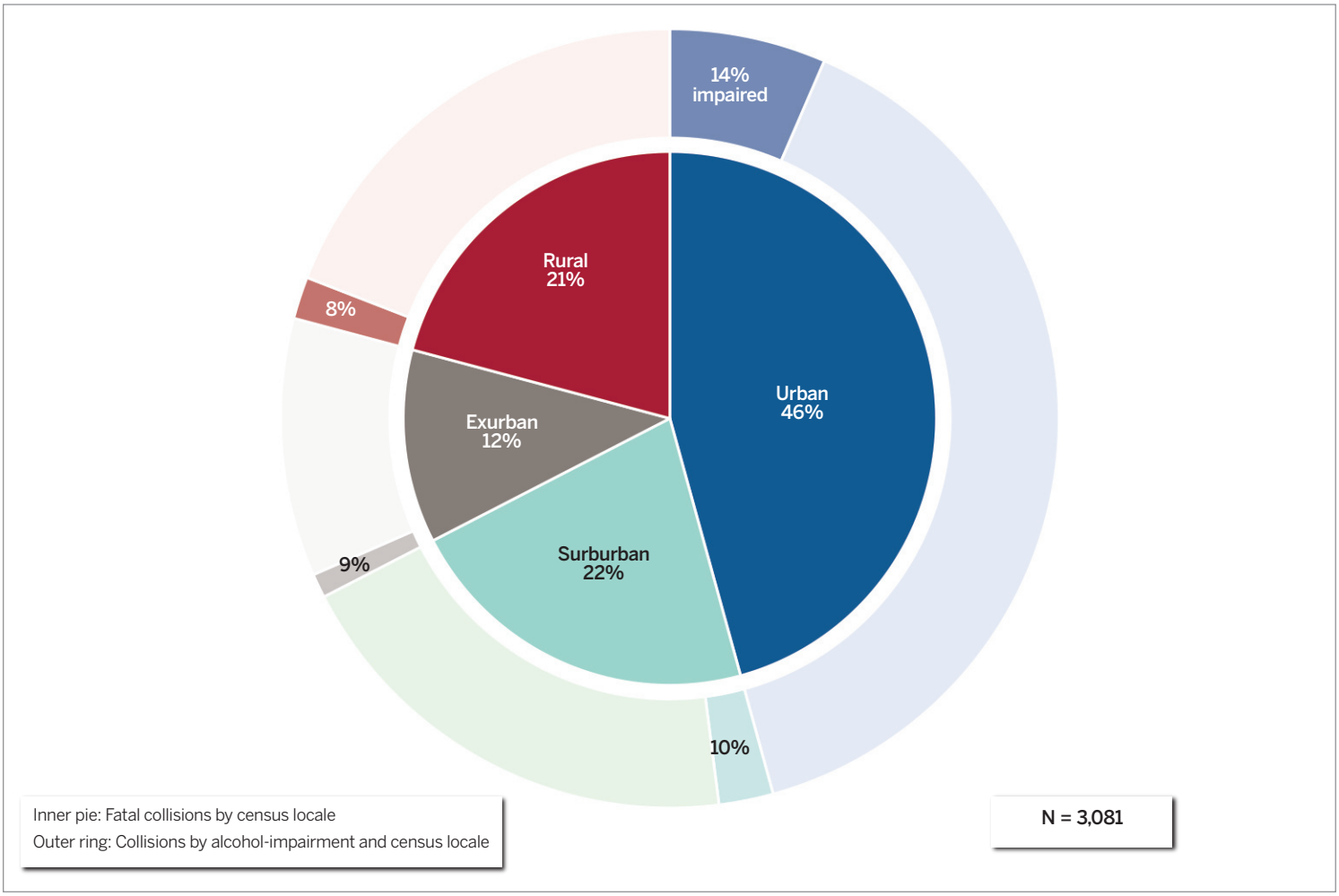
Figure 5.6. Percent of fatal and incapacitating injuries in alcohol-impaired collisions in Indiana by day of week and time of day, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Alcohol-impaired collisions are collisions that involved one or more alcohol-impaired drivers with a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.

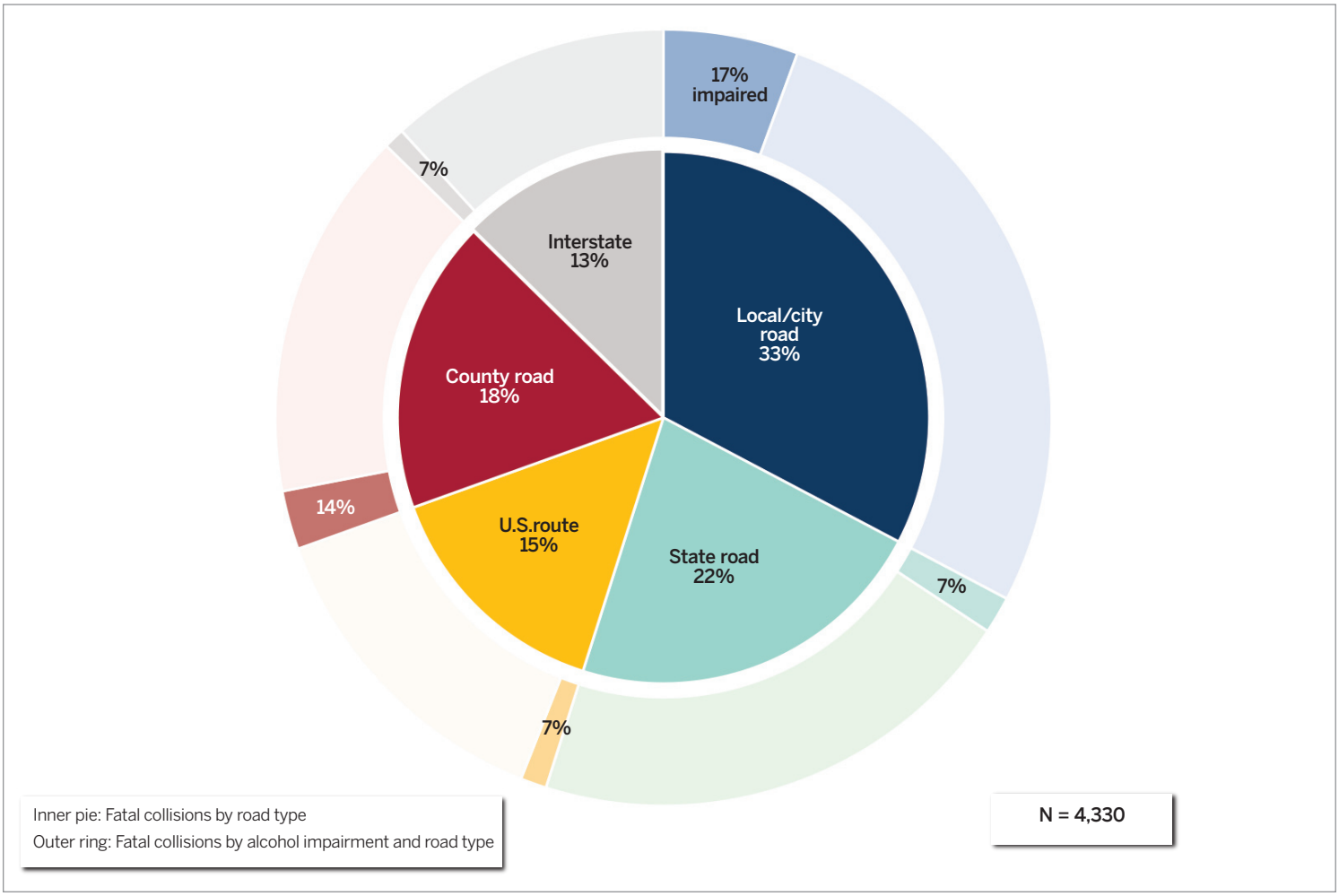
Figure 5.7. Fatal collisions in Indiana by alcohol impairment and census locale, 2019–23



Source: Analysis provided by the Indiana University Public Policy using data downloaded from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), as of April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.
2) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. The research team created the suburban, exurban, and rural areas based on the 2020 urban boundaries. See the glossary for a complete explanation.
3) Excludes cases for which census locale could not be determined.

Figure 5.8. Fatal collisions in indiana by alcohol impairment and road type, 2019–23



Source: Analysis provided by the Indiana University Public Policy using data downloaded from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are treated as invalid.
2) Excludes collisions on private drives and with no valid road class exported.

INDIANA TRAFFIC SAFETY FACTS

SPEED, 2023

In 2023, 14,600 speed-related collisions occurred in Indiana. The rate of speed-related collisions per 1,000 collisions was 73.6 (Figure 6.1). Speed-related collisions accounted for 7% of all collisions and 26% of fatal collisions in 2023 (Table 6.1). Speed-related collisions decreased 22% from 2022 to 2023. However, the annual rate of change from 2019 to 2023 was lower (-8%).

Fatal speed-related collisions decreased from 259 in 2022 to 230 in 2023. However, fatal speed-related collisions increased year-over-year from 2019 to 2022. Speed-related fatal collisions accounted for a steady proportion of all fatal collisions from 2019 to 2022 at 9%. The proportion in 2023 was lower at 7%. While fatal speed-related collisions decreased 11% from 2022 to 2023, they increased 5% annually from 2019–23.

Specifically, collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation. In 2023, among the individual speed criteria for collisions, unsafe speed was listed as the primary factor or as a contributing factor for 53% of speed-related collisions. Speed too fast for weather conditions was listed as a factor for 42% of speed-related collisions, and 13% of drivers in speed-related collisions were issued a speed-related citation.

Collisions in which the driver was identified as driving too fast for weather conditions decreased 41% from 2022 to 2023, driven primarily by a decrease in collisions that resulted in only property damage. Collisions identified as involving unsafe speed decreased by 6% from 2022. Fatal collisions identified specifically as involving unsafe speed decreased by 11% from 2022 but rose by 6% annually from 2019 to 2023. Collisions identified as driving too fast for weather conditions followed a similar pattern.

In 2023, 25,222 individuals were involved in speed-related collisions, representing 7% of individuals in all collisions (Table 6.2). Speed-related fatalities and the proportion of fatalities that were speed-related in 2023 each fell from five-year highs in 2022. The fatal injury rate per 1,000 people involved in speed-related collisions increased from 9.2 in 2022 to 9.8 in 2023 (Figure 6.2). Both rates were lower than the five-year high (10.2) established in 2020.

Vehicle type

In 2023, 4% of vehicle drivers involved in collisions were classified as speeding, a decrease from 5% of vehicle drivers in 2021 and 2022 (Figure 6.3). Motorcycle drivers were the most likely to have been speeding in collisions at 12% in 2023 and 13% each in 2021 and 2022.

Overall, in 2023, the rate of injury per 1,000 occupants in speed-related collisions was more than twice the injury rate for occupants in collisions that were not speed-related (Figure 6.4). As in previous years, motorcycle drivers and passengers suffered injuries at a higher rate per 1,000 occupants while speeding than occupants in other types of speeding vehicles. However, the injury rates for motorcycles identified as speeding and not speeding were more similar than for other types of vehicles. Occupants in passenger vehicles, buses, motorhomes/RVs, and school buses were considerably more likely to be injured while speeding compared to occupants in the same vehicles who were not speeding.

Age and gender

From 2019–23, the proportion of crashes that were speed-related decreased as driver age increased. Young male drivers—ages 15–20—were most likely to be speeding in each of the five years (Table 6.3). In 2023, 10% of male drivers and 5% of female drivers ages 15 to 20 were speeding at the time of the collision, the highest rates for all age groups. In contrast, only 2% of male and 1% of female drivers ages 75 and older were speeding in collisions.

Alcohol impairment

The number of speeding drivers who were legally impaired (blood alcohol content of 0.08 g/dL or higher) rose from 559 in 2022 to 570 in 2023, a small increase (Figure 6.5). Overall, 4% of speeding drivers in collisions were alcohol-impaired. Speeding drivers ages 21 to 24 and 25 to 34 in collisions had the highest rates of alcohol impairment across all age groups (Table 6.4). Speeding drivers in collisions were almost five times more likely to be alcohol-impaired than those who were not speeding.

Restraint use

From 2019 to 2023, passenger-vehicle occupants killed or injured in speed-related collisions had lower rates of restraint use than passenger-vehicle occupants who were killed or injured in non-speed-related collisions (Figure 6.6). In 2023, 43% of passenger-vehicle occupants killed in speed-related collisions were wearing restraints. Seventy-eight percent of passenger-vehicle occupants who sustained non-fatal injuries in speed-related collisions were wearing restraints—a five-year low.

Month, day of week, and time of day

From 2019–23, speed-related collisions occurred most often during two winter months—January or February (Table 6.5). The month with the fewest speed-related collisions varied during this period. In 2023, speed-related collisions occurred most often in January, and least often in April.

In 2023, the proportion of all collisions that were speed-related generally was highest during late night and early morning hours between 10 p.m. and 6:59 a.m. (Table 6.6). The proportion of crashes that were speed-related was lowest during the noon hour and increased hourly until the end of the day.

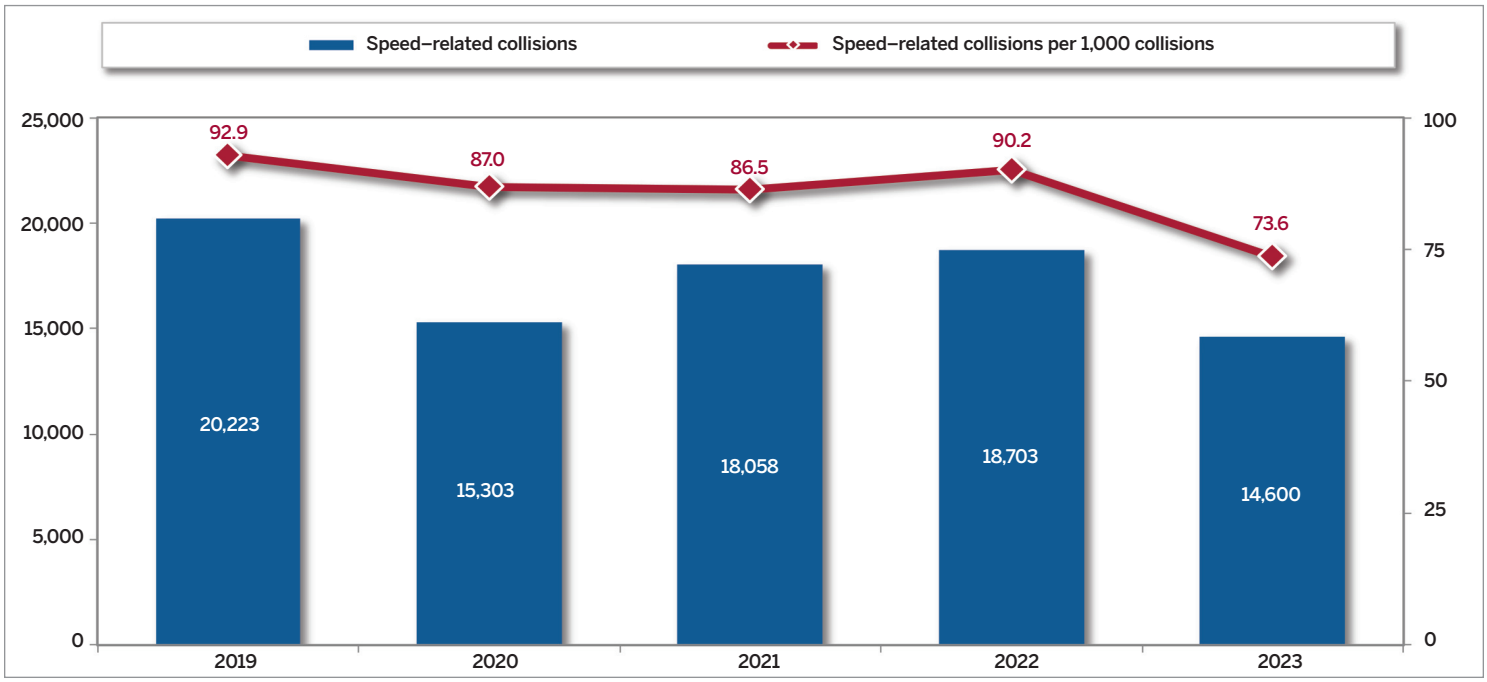
The likelihood of speed-related collisions was highest on Fridays, Saturdays, and Sundays. They were least likely to occur on Tuesdays. The proportion of collisions that were speed-related was highest on Saturday and Sunday mornings between midnight and 8:59 a.m. The highest proportion for a single hour was on Sundays from 1–1:59 a.m. The lowest proportion occurred on Tuesday afternoons from 3–3:59 p.m.

Census locale and road class

In 2023, the proportion of collisions that were speed-related was slightly higher in non-urban areas— suburban (10%), exurban (8%), and rural areas (9%)—than in urban areas (7%) (Figure 6.7). The proportion of fatal collisions that were speed-related was highest in suburban (29%) and urban areas (27%).

In 2023, the proportion of collisions that were speed-related was highest on interstate highways (15%) and lowest on state roads (7%) and local/city road (7%) (Figure 6.8). The proportion of fatal collisions that were speed-related collisions was highest on county (33%) and local/city roads (32%). The lowest proportion was on U.S. routes (9%).

Figure 6.1. Speed-related collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.

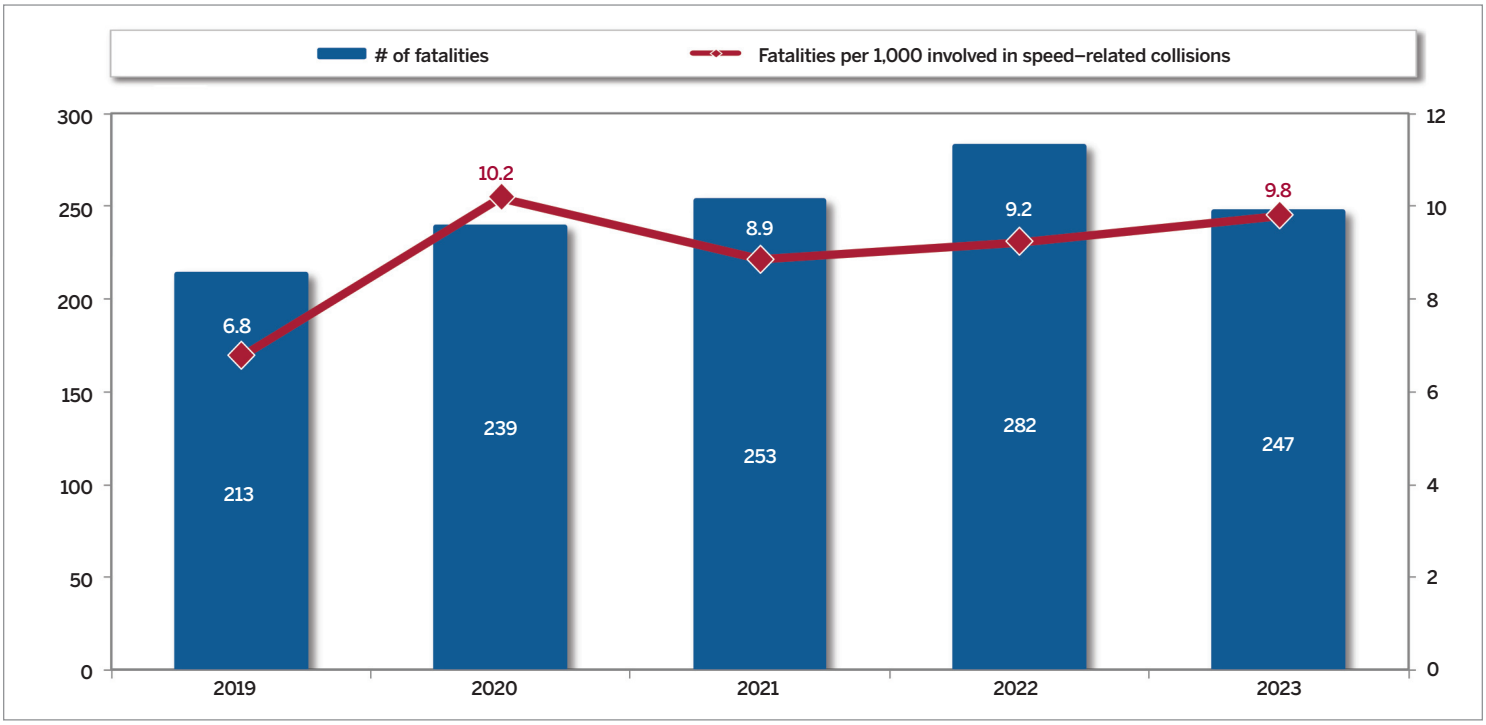
Table 6.1. Collisions in Indiana by speed involvement, speed-related criteria, and collision severity, 2019–23

	Count of collisions					Annual rate of change	
	2019	2020	2021	2022	2023	2022–23	2019–23
Total collisions	**217,605**	**175,952**	**208,823**	**207,330**	**198,247**	**-4.4%**	**-2.3%**
Fatal	747	812	834	914	871	-4.7%	3.9%
Non-fatal	31,782	27,163	31,667	33,753	34,213	1.4%	1.9%
Property damage	185,076	147,977	176,322	172,663	163,163	-5.5%	-3.1%
All speed-related collisions	**20,223**	**15,303**	**18,058**	**18,703**	**14,600**	**-21.9%**	**-7.8%**
Fatal	190	211	228	259	230	-11.2%	4.9%
Non-fatal	4,159	3,517	4,229	4,316	3,997	-7.4%	-1.0%
Property damage	15,874	11,575	13,601	14,128	10,373	-26.6%	-10.1%
Speed-related collisions as % of total	**9.3%**	**8.7%**	**8.6%**	**9.0%**	**7.4%**	**-18.4%**	**-5.6%**
Fatal	25.4%	26.0%	27.3%	28.3%	26.4%	-6.8%	0.9%
Non-fatal	13.1%	12.9%	13.4%	12.8%	11.7%	-8.6%	-2.8%
Property damage	8.6%	7.8%	7.7%	8.2%	6.4%	-22.3%	-7.2%
Speed too fast for weather conditions	12,082	6,953	8,548	10,505	6,169	-41.3%	-15.5%
Fatal	29	25	30	38	35	-7.9%	4.8%
Non-fatal	1,815	1,150	1,453	1,734	1,254	-27.7%	-8.8%
Property damage	10,238	5,778	7,065	8,733	4,880	-44.1%	-16.9%
Unsafe speed	7,814	7,967	8,923	8,266	7,793	-5.7%	-0.1%
Fatal	162	184	207	228	202	-11.4%	5.7%
Non-fatal	2,270	2,274	2,687	2,616	2,586	-1.1%	3.3%
Property damage	5,382	5,509	6,029	5,422	5,005	-7.7%	-1.8%
Speed-related citation	2,074	1,717	2,174	1,012	1,931	90.8%	-1.8%
Fatal	13	13	8	2	10	400.0%	-6.3%
Non-fatal	529	510	585	276	584	111.6%	2.5%
Property damage	1,532	1,194	1,581	734	1,337	82.2%	-3.3%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Speed-related criteria categories are not mutually exclusive. All speed-related collisions may not equal the total of individual categories.

Figure 6.2. Fatalities in speed-related collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.

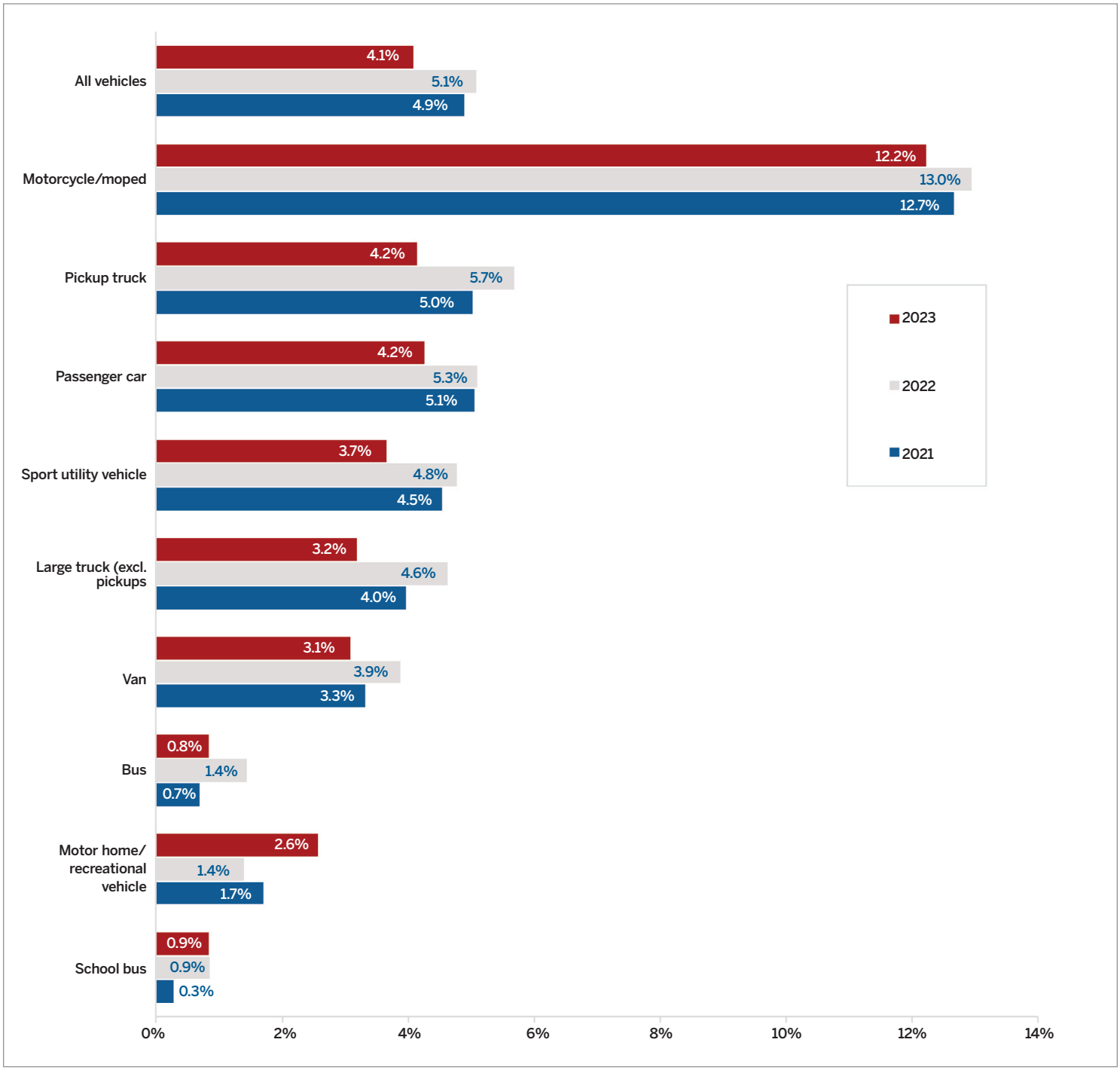
Table 6.2. Individuals in collisions in Indiana by speed involvement and injury status, 2019–23

	Count of individuals					% 2023 total	Annual rate of change	
	2019	2020	2021	2022	2023		2022–23	2019–23
All individuals	**351,119**	**276,570**	**343,839**	**364,375**	**358,059**	**100.0%**	**-1.7%**	**0.5%**
Speed-related	**31,448**	**23,471**	**28,587**	**30,546**	**25,222**	**100.0%**	**-17.4%**	**-5.4%**
Fatal	213	239	253	282	247	1.0%	-12.4%	3.8%
Non-fatal injury	6,215	5,267	6,269	6,098	5,826	23.1%	-4.5%	-1.6%
Not injured	25,020	17,965	22,065	24,166	19,149	75.9%	-20.8%	-6.5%
Not speed-related	**319,671**	**253,099**	**315,252**	**333,829**	**332,837**	**100.0%**	**-0.3%**	**1.0%**
Fatal	595	661	648	697	681	0.2%	-2.3%	3.4%
Non-fatal injury	40,624	34,693	39,901	40,547	41,726	12.5%	2.9%	0.7%
Not injured	278,452	217,745	274,703	292,585	290,430	87.3%	-0.7%	1.1%
% speed-related	**9.0%**	**8.5%**	**8.3%**	**8.4%**	**7.0%**	**-**	**-16.0%**	**-5.8%**
Fatal	26.4%	26.6%	28.1%	28.8%	26.6%	-	-7.6%	0.2%
Non-fatal injury	13.3%	13.2%	13.6%	13.1%	12.3%	-	-6.3%	-2.0%
Not injured	8.2%	7.6%	7.4%	7.6%	6.2%	-	-18.9%	-6.9%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Not injured status includes only individuals involved in collisions reported as null values in both the injury status and injury nature fields. 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.

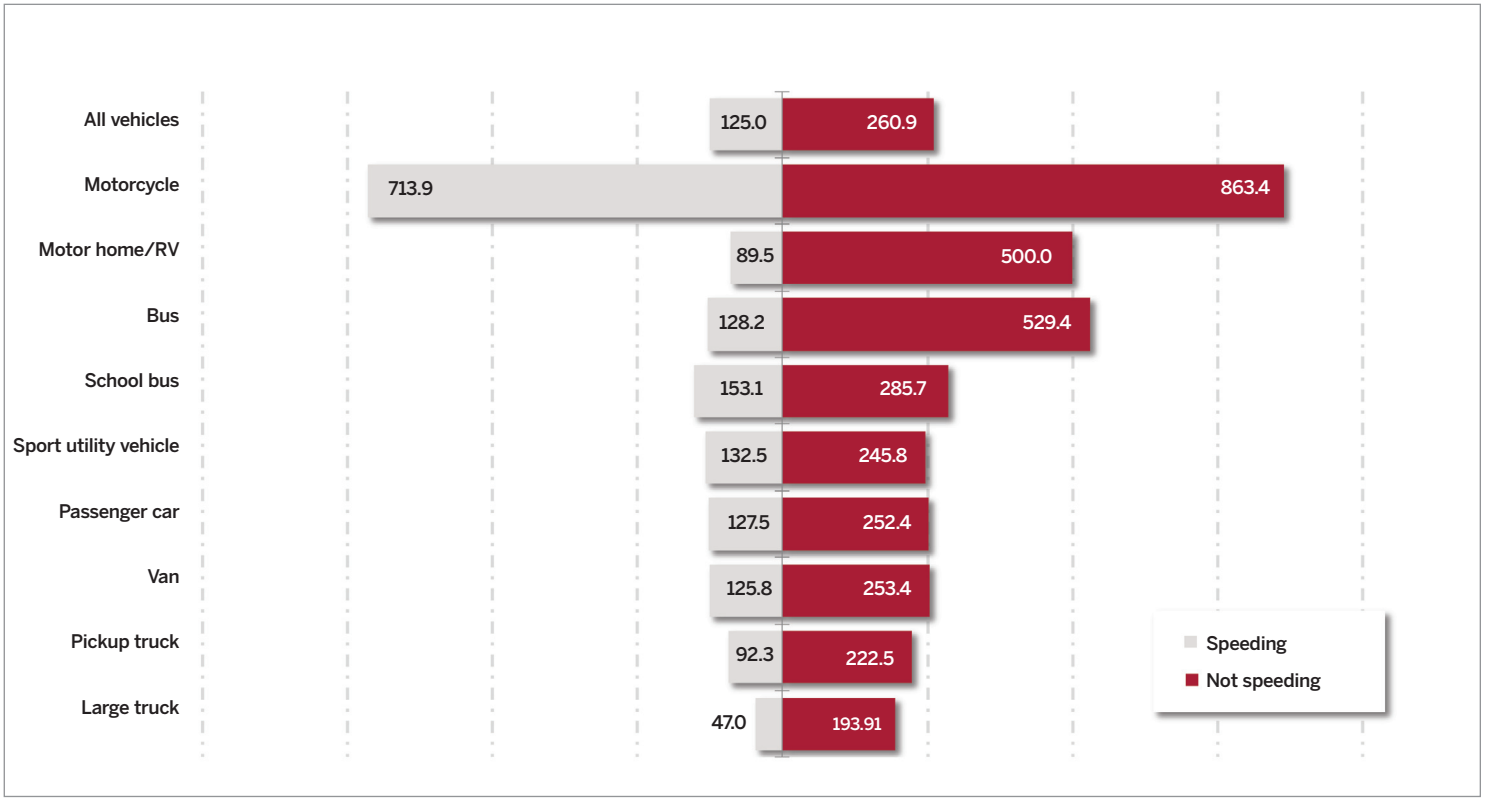
Figure 6.3. Percent of vehicle drivers speeding in collisions in Indiana by vehicle type, 2021–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Motorcycles include vehicles classified as motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bikes. .
3) For this analysis, buses are large motor vehicles with drivers that seat nine or more persons.School buses are considered separately..
4) Large trucks are trucks over 10,000 pound gross vehicle weight rating, including single unit trucks and truck tractors. Large pickup trucks are excluded from this category to avoid double counting.
5) Excludes animal-drawn vehicles (non-motor vehicle), farm vehicle, combination vehicle, pedestrian, bicycle, and unknown vehicle types.

Figure 6.4. Injury rates per 1,000 occupants in collisions in Indiana by speed involvement and vehicle type, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Motorcycles include vehicles classified as motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bikes.
3) For this analysis, buses are large motor vehicles with drivers that seat nine or more persons. School buses are considered separately.
4) Large trucks are trucks over 10,000 pound gross vehicle weight rating, including single unit trucks and truck tractors. Large pickup trucks are excluded to avoid double counting.
5) Excludes animal-drawn vehicles (non-motor vehicle), farm vehicless, combination vehicles, pedestrians, bicycles, and unknown vehicle types.
6) Occupants include drivers and injured occupants.
7) Injury includes injuries identified as fatal, incapacitating, and non-incapacitating. Only individuals with null values for both injury status and injury nature are treated as not injured. See the glossary for updated injury definitions and methodologies.

Table 6.3. Percent of drivers speeding in collisions in Indiana by age and gender, 2019–23

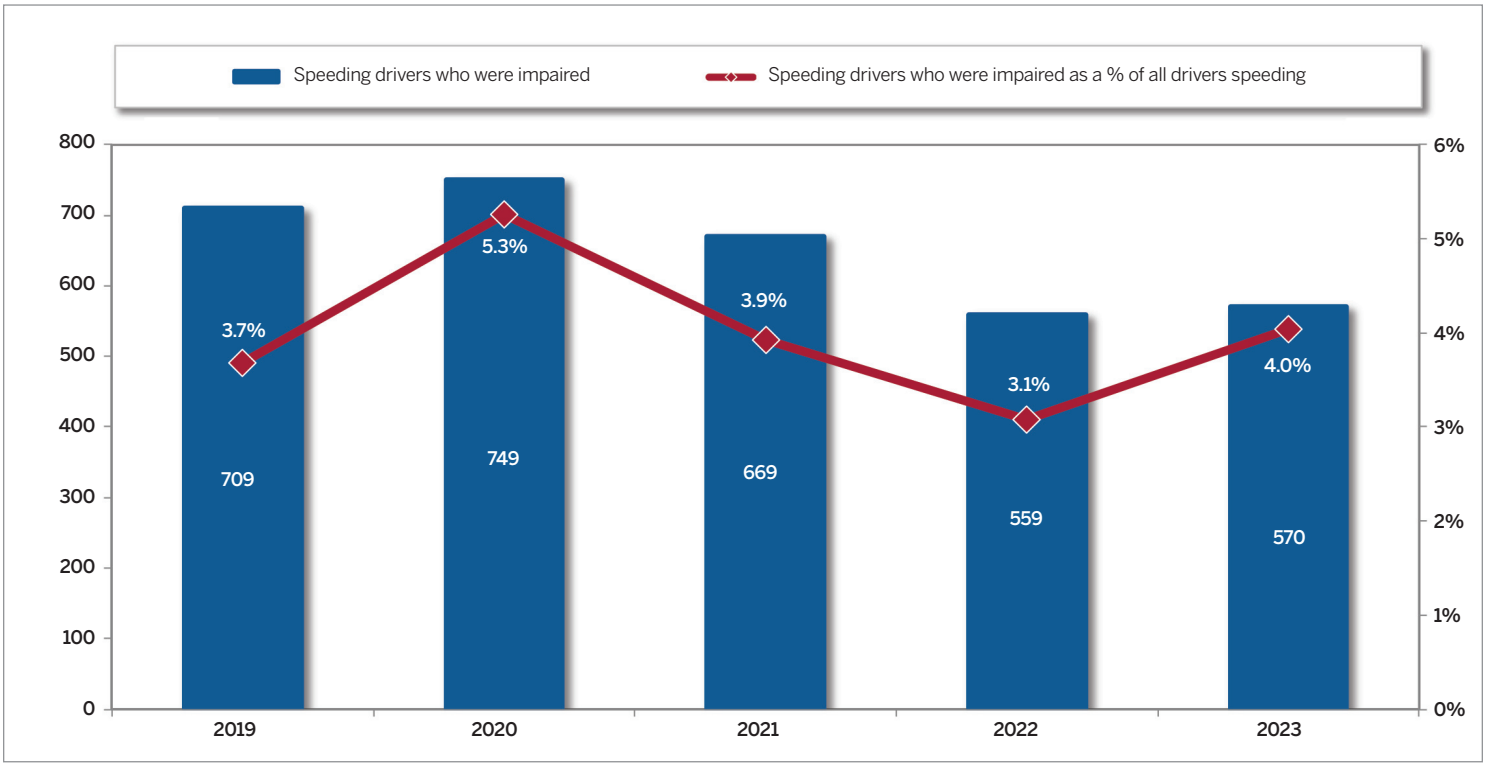
	2019		2020		2021		2022		2023	
Age group	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
15–20	7.9%	11.9%	7.0%	11.5%	6.4%	10.7%	6.6%	11.6%	5.2%	9.8%
21–24	7.1%	10.1%	6.1%	9.4%	6.2%	9.4%	6.0%	9.5%	4.6%	7.8%
25–34	5.2%	8.1%	5.0%	7.5%	4.9%	7.7%	4.6%	7.8%	3.9%	6.2%
35–44	4.1%	6.1%	3.6%	5.8%	3.0%	5.8%	3.7%	5.9%	3.0%	4.7%
45–54	2.9%	4.6%	2.8%	4.2%	2.5%	4.2%	2.9%	4.3%	2.1%	3.4%
55–64	2.5%	3.8%	2.1%	3.3%	2.0%	3.2%	2.4%	3.5%	1.6%	2.6%
65–74	2.0%	3.1%	1.5%	2.3%	1.4%	2.1%	1.7%	2.6%	1.3%	2.2%
75 +	1.5%	2.4%	1.5%	2.0%	1.4%	1.5%	1.5%	2.3%	1.2%	1.6%
All ages	4.5%	6.7%	4.1%	6.2%	3.9%	6.1%	4.0%	6.4%	3.1%	5.1%

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Data limited to drivers with valid genders and ages reported. Excludes drivers under 15 years old and over 109 years old.
3) Color scales apply within each year across ages and genders.

Figure 6.5. Speeding drivers in collisions in Indiana by alcohol impairment, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Drivers are identified as speeding if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Alcohol-impaired drivers are those with blood alcohol count (BAC) of 0.08 g/dL or higher. BAC results greater than 0.59 g/dL are excluded from the analysis.

Table 6.4. Drivers involved in collisions in Indiana by age, speed involvement, and alcohol impairment, 2023

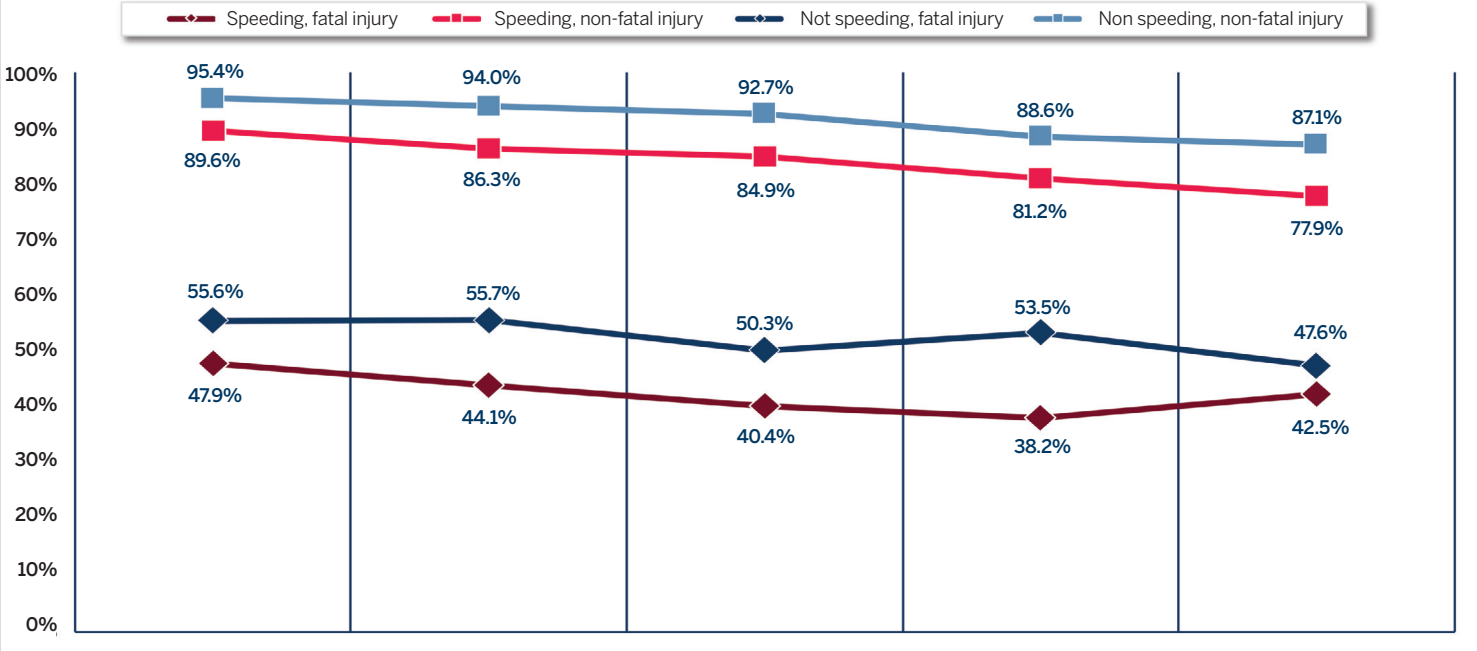
	Not speeding			Speeding		
Age group	Non–impaired	Alcohol-impaired	% alcohol-impaired	Non–impaired	Alcohol-impaired	% alcohol-impaired
15–20	35,141	143	0.4%	2,919	42	1.4%
21–24	27,880	436	1.5%	1,814	123	6.4%
25–34	61,796	856	1.4%	3,246	191	5.6%
35–44	52,490	535	1.0%	2,083	107	4.9%
45–54	42,526	398	0.9%	1,214	50	4.0%
55–64	37,676	257	0.7%	817	41	4.8%
65–74	24,297	99	0.4%	437	15	3.3%
75+	13,875	22	0.2%	195	1	0.5%
Total	**295,681**	**2,746**	**0.9%**	**12,725**	**570**	**4.3%**

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Drivers are identified as speeding if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Excludes drivers with unknown age, and ages under 15 years and over 109 years.
3) Alcohol-impaired drivers are those with blood alcohol count (BAC) of 0.08 g/dL or higher. BAC results greater than 0.59 g/dL are treated as invalid.
4) Color scale applies across percent impaired for both speeding and not speeding.

Figure 6.6. Restraint use rates among passenger vehicle occupants in collisions in Indiana by speed involvement and injury status, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Data limited to drivers and injured occupants in passenger vehicles (passenger cars, pickup trucks, sport utility vehicles, and vans).
3) Occupant restraints include seat belts and child restraints.
4) Restraint use is calculated solely for occupants with known restraint status. Unknown restraint use is excluded from these calculations.

Table 6.5. Total and speed-related collisions in Indiana by month, 2019–23

Month	Total collisions					Speed–related collisions				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Jan	19,459	15,787	15,691	17,922	16,096	4,418	1,539	2,627	3,135	2,175
Feb	16,982	16,853	15,931	16,728	13,799	3,199	2,586	3,144	2,918	984
Mar	15,967	11,815	14,561	15,300	16,020	1,208	829	904	1,082	1,679
Apr	16,389	8,013	16,039	15,487	15,475	1,089	698	1,230	870	911
May	18,331	12,251	17,424	18,009	17,427	1,067	992	1,210	1,064	1,000
Jun	17,687	14,580	17,729	16,680	16,492	1,098	993	1,250	808	1,026
Jul	17,655	15,454	17,539	16,050	15,749	974	1,083	1,166	1,029	1,018
Aug	18,092	15,430	17,821	17,307	16,980	1,007	1,047	1,146	1,109	1,106
Sep	17,526	15,211	17,718	16,949	16,249	938	1,013	1,129	1,063	956
Oct	20,157	17,696	20,487	18,955	18,778	1,317	1,310	1,572	1,176	1,334
Nov	20,542	16,899	19,730	19,180	18,723	1,946	1,269	1,158	1,560	1,074
Dec	18,818	15,963	18,153	18,763	16,459	1,962	1,944	1,522	2,889	1,337
Total	217,605	175,952	208,823	207,330	198,247	20,223	15,303	18,058	18,703	14,600
High	Nov	Oct	Oct	Nov	Oct	Jan	Feb	Feb	Jan	Jan
Low	Mar	Apr	Mar	Mar	Feb	Sep	Apr	Mar	Jun	Apr

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Color scales apply to all months and years within total collisions and within speed-related collisions for the entire five-year period (2019–23).

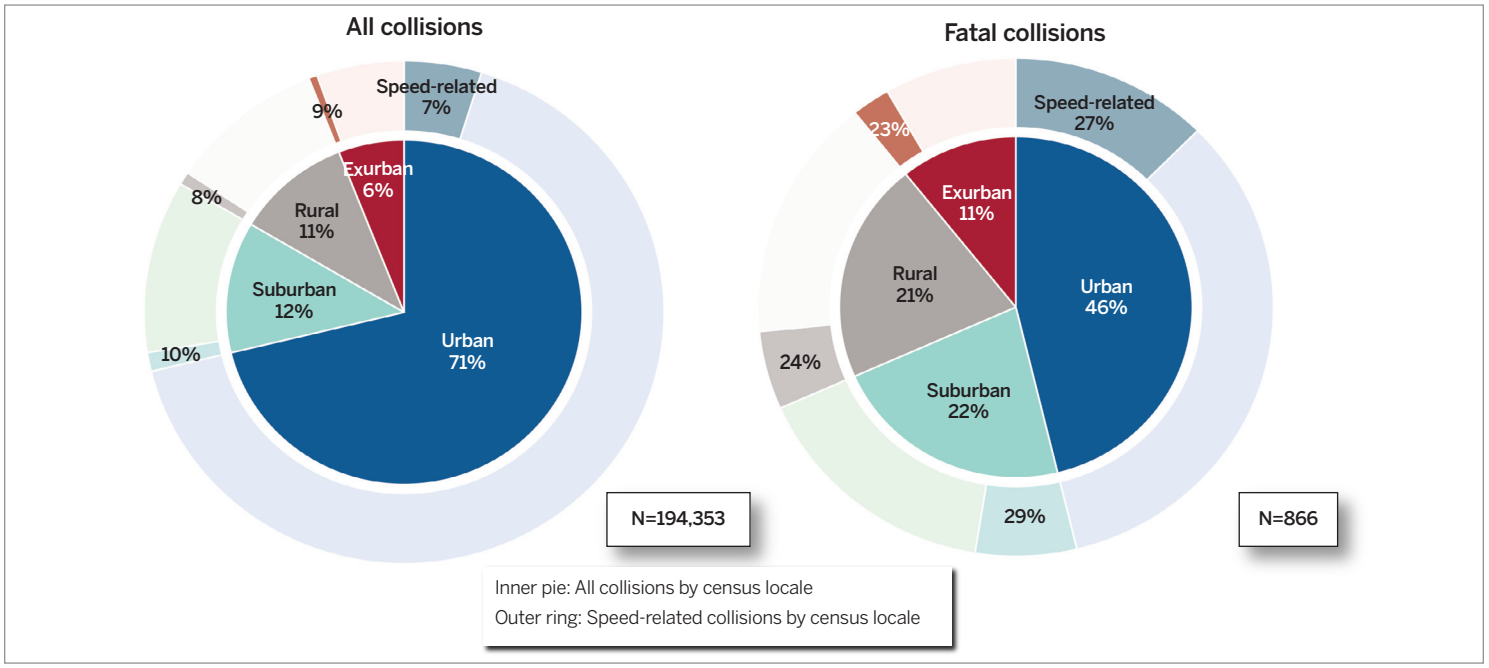
Table 6.6. Percent of speed-related collisions in Indiana by time of day and day of week, 2023

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	% speed–related by hour
12 a.m.	12.7%	12.3%	14.3%	16.0%	9.1%	10.8%	15.1%	13.0%
1 a.m.	17.2%	8.6%	11.7%	11.4%	9.4%	12.8%	15.7%	13.4%
2 a.m.	13.5%	15.3%	9.5%	13.9%	9.3%	14.7%	15.8%	13.4%
3 a.m.	14.4%	7.7%	9.7%	10.3%	11.1%	13.5%	13.8%	12.1%
4 a.m.	14.3%	7.5%	8.0%	8.7%	8.3%	11.8%	15.2%	10.7%
5 a.m.	14.3%	8.1%	9.2%	7.5%	8.3%	8.4%	13.6%	9.5%
6 a.m.	15.6%	6.7%	6.0%	7.4%	8.0%	8.5%	13.9%	8.5%
7 a.m.	17.1%	8.1%	6.2%	5.4%	7.6%	6.3%	14.3%	7.6%
8 a.m.	16.2%	7.8%	6.3%	8.2%	7.0%	6.3%	14.5%	8.3%
9 a.m.	14.4%	8.6%	5.9%	8.1%	6.8%	6.3%	8.6%	8.0%
10 a.m.	9.5%	6.7%	4.3%	6.9%	5.6%	6.0%	5.7%	6.2%
11 a.m.	10.9%	5.2%	4.2%	5.1%	4.6%	5.2%	6.4%	5.7%
12 p.m.	8.8%	4.4%	4.3%	5.3%	5.0%	4.8%	6.3%	5.5%
1 p.m.	6.9%	5.2%	5.2%	6.3%	4.9%	5.8%	5.7%	5.7%
2 p.m.	6.8%	5.3%	4.5%	5.9%	6.5%	5.9%	4.8%	5.7%
3 p.m.	7.1%	5.2%	4.1%	4.5%	6.0%	7.7%	7.1%	5.9%
4 p.m.	9.9%	5.6%	5.3%	6.1%	4.9%	7.2%	5.1%	6.1%
5 p.m.	10.2%	5.7%	5.2%	4.7%	5.8%	7.0%	6.7%	6.2%
6 p.m.	8.9%	5.4%	5.3%	4.6%	5.9%	7.3%	7.4%	6.3%
7 p.m.	8.9%	8.5%	7.2%	7.1%	6.1%	8.1%	7.1%	7.6%
8 p.m.	9.1%	8.5%	7.3%	8.3%	6.9%	9.5%	7.1%	8.1%
9 p.m.	8.1%	10.0%	6.1%	7.6%	9.0%	9.5%	8.6%	8.5%
10 p.m.	9.6%	11.4%	8.9%	9.9%	11.0%	12.4%	10.1%	10.6%
11 p.m.	14.8%	9.2%	9.8%	13.2%	12.1%	14.1%	13.7%	12.7%
% speed–related by day	**10.6%**	**6.8%**	**5.8%**	**6.6%**	**6.6%**	**7.6%**	**8.7%**	**7.4%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Excludes collisions for which no valid time was reported.
3) Color scale applies to all days and times.

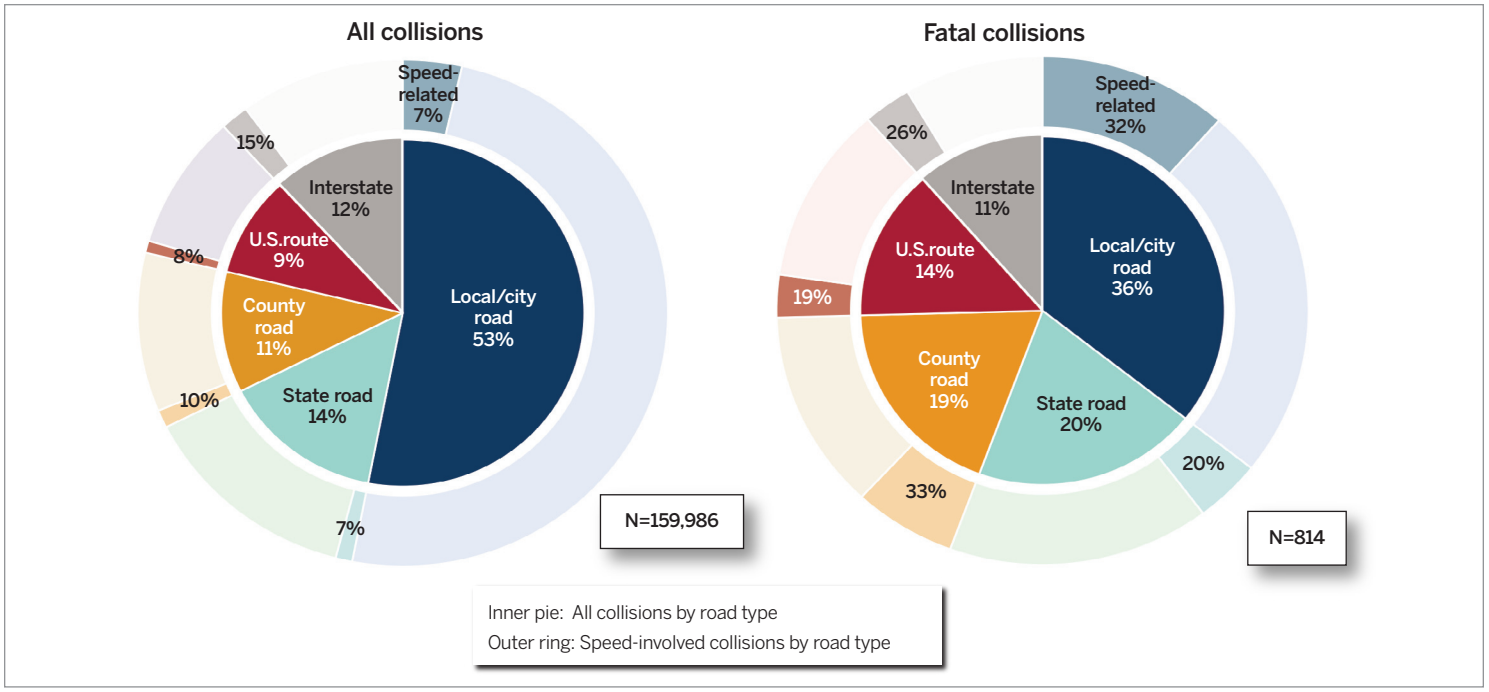
Figure 6.7. Total and fatal collisions in Indiana by speed involvement and census locale, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data downloaded from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. Suburban, exurban, and rural areas were created by the research team based on the 2020 urban boundaries. See the glossary for a complete explanation.
3) Excludes cases where census locale could not be determined.

Figure 6.8. Total and fatal collisions in Indiana by speed-involvement and road type, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Collisions are defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or a contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Excludes collisions on private drives and with no valid road class reported.

INDIANA TRAFFIC SAFETY FACTS

CHILDREN AND YOUNG DRIVERS

CHILDREN AND YOUNG DRIVERS, 2023

The Centers for Disease Control and Prevention listed motor vehicle traffic collisions among the top three causes of death for 1- to 14-year-olds and 15- to 20-year-olds nationally (2022).[6] In 2023, children (0- to 14-year-olds) sustained 2% of traffic fatalities and 6% of non-fatal traffic injuries in Indiana, while young drivers (15- to 20-year-olds) sustained 11% of traffic fatalities and 13% of non-fatal traffic injuries.

Children (ages 0–14)

In 2023, 20 children (ages 0–14) were killed in collisions, fewer annual child deaths than in 2019–22 (Figure 7.1). Children ages 4–7 had the most fatalities at six, representing 30% of all child traffic deaths in 2023 (Table 7.1). Child deaths in every age category decreased from 2022 to 2023 except for children under one year of age and ages 1–3. Deaths among children under one year of age increased by one in 2023, while deaths among children ages 1–3 were the same in both years. The rate of fatal injuries per 1,000 children involved in crashes decreased from 8.9 in 2022 to 6.3 in 2023. In the same year, the fatality rate was 1.6 per 100,000 children, a lower rate than in the four previous years (2019–22) (Figure 7.2).

Children in collisions experienced fewer incapacitating injuries in 2023 than in 2022—decreasing from 228 to 216. (Table 7.1). Children with non-incapacitating injuries, however, increased from 2,648 in 2022 to 2,799 in 2023.

Based on child population estimates, the 8- to 12-year-old and 13- to 14-year-old age groups were overrepresented slightly among child injured in collisions in 2023 (Table 7.2). Children in the 8- to 12-year-old cohort made up 34% of Indiana children in 2022[7] but were involved in 36% of traffic fatalities and injuries in 2023. Children in the 13- to 14-year-old cohort made up 15% of Indiana's children but accounted for 19% of traffic fatalities and injuries. This oldest child cohort also experienced the highest injury rate (301 per 100,000 children) among the five age groups. Children under one year of age had the lowest injury rate at 172 per 100,000 children.

Most children (85%) involved in collisions in 2023 were vehicle passengers (Figure 7.3). In the same year, 342, or 82%, of the children who sustained fatal or incapacitating injuries in collisions also were passengers (Table 7.3). Between 2022 and 2023, fatalities among child passengers declined from 20 to 13. Incapacitating injuries among child passengers also declined. Child pedestrian deaths decreased from seven in 2022 to six in 2023. No child pedalcyclist deaths were reported for 2021–23.

Incapacitating injuries among child pedalcyclists declined each year since 2021. Incapacitating injuries among child pedestrians, however, increased each year since 2021. Non-incapacitating injuries for child drivers, passengers, and pedestrians have increased during this time, while they have decreased for child pedalcyclists.

Restraint use

Rates of restraint use among children in collisions tend to decline as children get older.[8] In 2023, 13- to 14-year-olds in collisions used restraints at the lowest rate (81%) among all child age groups (Figure 7.4). This cohort consistently used restraints at the lowest rates between 2019 and 2023. Children less than one year old had the highest rates of restraint use, except in 2021 when 1- to 3-year-olds had the highest rate, and in 2022 when the rates for the two youngest groups were the same.

Figure 7.5 shows that drivers' restraint use is a good predictor of child restraint use. Between 2019 and 2023, 99% or more of children were properly restrained when the drivers in the same vehicles were restrained. When drivers were reported as unrestrained, only 5%–15% of child passengers were restrained.

Alcohol-impairment

In 2023, 94 children were involved in traffic collisions with one or more alcohol-impaired drivers (Figure 7.6). The number of children involved in alcohol-impaired collisions increased from 59 in 2022 to 94 in 2023. The rate of child fatal or incapacitating injuries in alcohol-impaired collisions per 1,000 children involved also increased from 3.9 in 2022 to 5.7 in 2023.

Census locale

In 2023, the fatal injury rate per 1,000 children involved was lower in urban (3.3) and rural (8.4) areas than in suburban (33.6) and exurban (28.7) areas (Figure 7.7). Map 8.8 in the Counties chapter shows child injury rates by county.

Young drivers (ages 15–20)

In 2023, there were 35,424 collisions involving one or more young drivers (ages 15–20). Like all crashes, collisions involving young drivers declined from 2022 to 2023 (Figure 7.8). Fatal collisions involving young drivers, however, increased from 105 in 2022 to 134 in 2023 (Figure 7.9). There were 38,245 young drivers involved in collisions in 2023, a decrease from 2022 (Table 7.4).

Total fatalities in crashes with young drivers increased from 115 in 2022 to 148 in 2023 (Table 7.4). The number of young driver fatalities increased from 48 in 2022 to 64 in 2023. Fatalities among passengers of young drivers also increased from 23 in 2022 to 36 in 2023. From 2019–23, more than two-thirds of fatalities in collisions involving young drivers were young drivers and their passengers. Fatalities among drivers and passengers in other vehicles increased from 35 in 2022 to 38 in 2023. Fatalities to non-motorists in young driver collisions increased by one from 2022 to 2023.

Young drivers with non-fatal injuries made up 11% of all drivers with non-fatal injuries in 2023 (Table 7.4). Non-fatal injuries for young drivers decreased from 2022 to 2023, while non-fatal injuries to passengers of young drivers and drivers and passengers in other vehicles increased. Non-fatal injuries to non-motorists also increased.

In 2023, young drivers comprised about 7% of all licensed drivers. Young drivers were overrepresented in traffic collisions relative to their share of all licensed drivers with a rate of 1,123 per 10,000 licensed drivers (Figure 7.10). This rate was the highest among the eight population categories.

During the five-year period starting in 2019, young male drivers were killed in collisions at higher rates than young female drivers (Table 7.5). In 2023, the rate of fatal injuries for young male drivers was 2.2 per 10,000 licensed drivers, while the rate for young female drivers was 0.9 per 10,000.

[6]Centers for Disease Control and Prevention, 2023.
[7]The most recent year available for age-specific populations estimates was 2022.
[8]Kirley, B. B., Robison, K. L., Goodwin, A. H., Harmon, K. J. O'Brien, N. P., West, A., Harrell, S. S., Thomas, L., & Brookshire, K., 2023.

Restraint use

From 2019 to 2023, seat belt use among young drivers in passenger vehicle collisions declined steadily (Table 7.6). In 2023, 49% of young drivers who died were properly restrained compared to 86% who sustained non-fatal injuries. During the five-year period, seat belt use among male and female young drivers declined consistently (Table 7.7). However, young female drivers were slightly more likely to be wearing seat belts than young male drivers in all years.

Speed

From 2019 to 2023, a higher proportion of young drivers in collisions were speeding than drivers in older age categories (Table 7.8). Young male drivers were more likely to be identified as speeding in collisions than young female drivers. In 2023, 10% of young male drivers were speeding at the time of the collision while only 5% of young female drivers were speeding.

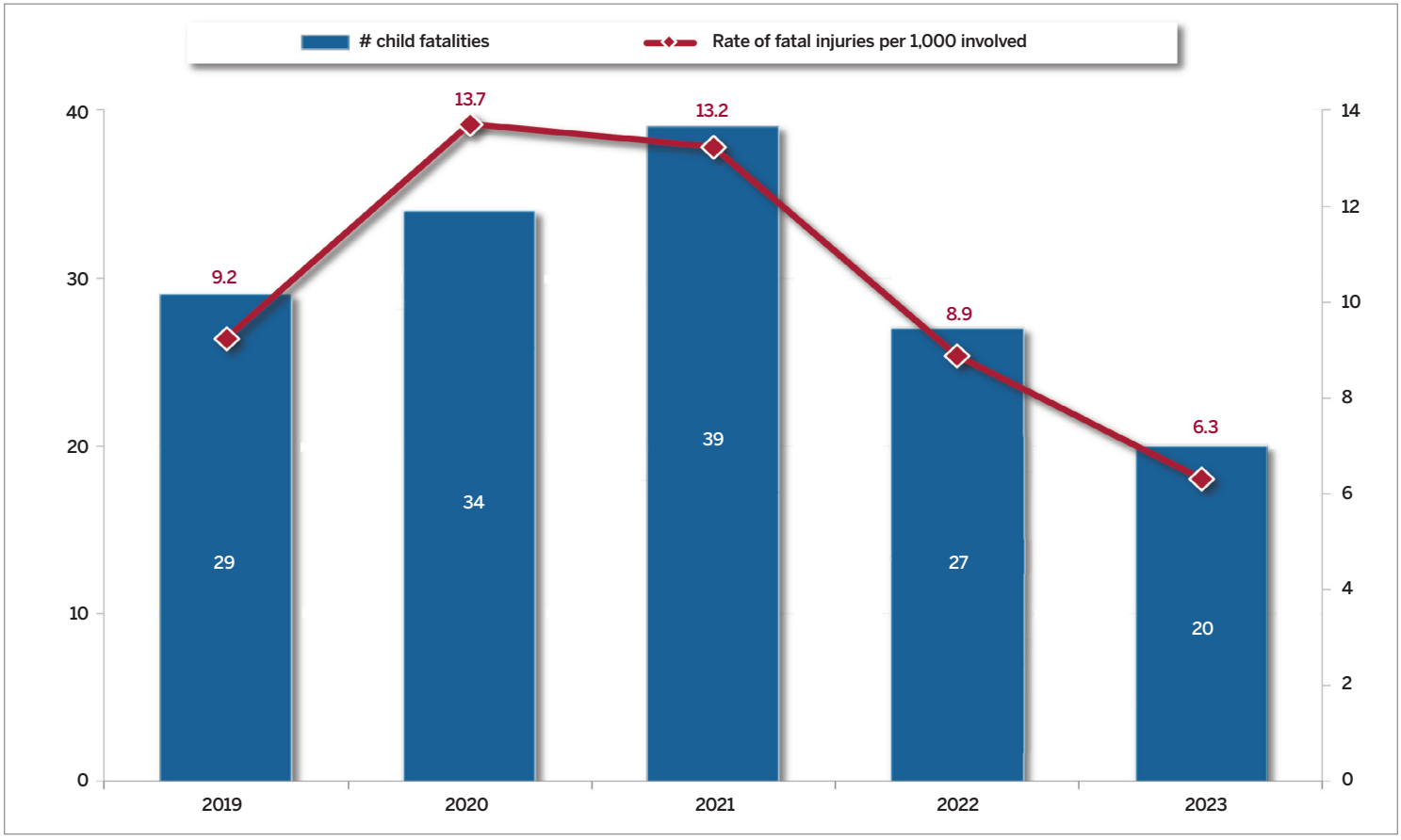
Alcohol-impairment

In 2023, the rate of alcohol impairment for young drivers per 10,000 licensed drivers was 5.2 (Figure 7.11). The rate for young drivers was lower than for four age groups—ages 21–24, 25–34, 35–44, and 45–54.

Census locale

In 2023, the fatal injury rates per 1,000 young drivers involved in collisions were highest in rural (5.8) and exurban areas (4.9). (Figure 7.12). The rates in urban (0.9) and suburban areas (2.2) were substantially lower. Table 8.6 and Map 8.7 in the Counties chapter show selected young driver data by county.

Figure 7.1. Child fatalities and fatal injury rates per 1,000 children involved in collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.

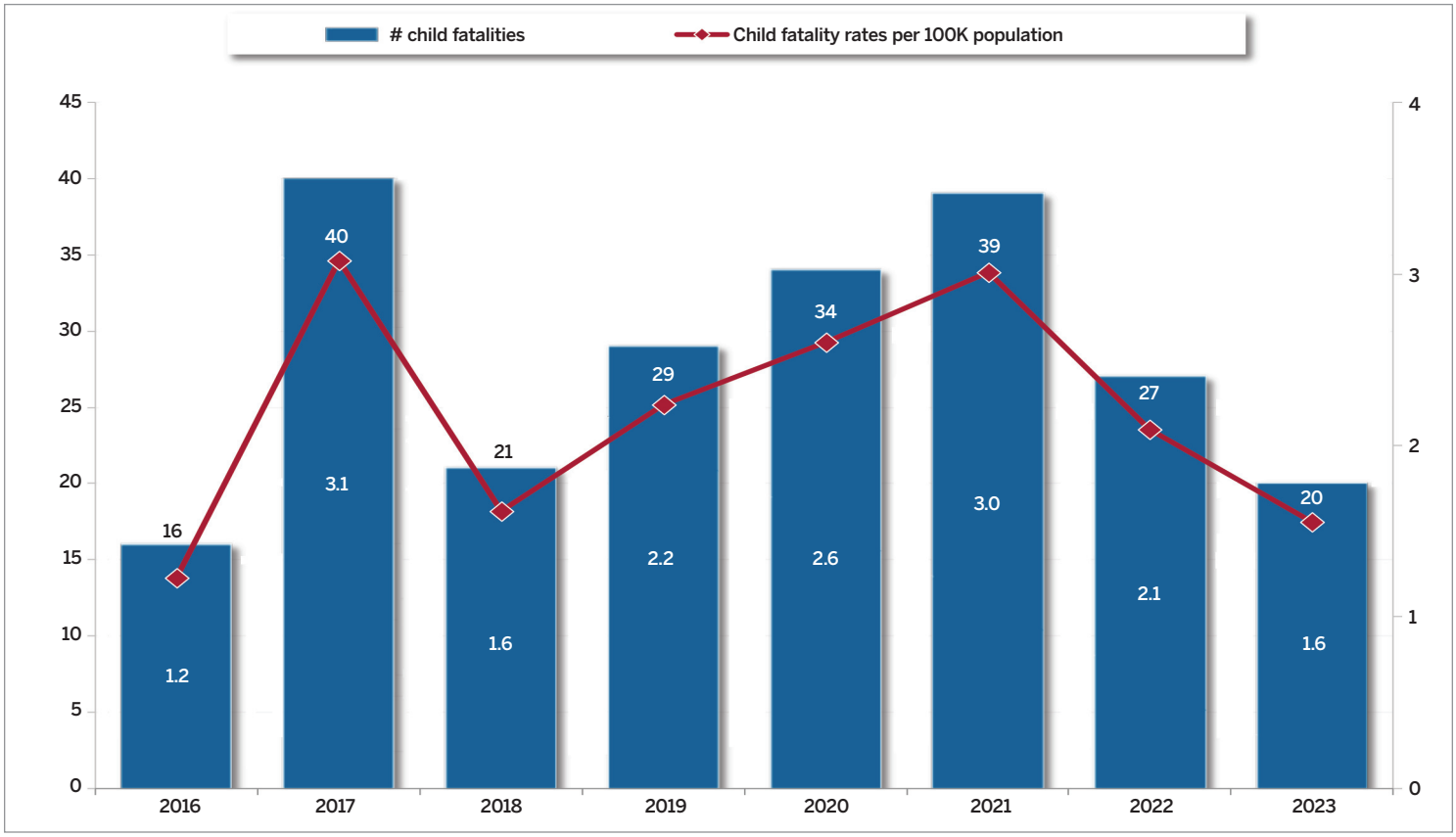
Table 7.1. Children in collisions in Indiana by injury status and age, 2019–23

Injury status by age group	2019		2020		2021		2022		2023		Annual rate of change	
	Count	% total	Count	% total	Count	% total	Count	% total	Count	% total	2022–23	2019–23
All children involved	**3,138**	**100%**	**2,478**	**100%**	**2,944**	**100%**	**3,039**	**100%**	**3,162**	**100%**	**4.0%**	**0.2%**
<1	139	4%	125	5%	144	5%	166	5%	140	4%	-15.7%	0.2%
1–3	453	14%	324	13%	395	13%	428	14%	443	14%	3.5%	-0.6%
4–7	768	24%	630	25%	714	24%	736	24%	805	25%	9.4%	1.2%
8–12	1,172	37%	865	35%	1,055	36%	1,056	35%	1,132	36%	7.2%	-0.9%
13–14	606	19%	534	22%	636	22%	653	21%	642	20%	-1.7%	1.5%
Fatal	**29**	**100%**	**34**	**100%**	**39**	**100%**	**27**	**100%**	**20**	**100%**	**-25.9%**	**-8.9%**
<1	1	15.0%	3	5.7%	8	6.7%	3	11.1%	4	20.0%	33.3%	N/A
1–3	10	5.0%	6	17.1%	8	46.7%	5	18.5%	5	25.0%	0.0%	-15.9%
4–7	6	20.0%	12	20.0%	7	6.7%	9	33.3%	6	30.0%	-33.3%	0.0%
8–12	9	35.0%	4	42.9%	11	26.7%	5	18.5%	3	15.0%	-40.0%	-24.0%
13–14	3	25.0%	9	14.3%	5	13.3%	5	18.5%	2	10.0%	-60.0%	-9.6%
Incapacitating	**159**	**100%**	**156**	**100%**	**230**	**100%**	**228**	**100%**	**216**	**100%**	**-5.3%**	**8.0%**
<1	4	4.8%	5	5.0%	5	4.3%	14	6.1%	7	3.2%	-50.0%	15.0%
1–3	23	13.7%	21	14.7%	30	14.4%	24	10.5%	21	9.7%	-12.5%	-2.2%
4–7	47	25.2%	43	24.7%	54	24.3%	50	21.9%	49	22.7%	-2.0%	1.0%
8–12	52	35.1%	47	37.0%	90	39.0%	82	36.0%	87	40.3%	6.1%	13.7%
13–14	33	21.1%	40	18.6%	51	18.0%	58	25.4%	52	24.1%	-10.3%	12.0%
Non-incapacitating	**2,734**	**100%**	**2,085**	**100%**	**2,466**	**100%**	**2,648**	**100%**	**2,799**	**100%**	**5.7%**	**0.6%**
<1	129	4.7%	112	5.4%	120	4.9%	144	5.4%	126	4.5%	-12.5%	-0.6%
1–3	407	14.9%	287	13.8%	349	14.2%	392	14.8%	416	14.9%	6.1%	0.5%
4–7	692	25.3%	540	25.9%	633	25.7%	669	25.3%	750	26.8%	12.1%	2.0%
8–12	1,037	37.9%	752	36.1%	892	36.2%	944	35.6%	1009	36.0%	6.9%	-0.7%
13–14	469	17.2%	394	18.9%	472	19.1%	499	18.8%	498	17.8%	-0.2%	1.5%
Not injured	**216**	**100%**	**203**	**100%**	**209**	**100%**	**136**	**100%**	**127**	**100%**	**-6.6%**	**-12.4%**
<1	5	1.4%	5	1.6%	11	5.6%	5	3.7%	3	2.4%	-40.0%	-12.0%
1–3	13	1.9%	10	2.9%	8	8.7%	7	5.1%	1	0.8%	-85.7%	-47.3%
4–7	23	5.0%	35	10.1%	20	11.3%	8	5.9%	0	0.0%	-100.0%	-100.0%
8–12	74	16.0%	62	30.5%	62	33.8%	25	18.4%	33	26.0%	32.0%	-18.3%
13–14	101	75.8%	91	54.9%	108	40.7%	91	66.9%	90	70.9%	-1.1%	-2.8%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.
2) Non-incapacitating injuries include those injuries not defined as fatal or incapacitating. See the glossary for updated injury definitions and methodologies.
3) Not injured includes individuals involved in collisions with null values in the injury status and injury nature fields. While reporting officers are instructed to enter all drivers in ARIES, passengers are to be entered in the crash report only if an injury occurs. Therefore, readers should interpret counts of those listed as not injured with caution.

Figure 7.2. Child fatalities and fatal injury rates per 100,000 child population in collisions in Indiana, 2016–23



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024, and the U.S. Census Bureau, 2022 age-specific population estimates, downloaded February 28, 2024.

Notes:
1) Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.
2) The most recent population estimates available by age are for 2022.

Table 7.2. Child population estimates and traffic injuries in Indiana, 2023

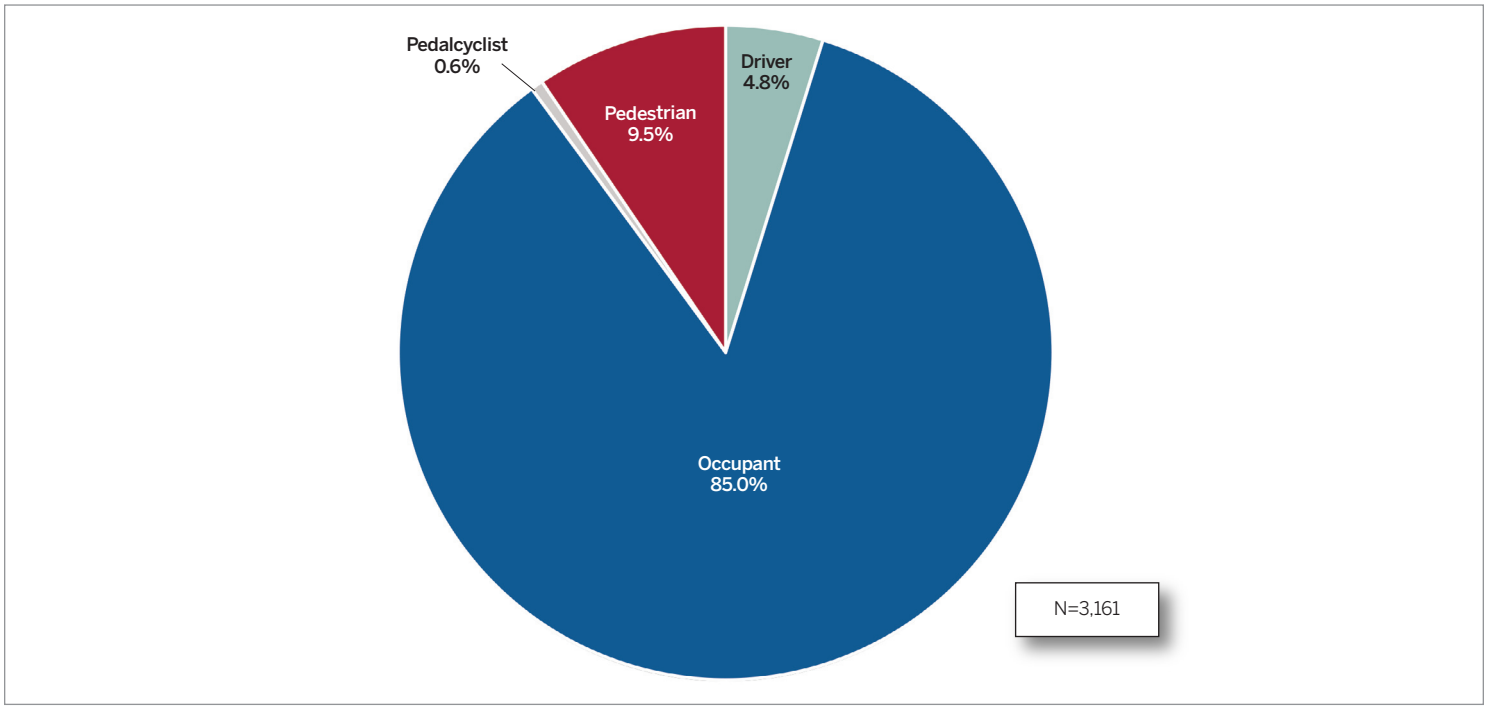
Age group	Estimated IN child population (2022)	Share of IN child population (2022)	2023 total child injuries	Share of IN child injuries	2023 injury rate per 100K child population
<1	79,786	6.2%	137	4.5%	171.7
1–3	241,184	18.7%	442	14.5%	183.3
4–7	343,042	26.6%	805	26.4%	234.7
8–12	438,209	34.0%	1,099	36.1%	250.8
13–14	186,581	14.5%	562	18.5%	301.2
Total	**1,288,802**	**100.0%**	**3,045**	**100.0%**	**236.3**

Low < > High

Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024, and U.S. Census Bureau, 2022 age-specific population estimates, downloaded February 28, 2024.

Notes:
1) Includes injuries for individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.
2) Total injuries includes those reported as fatal, incapacitating, and non-incapacitating. Excludes individuals classified as not injured. See the glossary for updated injury definitions and methodologies.
3) The most recent population estimates available by age are for 2022.
4) Color scale applies to data in each column.

Figure 7.3. Children in collisions in Indiana by person type, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers ages 8–14. See the glossary for a full explanation.
2) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operators are excluded due to small numbers.

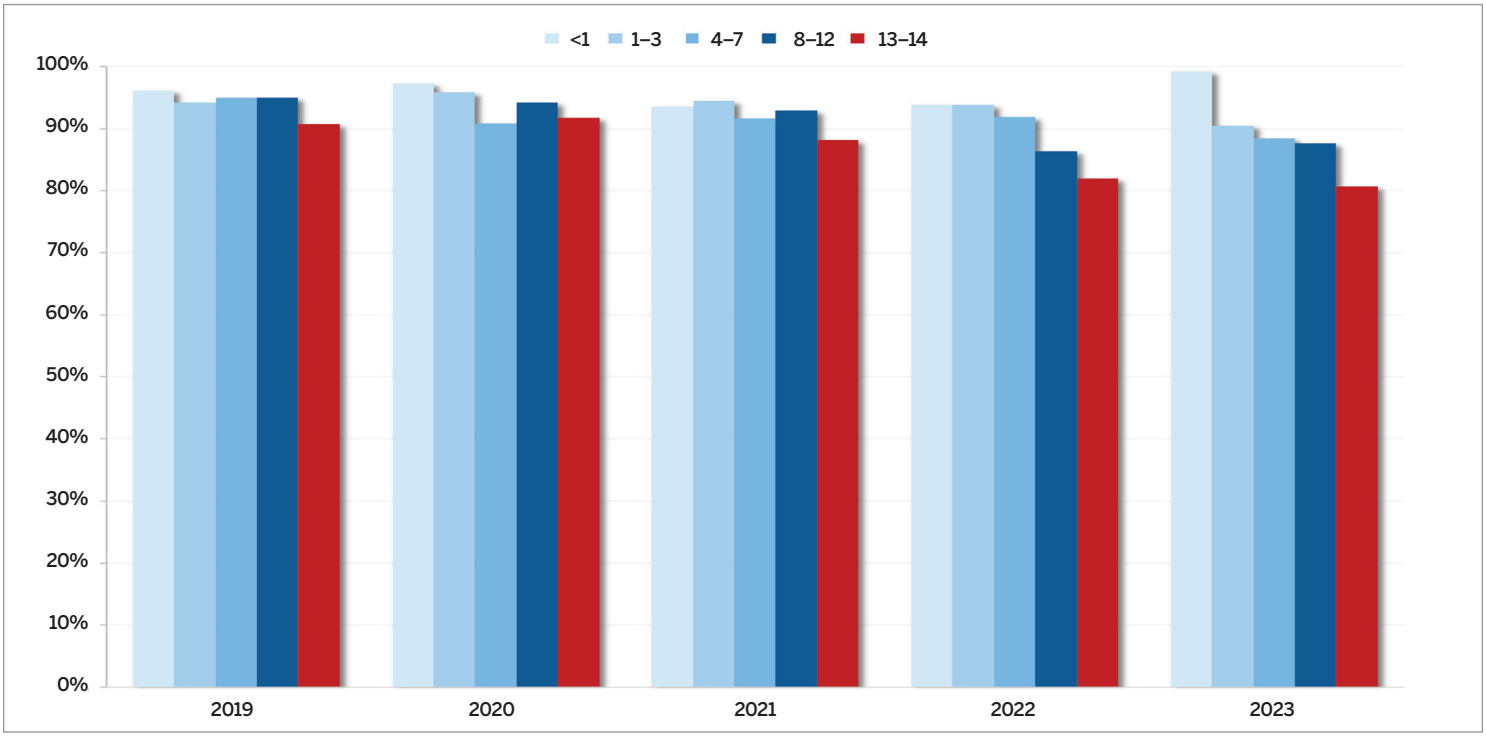
Table 7.3. Children killed or injured in collisions in Indiana by injury status and person type, 2019–23

Injury status by person type	2019		2020		2021		2022		2023		Annual rate of change	
	Count	% total	Count	% total	Count	% total	Count	% total	Count	% total	2022–23	2019–23
Fatal	**29**	**100%**	**34**	**100%**	**39**	**100%**	**27**	**100%**	**20**	**100%**	**-25.9%**	**-8.9%**
Driver	1	3.4%	0	0.0%	2	5.1%	0	0.0%	1	5.0%	N/A	0.0%
Occupant	19	65.5%	26	76.5%	26	66.7%	20	74.1%	13	65.0%	-35.0%	-9.1%
Pedalcyclist	1	3.4%	1	2.9%	0	0.0%	0	0.0%	0	0.0%	N/A	-100.0%
Pedestrian	8	27.6%	7	20.6%	11	28.2%	7	25.9%	6	30.0%	-14.3%	-6.9%
Incapacitating	**617**	**100%**	**661**	**100%**	**553**	**100%**	**565**	**100%**	**399**	**100%**	**-29.4%**	**-10.3%**
Driver	3	0.5%	8	1.2%	5	0.9%	14	2.5%	15	3.8%	7.1%	49.5%
Occupant	548	88.8%	586	88.7%	480	86.8%	487	86.2%	330	82.7%	-32.2%	-11.9%
Pedalcyclist	13	2.1%	19	2.9%	21	3.8%	13	2.3%	2	0.5%	-84.6%	-37.4%
Pedestrian	53	8.6%	48	7.3%	47	8.5%	51	9.0%	52	13.0%	2.0%	-0.5%
Non-incapacitating	**2,746**	**100%**	**2,085**	**100%**	**2,466**	**100%**	**2,648**	**100%**	**2,799**	**100%**	**5.7%**	**0.5%**
Driver	1,188	43.3%	32	1.5%	27	1.1%	30	1.1%	32	1.1%	6.7%	-59.5%
Occupant	1,332	48.5%	1,875	89.9%	2,241	90.9%	2,362	89.2%	2,515	89.9%	6.5%	17.2%
Pedalcyclist	126	4.6%	86	4.1%	60	2.4%	16	0.6%	10	0.4%	-37.5%	-46.9%
Pedestrian	100	3.6%	92	4.4%	138	5.6%	240	9.1%	242	8.6%	0.8%	24.7%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers ages 8–14. See the glossary for a full explanation.
2) Pedalcyclists and pedestrians are individuals identified as person type pedalcyclist or pedestrian. Animal-drawn vehicle operator are excluded due to small numbers.
3) Non-incapacitating injuries include those injuries not defined as fatal or incapacitating. See the glossary for updated injury definitions and methodologies.

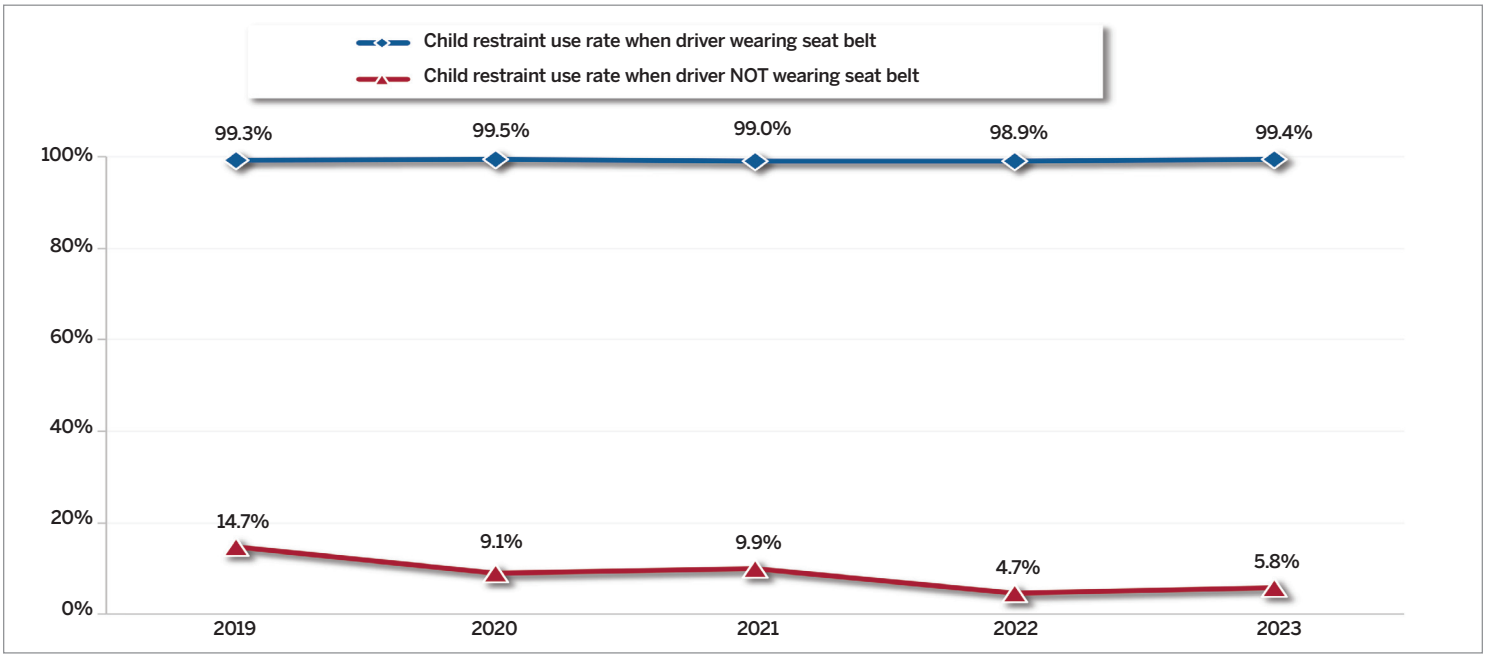
Figure 7.4. Child restraint use in passenger-vehicle collisions in Indiana by age group, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals identified as injured occupants (ages 0–14) or drivers (ages 8–14). See the glossary for a full explanation.
2) Restraint use rates are limited to drivers and injured occupants in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans.
3) Restraint use is calculated using only vehicle occupants with known restraint status. Occupants with unknown restraint use are excluded from the analysis.
4) Occupant restraints include seat belts and child restraints.

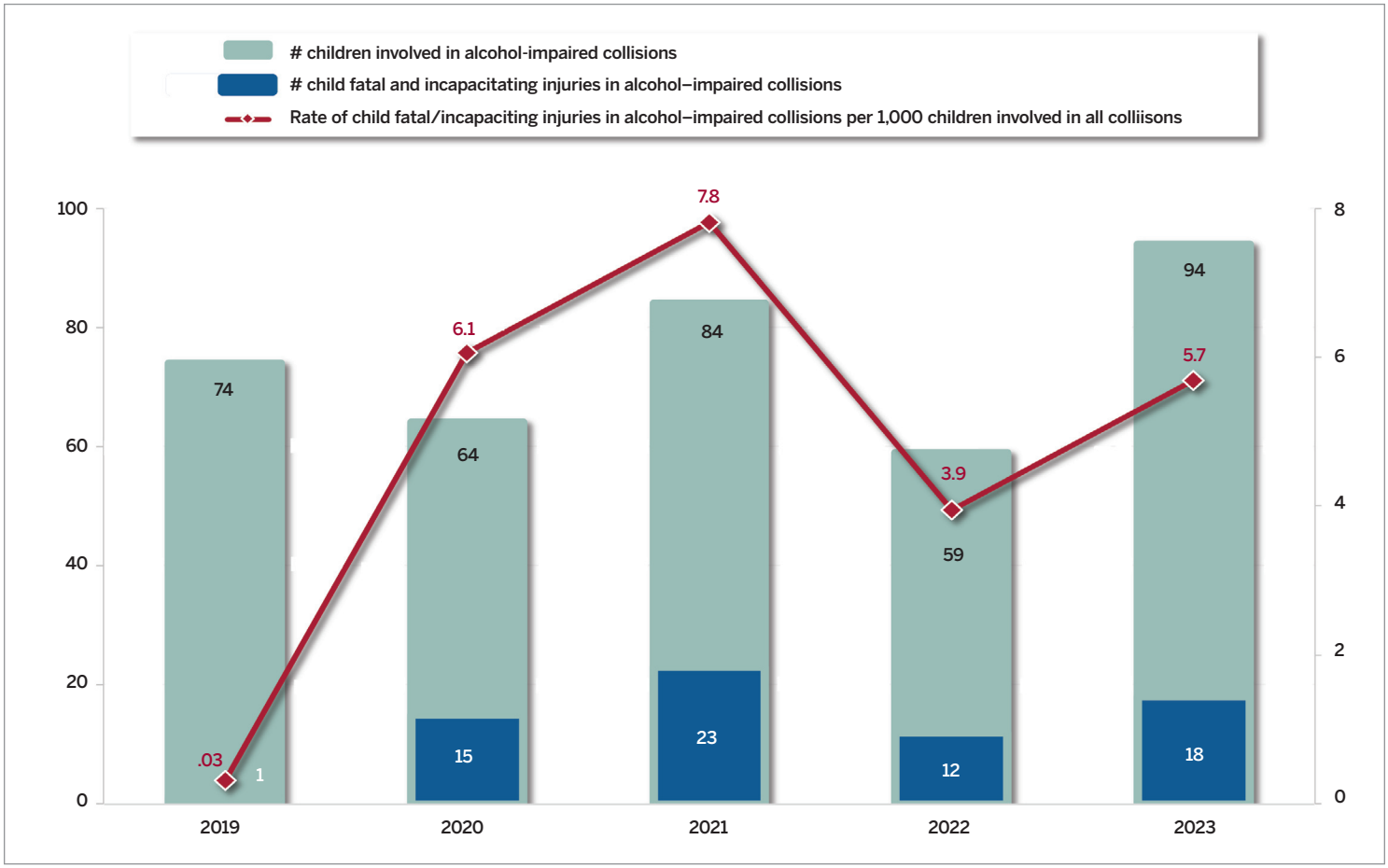
Figure 7.5. Child restraint use in passenger-vehicle collisions in Indiana by driver seat belt use, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals identified as injured occupants (ages 0–14) and drivers (ages 8–14). See the glossary for a full explanation.
2) Restraint use rates are limited to drivers and injured occupants in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans.
3) Restraint use is calculated using only vehicle occupants with known restraint status. Occupants with unknown restraint use are excluded from the analysis.
4) Child occupant restraints include seat belts and child restraints. Driver restraints are seat belts.

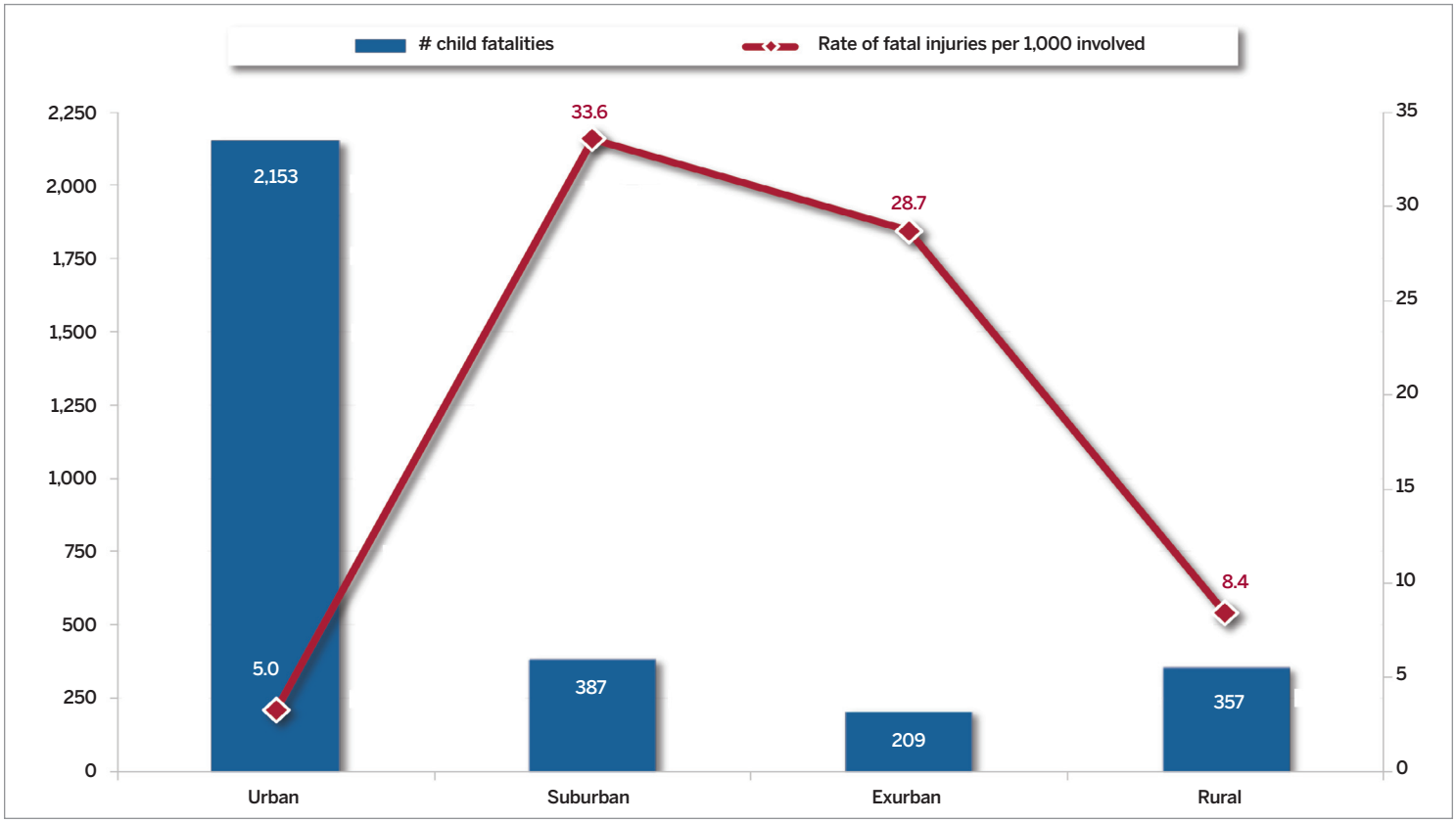
Figure 7.6. Children in alcohol-impaired collisions in Indiana, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.
2) Alcohol-impaired collisions are defined as those that involved at least one driver or non-motorist with a BAC of 0.08 g/dL or greater. BAC results greater than 0.59 g/dL are treated as invalid.
3) Incapacitating injuries include non-fatal injuries coded with the following injury nature codes—severed, internal, severe burn, severe bleeding, fracture/dislocation, crush injury, unconsciousness, and paralysis. See the glossary for updated injury definitions and methodologies.

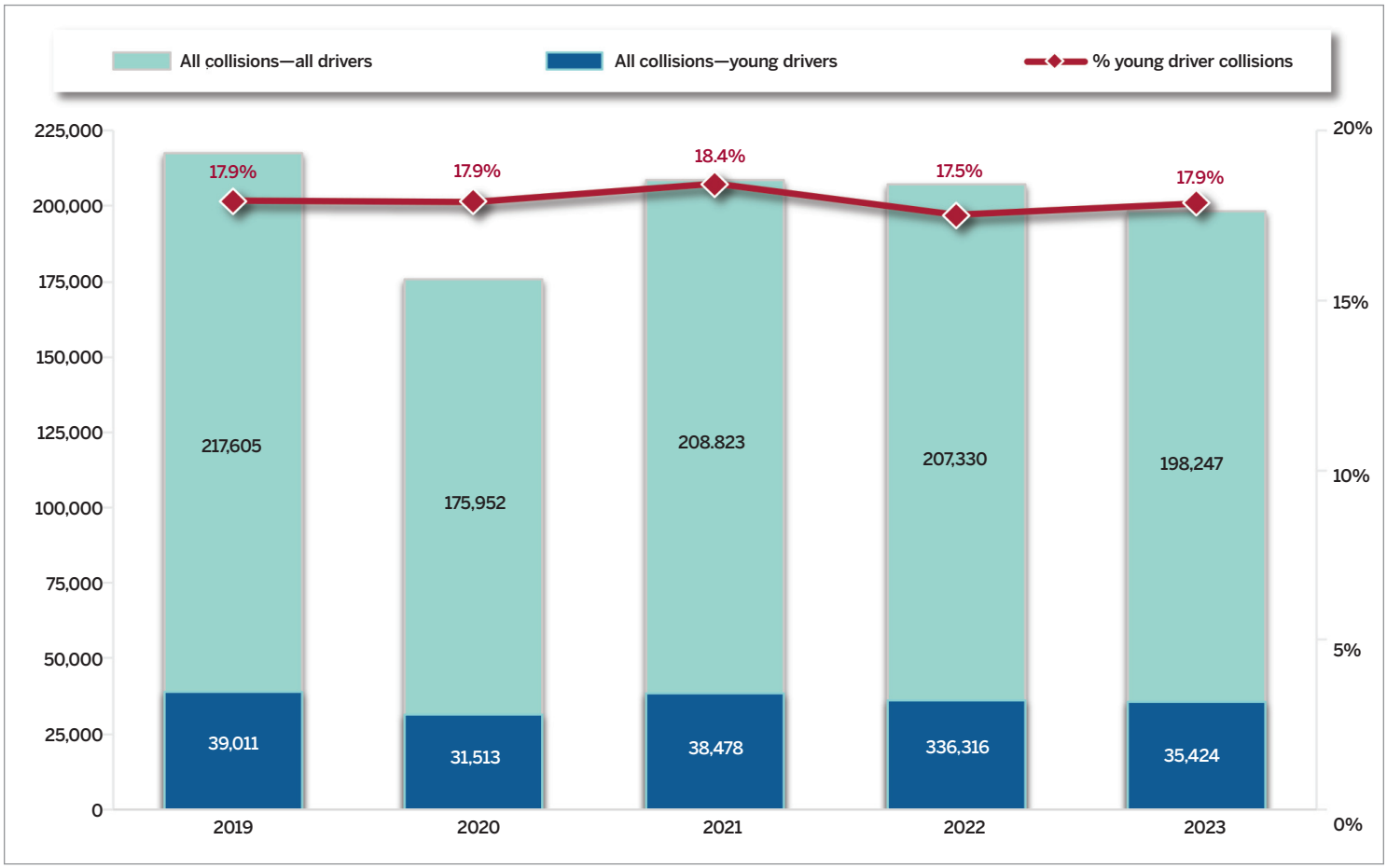
Figure 7.7. Children in collisions in Indiana by census locale, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12,2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Includes all individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14. See the glossary for a full explanation.
2) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. The research team created the suburban, exurban, and rural areas based on the 2020 urban boundaries. See the glossary for a complete explanation.
3) Excludes children in collisions for which census locale could not be determined.

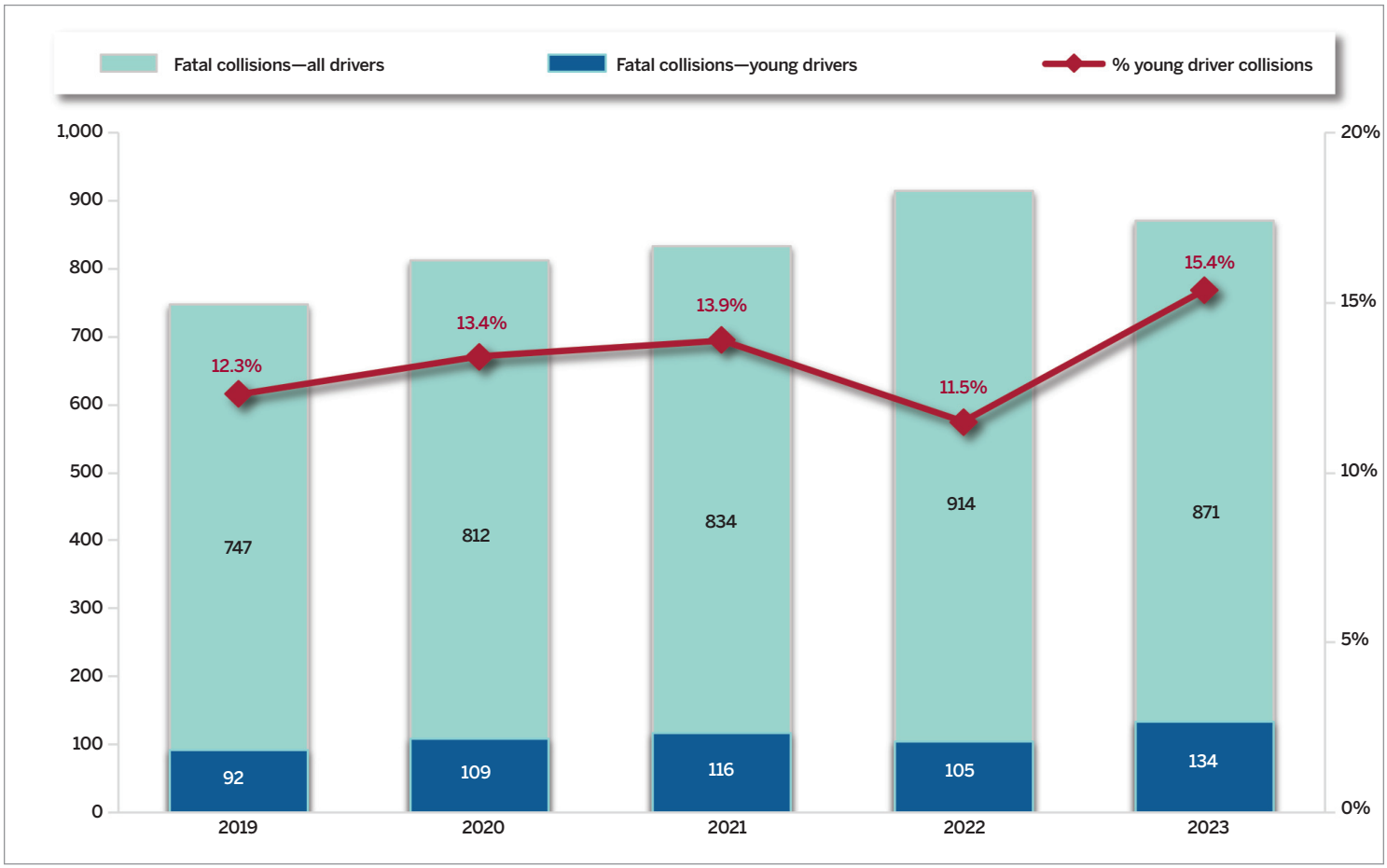
Figure 7.8. Collisions in Indiana by young driver involvement, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Young drivers are defined as drivers ages 15–20.

Figure 7.9. Fatal collisions in Indiana by young driver involvement, 2019–23



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Young drivers are defined as drivers ages 15–20.

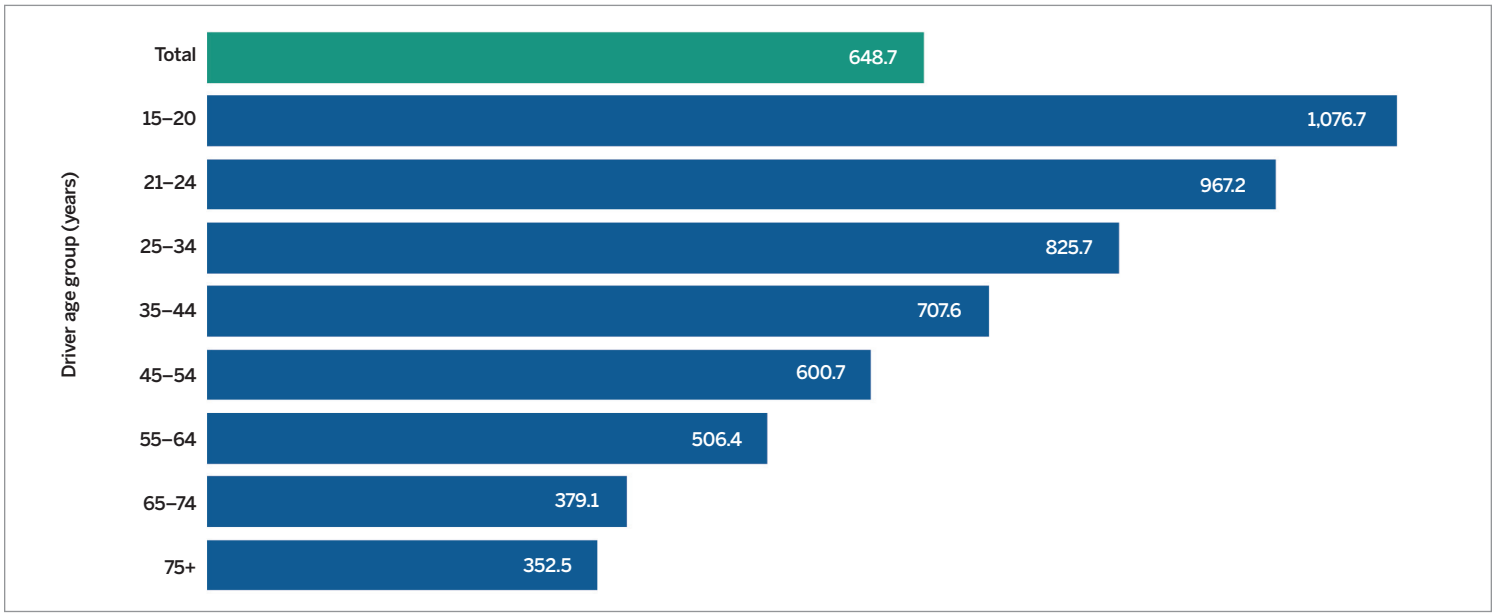
Table 7.4. Injury status for individuals in collisions in Indiana by young driver involvement, 2019–23

Person type/injury status	Count of collisions					Annual rate of change	
	2019	2020	2021	2022	2023	2022–23	2019–23
Total drivers	**336,946**	**264,707**	**330,571**	**351,314**	**344,470**	**-1.9%**	**0.6%**
Fatal	560	600	613	674	627	-7.0%	2.9%
Non-fatal injuries	33,965	29,326	33,974	34,266	34,484	0.6%	0.4%
Not injured	302,421	234,781	295,984	316,374	309,359	-2.2%	0.6%
Young drivers	**41,849**	**33,606**	**41,399**	**39,091**	**38,245**	**-2.2%**	**-2.2%**
Fatal	41	50	58	48	64	33.3%	11.8%
Non-fatal injuries	4,115	3,614	4,207	4,008	3,874	-3.3%	-1.5%
Not injured	37,693	29,942	37,134	35,035	34,307	-2.1%	-2.3%
Passengers of young drivers	**1,573**	**1,487**	**1,653**	**1,553**	**1,618**	**4.2%**	**0.7%**
Fatal	23	37	22	23	36	56.5%	11.9%
Non-fatal injuries	1,488	1,397	1,585	1,513	1,572	3.9%	1.4%
Not injured	62	53	46	17	10	-41.2%	-36.6%
Drivers and passengers in other vehicles	**28,600**	**22,388**	**29,086**	**29,026**	**29,380**	**1.2%**	**0.7%**
Fatal	36	31	37	35	38	8.6%	1.4%
Non-fatal injuries	4,235	3,492	4,122	3,950	4,177	5.7%	-0.3%
Not injured	24,329	18,865	24,927	25,041	25,165	0.5%	0.8%
Non-motorists	**209**	**213**	**202**	**199**	**218**	**9.5%**	**1.1%**
Fatal	5	10	13	9	10	11.1%	18.9%
Non-fatal injuries	158	156	156	170	189	11.2%	4.6%
Not injured	46	47	33	20	19	-5.0%	-19.8%
All individuals involved in young driver crashes	**72,231**	**57,694**	**72,340**	**69,869**	**69,461**	**-0.6%**	**-1.0%**
Fatal	105	128	130	115	148	28.7%	9.0%
Non-fatal injuries	9,996	8,659	10,070	9,641	9,812	1.8%	-0.5%
Not injured	62,130	48,907	62,140	60,113	59,501	-1.0%	-1.1%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Young drivers are defined as drivers ages 15–20.
2) Young driver crashes involve one or more drivers ages 15–20.
3) Non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.

Figure 7.10. Drivers in collision per 10,000 licensed drivers in Indiana by age group, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, downloaded March 26, 2024.

Notes:
1) Excludes drivers under 15 years old and over 109 years old.
2) Data limited to drivers with valid age reported.

Table 7.5. Drivers killed in collisions per 10,000 licensed drivers in Indiana by gender and age group, 2019–23

	2019		2020		2021		2022		2023		Annual rate of change, 2019–23	
Age group	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
15-20	0.6	1.8	0.5	2.4	0.7	2.7	0.8	2.0	0.9	2.6	10.5%	10.6%
21-24	0.8	2.4	0.9	2.5	1.1	2.5	0.5	2.6	0.8	2.5	1.3%	0.8%
25-34	0.6	2.2	0.7	2.4	0.8	2.7	0.9	2.4	0.5	2.2	-1.9%	-0.3%
35-44	0.4	2.1	0.2	1.6	0.7	2.1	0.6	2.3	0.6	2.1	11.6%	-0.1%
45-54	0.4	1.7	0.3	2.5	0.5	2.2	0.5	2.4	0.5	1.9	4.7%	2.6%
55-64	0.3	1.7	0.5	2.1	0.5	1.4	0.5	1.9	0.4	2.1	1.4%	4.7%
65-74	0.5	1.6	0.3	1.7	0.4	1.3	0.5	2.0	0.6	1.5	0.4%	-1.8%
75+	0.5	2.7	0.3	2.1	0.2	1.7	1.2	1.6	0.6	2.1	2.9%	-5.3%
All ages	**0.5**	**2.0**	**0.5**	**2.1**	**0.6**	**2.0**	**0.7**	**2.2**	**0.6**	**2.1**	**3.7%**	**1.3%**

Low < > High

Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024.

Notes:
1) Excludes drivers under 15 years old and over 109 years old.
2) Data limited to drivers with valid age reported.
3) Color scale applies across all years, age groups, and genders.

Table 7.6. Young driver seat belt use in passenger-vehicle collisions in Indiana by injury status, 2019–23

Passenger vehicle occupant injuries	Count of collisions					Annual rate of change	
	2019	2020	2021	2022	2023	2022–23	2019–23
All young drivers	**41,284**	**33,128**	**40,906**	**38,574**	**37,735**	**-2.2%**	**-2.2%**
Restrained	37,231	29,072	35,639	32,000	30,346	-5.2%	-5.0%
% restrained	99.0%	98.5%	97.7%	95.0%	93.8%	-1.2%	-1.3%
Fatalities	**37**	**45**	**48**	**43**	**55**	**27.9%**	**10.4%**
Restrained	22	18	21	13	22	69.2%	0.0%
% restrained	59.5%	47.4%	48.8%	41.9%	48.9%	16.6%	-4.8%
Non-fatal injuries	**3,956**	**3,466**	**4,038**	**3,808**	**3,674**	**-3.5%**	**-1.8%**
Restrained	3,567	3,026	3,428	3,079	2,855	-7.3%	-5.4%
% restrained	95.4%	93.6%	91.7%	87.6%	85.5%	-2.5%	-2.7%
Not injured	**37,291**	**29,617**	**36,820**	**34,723**	**34,006**	**-2.1%**	**-2.3%**
Restrained	33,642	26,028	32,190	28,908	27,469	-5.0%	-4.9%
% restrained	99.4%	99.1%	98.4%	95.9%	94.9%	-1.1%	-1.2%

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Seat belt use rates are calculated based on individuals identified as young drivers (ages 15–20).
2) Restraint rates were calculated using only individuals with known restraint status.
3) Seat belt use rates are limited to young drivers in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans.

Table 7.7. Driver seat belt use in passenger-vehicle collisions in Indiana by gender and age group, 2019–23

Age group	2019		2020		2021		2022		2023		Annual rate of change, 2019-23	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
15–20	99.3%	98.7%	98.9%	98.1%	98.0%	97.4%	95.5%	94.5%	94.8%	93.1%	-1.2%	-1.5%
21–24	99.3%	98.3%	98.5%	97.7%	97.6%	96.9%	95.3%	93.9%	93.8%	92.5%	-1.4%	-1.5%
25–34	99.2%	98.3%	98.7%	97.5%	97.9%	96.5%	95.6%	94.0%	93.7%	92.6%	-1.4%	-1.5%
35–44	99.3%	98.6%	98.9%	99.0%	98.0%	98.5%	97.9%	97.1%	97.5%	95.6%	-0.5%	-0.8%
45–54	99.5%	99.0%	99.2%	98.1%	98.2%	97.4%	95.7%	95.0%	94.8%	93.8%	-1.2%	-1.3%
55–64	99.6%	99.0%	99.4%	98.7%	98.5%	97.7%	95.8%	95.2%	95.1%	94.3%	-1.1%	-1.2%
65–74	99.6%	99.2%	99.5%	98.9%	98.4%	98.0%	96.4%	95.5%	95.1%	94.6%	-1.1%	-1.2%
75+	99.4%	99.0%	99.5%	98.6%	98.3%	97.7%	95.9%	95.5%	95.0%	93.7%	-1.1%	-1.4%
All ages	**99.4%**	**98.7%**	**99.0%**	**98.1%**	**98.0%**	**97.2%**	**95.7%**	**94.6%**	**94.4%**	**93.3%**	**-1.3%**	**-1.4%**

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Data limited to drivers with valid ages reported. Excludes drivers under 15 years old and over 109 years old.
2) Restraint rates were calculated using only individuals with known restraint status.
3) Seat belt use rates are limited to drivers in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans.
4) Color scale applies across all years, age groups, and genders.

Table 7.8. Speeding drivers as a percent of all drivers in collisions in Indiana by age group and gender, 2019–23

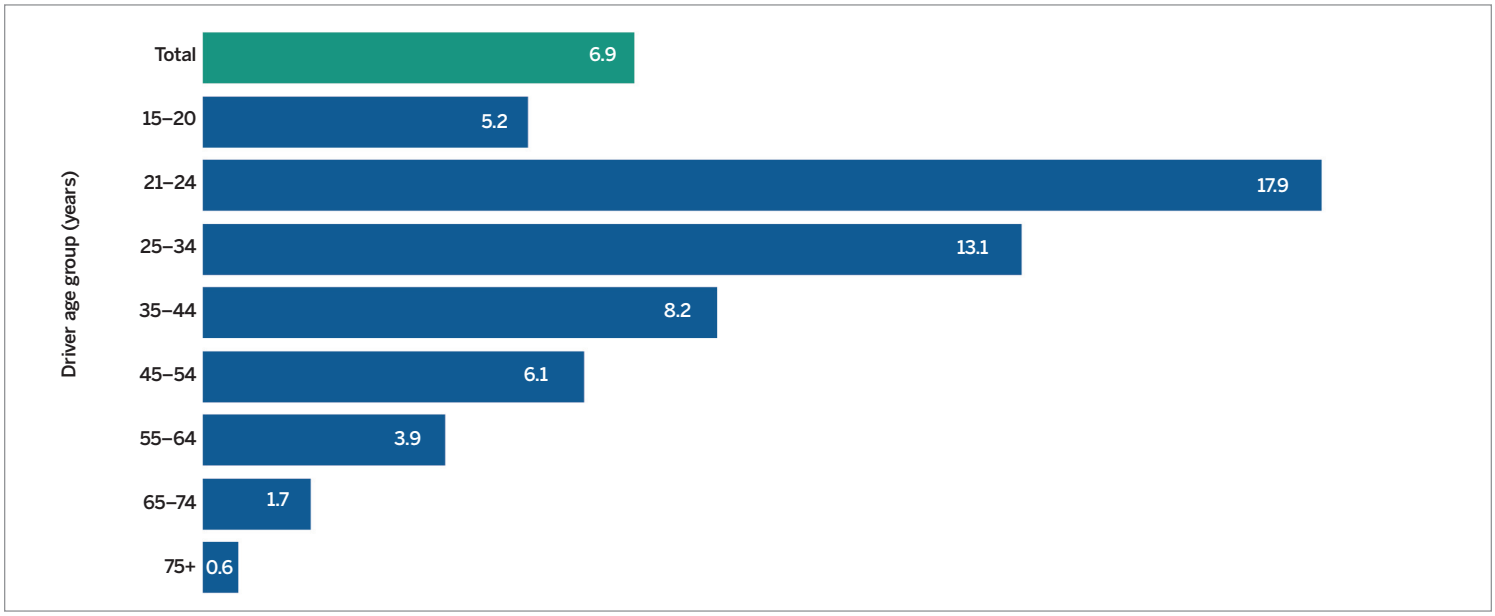
	2019		2020		2021		2022		2023	
Age group	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
15–20	7.9%	11.9%	7.0%	11.5%	6.4%	10.7%	6.6%	11.6%	5.2%	9.8%
21–24	7.1%	10.1%	6.1%	9.4%	6.2%	9.4%	6.0%	9.5%	4.6%	7.8%
25–34	5.2%	8.1%	5.0%	7.5%	4.9%	7.7%	4.6%	7.8%	3.9%	6.2%
35–44	4.1%	6.1%	3.6%	5.8%	3.0%	5.8%	3.7%	5.9%	3.0%	4.7%
45–54	2.9%	4.6%	2.8%	4.2%	2.5%	4.2%	2.9%	4.3%	2.1%	3.4%
55–64	2.5%	3.8%	2.1%	3.3%	2.0%	3.2%	2.4%	3.5%	1.6%	2.6%
65–74	2.0%	3.1%	1.5%	2.3%	1.4%	2.1%	1.7%	2.6%	1.3%	2.2%
75 +	1.5%	2.4%	1.5%	2.0%	1.4%	1.5%	1.5%	2.3%	1.2%	1.6%
All ages	4.5%	6.7%	4.1%	6.2%	3.9%	6.1%	4.0%	6.4%	3.1%	5.1%

Low < > High

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) A collision is defined as speed-related if either unsafe speed or speed too fast for weather conditions is listed as the primary or acontributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Data limited to drivers with valid genders and ages reported. Excludes drivers under 15 years old and over 109 years old.
3) This table also appears in the Speed chapter. It is repeated here for the ease of the reader.

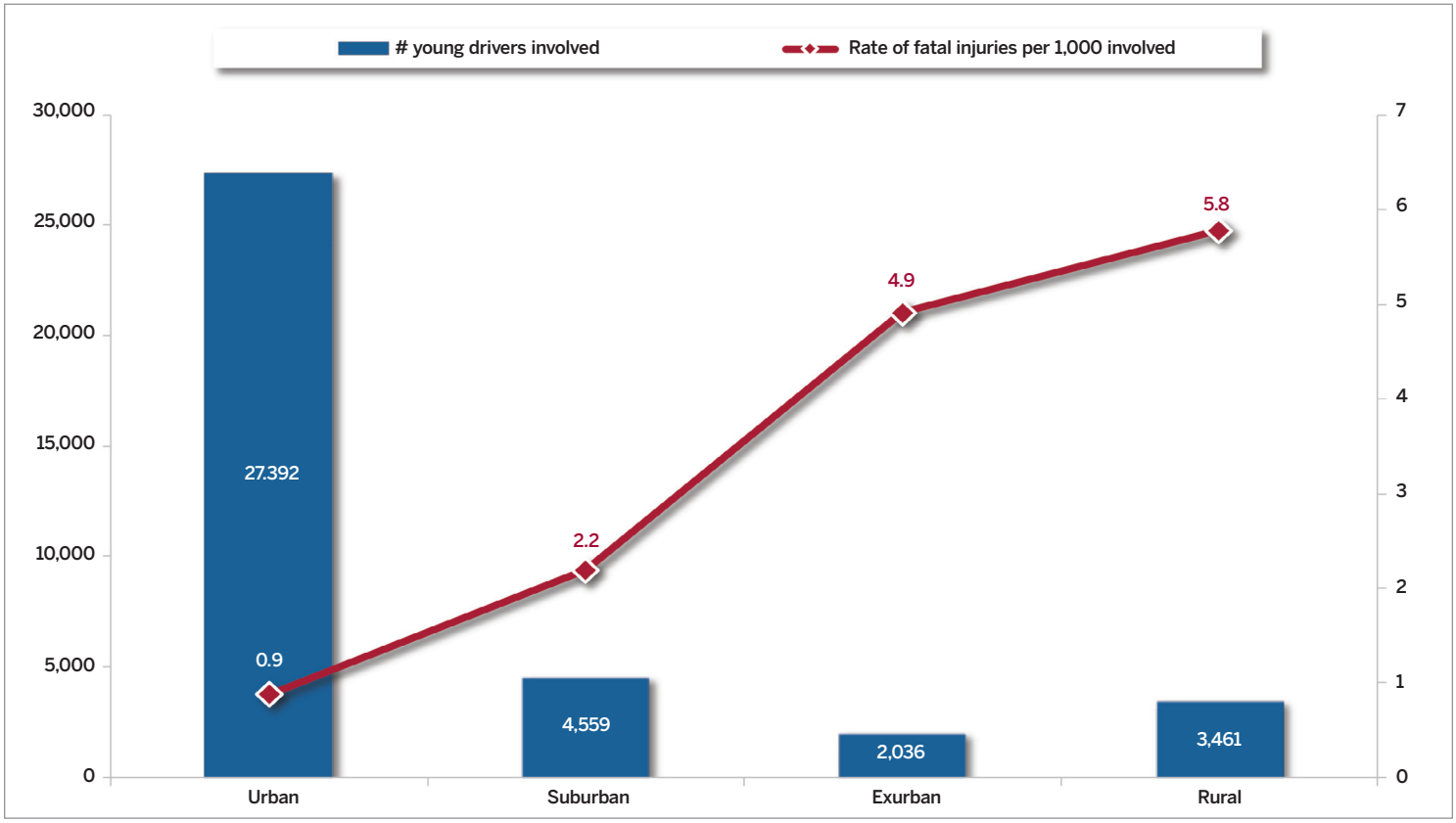
Figure 7.11. Alcohol-impaired drivers in collisions per 10,000 licensed drivers in Indiana by age group, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), download April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, as of March 26, 2024.

Note: Data limited to drivers with valid ages reported. Excludes drivers under 15 years old and over 109 years old.

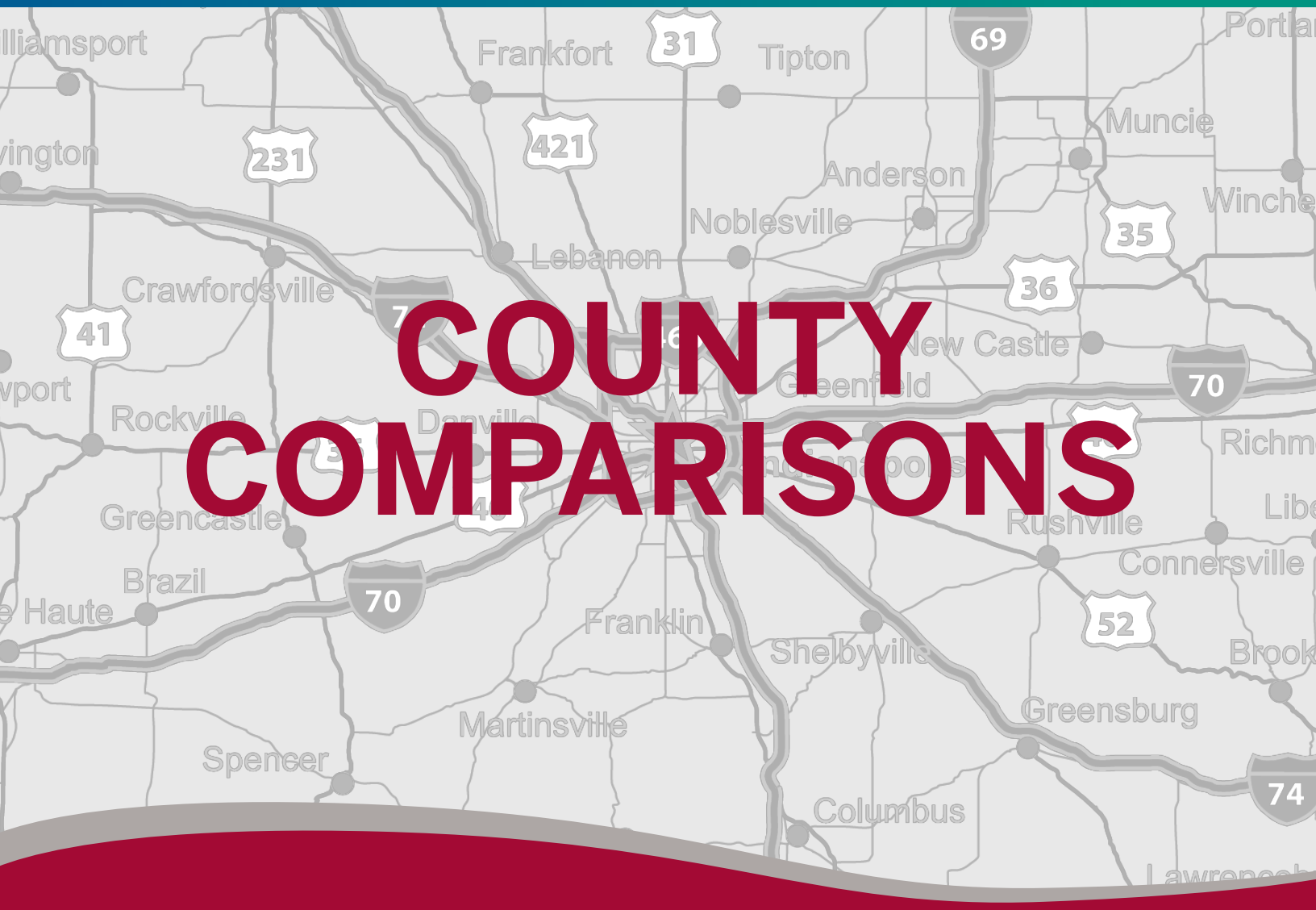
Figure 7.12. Young drivers in collisions in Indiana by census locale, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2020 TIGER/line shapefile—Urban areas.

Notes:
1) Young drivers are defined as drivers ages 15–20
2) Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are those defined in the 2020 census generally by density and size. The research team created the suburban, exurban, and rural areas were created by the research team based on the 2020 urban boundaries. See the glossary for a complete explanation.
3) Excludes young drivers in collisions for which census locale could not be determined.

INDIANA TRAFFIC SAFETY FACTS



COUNTY COMPARISONS

COUNTY COMPARISONS BY SUBJECT AREA, 2023

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 any 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 areas throughout the state.

The following tables and color-scale maps show various collision and injury rates in Indiana counties in 2023. The color-scale maps are grouped using natural breaks.[9] Totals for collisions and injuries reported in this chapter include only those records for which a county location was identified.

Collision severity and injuries

In 2023, 198,215 collisions occurred in Indiana counties with an average of 2,155 collisions per county (Table 8.1). Marion County (36,662) and Lake County (16,366) had the most collisions, and Martin County (123) and Union County (83) had the fewest. The mean county rate of collisions per 100 million vehicle miles traveled (VMT) was 194.6, and the median rate was 191.2 (Map 8.1). Tippecanoe (366.2), Ohio (329.3), and Floyd (302.9) counties had the highest rates of collisions per 100 million VMT.

There were 871 fatal collisions in Indiana counties with an average of 9 fatal crashes per county in 2023 (Table 8.1). Marion County (129) and Lake County (56) also had the most fatal collisions. Three counties—Perry (2%), Newton (2%), and Randolph (2%) counties—had the highest proportions of fatal collisions.

In 2023, 357,999 individuals were involved in collisions in Indiana counties with an average of 3,891 individuals per county (Table 8.2). Marion (69,445) and Lake (32,476) counties had the most individuals involved in collisions. Union (140), Ohio (168), and Martin (170) counties had the fewest individuals involved in collisions.

Marion (135) and Lake (59) counties had the most fatalities the same year. The median county traffic fatality rate per 100,000 people was 15.9. Newton (50.1), Warren (35.2), and Spencer (35.2) counties had the highest fatality rates per 100,000 population (Map 8.2). As mentioned above, five counties—Gibson, Martin, Noble, Ohio, and Union—had no fatalities.

Speed

Speed-related collisions accounted for 7% of all collisions in 2023 and 26% of all fatal collisions that year (Table 8.3). The average number of speed-related collisions per county was 159. Lake (14%), Newton (12%), and Benton (12%) counties had the highest proportions of collisions that were speed-related, while Pulaski County (2%) had the lowest. The county mean and median proportion of speed-related collisions were 6.8% and 6.5%, respectively. The three counties with the highest proportions of speed-related collisions—Lake (14%), Newton, 12%, and Benton (12%)—are in the northwest corner of the state (Map 8.3).

Alcohol impairment

Collisions involving an alcohol-impaired driver accounted for 2% of collisions in Indiana counties and 7% of fatal collisions in 2023 (Table 8.4). The average number of alcohol-impaired collisions per county was 36, and the average number of fatal alcohol-impaired collisions per county was 1. The mean county rate of alcohol-impaired drivers in collisions per 10,000 licensed drivers was 6.7 (Map 8.4). La Porte (14.7 per 10,000) and Jackson (14.4 per 10,000) counties had the highest rates of alcohol-impaired drivers in collisions. Pike (1.1 per 10,000), Starke (1.7 per 10,000), and Tipton (1.7 per 10,000) counties had the lowest rates of alcohol-impaired drivers in collisions.

Restraint use

In 2023, more than half (57%) of passenger vehicle occupants who were killed in collisions were unrestrained in Indiana counties. More than one-third (38%) of individuals suffering incapacitating injuries were unrestrained (Table 8.5). The mean county proportion of unrestrained passenger vehicle occupants injured in collisions was 23.6%. Warren (55%), Fayette (47%), and Crawford (47%) counties had the highest proportions of unrestrained occupants injured in collisions (Map 8.5).

Children

In 2023, 3,034 children (ages 0–14) were injured in crashes in Indiana counties (Map 8.6). The mean rate of children injured in collisions per 1,000 child population was 2.3, slightly higher than the median rate of 2.1. Jasper (7.3 children per 1,000), Scott (5.7), and White (5.4) counties had the highest child injury rates.

Young drivers

In 2023, 38,236 young drivers ages 15 to 20 were involved in collisions, accounting for 11% of all drivers involved in collisions across Indiana counties (Table 8.6). Marion (5,899), Allen (2,756), and Lake (2,745) counties had the most young drivers involved in collisions. Franklin (17%), Warrick (16%), and Monroe (16%) counties had the highest proportions of young drivers involved in collisions. The mean county rate of young driver involvement in collisions was 89.0 per 1,000 licensed young drivers (Map 8.7). Counties with large universities (Monroe, Tippecanoe, Delaware, Marion, Vanderburgh, and Vigo counties) had some of the highest rates of young driver involvement in collisions, continuing a pattern observed yearly during the past decade.

Sixty-four young drivers in Indiana counties were killed in 2023 and 3,537 suffered incapacitating injuries (Table 8.6). Marion County had the most young drivers killed at 10. Warren (4%) and Randolph (3%) counties had the highest fatality rates for young drivers. Marion (536), Allen (243), and Lake (222) counties had the most young drivers who

[9] From the ArcGIS Pro website (accessed on August 12, 2024): "This classification is based on the Jenks Natural Breaks algorithm. . . [these]classes are based on natural groupings inherent in the data. Class breaks are created in a way that best groups similar values together and maximizes the differences between classes. The features are divided into classes whose boundaries are set where there are relatively big differences in the data values."

suffered incapacitating injuries. Vermillion (234%), Brown (22%), and Martin (21%) had the highest proportions of young drivers who suffered these severe injuries.

Motorcycles

In 2023, there were 3,040 motorcyclists involved in collisions, 141 of whom were killed (Table 8.7). Marion (363), Allen (186), and Lake (184) counties had the most motorcyclists involved in collisions. The mean and median county rates of motorcyclists involved in collisions per 1,000 individuals involved in all collisions were 12.8 and 10.5, respectively. The highest county rates occurred in Brown (58.7 per 1,000) and Martin (52.9 per 1,000) counties (Map 8.8).

In 2023, 141 motorcyclists died in collisions in 2023 and 1,387 suffered incapacitating injuries (Table 8.7). The most motorcyclists were killed in Marion County (23). Sullivan (50%) and Perry (43%) had the highest fatality rates for motorcyclists. Marion (69) and Allen (51) counties had the most motorcyclists who suffered incapacitating injuries. Warren (100%), Union (100%), and Pulaski (80%) counties had the highest proportions of motorcyclists who suffered incapacitating injuries. However, only a very small number of motorcyclists were involved in collisions in these counties.

Hit-and-run collisions

When drivers are in collisions resulting in injury or death, they 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. In 2023, 27,174 hit-and-run collisions accounted for 14% of all collisions in Indiana counties. The average county proportion of hit-and-run collisions was 8%, and the median county proportion was 7% (Map 8.9). Marion County (22%) and Lake County (20%) had the highest proportions for hit-and-run collisions. Pike County (2%) had the lowest.

Deer

In 2023, 17,490 collisions involved deer in Indiana counties. Rural counties away from the center of the state accounted for the highest proportion of deer-involved collisions (Map 8.10). The mean proportion of deer-related collisions was 19%. Pulaski (55%) and Warren (47%) counties had the highest proportions of deer-involved collisions, while the urban counties of Marion (<1%) and Lake (2%) counties had the lowest.

Work zones

In 2023, 7,480 work zone collisions occurred in Indiana counties (Map 8.11). The mean county rate of work zone collisions per 1,000 total collisions was 19.6, and the median rate was 13.1. Given that work zone locations constantly change throughout the state, counties with the highest work zone collision rates tend to vary from year to year. In 2023, Tipton (108.4 per 1,000), Hancock (99.6), Boone (95.2), Lake (88.2), and Marion (73.8) counties had the highest rates of work zone collisions.

County rankings

Table 8.8 shows Indiana counties ranked by six collision metrics:

- Fatalities per 100,000 population
- Speed-related collisions as a percentage of all collisions
- Alcohol-impaired collisions as a percentage of total collisions
- Motorcyclists per 1,000 individuals in collisions
- Unrestrained passenger vehicle injuries as a percentage of total injuries
- Young drivers in collisions per 1,000 licensed drivers

Calculations of an average score for these six metrics indicate a county's overall traffic safety environment. However, calculations for these metrics do not account for several factors—such as different population compositions, road types, driving conditions, crash reporting practices, etc.—that may influence collision rankings. Readers should be mindful of these differences when viewing county ranks.

Table 8.1. Collisions in Indiana by severity and county, 2023

	Total collisions		Fatal			Non-fatal		Property damage only	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total
All counties	**198,215**	**N/A**	**871**	**0.4%**	**N/A**	**34,209**	**17.3%**	**163,135**	**82.3%**
Mean	2,155	N/A	9	0.6%	N/A	372	17.4%	1,773	82.0%
Median	898	N/A	6	0.6%	N/A	148	17.1%	744	82.2%
Minimum	83	N/A	0	0.0%	N/A	15	8.0%	65	66.7%
Maximum	36,662	N/A	129	1.9%	N/A	6,274	32.7%	30,259	91.3%
Adams	650	58	1	0.2%	86	115	17.7%	534	82.2%
Allen	12,698	3	40	0.3%	76	2,308	18.2%	10,350	81.5%
Bartholomew	1,503	29	10	0.7%	38	491	32.7%	1,002	66.7%
Benton	127	90	1	0.8%	26	33	26.0%	93	73.2%
Blackford	241	85	1	0.4%	62	41	17.0%	199	82.6%
Boone	2,343	19	7	0.3%	79	356	15.2%	1,980	84.5%
Brown	480	72	5	1.0%	11	106	22.1%	369	76.9%
Carroll	500	71	3	0.6%	42	70	14.0%	427	85.4%
Cass	943	44	4	0.4%	61	174	18.5%	765	81.1%
Clark	3,822	11	14	0.4%	69	663	17.3%	3,145	82.3%
Clay	563	62	4	0.7%	32	100	17.8%	459	81.5%
Clinton	897	47	6	0.7%	37	173	19.3%	718	80.0%
Crawford	297	81	2	0.7%	36	51	17.2%	244	82.2%
Daviess	541	67	5	0.9%	18	106	19.6%	430	79.5%
Dearborn	1,328	31	6	0.5%	57	199	15.0%	1,123	84.6%
Decatur	685	56	4	0.6%	46	144	21.0%	537	78.4%
DeKalb	1,186	35	7	0.6%	45	202	17.0%	977	82.4%
Delaware	3,563	15	14	0.4%	65	624	17.5%	2,925	82.1%
Dubois	1,266	33	7	0.6%	53	190	15.0%	1,069	84.4%
Elkhart	6,056	7	18	0.3%	80	873	14.4%	5,165	85.3%
Fayette	353	77	2	0.6%	49	66	18.7%	285	80.7%
Floyd	2,374	18	7	0.3%	81	362	15.2%	2,005	84.5%
Fountain	275	83	4	1.5%	6	49	17.8%	222	80.7%
Franklin	551	64	4	0.7%	31	85	15.4%	462	83.8%
Fulton	578	61	5	0.9%	22	60	10.4%	513	88.8%
Gibson	995	42	0	0.0%	88	214	21.5%	781	78.5%
Grant	2,190	22	13	0.6%	44	332	15.2%	1,845	84.2%
Greene	843	50	8	0.9%	15	129	15.3%	706	83.7%
Hamilton	8,246	4	24	0.3%	82	1,171	14.2%	7,051	85.5%
Hancock	1,968	24	11	0.6%	51	389	19.8%	1,568	79.7%
Harrison	1,045	40	9	0.9%	23	164	15.7%	872	83.4%
Hendricks	4,924	9	13	0.3%	85	698	14.2%	4,213	85.6%
Henry	986	43	8	0.8%	25	227	23.0%	751	76.2%
Howard	2,128	23	12	0.6%	50	414	19.5%	1,702	80.0%
Huntington	1,135	38	7	0.6%	40	182	16.0%	946	83.3%
Jackson	1,699	25	8	0.5%	55	229	13.5%	1,462	86.1%
Jasper	1,162	37	8	0.7%	34	197	17.0%	957	82.4%
Jay	554	63	5	0.9%	20	74	13.4%	475	85.7%
Jefferson	826	52	7	0.8%	24	141	17.1%	678	82.1%
Jennings	691	55	6	0.9%	21	112	16.2%	573	82.9%
Johnson	3,748	12	16	0.4%	60	634	16.9%	3,098	82.7%
Knox	1,205	34	4	0.3%	72	182	15.1%	1,019	84.6%
Kosciusko	2,341	20	14	0.6%	43	373	15.9%	1,954	83.5%
LaGrange	918	45	7	0.8%	29	105	11.4%	806	87.8%
Lake	16,366	2	56	0.3%	71	2,931	17.9%	13,379	81.7%
La Porte	2,934	17	23	0.8%	27	628	21.4%	2,283	77.8%
Lawrence	1,287	32	6	0.5%	56	209	16.2%	1,072	83.3%
Madison	3,667	13	19	0.5%	54	608	16.6%	3,040	82.9%

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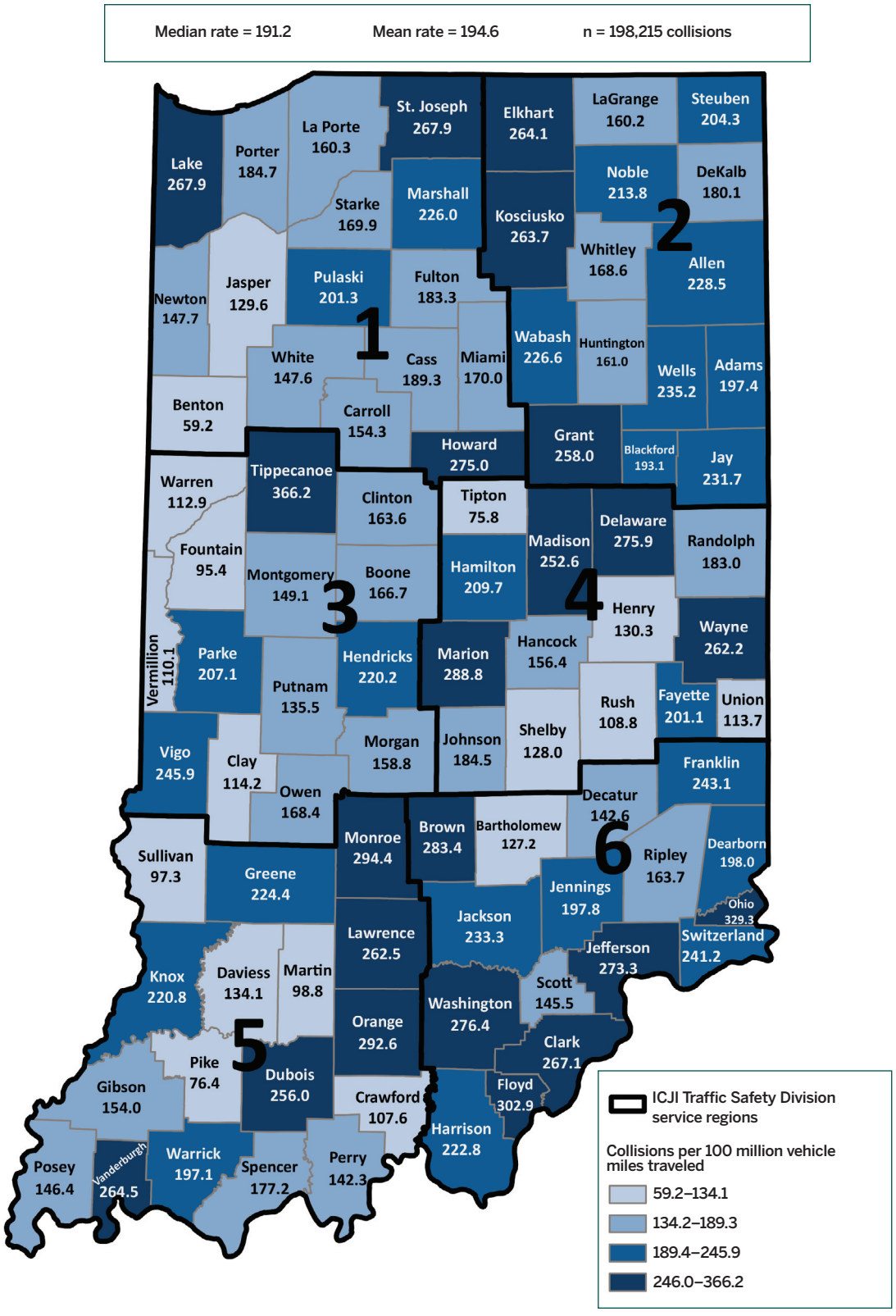
Table 8.1. Collisions in Indiana by severity and county, 2023 *(continued)*

	Total collisions		Fatal			Non-fatal		Property damage only	
	Count	County rank	Count	As % county total	County rank (on %)	Count	As % county total	Count	As % county total
Marion	36,662	1	129	0.4%	70	6,274	17.1%	30,259	82.5%
Marshall	1,494	30	9	0.6%	41	195	13.1%	1,290	86.3%
Martin	123	91	0	0.0%	88	28	22.8%	95	77.2%
Miami	1,031	41	3	0.3%	83	171	16.6%	857	83.1%
Monroe	3,647	14	11	0.3%	77	767	21.0%	2,869	78.7%
Montgomery	833	51	8	1.0%	13	157	18.8%	668	80.2%
Morgan	1,602	26	15	0.9%	17	272	17.0%	1,315	82.1%
Newton	399	75	7	1.8%	2	78	19.5%	314	78.7%
Noble	1,133	39	0	0.0%	88	180	15.9%	953	84.1%
Ohio	131	89	0	0.0%	88	15	11.5%	116	88.5%
Orange	502	70	2	0.4%	64	88	17.5%	412	82.1%
Owen	512	69	6	1.2%	8	99	19.3%	407	79.5%
Parke	378	76	1	0.3%	84	39	10.3%	338	89.4%
Perry	324	78	6	1.9%	1	50	15.4%	268	82.7%
Pike	136	88	2	1.5%	5	30	22.1%	104	76.5%
Porter	4,302	10	16	0.4%	68	774	18.0%	3,512	81.6%
Posey	542	66	3	0.6%	52	97	17.9%	442	81.5%
Pulaski	446	74	2	0.4%	58	45	10.1%	399	89.5%
Putnam	873	48	5	0.6%	48	149	17.1%	719	82.4%
Randolph	457	73	8	1.8%	3	73	16.0%	376	82.3%
Ripley	619	60	2	0.3%	74	112	18.1%	505	81.6%
Rush	268	84	3	1.1%	9	61	22.8%	204	76.1%
St. Joseph	7,459	5	28	0.4%	67	1,414	19.0%	6,017	80.7%
Scott	530	68	5	0.9%	16	134	25.3%	391	73.8%
Shelby	1,179	36	8	0.7%	35	238	20.2%	933	79.1%
Spencer	646	59	4	0.6%	39	113	17.5%	529	81.9%
Starke	545	65	4	0.7%	30	104	19.1%	437	80.2%
Steuben	1,558	28	11	0.7%	33	125	8.0%	1,422	91.3%
Sullivan	300	80	3	1.0%	12	51	17.0%	246	82.0%
Switzerland	221	86	2	0.9%	19	40	18.1%	179	81.0%
Tippecanoe	6,434	6	21	0.3%	73	1,081	16.8%	5,332	82.9%
Tipton	286	82	4	1.4%	7	50	17.5%	232	81.1%
Union	83	92	0	0.0%	88	18	21.7%	65	78.3%
Vanderburgh	5,612	8	23	0.4%	63	1,230	21.9%	4,359	77.7%
Vermillion	313	79	3	1.0%	14	59	18.8%	251	80.2%
Vigo	3,037	16	13	0.4%	59	579	19.1%	2,445	80.5%
Wabash	860	49	1	0.1%	87	117	13.6%	742	86.3%
Warren	202	87	3	1.5%	4	29	14.4%	170	84.2%
Warrick	1,569	27	6	0.4%	66	218	13.9%	1,345	85.7%
Washington	694	54	4	0.6%	47	132	19.0%	558	80.4%
Wayne	2,213	21	7	0.3%	75	346	15.6%	1,860	84.0%
Wells	668	57	2	0.3%	78	100	15.0%	566	84.7%
White	898	46	7	0.8%	28	146	16.3%	745	83.0%
Whitley	816	53	9	1.1%	10	147	18.0%	660	80.9%
Unknown	32	N/A	0	N/A	N/A	4	N/A	28	N/A

Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.1. Collisions per 100 million vehicle miles traveled in Indiana by county and ICJI Traffic Safety Division service region, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Department of Transportation, 2022 county-level VMT downloaded August 7, 2024.

Table 8.2 Individuals in collisions in Indiana by injury status and county, 2023

	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	**357,999**	**N/A**	**928**	**0.3%**	**N/A**	**4,743**	**1.3%**	**42,803**	**12.0%**	**309,525**	**86.5%**
Mean	3,891	N/A	10	0.4%	N/A	52	2.0%	465	12.5%	3,364	85.0%
Median	1,417	N/A	6	0.4%	N/A	29	1.8%	179	12.1%	1,225	85.3%
Minimum	140	N/A	0	0.0%	N/A	1	0.3%	14	5.8%	115	73.6%
Maximum	69,445	N/A	135	1.2%	N/A	702	6.5%	8,230	23.4%	60,378	91.8%
Adams	1,062	57	1	0.1%	86	21	2.0%	136	12.8%	904	85.1%
Allen	24,358	3	44	0.2%	79	273	1.1%	2,889	11.9%	21,152	86.8%
Bartholomew	2,782	26	10	0.4%	50	73	2.6%	651	23.4%	2,048	73.6%
Benton	191	89	1	0.5%	28	10	5.2%	27	14.1%	153	80.1%
Blackford	352	85	2	0.6%	22	1	0.3%	50	14.2%	299	84.9%
Boone	4,175	19	9	0.2%	69	48	1.1%	426	10.2%	3,692	88.4%
Brown	682	73	5	0.7%	13	25	3.7%	109	16.0%	543	79.6%
Carroll	687	72	3	0.4%	38	15	2.2%	74	10.8%	595	86.6%
Cass	1,643	43	4	0.2%	63	22	1.3%	226	13.8%	1,391	84.7%
Clark	7,219	11	15	0.2%	71	84	1.2%	790	10.9%	6,330	87.7%
Clay	949	61	4	0.4%	40	17	1.8%	97	10.2%	831	87.6%
Clinton	1,517	45	6	0.4%	45	31	2.0%	192	12.7%	1,288	84.9%
Crawford	388	84	3	0.8%	10	17	4.4%	46	11.9%	322	83.0%
Daviess	977	59	6	0.6%	21	15	1.5%	156	16.0%	800	81.9%
Dearborn	2,274	30	6	0.3%	62	36	1.6%	229	10.1%	2,003	88.1%
Decatur	1,155	54	4	0.3%	52	37	3.2%	149	12.9%	965	83.5%
DeKalb	1,851	37	7	0.4%	47	34	1.8%	236	12.7%	1,574	85.0%
Delaware	6,502	15	18	0.3%	60	84	1.3%	753	11.6%	5,647	86.9%
Dubois	2,143	32	9	0.4%	41	38	1.8%	228	10.6%	1,868	87.2%
Elkhart	11,150	7	20	0.2%	81	144	1.3%	1,008	9.0%	9,978	89.5%
Fayette	608	74	2	0.3%	54	12	2.0%	70	11.5%	524	86.2%
Floyd	4,515	18	7	0.2%	84	44	1.0%	439	9.7%	4,025	89.1%
Fountain	415	82	4	1.0%	6	11	2.7%	64	15.4%	336	81.0%
Franklin	793	68	4	0.5%	31	19	2.4%	96	12.1%	674	85.0%
Fulton	835	64	6	0.7%	15	10	1.2%	65	7.8%	754	90.3%
Gibson	1,657	41	0	0.0%	88	39	2.4%	263	15.9%	1,355	81.8%
Grant	3,840	22	13	0.3%	53	50	1.3%	403	10.5%	3,374	87.9%
Greene	1,207	53	8	0.7%	18	25	2.1%	135	11.2%	1,039	86.1%
Hamilton	15,108	4	25	0.2%	83	140	0.9%	1,704	11.3%	13,239	87.6%
Hancock	3,669	23	11	0.3%	57	53	1.4%	482	13.1%	3,123	85.1%
Harrison	1,647	42	9	0.5%	25	28	1.7%	173	10.5%	1,437	87.2%
Hendricks	9,331	9	13	0.1%	85	94	1.0%	870	9.3%	8,354	89.5%
Henry	1,713	39	8	0.5%	36	46	2.7%	278	16.2%	1,381	80.6%
Howard	3,962	20	14	0.4%	51	74	1.9%	484	12.2%	3,390	85.6%
Huntington	1,780	38	7	0.4%	46	31	1.7%	205	11.5%	1,537	86.3%
Jackson	2,817	25	9	0.3%	55	56	2.0%	252	8.9%	2,500	88.7%
Jasper	1,890	36	8	0.4%	39	49	2.6%	263	13.9%	1,570	83.1%
Jay	799	67	5	0.6%	20	14	1.8%	93	11.6%	687	86.0%
Jefferson	1,420	46	8	0.6%	23	30	2.1%	161	11.3%	1,221	86.0%
Jennings	1,123	55	6	0.5%	26	34	3.0%	119	10.6%	964	85.8%
Johnson	7,143	12	17	0.2%	65	79	1.1%	781	10.9%	6,266	87.7%
Knox	2,087	34	4	0.2%	74	29	1.4%	217	10.4%	1,837	88.0%
Kosciusko	3,504	24	14	0.4%	44	29	0.8%	492	14.0%	2,969	84.7%
LaGrange	1,387	48	7	0.5%	30	21	1.5%	131	9.4%	1,228	88.5%
Lake	32,476	2	59	0.2%	77	365	1.1%	3,631	11.2%	28,421	87.5%
La Porte	5,163	17	26	0.5%	32	85	1.6%	798	15.5%	4,254	82.4%
Lawrence	2,119	33	6	0.3%	58	40	1.9%	249	11.8%	1,824	86.1%
Madison	6,648	14	21	0.3%	56	94	1.4%	757	11.4%	5,776	86.9%

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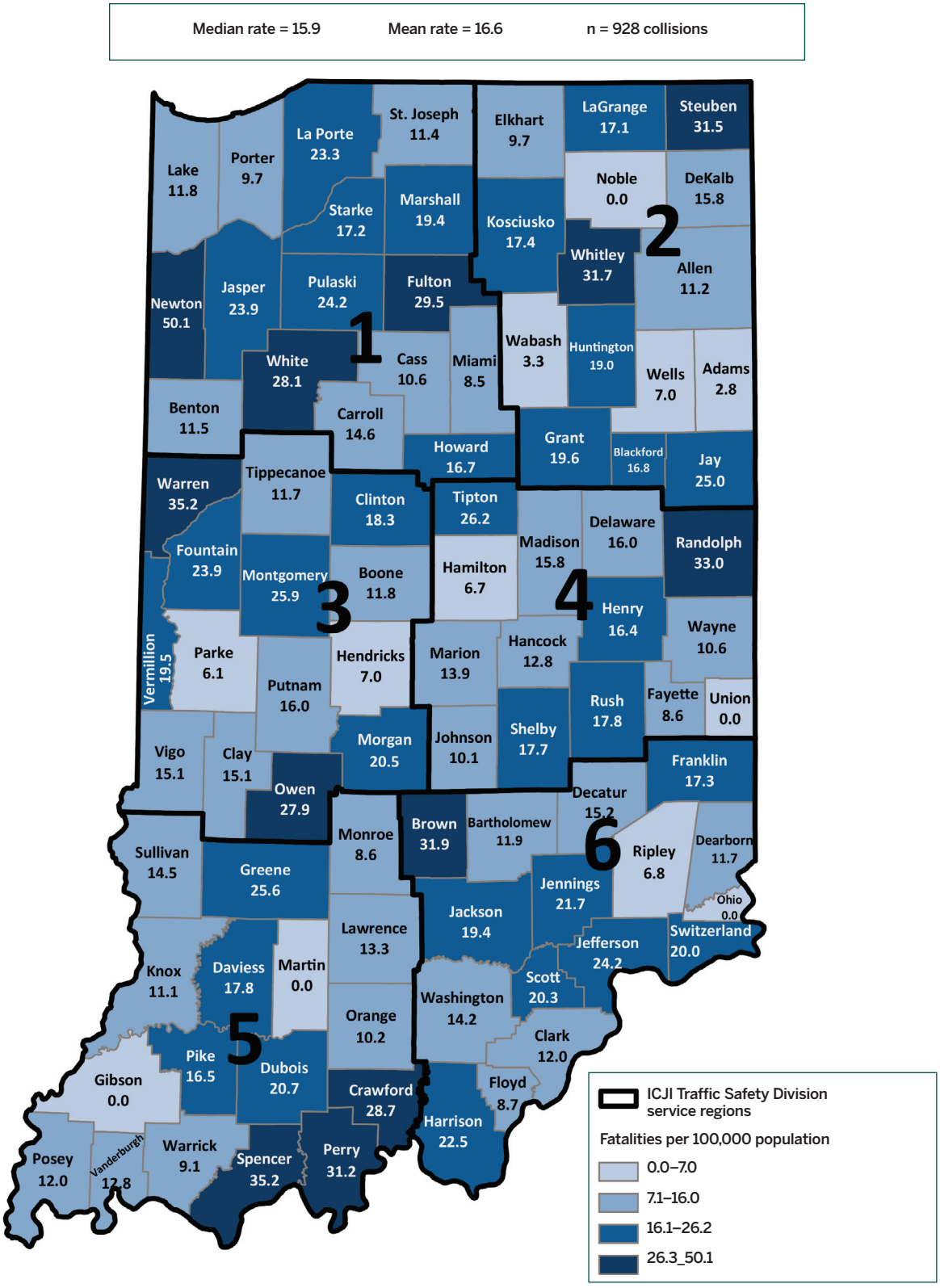
Table 8.2 Individuals in collisions in Indiana by injury status and county, 2023 *(continued)*

	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
Marion	69,445	1	135	0.2%	73	702	1.0%	8,230	11.9%	60,378	86.9%
Marshall	2,248	31	9	0.4%	43	25	1.1%	233	10.4%	1,981	88.1%
Martin	170	90	0	0.0%	88	11	6.5%	28	16.5%	131	77.1%
Miami	1,594	44	3	0.2%	75	30	1.9%	205	12.9%	1,356	85.1%
Monroe	6,947	13	12	0.2%	82	70	1.0%	979	14.1%	5,886	84.7%
Montgomery	1,358	51	10	0.7%	12	25	1.8%	200	14.7%	1,123	82.7%
Morgan	2,737	27	15	0.5%	24	56	2.0%	337	12.3%	2,329	85.1%
Newton	589	75	7	1.2%	2	26	4.4%	91	15.4%	465	78.9%
Noble	1,685	40	0	0.0%	88	29	1.7%	209	12.4%	1,447	85.9%
Ohio	168	91	0	0.0%	88	6	3.6%	14	8.3%	148	88.1%
Orange	739	70	2	0.3%	61	16	2.2%	103	13.9%	618	83.6%
Owen	780	69	6	0.8%	11	19	2.4%	112	14.4%	643	82.4%
Parke	496	78	1	0.2%	72	12	2.4%	35	7.1%	448	90.3%
Perry	501	77	6	1.2%	1	10	2.0%	57	11.4%	428	85.4%
Pike	203	88	2	1.0%	5	6	3.0%	32	15.8%	163	80.3%
Porter	7,706	10	17	0.2%	67	110	1.4%	960	12.5%	6,619	85.9%
Posey	823	65	3	0.4%	49	26	3.2%	103	12.5%	691	84.0%
Pulaski	580	76	3	0.5%	29	12	2.1%	49	8.4%	516	89.0%
Putnam	1,362	50	6	0.4%	37	24	1.8%	172	12.6%	1,160	85.2%
Randolph	694	71	8	1.2%	3	15	2.2%	86	12.4%	585	84.3%
Ripley	948	62	2	0.2%	70	23	2.4%	134	14.1%	789	83.2%
Rush	414	83	3	0.7%	14	10	2.4%	74	17.9%	327	79.0%
St. Joseph	14,316	5	31	0.2%	68	163	1.1%	1,721	12.0%	12,401	86.6%
Scott	951	60	5	0.5%	27	20	2.1%	174	18.3%	752	79.1%
Shelby	1,911	35	8	0.4%	42	36	1.9%	279	14.6%	1,588	83.1%
Spencer	905	63	7	0.8%	9	26	2.9%	116	12.8%	756	83.5%
Starke	823	65	4	0.5%	34	21	2.6%	132	16.0%	666	80.9%
Steuben	2,287	29	11	0.5%	35	43	1.9%	133	5.8%	2,100	91.8%
Sullivan	451	81	3	0.7%	17	11	2.4%	51	11.3%	386	85.6%
Switzerland	299	86	2	0.7%	16	4	1.3%	49	16.4%	244	81.6%
Tippecanoe	12,118	6	22	0.2%	78	128	1.1%	1,372	11.3%	10,596	87.4%
Tipton	468	80	4	0.9%	7	19	4.1%	56	12.0%	389	83.1%
Union	140	92	0	0.0%	88	9	6.4%	16	11.4%	115	82.1%
Vanderburgh	10,392	8	23	0.2%	66	56	0.5%	1,850	17.8%	8,463	81.4%
Vermillion	472	79	3	0.6%	19	8	1.7%	63	13.3%	398	84.3%
Vigo	5,732	16	16	0.3%	59	105	1.8%	688	12.0%	4,923	85.9%
Wabash	1,256	52	1	0.1%	87	20	1.6%	130	10.4%	1,105	88.0%
Warren	263	87	3	1.1%	4	5	1.9%	32	12.2%	223	84.8%
Warrick	2,517	28	6	0.2%	64	34	1.4%	277	11.0%	2,200	87.4%
Washington	1,061	58	4	0.4%	48	31	2.9%	161	15.2%	865	81.5%
Wayne	3,892	21	7	0.2%	80	54	1.4%	418	10.7%	3,413	87.7%
Wells	1,065	56	2	0.2%	76	15	1.4%	121	11.4%	927	87.0%
White	1,413	47	7	0.5%	33	24	1.7%	183	13.0%	1,199	84.9%
Whitley	1,367	49	11	0.8%	8	22	1.6%	191	14.0%	1,143	83.6%
Unknown	60	N/A	0	N/A	N/A	0	N/A	6	N/A	54	N/A

Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), as of April 12, 2024.

Note: Non-incapacitating injuries include those injuries that do not meet the criteria for fatal or incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.2. Fatalities in collisions per 100,000 population in Indiana by county and ICJI Traffic Safety Division service region, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2023 county population estimates downloaded March 12, 2024.

Table 8.3. Speed-related collisions in Indiana by severity and county, 2023

	All collisions			Fatal		Non-fatal		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	**14,598**	**7.4%**	**N/A**	**230**	**26.4%**	**3,997**	**11.7%**	**10,371**	**6.4%**
Mean	159	6.8%	N/A	3	24.7%	43	12.2%	113	5.5%
Median	62	6.5%	N/A	1	21.4%	18	12.8%	42	5.1%
Minimum	6	2.0%	N/A	0	0.0%	1	2.2%	3	1.9%
Maximum	2,634	13.8%	N/A	29	100.0%	671	23.5%	1,934	12.5%
Adams	31	4.8%	78	0	0.0%	11	9.6%	20	3.7%
Allen	1,009	7.9%	26	14	35.0%	305	13.2%	690	6.7%
Bartholomew	104	6.9%	41	2	20.0%	38	7.7%	64	6.4%
Benton	15	11.8%	3	0	0.0%	5	15.2%	10	10.8%
Blackford	12	5.0%	71	0	0.0%	4	9.8%	8	4.0%
Boone	128	5.5%	63	1	14.3%	31	8.7%	96	4.8%
Brown	41	8.5%	18	1	20.0%	18	17.0%	22	6.0%
Carroll	28	5.6%	61	1	33.3%	10	14.3%	17	4.0%
Cass	42	4.5%	82	2	50.0%	11	6.3%	29	3.8%
Clark	204	5.3%	65	6	42.9%	67	10.1%	131	4.2%
Clay	33	5.9%	54	1	25.0%	11	11.0%	21	4.6%
Clinton	68	7.6%	36	1	16.7%	23	13.3%	44	6.1%
Crawford	19	6.4%	47	0	0.0%	9	17.6%	10	4.1%
Daviess	16	3.0%	90	1	20.0%	7	6.6%	8	1.9%
Dearborn	66	5.0%	72	0	0.0%	13	6.5%	53	4.7%
Decatur	76	11.1%	4	1	25.0%	21	14.6%	54	10.1%
DeKalb	123	10.4%	6	4	57.1%	35	17.3%	84	8.6%
Delaware	190	5.3%	66	3	21.4%	57	9.1%	130	4.4%
Dubois	97	7.7%	33	3	42.9%	41	21.6%	53	5.0%
Elkhart	535	8.8%	15	5	27.8%	133	15.2%	397	7.7%
Fayette	24	6.8%	42	1	50.0%	11	16.7%	12	4.2%
Floyd	107	4.5%	81	2	28.6%	34	9.4%	71	3.5%
Fountain	18	6.5%	45	0	0.0%	7	14.3%	11	5.0%
Franklin	54	9.8%	8	0	0.0%	20	23.5%	34	7.4%
Fulton	48	8.3%	19	4	80.0%	11	18.3%	33	6.4%
Gibson	75	7.5%	37	0	N/A	34	15.9%	41	5.2%
Grant	163	7.4%	38	3	23.1%	35	10.5%	125	6.8%
Greene	37	4.4%	83	0	0.0%	17	13.2%	20	2.8%
Hamilton	399	4.8%	76	8	33.3%	99	8.5%	292	4.1%
Hancock	111	5.6%	60	6	54.5%	29	7.5%	76	4.8%
Harrison	60	5.7%	55	2	22.2%	17	10.4%	41	4.7%
Hendricks	280	5.7%	59	2	15.4%	63	9.0%	215	5.1%
Henry	62	6.3%	50	2	25.0%	18	7.9%	42	5.6%
Howard	87	4.1%	84	2	16.7%	24	5.8%	61	3.6%
Huntington	74	6.5%	46	1	14.3%	21	11.5%	52	5.5%
Jackson	97	5.7%	56	2	25.0%	29	12.7%	66	4.5%
Jasper	107	9.2%	11	2	25.0%	33	16.8%	72	7.5%
Jay	22	4.0%	87	1	20.0%	7	9.5%	14	2.9%
Jefferson	44	5.3%	67	1	14.3%	11	7.8%	32	4.7%
Jennings	46	6.7%	43	5	83.3%	21	18.8%	20	3.5%
Johnson	235	6.3%	51	3	18.8%	59	9.3%	173	5.6%
Knox	46	3.8%	88	3	75.0%	14	7.7%	29	2.8%
Kosciusko	116	5.0%	73	3	21.4%	31	8.3%	82	4.2%
LaGrange	83	9.0%	12	4	57.1%	17	16.2%	62	7.7%
Lake	2,265	13.8%	1	26	46.4%	567	19.3%	1,672	12.5%
La Porte	262	8.9%	14	4	17.4%	95	15.1%	163	7.1%
Lawrence	66	5.1%	69	1	16.7%	16	7.7%	49	4.6%
Madison	181	4.9%	74	5	26.3%	50	8.2%	126	4.1%

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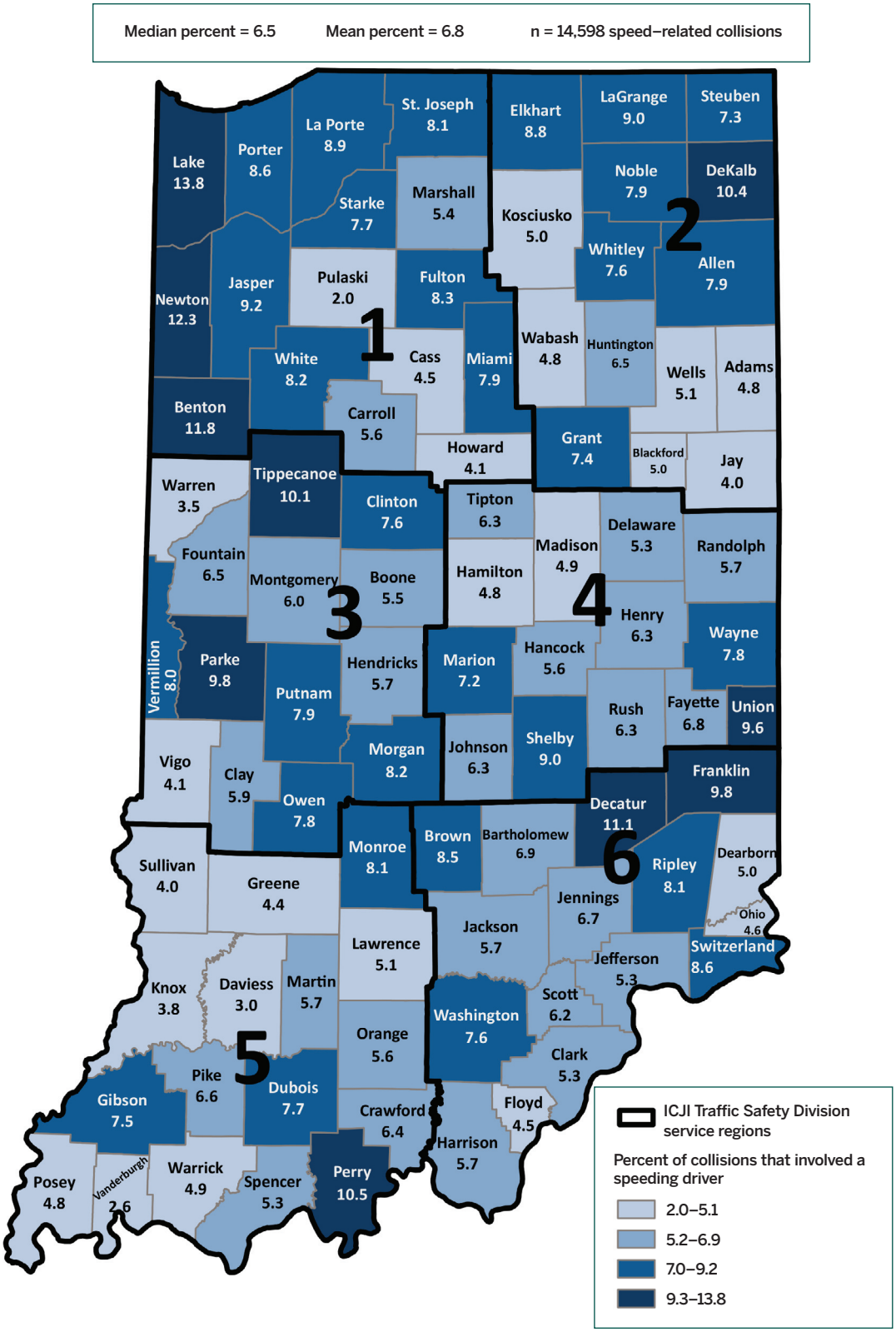
Table 8.3. Speed-related collisions in Indiana by severity and county, 2023 *(continued)*

	All collisions			Fatal		Non-fatal		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	2,634	7.2%	40	29	22.5%	671	10.7%	1,934	6.4%
Marshall	81	5.4%	64	1	11.1%	17	8.7%	63	4.9%
Martin	7	5.7%	57	0	N/A	4	14.3%	3	3.2%
Miami	81	7.9%	29	1	33.3%	26	15.2%	54	6.3%
Monroe	297	8.1%	22	3	27.3%	106	13.8%	188	6.6%
Montgomery	50	6.0%	53	0	0.0%	14	8.9%	36	5.4%
Morgan	132	8.2%	21	4	26.7%	39	14.3%	89	6.8%
Newton	49	12.3%	2	1	14.3%	13	16.7%	35	11.1%
Noble	90	7.9%	27	0	N/A	25	13.9%	65	6.8%
Ohio	6	4.6%	80	0	N/A	3	20.0%	3	2.6%
Orange	28	5.6%	62	0	0.0%	7	8.0%	21	5.1%
Owen	40	7.8%	31	1	16.7%	14	14.1%	25	6.1%
Parke	37	9.8%	9	1	100.0%	3	7.7%	33	9.8%
Perry	34	10.5%	5	2	33.3%	10	20.0%	22	8.2%
Pike	9	6.6%	44	0	0.0%	5	16.7%	4	3.8%
Porter	369	8.6%	17	2	12.5%	89	11.5%	278	7.9%
Posey	26	4.8%	77	2	66.7%	3	3.1%	21	4.8%
Pulaski	9	2.0%	92	0	0.0%	1	2.2%	8	2.0%
Putnam	69	7.9%	28	2	40.0%	25	16.8%	42	5.8%
Randolph	26	5.7%	58	3	37.5%	10	13.7%	13	3.5%
Ripley	50	8.1%	23	0	0.0%	13	11.6%	37	7.3%
Rush	17	6.3%	48	0	0.0%	8	13.1%	9	4.4%
St. Joseph	601	8.1%	24	11	39.3%	150	10.6%	440	7.3%
Scott	33	6.2%	52	0	0.0%	13	9.7%	20	5.1%
Shelby	106	9.0%	13	1	12.5%	31	13.0%	74	7.9%
Spencer	34	5.3%	68	0	0.0%	18	15.9%	16	3.0%
Starke	42	7.7%	32	1	25.0%	18	17.3%	23	5.3%
Steuben	113	7.3%	39	6	54.5%	20	16.0%	87	6.1%
Sullivan	12	4.0%	86	0	0.0%	7	13.7%	5	2.0%
Switzerland	19	8.6%	16	1	50.0%	6	15.0%	12	6.7%
Tippecanoe	649	10.1%	7	4	19.0%	149	13.8%	496	9.3%
Tipton	18	6.3%	49	0	0.0%	6	12.0%	12	5.2%
Union	8	9.6%	10	0	N/A	1	5.6%	7	10.8%
Vanderburgh	146	2.6%	91	3	13.0%	45	3.7%	98	2.2%
Vermillion	25	8.0%	25	0	0.0%	8	13.6%	17	6.8%
Vigo	124	4.1%	85	2	15.4%	30	5.2%	92	3.8%
Wabash	41	4.8%	79	0	0.0%	8	6.8%	33	4.4%
Warren	7	3.5%	89	0	0.0%	3	10.3%	4	2.4%
Warrick	77	4.9%	75	0	0.0%	21	9.6%	56	4.2%
Washington	53	7.6%	34	1	25.0%	17	12.9%	35	6.3%
Wayne	173	7.8%	30	2	28.6%	47	13.6%	124	6.7%
Wells	34	5.1%	70	2	100.0%	14	14.0%	18	3.2%
White	74	8.2%	20	2	28.6%	25	17.1%	47	6.3%
Whitley	62	7.6%	35	3	33.3%	14	9.5%	45	6.8%
Unknown	2	N/A	N/A	0	N/A	0	N/A	2	N/A

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) A collision is identified as speed-related if the crash report lists unsafe speed or speed too fast for weather conditions as the primary or contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) Percent calculations represent the proportion of total county collisions in each injury category (presented in Table 2.1) that are speed-related.
3) Non-fatal injury collisions include collisions for which the highest injury for individuals was defined as incapacitating and non-incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.3. Speed-related collisions as a percent of all collisions in Indiana by county and ICJI Traffic Safety Division service region, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: A collision is identified as speed-related if the crash report lists unsafe speed or speed too fast for weather conditions as the primary or contributing factor of the collision, or if a vehicle driver is issued a speeding citation.

Table 8.4. Alcohol-impaired collisions in Indiana by severity and county, 2023

County	All collisions		Fatal		Non-fatal		Property damage only	
	Count	Alcohol–impaired as % of total collisions	Count	Alcohol–impaired as % of total fatal collisions	Count	Alcohol–impaired as % of total non-fatal injury collisions	Count	Alcohol–impaired as % of total property damage collisions
All counties	**3,305**	**1.7%**	**64**	**7.3%**	**933**	**2.7%**	**2,308**	**1.4%**
Mean	36	1.9%	1	4.7%	10	3.3%	25	1.7%
Median	18	1.8%	0	0.0%	5	3.0%	12	1.5%
Minimum	1	0.6%	0	0.0%	0	0.0%	0	0.0%
Maximum	357	4.9%	22	50.0%	129	10.7%	222	5.4%
Adams	10	1.5%	0	0.0%	2	1.7%	8	1.5%
Allen	357	2.8%	6	15.0%	129	5.6%	222	2.1%
Bartholomew	38	2.5%	0	0.0%	9	1.8%	29	2.9%
Benton	6	4.7%	0	0.0%	1	3.0%	5	5.4%
Blackford	7	2.9%	0	0.0%	0	0.0%	7	3.5%
Boone	22	0.9%	0	0.0%	7	2.0%	15	0.8%
Brown	10	2.1%	0	0.0%	5	4.7%	5	1.4%
Carroll	6	1.2%	0	0.0%	4	5.7%	2	0.5%
Cass	22	2.3%	0	0.0%	9	5.2%	13	1.7%
Clark	58	1.5%	0	0.0%	16	2.4%	42	1.3%
Clay	8	1.4%	0	0.0%	4	4.0%	4	0.9%
Clinton	24	2.7%	0	0.0%	4	2.3%	20	2.8%
Crawford	2	0.7%	0	0.0%	0	0.0%	2	0.8%
Daviess	13	2.4%	1	20.0%	4	3.8%	8	1.9%
Dearborn	23	1.7%	0	0.0%	5	2.5%	18	1.6%
Decatur	14	2.0%	0	0.0%	5	3.5%	9	1.7%
DeKalb	22	1.9%	0	0.0%	8	4.0%	14	1.4%
Delaware	50	1.4%	0	0.0%	13	2.1%	37	1.3%
Dubois	28	2.2%	0	0.0%	11	5.8%	17	1.6%
Elkhart	101	1.7%	0	0.0%	21	2.4%	80	1.5%
Fayette	10	2.8%	0	0.0%	1	1.5%	9	3.2%
Floyd	43	1.8%	0	0.0%	11	3.0%	32	1.6%
Fountain	6	2.2%	0	0.0%	0	0.0%	6	2.7%
Franklin	6	1.1%	0	0.0%	1	1.2%	5	1.1%
Fulton	14	2.4%	1	20.0%	2	3.3%	11	2.1%
Gibson	12	1.2%	0	N/A	5	2.3%	7	0.9%
Grant	32	1.5%	0	0.0%	13	3.9%	19	1.0%
Greene	13	1.5%	1	12.5%	2	1.6%	10	1.4%
Hamilton	160	1.9%	1	4.2%	35	3.0%	124	1.8%
Hancock	35	1.8%	0	0.0%	8	2.1%	27	1.7%
Harrison	16	1.5%	1	11.1%	5	3.0%	10	1.1%
Hendricks	67	1.4%	1	7.7%	17	2.4%	49	1.2%
Henry	28	2.8%	0	0.0%	11	4.8%	17	2.3%
Howard	44	2.1%	2	16.7%	11	2.7%	31	1.8%
Huntington	29	2.6%	0	0.0%	6	3.3%	23	2.4%
Jackson	46	2.7%	0	0.0%	5	2.2%	41	2.8%
Jasper	23	2.0%	1	12.5%	7	3.6%	15	1.6%
Jay	7	1.3%	0	0.0%	3	4.1%	4	0.8%
Jefferson	21	2.5%	0	0.0%	5	3.5%	16	2.4%
Jennings	12	1.7%	1	16.7%	3	2.7%	8	1.4%
Johnson	51	1.4%	1	6.3%	8	1.3%	42	1.4%
Knox	18	1.5%	1	25.0%	4	2.2%	13	1.3%
Kosciusko	42	1.8%	1	7.1%	16	4.3%	25	1.3%
LaGrange	20	2.2%	0	0.0%	5	4.8%	15	1.9%
Lake	241	1.5%	4	7.1%	60	2.0%	177	1.3%
La Porte	116	4.0%	4	17.4%	36	5.7%	76	3.3%
Lawrence	20	1.6%	1	16.7%	9	4.3%	10	0.9%
Madison	55	1.5%	2	10.5%	12	2.0%	41	1.3%

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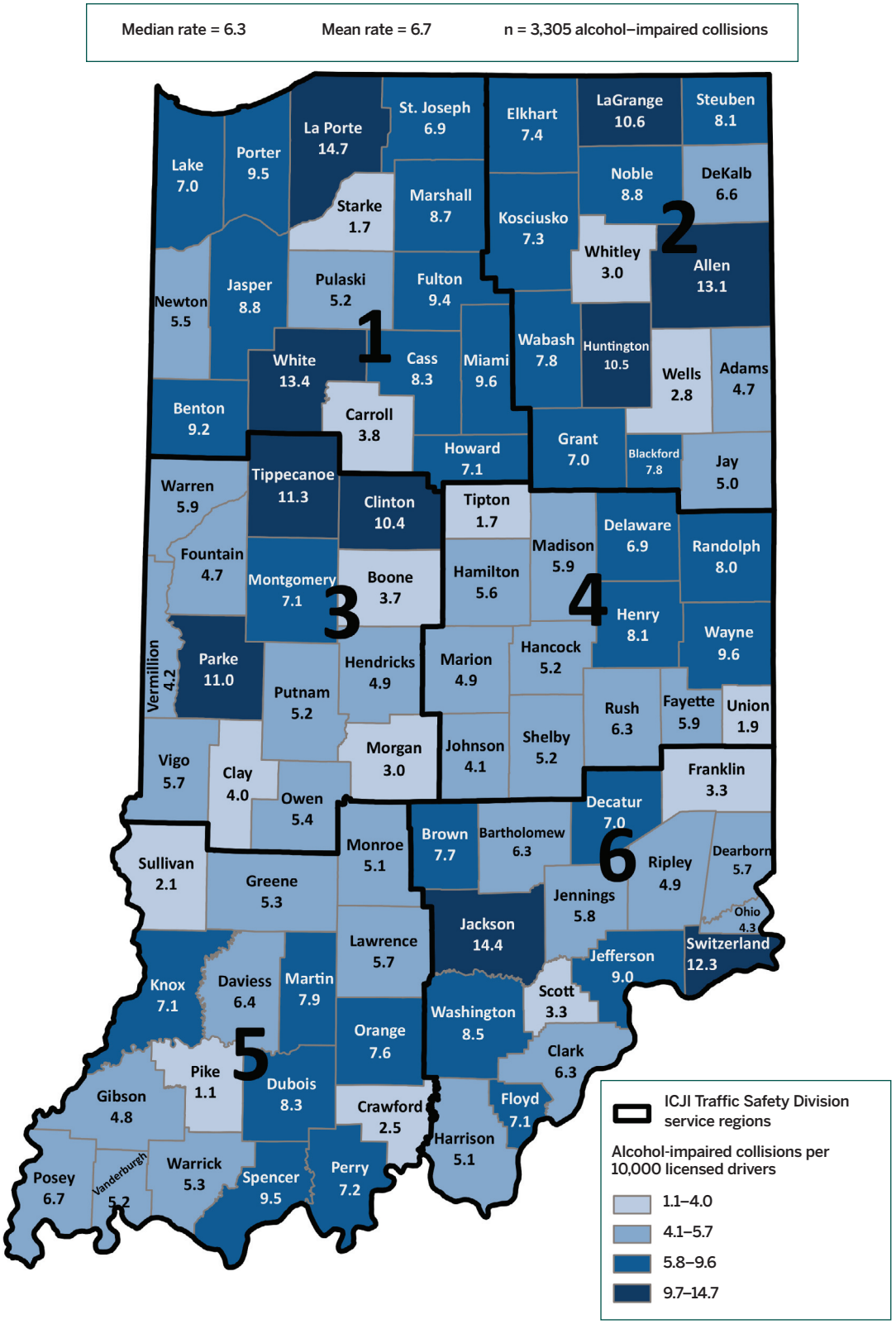
Table 8.4. Alcohol-impaired collisions in Indiana by severity and county, 2023 *(continued)*

	All collisions		Fatal		Non-fatal		Property damage only	
County	Count	Alcohol–impaired as % of total collisions	Count	Alcohol–impaired as % of total fatal collisions	Count	Alcohol–impaired as % of total non-fatal injury collisions	Count	Alcohol–impaired as % of total property damage collisions
Marion	296	0.8%	22	17.1%	75	1.2%	199	0.7%
Marshall	29	1.9%	0	0.0%	6	3.1%	23	1.8%
Martin	6	4.9%	0	N/A	3	10.7%	3	3.2%
Miami	23	2.2%	0	0.0%	6	3.5%	17	2.0%
Monroe	43	1.2%	0	0.0%	21	2.7%	22	0.8%
Montgomery	20	2.4%	0	0.0%	6	3.8%	14	2.1%
Morgan	17	1.1%	0	0.0%	8	2.9%	9	0.7%
Newton	6	1.5%	0	0.0%	2	2.6%	4	1.3%
Noble	30	2.6%	0	N/A	9	5.0%	21	2.2%
Ohio	2	1.5%	0	N/A	0	0.0%	2	1.7%
Orange	11	2.2%	0	0.0%	3	3.4%	8	1.9%
Owen	9	1.8%	0	0.0%	4	4.0%	5	1.2%
Parke	12	3.2%	0	0.0%	3	7.7%	9	2.7%
Perry	10	3.1%	1	16.7%	5	10.0%	4	1.5%
Pike	1	0.7%	0	0.0%	1	3.3%	0	0.0%
Porter	127	3.0%	1	6.3%	45	5.8%	81	2.3%
Posey	13	2.4%	0	0.0%	5	5.2%	8	1.8%
Pulaski	5	1.1%	0	0.0%	1	2.2%	4	1.0%
Putnam	14	1.6%	0	0.0%	4	2.7%	10	1.4%
Randolph	14	3.1%	0	0.0%	5	6.8%	9	2.4%
Ripley	11	1.8%	0	0.0%	3	2.7%	8	1.6%
Rush	8	3.0%	0	0.0%	0	0.0%	8	3.9%
St. Joseph	125	1.7%	3	10.7%	26	1.8%	96	1.6%
Scott	6	1.1%	0	0.0%	2	1.5%	4	1.0%
Shelby	18	1.5%	0	0.0%	5	2.1%	13	1.4%
Spencer	15	2.3%	0	0.0%	6	5.3%	9	1.7%
Starke	3	0.6%	0	0.0%	1	1.0%	2	0.5%
Steuben	21	1.3%	0	0.0%	5	4.0%	16	1.1%
Sullivan	3	1.0%	1	33.3%	1	2.0%	1	0.4%
Switzerland	9	4.1%	0	0.0%	3	7.5%	6	3.4%
Tippecanoe	129	2.0%	3	14.3%	34	3.1%	92	1.7%
Tipton	2	0.7%	0	0.0%	1	2.0%	1	0.4%
Union	1	1.2%	0	N/A	1	5.6%	0	0.0%
Vanderburgh	65	1.2%	1	4.3%	16	1.3%	48	1.1%
Vermillion	5	1.6%	0	0.0%	1	1.7%	4	1.6%
Vigo	39	1.3%	0	0.0%	17	2.9%	22	0.9%
Wabash	18	2.1%	0	0.0%	7	6.0%	11	1.5%
Warren	4	2.0%	1	33.3%	1	3.4%	2	1.2%
Warrick	27	1.7%	0	0.0%	10	4.6%	17	1.3%
Washington	18	2.6%	0	0.0%	5	3.8%	13	2.3%
Wayne	43	1.9%	0	0.0%	12	3.5%	31	1.7%
Wells	6	0.9%	1	50.0%	0	0.0%	5	0.9%
White	25	2.8%	0	0.0%	2	1.4%	23	3.1%
Whitley	8	1.0%	0	0.0%	4	2.7%	4	0.6%
Unknown	1	N/A	0	N/A	0	N/A	1	N/A

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) A collision is considered alcohol-impaired when at least one vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are excluded from the analysis.
2) Percent calculations represent the proportion of total county collisions in each injury category (presented in Table 8.1) that are alcohol-impaired.
3) Non-fatal injuries include injuries defined as incapacitating and non-incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.4. Alcohol-impaired collisions per 10,000 licensed drivers in Indiana by county and ICJI Traffic Safety Division service region, 2023



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024.

Note: A collision is considered alcohol-impaired when at least one vehicle driver involved has a BAC test result at or above 0.08 g/dL. Results greater than 0.59 g/dL are treated as invalid.

Table 8.5. Restraint use by passenger-vehicle occupants in collisions in Indiana by injury status and county, 2023

	All occupants			Fatal			Incapacitating			Non–incapacitating		
	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained
All counties	**273,619**	**19,996**	**7.3%**	**673**	**385**	**57.2%**	**3,857**	**1,468**	**38.1%**	**36,789**	**5,375**	**14.6%**
Mean	2,974	217	10.9%	7	4	61.1%	42	16	41.7%	400	58	19.5%
Median	1,092	103	10.0%	5	3	60.0%	23	9	39.1%	160	27	18.7%
Minimum	105	15	1.9%	0	0	0.0%	1	0	0.0%	11	1	5.4%
Maximum	51,108	3,949	32.3%	70	45	100.0%	532	201	100.0%	6,522	1,019	44.0%
Adams	786	65	8.3%	1	1	100.0%	19	9	47.4%	118	25	21.2%
Allen	17,423	1,108	6.4%	30	9	30.0%	223	92	41.3%	2,476	295	11.9%
Bartholomew	2,363	259	11.0%	9	6	66.7%	61	25	41.0%	577	81	14.0%
Benton	148	21	14.2%	1	0	0.0%	6	2	33.3%	23	4	17.4%
Blackford	290	22	7.6%	2	0	0.0%	1	0	0.0%	43	3	7.0%
Boone	2,631	372	14.1%	2	2	100.0%	42	17	40.5%	348	72	20.7%
Brown	513	91	17.7%	5	2	40.0%	18	8	44.4%	86	29	33.7%
Carroll	543	61	11.2%	3	3	100.0%	15	10	66.7%	64	15	23.4%
Cass	1,079	132	12.2%	3	2	66.7%	19	6	31.6%	194	39	20.1%
Clark	5,491	370	6.7%	11	4	36.4%	73	27	37.0%	678	87	12.8%
Clay	523	120	22.9%	2	2	100.0%	11	5	45.5%	62	26	41.9%
Clinton	1,097	110	10.0%	4	2	50.0%	25	14	56.0%	173	38	22.0%
Crawford	247	58	23.5%	3	2	66.7%	10	7	70.0%	32	12	37.5%
Daviess	581	130	22.4%	6	6	100.0%	12	6	50.0%	133	37	27.8%
Dearborn	1,644	109	6.6%	4	3	75.0%	27	6	22.2%	200	24	12.0%
Decatur	822	84	10.2%	3	1	33.3%	31	16	51.6%	134	26	19.4%
DeKalb	1,494	143	9.6%	5	3	60.0%	31	18	58.1%	210	31	14.8%
Delaware	5,187	336	6.5%	11	2	18.2%	71	26	36.6%	670	68	10.1%
Dubois	1,735	96	5.5%	9	7	77.8%	30	10	33.3%	209	19	9.1%
Elkhart	8,696	534	6.1%	14	6	42.9%	118	48	40.7%	881	127	14.4%
Fayette	372	120	32.3%	2	2	100.0%	10	5	50.0%	50	22	44.0%
Floyd	3,581	172	4.8%	4	1	25.0%	31	12	38.7%	394	45	11.4%
Fountain	228	42	18.4%	4	2	50.0%	6	2	33.3%	48	13	27.1%
Franklin	537	67	12.5%	3	1	33.3%	13	5	38.5%	77	13	16.9%
Fulton	477	56	11.7%	5	5	100.0%	7	3	42.9%	52	10	19.2%
Gibson	1,155	142	12.3%	0	0	N/A	35	24	68.6%	216	44	20.4%
Grant	2,378	257	10.8%	9	5	55.6%	41	20	48.8%	333	65	19.5%
Greene	720	103	14.3%	8	7	87.5%	19	7	36.8%	108	22	20.4%
Hamilton	13,634	523	3.8%	20	7	35.0%	118	32	27.1%	1,575	133	8.4%
Hancock	3,008	224	7.4%	11	7	63.6%	45	10	22.2%	446	63	14.1%
Harrison	1,238	154	12.4%	7	4	57.1%	23	9	39.1%	152	39	25.7%
Hendricks	5,749	596	10.4%	8	3	37.5%	77	28	36.4%	708	139	19.6%
Henry	1,325	140	10.6%	6	5	83.3%	36	13	36.1%	247	44	17.8%
Howard	2,335	365	15.6%	12	6	50.0%	52	23	44.2%	365	99	27.1%
Huntington	1,504	79	5.3%	6	3	50.0%	27	11	40.7%	184	22	12.0%
Jackson	1,706	218	12.8%	7	3	42.9%	46	19	41.3%	185	51	27.6%
Jasper	1,523	114	7.5%	8	7	87.5%	45	18	40.0%	250	45	18.0%
Jay	595	81	13.6%	4	2	50.0%	12	9	75.0%	82	23	28.0%
Jefferson	1,079	163	15.1%	7	6	85.7%	23	13	56.5%	138	31	22.5%
Jennings	767	82	10.7%	6	4	66.7%	31	13	41.9%	93	20	21.5%
Johnson	5,372	456	8.5%	9	2	22.2%	68	19	27.9%	668	134	20.1%
Knox	1,301	147	11.3%	4	2	50.0%	23	9	39.1%	179	54	30.2%
Kosciusko	3,225	60	1.9%	11	5	45.5%	24	3	12.5%	454	28	6.2%
LaGrange	1,178	82	7.0%	6	3	50.0%	21	7	33.3%	113	24	21.2%
Lake	25,881	1,452	5.6%	36	19	52.8%	298	110	36.9%	3,276	414	12.6%
La Porte	4,317	216	5.0%	18	10	55.6%	69	19	27.5%	740	77	10.4%
Lawrence	1,773	102	5.8%	5	3	60.0%	35	12	34.3%	222	32	14.4%
Madison	5,176	478	9.2%	15	9	60.0%	78	35	44.9%	672	118	17.6%

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Table 8.5. Restraint use by passenger-vehicle occupants in collisions in Indiana by injury status and county, 2023 *(continued)*

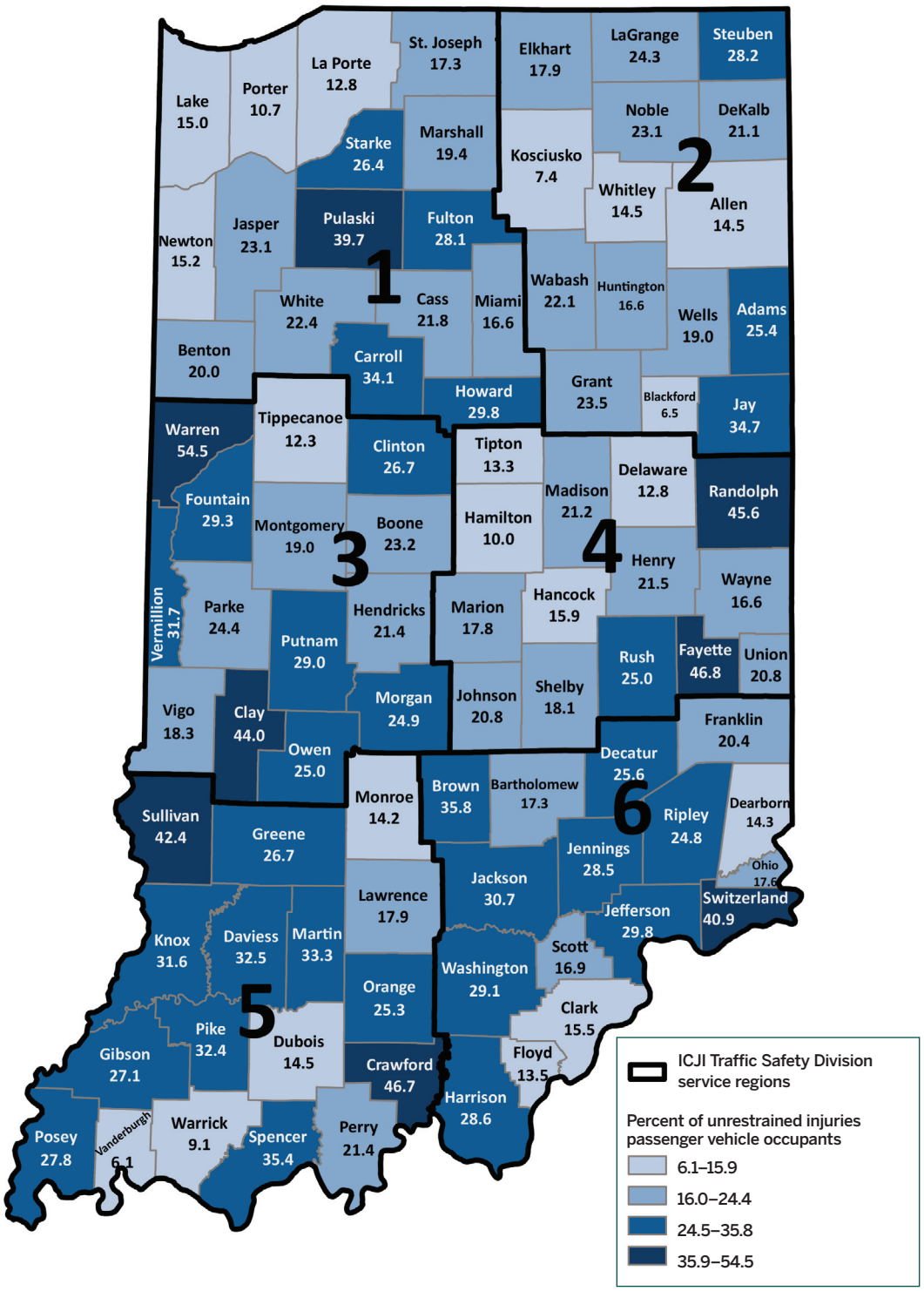
	All occupants			Fatal			Incapacitating			Non–incapacitating		
	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained	Total	Unrestrained	% unrestrained
Marion	51,108	3,949	7.7%	70	45	64.3%	532	201	37.8%	6,522	1,019	15.6%
Marshall	1,555	152	9.8%	6	3	50.0%	20	11	55.0%	191	28	14.7%
Martin	143	24	16.8%	0	0	N/A	7	5	71.4%	26	6	23.1%
Miami	1,000	88	8.8%	3	0	0.0%	26	11	42.3%	170	22	12.9%
Monroe	5,193	276	5.3%	10	6	60.0%	50	17	34.0%	826	103	12.5%
Montgomery	1,122	107	9.5%	10	6	60.0%	22	10	45.5%	178	24	13.5%
Morgan	2,073	242	11.7%	10	8	80.0%	46	15	32.6%	290	63	21.7%
Newton	505	35	6.9%	6	2	33.3%	21	6	28.6%	85	9	10.6%
Noble	1,210	119	9.8%	0	0	N/A	25	9	36.0%	183	39	21.3%
Ohio	105	15	14.3%	0	0	N/A	6	1	16.7%	11	2	18.2%
Orange	377	61	16.2%	2	2	100.0%	11	7	63.6%	70	12	17.1%
Owen	477	70	14.7%	5	3	60.0%	16	6	37.5%	91	19	20.9%
Parke	443	39	8.8%	1	1	100.0%	11	6	54.5%	33	4	12.1%
Perry	383	27	7.0%	5	3	60.0%	9	5	55.6%	42	4	9.5%
Pike	152	19	12.5%	2	2	100.0%	6	1	16.7%	26	8	30.8%
Porter	6,482	286	4.4%	14	5	35.7%	90	21	23.3%	886	80	9.0%
Posey	558	72	12.9%	2	1	50.0%	20	8	40.0%	86	21	24.4%
Pulaski	447	52	11.6%	3	2	66.7%	12	9	75.0%	43	12	27.9%
Putnam	964	148	15.4%	5	2	40.0%	23	5	21.7%	134	40	29.9%
Randolph	457	89	19.5%	7	6	85.7%	13	8	61.5%	70	27	38.6%
Ripley	723	71	9.8%	1	0	0.0%	21	8	38.1%	111	25	22.5%
Rush	340	47	13.8%	3	3	100.0%	6	2	33.3%	67	14	20.9%
St. Joseph	11,201	738	6.6%	24	16	66.7%	131	50	38.2%	1,496	219	14.6%
Scott	734	62	8.4%	5	2	40.0%	17	7	41.2%	144	19	13.2%
Shelby	1,576	150	9.5%	5	4	80.0%	25	11	44.0%	257	37	14.4%
Spencer	674	81	12.0%	6	5	83.3%	21	8	38.1%	86	27	31.4%
Starke	716	72	10.1%	3	3	100.0%	18	10	55.6%	119	24	20.2%
Steuben	1,724	93	5.4%	6	4	66.7%	39	10	25.6%	118	32	27.1%
Sullivan	323	43	13.3%	3	3	100.0%	10	7	70.0%	46	15	32.6%
Switzerland	190	42	22.1%	2	1	50.0%	2	2	100.0%	40	15	37.5%
Tippecanoe	10,026	469	4.7%	16	9	56.3%	108	35	32.4%	1,222	121	9.9%
Tipton	416	27	6.5%	3	1	33.3%	19	3	15.8%	53	6	11.3%
Union	109	18	16.5%	0	0	N/A	8	4	50.0%	16	1	6.3%
Vanderburgh	9,740	206	2.1%	16	9	56.3%	45	7	15.6%	1,714	93	5.4%
Vermillion	297	49	16.5%	3	2	66.7%	8	2	25.0%	52	16	30.8%
Vigo	4,116	346	8.4%	14	10	71.4%	78	24	30.8%	573	88	15.4%
Wabash	1,078	68	6.3%	1	1	100.0%	17	6	35.3%	122	24	19.7%
Warren	158	47	29.7%	3	3	100.0%	5	4	80.0%	25	11	44.0%
Warrick	2,265	53	2.3%	3	2	66.7%	27	6	22.2%	257	18	7.0%
Washington	785	90	11.5%	2	1	50.0%	28	14	50.0%	142	35	24.6%
Wayne	3,137	162	5.2%	5	3	60.0%	49	18	36.7%	385	52	13.5%
Wells	865	68	7.9%	2	2	100.0%	13	7	53.8%	101	13	12.9%
White	1,086	120	11.0%	6	4	66.7%	19	13	68.4%	167	26	15.6%
Whitley	1,159	92	7.9%	11	4	36.4%	21	6	28.6%	175	20	11.4%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes only drivers and passengers in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans. Pedestrians, pedalcyclists, and animal-drawn vehicle operators are excluded.
2) The "all occupants" column including occupants in collisions for which incapacitating injuries, non-incapacitating injuries, or property damage were reported. Data for individuals in property damage only collisions is not shown separately.
3) Restraint use includes seat belts as well as child restraints.
4) Restraint use is calculated using only passenger vehicle occupants with known restraint status. Occupants with unknown restraint status are excluded from the analysis.
5) Non-incapacitating injuries include those injuries that do not meet the criteria for fatal or incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.5. Percent of unrestrained injured passenger-vehicle occupants in collisions in Indiana by county and ICJI Traffic Safety Division service region, 2023

Median percent = 22.3 Mean percent = 23.6 n = 41,319 passenger vehicle occupants injured in collisions with known restraint status

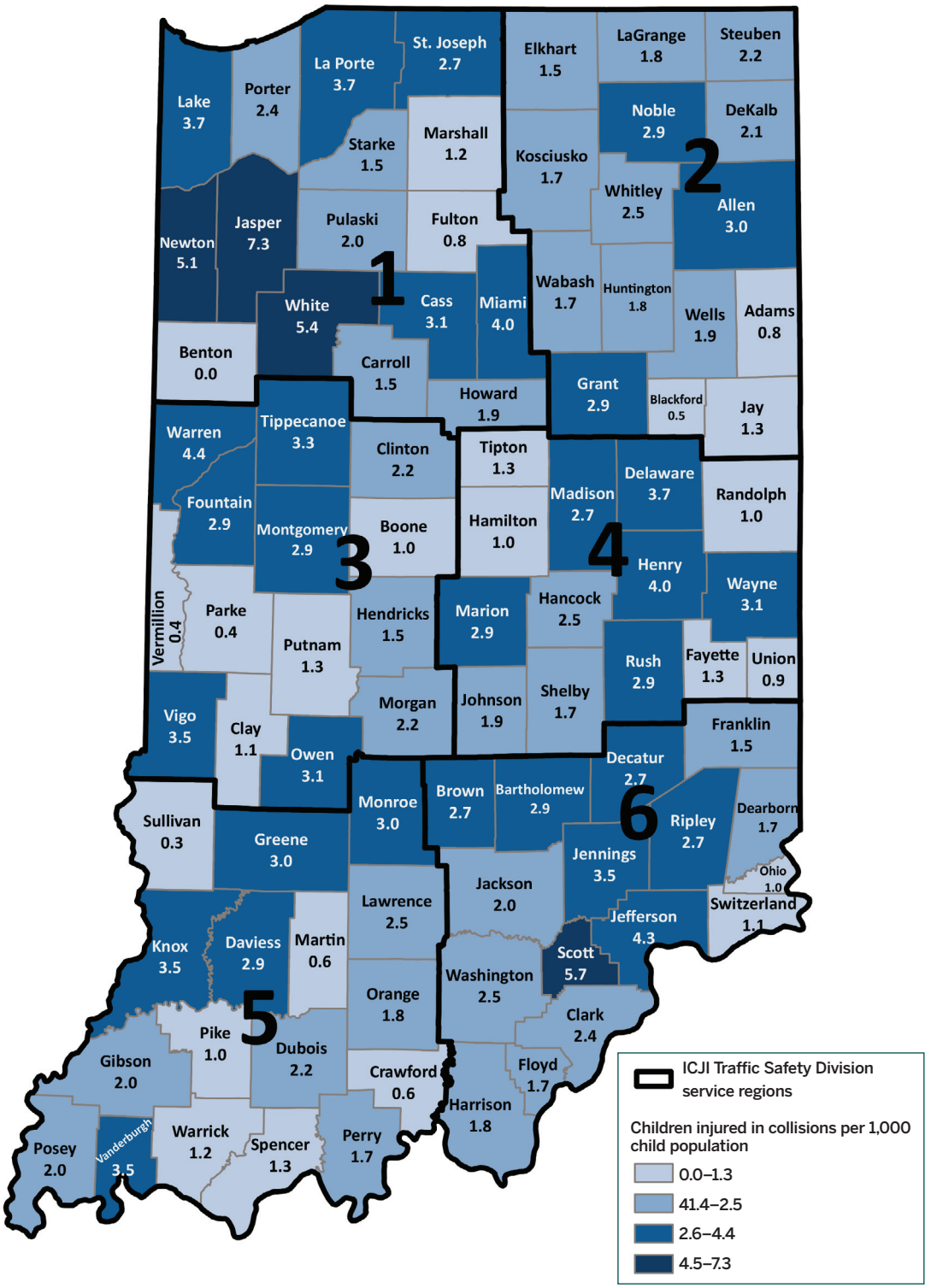


Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Includes only drivers and passengers in passenger vehicles—passenger cars, pickup trucks, sport utility vehicles, and vans. Pedestrians, pedalcyclists, and animal-drawn vehicle operators are excluded.
2) Restraint use includes seat belts and child restraints.
3) Restraint use is calculated using only passenger vehicle occupants with known restraint status. Occupants with unknown restraint status are excluded from the analysis.

Map 8.6. Child injuries in collisions per 1,000 child population in Indiana by county and ICJI Traffic Safety Division service region, 2023

Median rate = 2.1 | Mean rate = 2.3 | n = 3.034 injured children



Sources: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and U.S. Census Bureau, 2022 age-specific population estimates, downloaded February 28, 2024.

Notes:
1) Includes all individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists as well as drivers and animal-drawn vehicle operators ages 8–14.
2) Injured includes those injuries classified as fatal, incapacitating, and non-incapacitating. See the glossary for updated injury definitions and methodologies.

Table 8.6. Young drivers (ages 15–20) in Indiana collisions by injury status and county, 2023

County	All drivers in collisions	Young drivers in collisions									
		Total		Fatal		Incapacitating		Non–incapacitating		No injury	
		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	**344,411**	**38,236**	**11.1%**	**64**	**0.2%**	**337**	**0.9%**	**3,537**	**9.3%**	**34,298**	**89.7%**
Mean	3,744	416	12.1%	1	0.3%	4	1.6%	38	10.8%	373	87.4%
Median	1,353	169	12.1%	0	0.0%	2	1.2%	19	9.6%	146	88.4%
Minimum	132	15	8.1%	0	0.0%	0	0.0%	1	3.6%	12	76.3%
Maximum	66,816	5,899	16.5%	10	4.0%	47	8.6%	536	23.7%	5,306	94.8%
Adams	1,021	124	12.1%	0	0.0%	5	4.0%	13	10.5%	106	85.5%
Allen	23,392	2,756	11.8%	3	0.1%	16	0.6%	243	8.8%	2,494	90.5%
Bartholomew	2,581	328	12.7%	1	0.3%	7	2.1%	63	19.2%	257	78.4%
Benton	187	24	12.8%	0	0.0%	1	4.2%	3	12.5%	20	83.3%
Blackford	348	48	13.8%	0	0.0%	0	0.0%	8	16.7%	40	83.3%
Boone	4,080	430	10.5%	0	0.0%	4	0.9%	30	7.0%	396	92.1%
Brown	649	78	12.0%	0	0.0%	1	1.3%	17	21.8%	60	76.9%
Carroll	663	83	12.5%	0	0.0%	1	1.2%	8	9.6%	74	89.2%
Cass	1,571	159	10.1%	1	0.6%	0	0.0%	17	10.7%	141	88.7%
Clark	6,960	686	9.9%	0	0.0%	3	0.4%	56	8.2%	627	91.4%
Clay	912	107	11.7%	1	0.9%	2	1.9%	7	6.5%	97	90.7%
Clinton	1,466	209	14.3%	0	0.0%	3	1.4%	30	14.4%	176	84.2%
Crawford	373	35	9.4%	0	0.0%	3	8.6%	5	14.3%	27	77.1%
Daviess	910	116	12.7%	2	1.7%	1	0.9%	13	11.2%	100	86.2%
Dearborn	2,209	271	12.3%	0	0.0%	5	1.8%	20	7.4%	246	90.8%
Decatur	1,105	128	11.6%	0	0.0%	2	1.6%	12	9.4%	114	89.1%
DeKalb	1,783	230	12.9%	0	0.0%	5	2.2%	29	12.6%	196	85.2%
Delaware	6,265	775	12.4%	1	0.1%	5	0.6%	64	8.3%	705	91.0%
Dubois	2,051	271	13.2%	1	0.4%	2	0.7%	23	8.5%	245	90.4%
Elkhart	10,795	1,272	11.8%	2	0.2%	6	0.5%	86	6.8%	1,178	92.6%
Fayette	585	81	13.8%	0	0.0%	2	2.5%	7	8.6%	72	88.9%
Floyd	4,384	497	11.3%	1	0.2%	1	0.2%	37	7.4%	458	92.2%
Fountain	391	48	12.3%	0	0.0%	1	2.1%	8	16.7%	39	81.3%
Franklin	768	127	16.5%	0	0.0%	2	1.6%	18	14.2%	107	84.3%
Fulton	816	69	8.5%	1	1.4%	1	1.4%	5	7.2%	62	89.9%
Gibson	1,594	178	11.2%	0	0.0%	2	1.1%	17	9.6%	159	89.3%
Grant	3,715	384	10.3%	0	0.0%	2	0.5%	36	9.4%	346	90.1%
Greene	1,168	169	14.5%	1	0.6%	2	1.2%	20	11.8%	146	86.4%
Hamilton	14,692	2,064	14.0%	3	0.1%	7	0.3%	199	9.6%	1,855	89.9%
Hancock	3,528	419	11.9%	1	0.2%	3	0.7%	37	8.8%	378	90.2%
Harrison	1,616	214	13.2%	0	0.0%	4	1.9%	21	9.8%	189	88.3%
Hendricks	9,096	1,177	12.9%	1	0.1%	8	0.7%	73	6.2%	1,095	93.0%
Henry	1,610	184	11.4%	1	0.5%	7	3.8%	23	12.5%	153	83.2%
Howard	3,808	440	11.6%	1	0.2%	2	0.5%	41	9.3%	396	90.0%
Huntington	1,729	168	9.7%	0	0.0%	1	0.6%	16	9.5%	151	89.9%
Jackson	2,731	326	11.9%	1	0.3%	4	1.2%	24	7.4%	297	91.1%
Jasper	1,783	193	10.8%	1	0.5%	3	1.6%	24	12.4%	165	85.5%
Jay	770	98	12.7%	0	0.0%	2	2.0%	12	12.2%	84	85.7%
Jefferson	1,361	161	11.8%	0	0.0%	2	1.2%	19	11.8%	140	87.0%
Jennings	1,083	152	14.0%	0	0.0%	5	3.3%	9	5.9%	138	90.8%
Johnson	6,922	901	13.0%	1	0.1%	6	0.7%	70	7.8%	824	91.5%
Knox	2,012	241	12.0%	0	0.0%	4	1.7%	19	7.9%	218	90.5%
Kosciusko	3,353	492	14.7%	0	0.0%	1	0.2%	53	10.8%	438	89.0%
LaGrange	1,291	174	13.5%	0	0.0%	0	0.0%	9	5.2%	165	94.8%
Lake	31,230	2,745	8.8%	4	0.1%	24	0.9%	222	8.1%	2,495	90.9%
La Porte	4,882	429	8.8%	2	0.5%	6	1.4%	56	13.1%	365	85.1%
Lawrence	2,031	256	12.6%	0	0.0%	3	1.2%	23	9.0%	230	89.8%
Madison	6,405	651	10.2%	0	0.0%	6	0.9%	53	8.1%	592	90.9%

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Table 8.6. Young drivers (ages 15–20) in Indiana collisions by injury status and county, 2023 *(continued)*

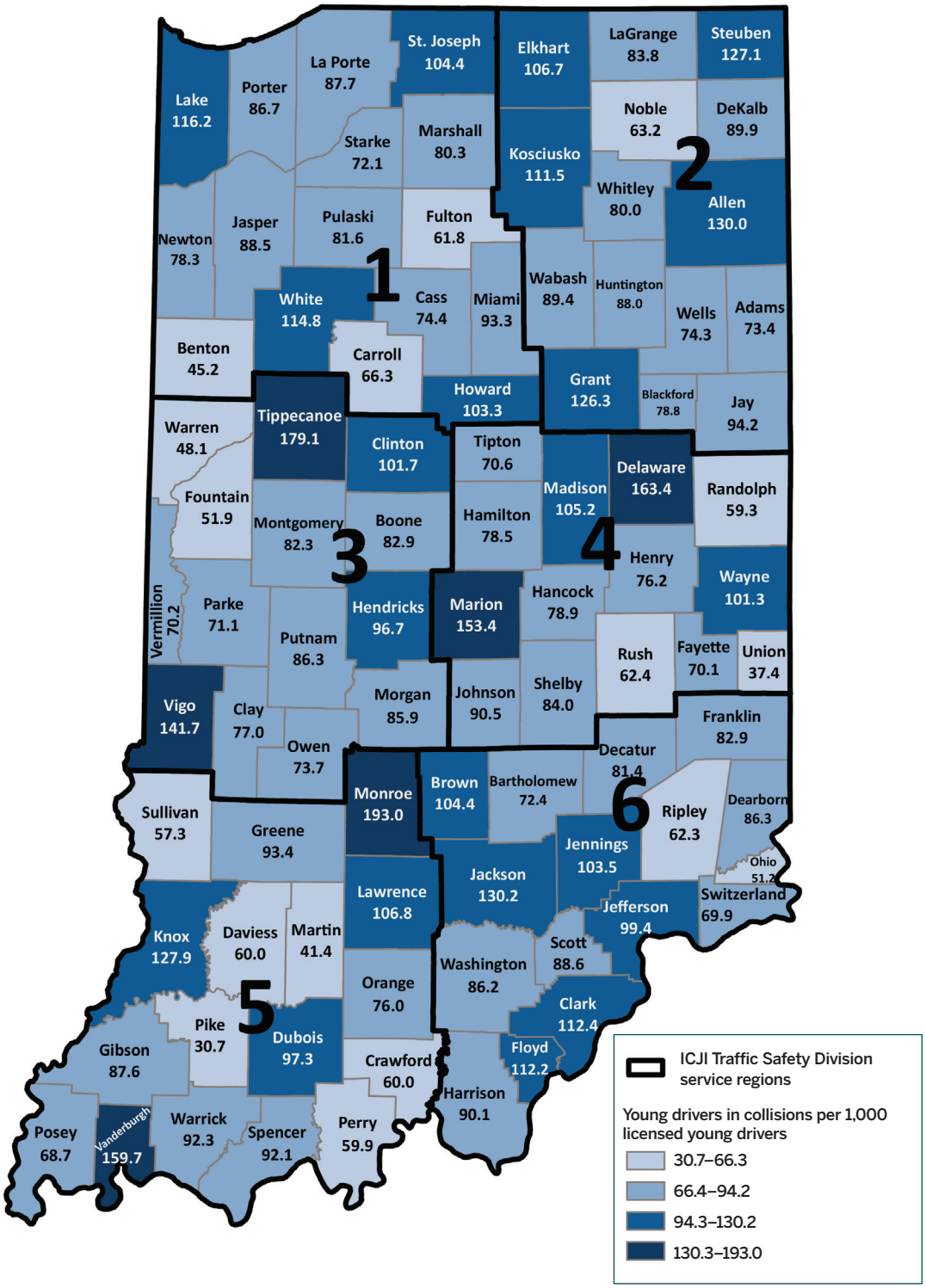
County	All drivers in collisions	Young drivers in collisions									
		Total		Fatal		Incapacitating		Non–incapacitating		No injury	
		Count	As % of total drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions	Count	As % of all young drivers in collisions
Marion	66,816	5,899	8.8%	10	0.2%	47	0.8%	536	9.1%	5,306	89.9%
Marshall	2,178	226	10.4%	0	0.0%	2	0.9%	19	8.4%	205	90.7%
Martin	159	24	15.1%	0	0.0%	0	0.0%	5	20.8%	19	79.2%
Miami	1,528	166	10.9%	0	0.0%	2	1.2%	19	11.4%	145	87.3%
Monroe	6,605	1,029	15.6%	0	0.0%	3	0.3%	86	8.4%	940	91.4%
Montgomery	1,288	171	13.3%	1	0.6%	1	0.6%	20	11.7%	149	87.1%
Morgan	2,625	369	14.1%	2	0.5%	9	2.4%	39	10.6%	319	86.4%
Newton	554	58	10.5%	1	1.7%	1	1.7%	10	17.2%	46	79.3%
Noble	1,615	173	10.7%	0	0.0%	6	3.5%	19	11.0%	148	85.5%
Ohio	164	15	9.1%	0	0.0%	1	6.7%	2	13.3%	12	80.0%
Orange	710	80	11.3%	0	0.0%	3	3.8%	7	8.8%	70	87.5%
Owen	749	84	11.2%	1	1.2%	1	1.2%	12	14.3%	70	83.3%
Parke	485	56	11.5%	0	0.0%	2	3.6%	2	3.6%	52	92.9%
Perry	479	68	14.2%	0	0.0%	2	2.9%	3	4.4%	63	92.6%
Pike	196	21	10.7%	0	0.0%	0	0.0%	4	19.0%	17	81.0%
Porter	7,409	849	11.5%	1	0.1%	7	0.8%	61	7.2%	780	91.9%
Posey	791	106	13.4%	0	0.0%	1	0.9%	15	14.2%	90	84.9%
Pulaski	565	59	10.4%	1	1.7%	0	0.0%	3	5.1%	55	93.2%
Putnam	1,313	169	12.9%	0	0.0%	1	0.6%	27	16.0%	141	83.4%
Randolph	666	75	11.3%	2	2.7%	2	2.7%	5	6.7%	66	88.0%
Ripley	908	114	12.6%	0	0.0%	4	3.5%	14	12.3%	96	84.2%
Rush	389	58	14.9%	1	1.7%	2	3.4%	5	8.6%	50	86.2%
St. Joseph	13,766	1,316	9.6%	3	0.2%	8	0.6%	100	7.6%	1,205	91.6%
Scott	889	116	13.0%	0	0.0%	1	0.9%	10	8.6%	105	90.5%
Shelby	1,826	210	11.5%	1	0.5%	4	1.9%	29	13.8%	176	83.8%
Spencer	879	116	13.2%	0	0.0%	2	1.7%	18	15.5%	96	82.8%
Starke	776	88	11.3%	0	0.0%	1	1.1%	10	11.4%	77	87.5%
Steuben	2,227	214	9.6%	0	0.0%	3	1.4%	12	5.6%	199	93.0%
Sullivan	443	62	14.0%	0	0.0%	1	1.6%	8	12.9%	53	85.5%
Switzerland	283	35	12.4%	0	0.0%	0	0.0%	6	17.1%	29	82.9%
Tippecanoe	11,673	1,505	12.9%	0	0.0%	10	0.7%	139	9.2%	1,356	90.1%
Tipton	447	58	13.0%	0	0.0%	4	6.9%	6	10.3%	48	82.8%
Union	132	15	11.4%	0	0.0%	1	6.7%	1	6.7%	13	86.7%
Vanderburgh	9,885	1,295	13.1%	1	0.1%	5	0.4%	162	12.5%	1,127	87.0%
Vermillion	462	59	12.8%	0	0.0%	0	0.0%	14	23.7%	45	76.3%
Vigo	5,479	646	11.8%	2	0.3%	5	0.8%	56	8.7%	583	90.2%
Wabash	1,225	152	12.4%	0	0.0%	3	2.0%	12	7.9%	137	90.1%
Warren	254	25	9.8%	1	4.0%	0	0.0%	3	12.0%	21	84.0%
Warrick	2,443	393	16.1%	1	0.3%	2	0.5%	36	9.2%	354	90.1%
Washington	1,017	132	13.0%	1	0.8%	2	1.5%	19	14.4%	110	83.3%
Wayne	3,759	305	8.1%	0	0.0%	1	0.3%	30	9.8%	274	89.8%
Wells	1,027	136	13.2%	1	0.7%	1	0.7%	18	13.2%	116	85.3%
White	1,345	157	11.7%	1	0.6%	3	1.9%	14	8.9%	139	88.5%
Whitley	1,307	164	12.5%	1	0.6%	0	0.0%	23	14.0%	140	85.4%
Unknown	59	9	N/A	0	N/A	0	N/A	0	N/A	9	N/A

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Young drivers are drivers ages 15–20.
2) Count of total drivers includes records with unknown or invalid ages.
3) See the glossary for updated injury definitions and methodologies.

Map 8.7. Young drivers (ages 15–20) in collisions per 1,000 licensed young drivers in Indiana by county and ICJI Traffic Safety Division service region, 2023

Median rate = 86.0 Mean rate = 89.0 N = 38,236 young drivers in collisons



Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024; and Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024.

Note: Young drivers are drivers ages 15–20.

Table 8.7. Motorcyclists involved in collisions in Indiana by injury status and county, 2023

	Total motorcyclists involved		Fatal		Incapacitating		Non–incapacitating		No injury	
	Count	County rank	Count	As % county total	Count	As % county total	Count	As % county total	Count	As % county total
All counties	**3,040**	**N/A**	**141**	**4.6%**	**697**	**22.9%**	**1,387**	**45.6%**	**815**	**26.8%**
Mean	33	N/A	2	5.4%	8	26.2%	15	44.3%	9	24.2%
Median	16	N/A	1	2.0%	4	24.0%	7	44.4%	4	25.5%
Minimum	1	N/A	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Maximum	363	N/A	23	50.0%	69	100.0%	145	88.9%	126	54.5%
Adams	13	54	0	0.0%	4	30.8%	6	46.2%	3	23.1%
Allen	186	2	7	3.8%	51	27.4%	73	39.2%	55	29.6%
Bartholomew	55	14	0	0.0%	18	32.7%	27	49.1%	10	18.2%
Benton	3	88	0	0.0%	0	0.0%	2	66.7%	1	33.3%
Blackford	2	90	0	0.0%	0	0.0%	1	50.0%	1	50.0%
Boone	27	30	0	0.0%	4	14.8%	16	59.3%	7	25.9%
Brown	40	23	1	2.5%	6	15.0%	26	65.0%	7	17.5%
Carroll	9	66	0	0.0%	5	55.6%	2	22.2%	2	22.2%
Cass	15	48	1	6.7%	3	20.0%	7	46.7%	4	26.7%
Clark	54	15	5	9.3%	9	16.7%	28	51.9%	12	22.2%
Clay	8	73	0	0.0%	2	25.0%	3	37.5%	3	37.5%
Clinton	19	41	0	0.0%	6	31.6%	12	63.2%	1	5.3%
Crawford	10	63	0	0.0%	4	40.0%	4	40.0%	2	20.0%
Daviess	9	66	0	0.0%	1	11.1%	8	88.9%	0	0.0%
Dearborn	29	28	0	0.0%	6	20.7%	12	41.4%	11	37.9%
Decatur	15	48	0	0.0%	7	46.7%	7	46.7%	1	6.7%
DeKalb	35	25	1	2.9%	10	28.6%	19	54.3%	5	14.3%
Delaware	50	18	0	0.0%	16	32.0%	19	38.0%	15	30.0%
Dubois	16	46	0	0.0%	2	12.5%	6	37.5%	8	50.0%
Elkhart	92	7	3	3.3%	18	19.6%	42	45.7%	29	31.5%
Fayette	6	82	1	16.7%	1	16.7%	1	16.7%	3	50.0%
Floyd	24	33	2	8.3%	7	29.2%	10	41.7%	5	20.8%
Fountain	9	66	0	0.0%	2	22.2%	4	44.4%	3	33.3%
Franklin	16	46	1	6.3%	3	18.8%	5	31.3%	7	43.8%
Fulton	11	58	1	9.1%	2	18.2%	3	27.3%	5	45.5%
Gibson	12	55	0	0.0%	4	33.3%	3	25.0%	5	41.7%
Grant	44	21	3	6.8%	9	20.5%	18	40.9%	14	31.8%
Greene	20	40	3	15.0%	3	15.0%	11	55.0%	3	15.0%
Hamilton	79	8	4	5.1%	16	20.3%	35	44.3%	24	30.4%
Hancock	26	32	3	11.5%	8	30.8%	13	50.0%	2	7.7%
Harrison	23	36	3	13.0%	8	34.8%	8	34.8%	4	17.4%
Hendricks	72	10	0	0.0%	18	25.0%	34	47.2%	20	27.8%
Henry	14	52	1	7.1%	3	21.4%	6	42.9%	4	28.6%
Howard	52	16	4	7.7%	13	25.0%	20	38.5%	15	28.8%
Huntington	23	36	3	13.0%	5	21.7%	8	34.8%	7	30.4%
Jackson	37	24	1	2.7%	9	24.3%	14	37.8%	13	35.1%
Jasper	15	48	1	6.7%	5	33.3%	6	40.0%	3	20.0%
Jay	7	80	0	0.0%	0	0.0%	4	57.1%	3	42.9%
Jefferson	24	33	2	8.3%	7	29.2%	12	50.0%	3	12.5%
Jennings	11	58	2	18.2%	1	9.1%	2	18.2%	6	54.5%
Johnson	67	12	1	1.5%	12	17.9%	35	52.2%	19	28.4%
Knox	11	58	0	0.0%	3	27.3%	3	27.3%	5	45.5%
Kosciusko	35	25	4	11.4%	8	22.9%	20	57.1%	3	8.6%
LaGrange	15	48	0	0.0%	2	13.3%	7	46.7%	6	40.0%
Lake	184	3	9	4.9%	36	19.6%	87	47.3%	52	28.3%
La Porte	72	10	1	1.4%	17	23.6%	41	56.9%	13	18.1%
Lawrence	12	55	0	0.0%	3	25.0%	4	33.3%	5	41.7%
Madison	64	13	0	0.0%	21	32.8%	24	37.5%	19	29.7%

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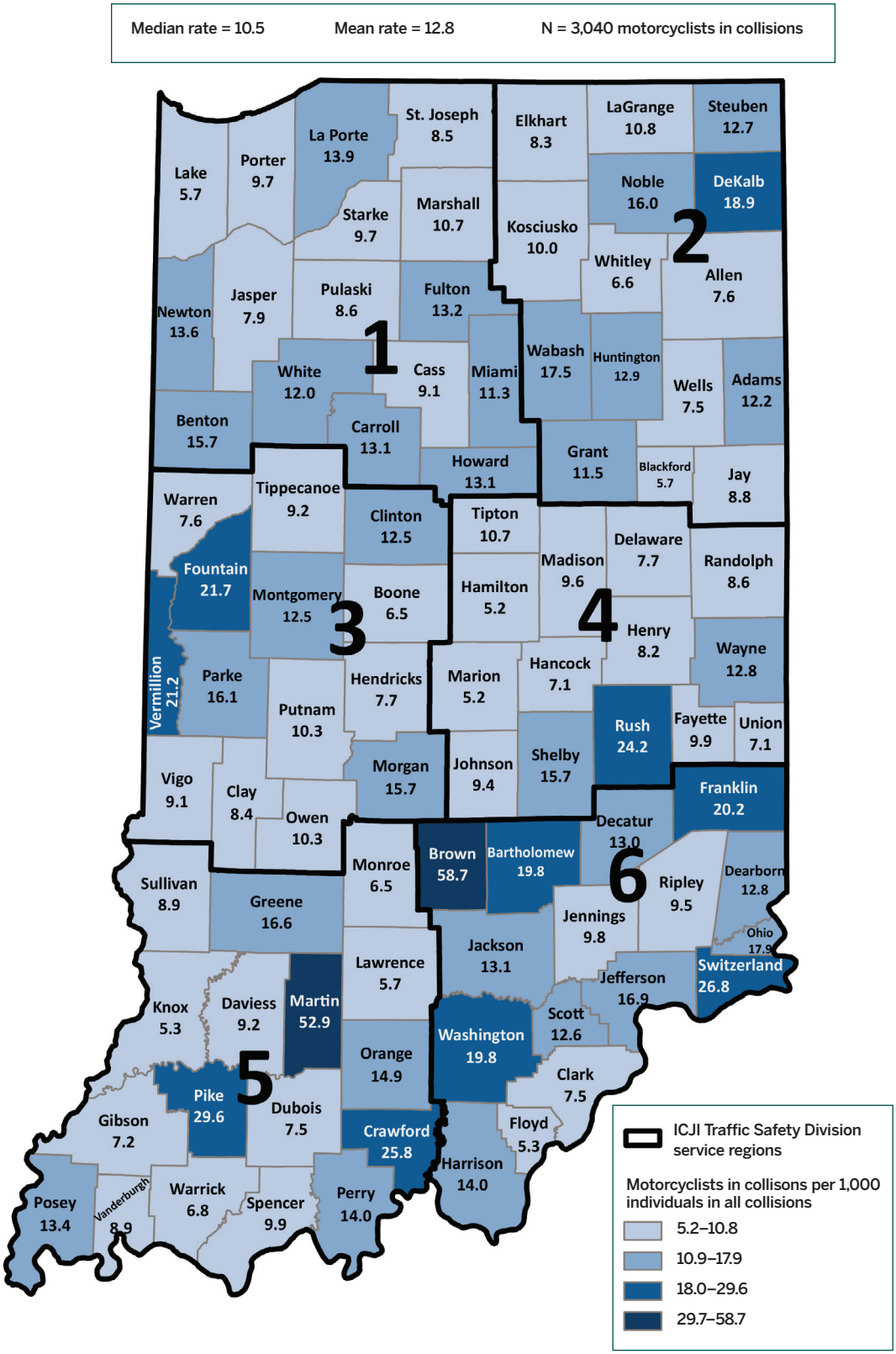
Table 8.7. Motorcyclists involved in collisions in Indiana by injury status and county, 2023 *(continued)*

	Total motorcyclists involved		Fatal		Incapacitating		Non–incapacitating		No injury	
	Count	County rank	Count	As % county total	Count	As % county total	Count	As % county total	Count	As % county total
Marion	363	1	23	6.3%	69	19.0%	145	39.9%	126	34.7%
Marshall	24	33	0	0.0%	4	16.7%	12	50.0%	8	33.3%
Martin	9	66	0	0.0%	4	44.4%	4	44.4%	1	11.1%
Miami	18	42	0	0.0%	5	27.8%	8	44.4%	5	27.8%
Monroe	45	20	1	2.2%	4	8.9%	32	71.1%	8	17.8%
Montgomery	17	43	2	11.8%	6	35.3%	7	41.2%	2	11.8%
Morgan	43	22	1	2.3%	14	32.6%	21	48.8%	7	16.3%
Newton	8	73	2	25.0%	2	25.0%	4	50.0%	0	0.0%
Noble	27	30	0	0.0%	3	11.1%	16	59.3%	8	29.6%
Ohio	3	88	0	0.0%	1	33.3%	1	33.3%	1	33.3%
Orange	11	58	0	0.0%	3	27.3%	7	63.6%	1	9.1%
Owen	8	73	0	0.0%	2	25.0%	4	50.0%	2	25.0%
Parke	8	73	1	12.5%	0	0.0%	3	37.5%	4	50.0%
Perry	7	80	3	42.9%	2	28.6%	2	28.6%	0	0.0%
Pike	6	82	1	16.7%	0	0.0%	4	66.7%	1	16.7%
Porter	75	9	4	5.3%	13	17.3%	36	48.0%	22	29.3%
Posey	11	58	0	0.0%	4	36.4%	6	54.5%	1	9.1%
Pulaski	5	85	0	0.0%	4	80.0%	1	20.0%	0	0.0%
Putnam	14	52	1	7.1%	3	21.4%	4	28.6%	6	42.9%
Randolph	6	82	1	16.7%	0	0.0%	3	50.0%	2	33.3%
Ripley	9	66	0	0.0%	4	44.4%	4	44.4%	1	11.1%
Rush	10	63	1	10.0%	1	10.0%	7	70.0%	1	10.0%
St. Joseph	122	4	9	7.4%	31	25.4%	45	36.9%	37	30.3%
Scott	12	55	0	0.0%	3	25.0%	8	66.7%	1	8.3%
Shelby	30	27	1	3.3%	7	23.3%	13	43.3%	9	30.0%
Spencer	9	66	0	0.0%	1	11.1%	7	77.8%	1	11.1%
Starke	8	73	0	0.0%	4	50.0%	3	37.5%	1	12.5%
Steuben	29	28	1	3.4%	5	17.2%	16	55.2%	7	24.1%
Sullivan	4	87	2	50.0%	2	50.0%	0	0.0%	0	0.0%
Switzerland	8	73	0	0.0%	2	25.0%	3	37.5%	3	37.5%
Tippecanoe	112	5	2	1.8%	31	27.7%	47	42.0%	32	28.6%
Tipton	5	85	0	0.0%	3	60.0%	1	20.0%	1	20.0%
Union	1	92	0	0.0%	1	100.0%	0	0.0%	0	0.0%
Vanderburgh	93	6	5	5.4%	11	11.8%	56	60.2%	21	22.6%
Vermillion	10	63	2	20.0%	2	20.0%	5	50.0%	1	10.0%
Vigo	52	16	4	7.7%	14	26.9%	22	42.3%	12	23.1%
Wabash	22	38	0	0.0%	5	22.7%	15	68.2%	2	9.1%
Warren	2	90	0	0.0%	2	100.0%	0	0.0%	0	0.0%
Warrick	17	43	0	0.0%	5	29.4%	7	41.2%	5	29.4%
Washington	21	39	1	4.8%	3	14.3%	13	61.9%	4	19.0%
Wayne	50	18	3	6.0%	10	20.0%	23	46.0%	14	28.0%
Wells	8	73	0	0.0%	4	50.0%	2	25.0%	2	25.0%
White	17	43	0	0.0%	3	17.6%	8	47.1%	6	35.3%
Whitley	9	66	2	22.2%	2	22.2%	4	44.4%	1	11.1%

Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Notes:
1) Motorcyclists include operators and passengers on motorcycles, motor-driven cycles—Class A and Class B, mopeds, and motorized bicycles.
2) Non-incapacitating injuries include those injuries that do not meet the criteria for fatal or incapacitating. See the glossary for updated injury definitions and methodologies.

Map 8.8. Motorcyclists per 1,000 individuals involved in collisions in Indiana by county and ICJI Traffic Safety Division service region, 2023

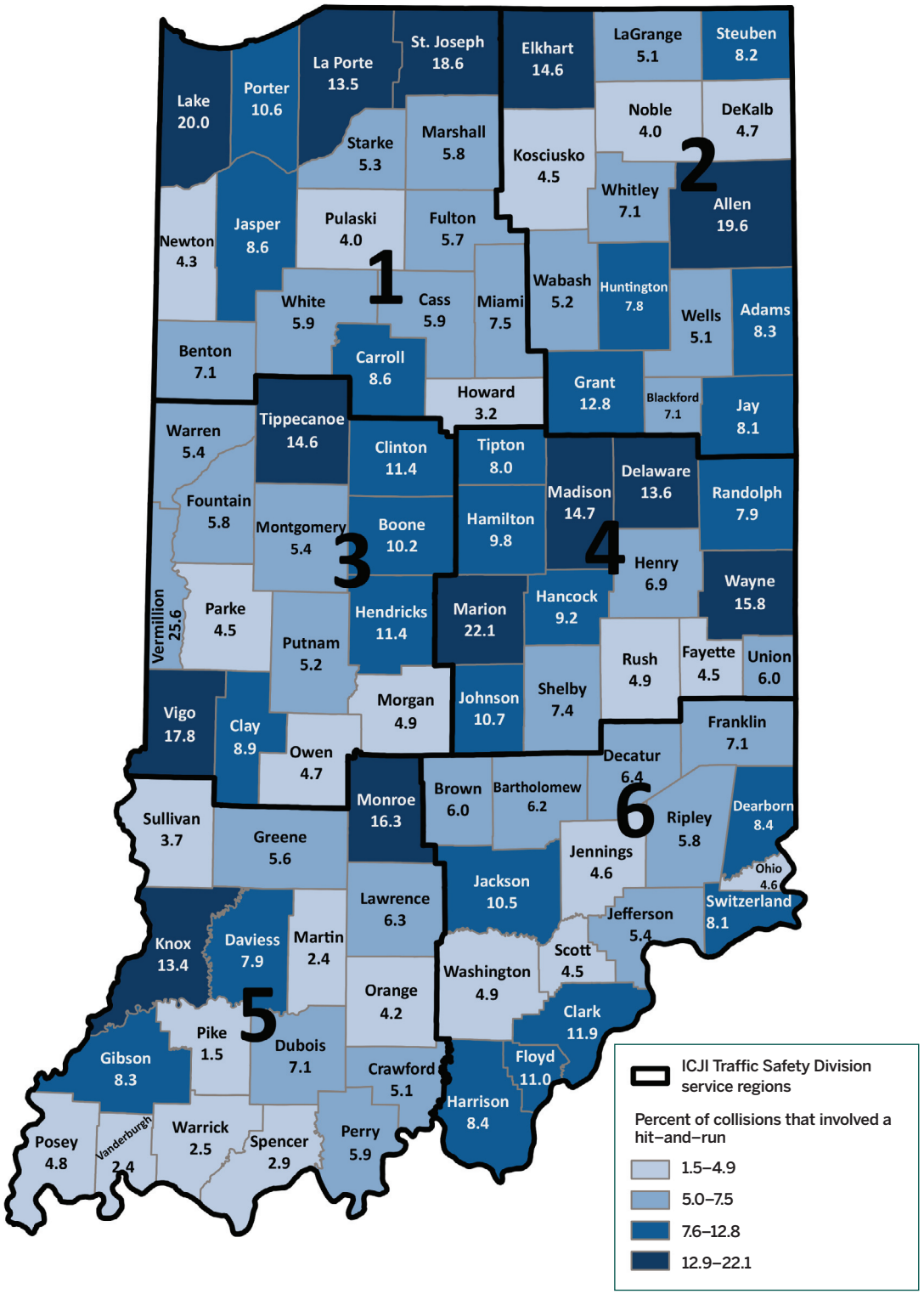


Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: Motorcyclists include operators and passengers of motorcycles, Class A and Class B motor-driven cycles, motorized bicycles, and mopeds. See the glossary for unit type definitions.

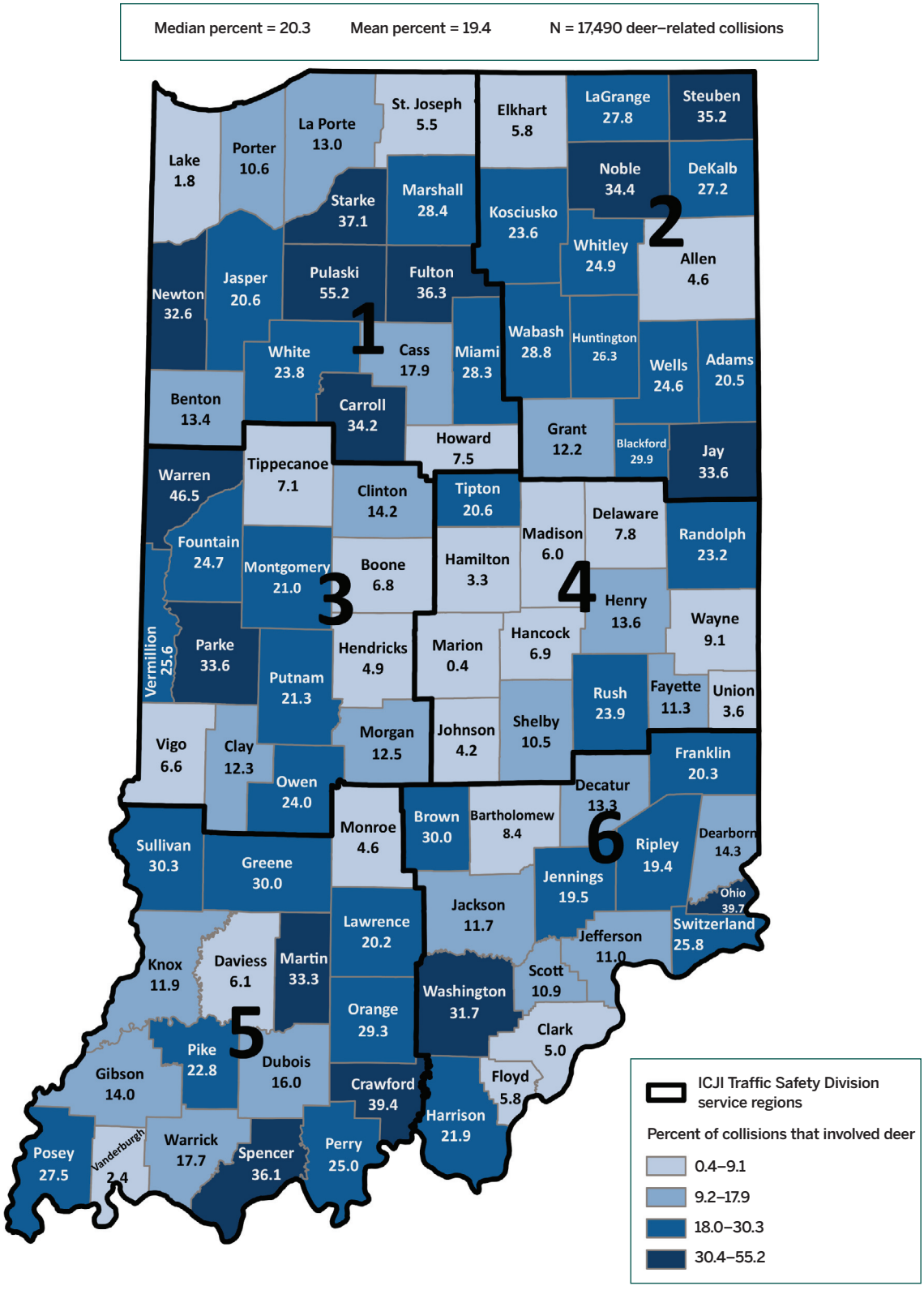
Map 8.9. Percent of hit–and–run collisions in Indiana by county and ICJI Traffic Safety Division service region, 2023

Median percent = 6.7 Mean percent = 7.9 N = 27,174 hit–and–run collisions



Source: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

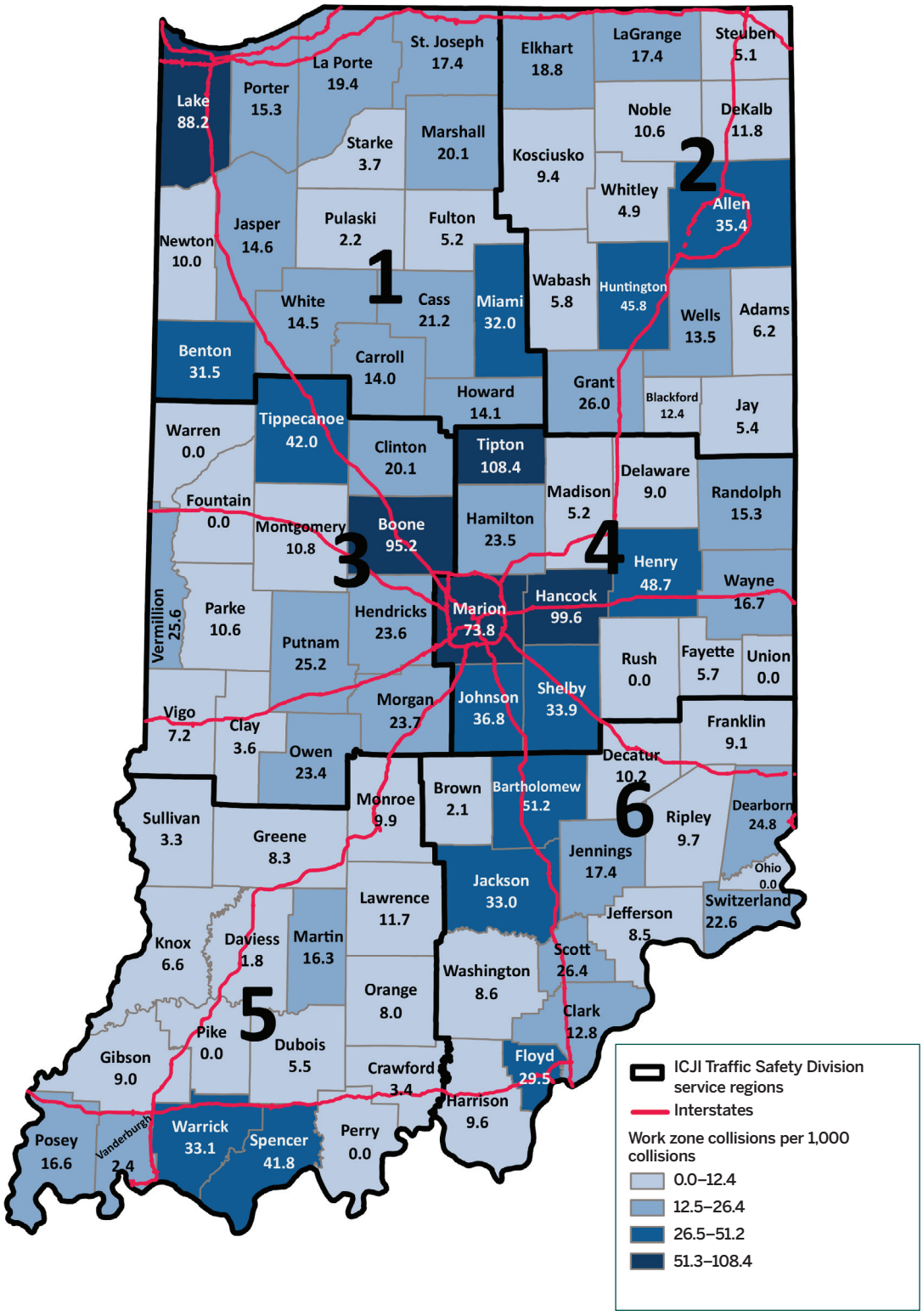
Map 8.10. Percent of collisions that involved deer in Indiana by county and ICJI Traffic Safety Division service region, 2023



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Map 8.11. Work zone collisions per 1,000 collisions in Indiana by county and ICJI Traffic Safety Division service region, 2023

Median rate = 13.1 Mean rate = 19.6 N = 7,480 work zone collisions



Source: Analysis provided by the Indiana University Public Policy Institute using data from the Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12, 2024.

Note: The data presented here includes work zone collisions on roads of all classes. The location of interstate highways is shown only as context for readers.

Table 8.8. County ranks by collision metric, 2023

Low < > High

County	Collision metric						Average rank of six metrics
	Fatalities per 100K population	Speed–related collisions as % of total collisions	Alcohol–impaired collisions as % of total collisions	Motorcyclists per 1,000 individuals in all collisions	Unrestrained passenger vehicle injuries as % of total injuries	Young drivers in collisions per 1,000 young licensed drivers	
Adams	87	78	58	40	34	67	61
Allen	68	26	13	74	78	8	45
Bartholomew	61	41	21	11	67	68	45
Benton	66	3	2	20	57	89	40
Blackford	41	71	10	86	91	58	60
Boone	62	63	86	85	43	51	65
Brown	5	18	34	1	9	21	15
Carroll	52	61	77	31	12	76	52
Cass	70	82	26	60	48	64	58
Clark	60	65	62	77	74	14	59
Clay	50	54	68	68	5	61	51
Clinton	33	36	16	38	30	24	30
Crawford	10	47	91	5	3	81	40
Daviess	34	90	23	59	14	82	50
Dearborn	64	72	50	35	80	44	58
Decatur	49	4	36	32	33	54	35
DeKalb	48	6	43	12	53	36	33
Delaware	45	66	69	73	85	3	57
Dubois	24	33	29	78	77	27	45
Elkhart	75	15	53	69	64	18	49
Fayette	79	42	12	51	2	73	43
Floyd	77	81	44	89	82	15	65
Fountain	19	45	31	7	21	86	35
Franklin	38	8	82	9	56	50	41
Fulton	9	19	22	28	27	80	31
Gibson	88	37	75	79	29	42	58
Grant	28	38	67	42	42	11	38
Greene	15	83	57	16	31	30	39
Hamilton	84	76	42	91	88	59	73
Hancock	58	60	46	81	73	57	63
Harrison	22	55	59	24	24	35	37
Hendricks	82	59	71	72	50	28	60
Henry	44	50	11	70	49	62	48
Howard	42	84	35	30	19	23	39
Huntington	32	46	19	33	71	40	40
Jackson	31	56	15	29	18	7	26
Jasper	20	11	39	71	44	39	37
Jay	16	87	74	64	11	29	47
Jefferson	18	67	20	15	20	26	28
Jennings	23	43	49	52	25	22	36
Johnson	73	51	70	57	55	34	57
Knox	69	88	65	90	17	9	56
Kosciusko	37	73	45	49	90	16	52
LaGrange	40	12	32	44	41	49	36
Lake	63	1	66	87	76	12	51
La Porte	21	14	4	25	84	41	32
Lawrence	56	69	56	88	63	17	58
Madison	47	74	64	55	52	19	52

continued on next page

Table 8.8. County ranks by collision metric, 2023 *(continued)*

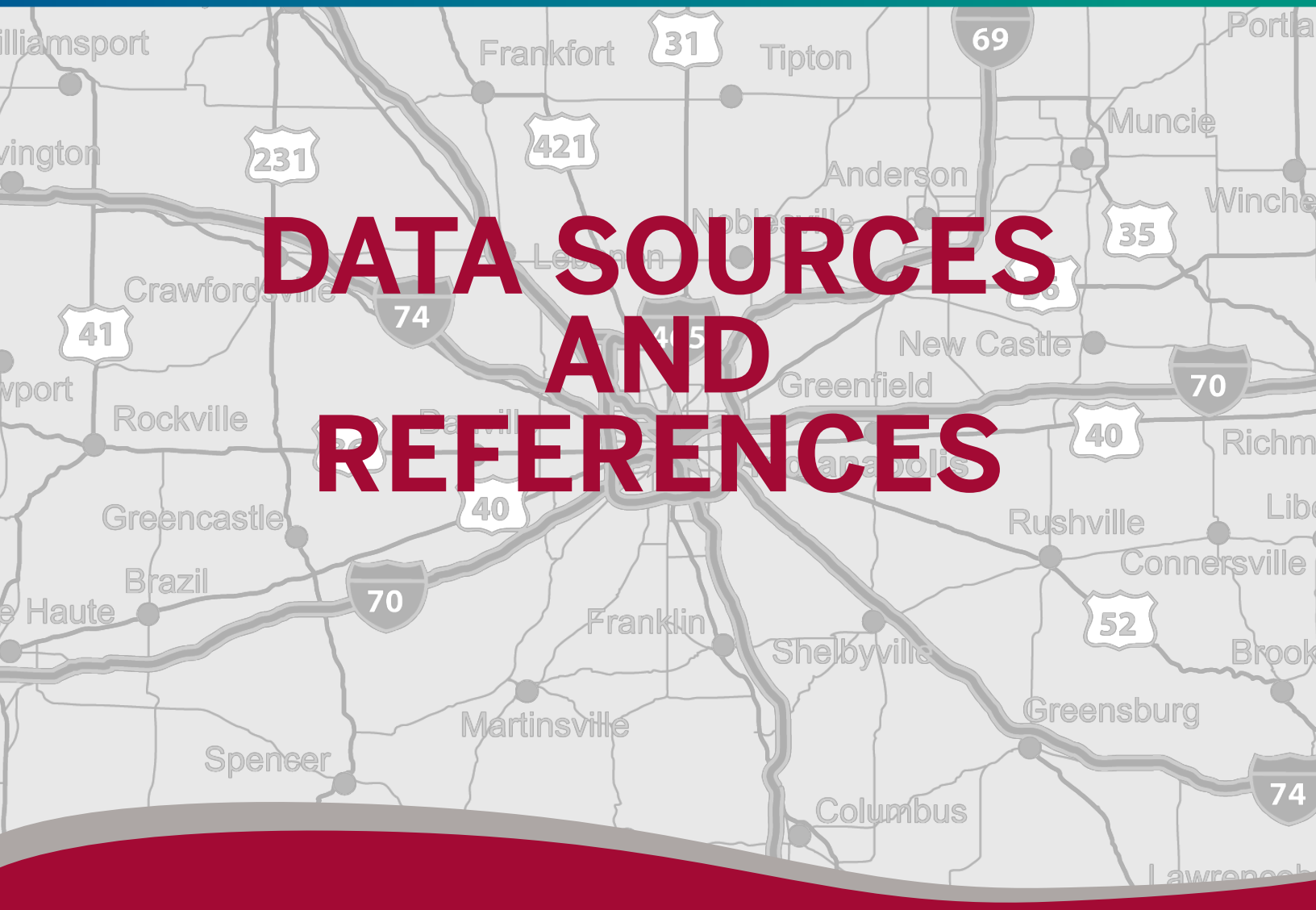
Low < > High

County	Collision metric						Average rank of six metrics
	Fatalities per 100K population	Speed–related collisions as % of total collisions	Alcohol–impaired collisions as % of total collisions	Motorcyclists per 1,000 individuals in all collisions	Unrestrained passenger vehicle injuries as % of total injuries	Young drivers in collisions per 1,000 young licensed drivers	
Marion	55	40	88	92	65	5	58
Marshall	30	64	41	46	58	55	49
Martin	88	57	1	2	13	90	42
Miami	80	29	28	43	72	31	47
Monroe	78	22	78	84	81	1	57
Montgomery	14	53	24	39	59	52	40
Morgan	25	21	83	19	38	47	39
Newton	1	2	63	26	75	60	38
Noble	88	27	17	18	45	77	45
Ohio	88	80	60	13	66	87	66
Orange	72	62	30	22	35	63	47
Owen	12	31	48	48	36	66	40
Parke	85	9	5	17	40	70	38
Perry	8	5	6	23	51	83	29
Pike	43	44	89	3	15	92	48
Porter	74	17	9	53	87	43	47
Posey	59	77	25	27	28	75	49
Pulaski	17	92	81	66	8	53	53
Putnam	46	28	54	47	23	45	41
Randolph	4	58	7	65	4	84	37
Ripley	83	23	47	56	39	79	55
Rush	35	48	8	6	36	78	35
St. Joseph	67	24	52	67	68	20	50
Scott	26	52	80	37	69	38	50
Shelby	36	13	60	21	62	48	40
Spencer	3	68	27	50	10	33	32
Starke	39	32	92	54	32	69	53
Steuben	7	39	72	36	26	10	32
Sullivan	53	86	84	63	6	85	63
Switzerland	27	16	3	4	7	74	22
Tippecanoe	65	7	37	58	86	2	43
Tipton	13	49	90	45	83	71	59
Union	88	10	76	80	54	91	67
Vanderburgh	57	91	79	62	92	4	64
Vermillion	29	25	55	8	16	72	34
Vigo	51	85	73	61	61	6	56
Wabash	86	79	33	14	47	37	49
Warren	2	89	38	75	1	88	49
Warrick	76	75	51	82	89	32	68
Washington	54	34	18	10	22	46	31
Wayne	71	30	40	34	70	25	45
Wells	81	70	87	76	60	65	73
White	11	20	14	41	46	13	24
Whitley	6	35	85	83	79	56	57

Sources: Analysis provided by the Indiana University Public Policy Institute using data from Indiana State Police, Automated Reporting Information Exchange System (ARIES), downloaded April 12,2024; Indiana Bureau of Motor Vehicles, Licensed drivers, downloaded March 26, 2024; and U.S. Census Bureau, 2023 county population estimates, downloaded March 12, 2024.

Notes:
1) A collision is identified as speed-related if the crash report lists unsafe speed or speed too fast for weather conditions as the primary or contributing factor of the collision, or if a vehicle driver is issued a speeding citation.
2) A collision is considered alcohol-impaired when any vehicle driver involved has a BAC test result at or above 0.08 g/dL. BAC results greater than 0.59 g/dL are not included as impaired.
3) Motorcyclists include operators and passengers on motorcycles, Class A and Class B motor-driven cycles, mopeds, and motorized bicycles.
4) Young drivers are drivers ages 15 to 20.
5) Ties received the same rank.
6) Color scales apply to rankings from high (1) to low (92) for each individual collision metric.

INDIANA
TRAFFIC SAFETY
FACTS



DATA SOURCES AND REFERENCES

DATA SOURCES AND OTHER REFERENCES

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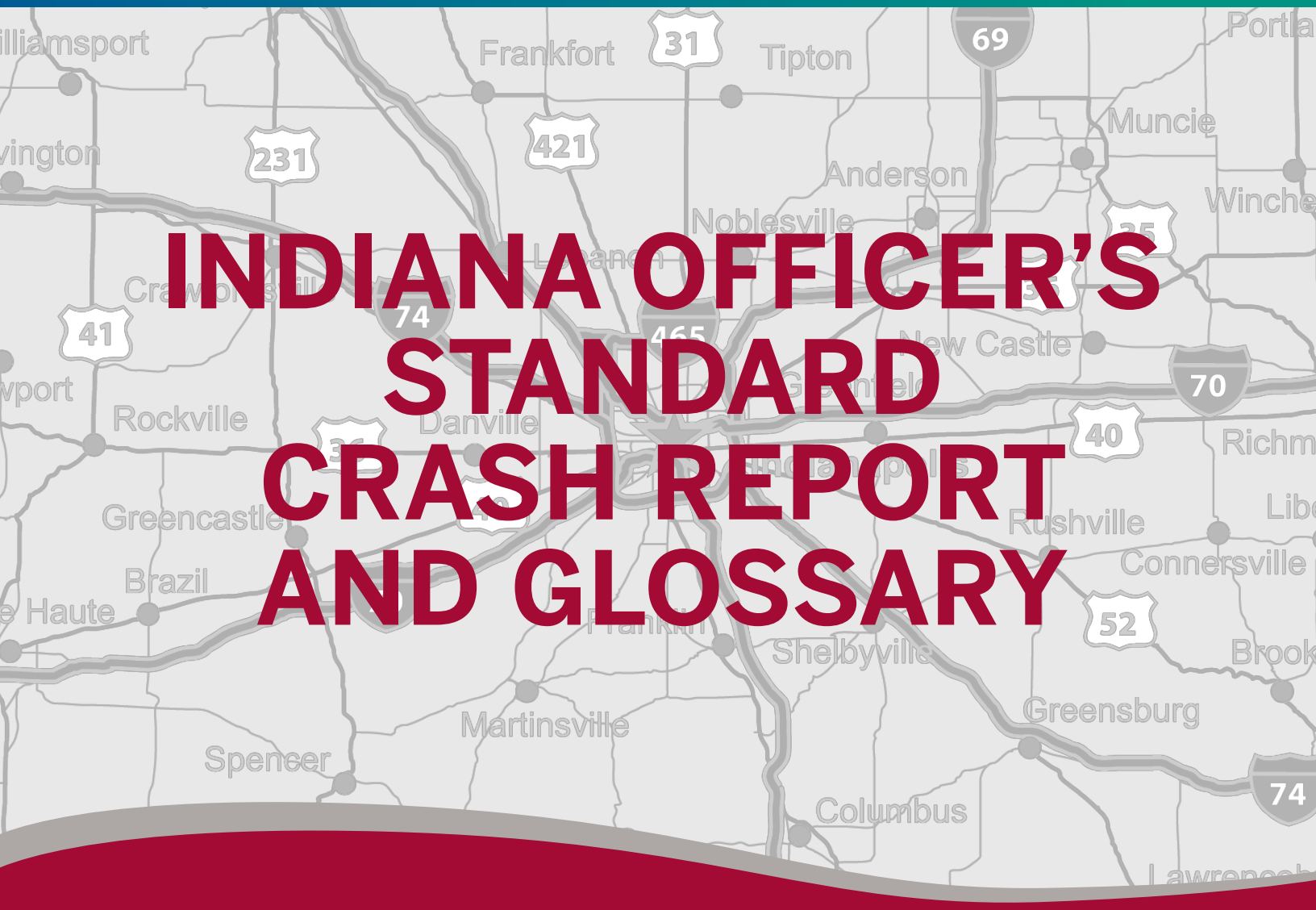
INDIANA
TRAFFIC SAFETY
FACTS



INDIANA OFFICER'S STANDARD CRASH REPORT AND GLOSSARY

INDIANA OFFICER'S STANDARD CRASH REPORT

State Id
DRAFT
Local Id

Indiana Officer's Standard Crash Report

Vehicles	Commercial	Injuries	Fatalities
1	0	0	0

Hit and Run ☐

Page 1 of 4

Printed on 6/28/2019 9:27:37 AM

Drivers

Crash Details

Location			County	Township	City
Crash Date	Day of Week	Crash Time	Date of Report	Latitude	Longitude
Weather Condition	Light Condition		Locality	Inside Corporate Limits?	☐ School Zone
Roadway Surface	Surface Condition		Roadway Classification		☐ Train or Rail Equipment
☐ Construction Zone	Construction Type		Roadway Junction	Railroad Crossing #	☐ Rumble Strips ☐ Deer

Investigative Information

Time Notified	Time Arrived	Primary Factor	Did this crash happen as a result of another incident?
Type of Crash	Other Location of Investigation	☐ Investigation Complete ☐ Photos taken	Total Estimate of all damage in Crash:

Investigative Officer	Agency	ID Number
Reviewing Officer		
Assisting Officer		
Assisting Officer		

Narrative

The following was written by Roth, Craig

State Id
DRAFT
Local Id

Indiana Officer's Standard Crash Report

Hit and Run ☐

Vehicles	Commercial	Injuries	Fatalities
1	0	0	0

Printed on 6/28/2019 9:27:37 AM

ISP BLOOMINGTON 33, ORI ISP3300

	Last Name	First	Middle

Address	DOB	Age	Gender

Driver's License Number	Lic Type	Lic State	CDL Class	☐ Aggressive Driving

Apparent Physical Status	Restrictions

Test Given	Type Given

Driver Injury Status	Ejection/Trapped

Safety Equipment Used	Safety Equipment Effective

EMS Number	Immediate Medical Attention

Nature of Most Severe Injury	Location of Most Severe Injury

If Cited	IC Codes

Vehicle Information

Veh #	Color	Veh Year	Occupants

Make	Model

Style

Insured By

Policy #	Ins Phone #

VIN

Plate Number	Plate Exp Year	Plate State

Towed?	Towed Due to Disabling Damage?

Inital Impact Area
☐ Undercarriage
☐ Trailer
☐ None
☐ Unknown

Areas of Damage
☐ Undercarriage
☐ Trailer
☐ None
☐ Unknown

Company Towed By	City Towed To	Fire?

Vehicle Use	Event Collision With

Emergency Run?	Type of Roadway	Roadway Character

Direction of Travel	Pre-Crash Vehicle Action	# of Axles

Speed Limit	Traffic Control Devices	Devices Operational?

Owner Information

Vehicle Owner's Name	Address (Street/City, State Zip)

Commercial Vehicle Information

Carrier's Name	Address (Street, City, State, Zip)

US DOT Number	CMV Inspection

HAZMAT Placard	HAZMAT Proper Shipping Name	HAZMAT Release of Cargo

Gross Vehicle Weight Rating	Hazmat 4-digit ID	Hazmat Class #	Cargo Body Type

	Last Name	First	Middle

Address	DOB	Age	Gender

Driver's License Number	Lic Type	Lic State	CDL Class	☐ Aggressive Driving

Apparent Physical Status	Restrictions

Test Given	Type Given

Driver Injury Status	Ejection/Trapped

Safety Equipment Used	Safety Equipment Effective

EMS Number	Immediate Medical Attention

Nature of Most Severe Injury	Location of Most Severe Injury

If Cited	IC Codes

Vehicle Information

Veh #	Color	Veh Year	Occupants

Make	Model

Style

Insured By

Policy #	Ins Phone #

VIN

Plate Number	Plate Exp Year	Plate State

Towed?	Towed Due to Disabling Damage?

Inital Impact Area
☐ Undercarriage
☐ Trailer
☐ None
☐ Unknown

Areas of Damage
☐ Undercarriage
☐ Trailer
☐ None
☐ Unknown

Company Towed By	City Towed To	Fire?

Vehicle Use	Event Collision With

Emergency Run?	Type of Roadway	Roadway Character

Direction of Travel	Pre-Crash Vehicle Action	# of Axles

Speed Limit	Traffic Control Devices	Devices Operational?

Owner Information

Vehicle Owner's Name	Address (Street/City, State Zip)

Commercial Vehicle Information

Carrier's Name	Address (Street, City, State, Zip)

US DOT Number	CMV Inspection

HAZMAT Placard	HAZMAT Proper Shipping Name	HAZMAT Release of Cargo

Gross Vehicle Weight Rating	Hazmat 4-digit ID	Hazmat Class #	Cargo Body Type

State Id
DRAFT
Local Id

Indiana Officer's Standard Crash Report

Hit and Run ☐

Vehicles	Commercial	Injuries	Fatalities
1	0	0	0

Printed on 6/28/2019 9:27:37 AM

ISP BLOOMINGTON 33, ORI ISP3300

Trailers

Vehicle #	Trailer Owner's Name	Address (Street/City, State Zip)	Lic State	Lic Year	License Number	Year	Make

Property Damage

State Property	Description	Owner's Name and Address

Indiana Officer's Standard Crash Report

Crash Diagram

End of Report

GLOSSARY

Many of the terms and definitions listed below were taken or adapted from current or past ARIES documentation. In some cases that are noted, the definitions reflect the specific treatment within the analyses contained within this report.

Aggressive driving

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

Alcohol-impaired

The National Highway Traffic Safety Administration (NHTSA) defines drivers as being alcohol-impaired when they test for a blood alcohol concentration (BAC) of at least 0.08 grams per deciliter (g/dL). Any fatal crash involving a driver at that BAC level is categorized as an alcohol-impaired driving crash, thus any fatality that happens in a crash that meets that criterion is deemed an alcohol-impaired fatality (NHTSA DOT HS 313 450, 2023a, p. 1). By law, drivers in Indiana who have a BAC of at least 0.08 should receive—at minimum—a Class C misdemeanor (IC 9-30-5-1). Drivers with a BAC of at least 0.15 g/dL should receive a Class A misdemeanor (IC 9-30-5-1). If the driver had a passenger under the age of 18 in the vehicle, they could face a Class D felony.

Attributable/attributability

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 collision.

Blood alcohol concentration (BAC)

Blood alcohol concentration (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 alcohol was consumed by the person tested. A BAC level of 0.08 g/dL or more indicates the person was legally impaired. For the purposes of the report, all BAC greater than 0.59 g/dL are excluded.

BMV

Indiana Bureau of Motor Vehicles

Bus

Large motor vehicles consisting primarily of a transport device (cargo body style) used to carry nine or more passengers, including school buses, intercity buses, and transit buses.

Census-based locale

Census locales for traffic collisions are defined as urban, suburban, exurban, or rural. Urban areas are defined in the 2020 census generally as densely settled cores that meet minimum population density requirements combined with adjacent non-residential land uses and any low population-density areas needed to connect outlying densely settled territory. The minimum population for urban areas was increased to 5,000 from 2,500 in 2010. The research team created suburban, exurban, and rural areas using geographic information system (GIS) buffers. Suburban areas are defined as areas within 2.5 miles of 2020 urban area boundaries, exurban areas as areas within 2.5 miles of suburban area boundaries, and rural areas are all areas beyond the exurban areas. The change in minimum population for urban areas reduces the area within the state identified as urban, suburban, and exurban because many small towns and the suburban and exurban buffers that previously surrounded them are now classified as rural.

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.

Children

For the purposes of the analysis in this report, children include all individuals ages 0–14 identified as injured occupants, pedestrians, and pedalcyclists, as well as drivers and animal-drawn vehicle operators ages 8–14. The <1, 1–3, and 4–7-year-old age groups exclude data records coded as driver or animal-drawn vehicle operator due to unavailable or invalid age reporting. Unknown age or birthdate often results in an inaccurate age assignment in the ARIES database.

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. Collisions involve contact with another vehicle, property, an animal, or a pedestrian.

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 at least one person was reported to have: (1) an incapacitating injury; (2) a non-incapacitating injury; or (3) a possible but 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.

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) of more than 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 a driver, apparent environmental conditions, or apparent vehicle conditions that contributed to the collision.

Dark—lighted
The time between dusk and dawn, and in a place 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 in a place where there are no lights designed or installed to illuminate the roadway.

Day or daytime
The time period from 6 a.m. to 5:59 p.m.

Disregarding traffic signal
A collision in which one or more drivers is identified as disregarding a traffic signal or flashing signal at a road intersection—four or-five-way intersection, t-intersection, y-intersection, roundabout, ramp, or interchange. This variable excludes collisions that occur on interstate highways, as well as pedestrians and pedalcyclists.

Distracted driving—any type
A collision for which cell phone use, telematics use, passenger distraction, or another driver distraction is identified as a factor.

Distracted driving—cell phone
A collision for which cell phone or telematics use is identified as a factor.

Driver
An occupant of a vehicle who is in physical control of a motor vehicle in transport. For an out-of-control vehicle, an occupant who was in control until control was lost. For the purposes of the analysis in this report, driver includes individuals identified as person type driver.

Ejection
Refers to occupants being completely or partially thrown from the vehicle as the 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 guardrails, bridge railings or abutments, trees, utility poles, ditches, culverts, and buildings.

Hazardous materials
Any substance or material which has been determined by the U.S. Department of Transportation (USDOT)—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.

Hit-and-run
A hit-and-run occurs when a motor vehicle driver involved in a collision leaves the scene without complying with the requirements in IC 9-26-1-1.1. The severity of the offense—misdemeanor or felony—depends on the circumstances of the collision and driver history.

ICJI
Indiana Criminal Justice Institute

Incapacitating injury
A non-fatal injury that prevents the injured person from walking, driving, or normally continuing activities they could perform before the injury occurred. Hospitalization is usually required. To better match the definition used by ICJI, the method for identifying incapacitating injuries has been updated. Incapacitating injuries now include non-fatal injuries with these injury nature codes—severed, internal, severe burn, severe bleeding, fracture/dislocation, crush injury, unconsciousness, and paralysis. This excludes some individuals for which officers coded the injury status as incapacitated but did not identify these specific injuries. The excluded individuals are now identified as having non-incapacitating injuries.

Injury nature
A data field in the ARIES database. Officers responding to collisions may select (1) severed, (2) internal, (3) minor burn, (4) severe burn, (5) abrasion, (6) minor bleeding, (7) severe bleeding, (8) fracture/dislocation, (9) contusion/bruise, (10) complaint of pain, (11), none visible, (12) other, (13) crush injury, (14) unconsciousness, (15) paralysis, or leave the field blank. Data in this and the injury status field were used in combination to establish the injury definitions used in this report.

Injury status
A data field in the ARIES database. Officers responding to collisions may select (1) fatal, (2) incapacitating, (3) non-incapacitating, (4) possible, (5) not reported, (5) not reported, (6) unknown, and (7) refused [treatment], or leave the field blank. Data in this and the injury nature field were used in combination to establish the injury definitions used in this report.

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 in the Indiana Crash Report are (1) T-intersections; (2) Y-intersections; (3) four-way intersections; (4) interchanges; (5) five points or more; (6) ramps; and (7) traffic circles/roundabouts.

ISP
Indiana State Police

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 with a gross vehicle weight rating of more than 10,000 pounds, including single–unit trucks and truck-tractors.

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

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

Motorcycle
Motorcycles are a category of vehicle. For the analysis in this report, motorcycles include five types of vehicles:

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; (3) complies with applicable motor vehicle equipment requirements under IC 9-19 and 49 CFR 571; (4) has an engine that produces no more than five-brake horsepower; and (5) is registered as a Class A motor-driven cycle. 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 Class B motor-driven cycle. The term does not include an electric personal assistive mobility device.
4. Motorized bicycle: ARIES includes motorized bicycles as a vehicle type. State law does not define motorized bicycle, specifically. However, IC 9-21-11 defines electric bicycles as any bicycle that meets the following three criteria: (1) equipped with fully operable pedals; (2) an assistive, electric motor with a power output no greater than 750 watts; and (3) meets the requirements of a Class1, Class 2, or Class 3 electric bicycle (IC 9-13-2-49.2). IC 9-23-2-26.6, 26.7, and 26.8 define each of the three classes.
5. Moped: ARIES includes mopeds as a vehicle type. However, there is no definition in state law.

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 or nighttime
The time period from 6 p.m. to 5:59 a.m.

Non-incapacitating injury
An injury, other than a fatal or incapacitating injury, which is evident to the officer at the scene of the crash and may require medical treatment, although hospitalization is usually not required. For the analysis in this report, non-incapacitating injuries include any that do not meet the criteria for fatal or incapacitating injuries described in those entries. Non-incapacitated injuries are recorded for any individual who was coded for injury status as incapacitating, non-incapacitating, possible, not reported, unknown, or refused [treatment] or coded for injury nature as minor burn, abrasion, minor bleeding, complaint of pain, none visible, or other. Individuals coded for injury status as incapacitating but for which specific injuries (injury nature) are not identified are classified as non-incapacitated. Only injuries coded as null for both injury nature and injury status are identified as not injured.

Non-motorist
Any person who is not an occupant of a motor vehicle in transport, including (1) pedestrians, (2) pedalcyclists, and (3) people riding in animal-drawn vehicles. For the purposes of the analysis in this report, non-motorists are individuals identified as person type pedalcyclist, pedestrian, or animal-drawn vehicle operator.

Not injured
For the analysis in this report, not injured status includes individuals involved in collisions with null values in both the injury status and injury nature fields. While reporting officers are instructed to enter all drivers into ARIES, passengers are to be entered in the crash report only if an injury occurs. Therefore, numbers of individuals identified as not injured should be interpreted with caution.

Occupant
Any person who is in or upon a motor vehicle in transport. Includes the driver, passengers, and anyone 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 collision = 24/76 = 0.32.

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 serious bodily injury for motorcycle riders and passenger car occupants is .21 and .01, respectively, the odds ratio of motorcyclists compared to car occupants = .21/.01 = 19.2 (i.e., motorcyclists are 19.2 times more likely to experience a serious bodily injury than are car occupants).

Passenger
Any occupant of a motor vehicle who is not a driver. For the purposes of the analysis in this report, passengers are individuals identified as person type injured passenger or other. Passengers are included in a crash report only if injured. Because of this, the number of passengers involved in collisions should be interpreted carefully.

Passenger car
Motor vehicles that are used primarily for carrying passengers, including convertibles, sedans, and station wagons.

Passenger vehicles
Passenger vehicles are defined as passenger cars, pickup trucks, sport utility vehicles (SUVs), and vans.

Pedalcyclist
A person on a bicycle or vehicle that is powered solely by pedals. For the purposes of the analysis in this report, pedalcyclists are individuals identified as person type pedalcyclist.

Pedestrian
Any person walking or not in or upon a motor vehicle or other vehicle. For the purposes of the analysis in this report, pedestrian are individuals identified as person type pedestrian.

Pickup truck
A motor vehicle designed to carry 10 or fewer people, with an exposed bed.

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.

1. Driver—unsafe action: Primary factors of following too closely, failure to yield right of way, unsafe backing, disregarding signal/regulatory 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.
2. Driver—loss of control: Primary factors of ran off road right, ran off road left, and overcorrecting/oversteering.
3. Driver—distraction: Primary factors of driver distracted (explained in narrative), cell phone usage, other telematics in use, and passenger distraction.
4. Driver—cognitive impairment: Primary factors of driver asleep or fatigued, driver illness, and driver under the influence of alcoholic beverages, prescription drugs, or illegal drugs.
5. Environmental: Primary factors of animal on roadway, roadway surface condition, view obstructed, other—environment (explained in narrative), obstruction not marked, severe crosswinds, traffic control problem, holes/ruts in surface, glare, lane marking obscured, road under construction, and shoulder defective.
6. Vehicle-related: Primary factors of brake failure or defective, other—vehicle (explained in narrative), 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.
7. All other: Primary factors of other—driver (explained in narrative), pedestrian action, not a factor—driver, not a factor—vehicle, violation of license restriction, and not a factor—environment.
8. Unknown: Primary factors of unknown and invalid.

Property damage only collision
A police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries but at least one vehicle or property was damaged. For the analysis in this report, these are collisions for which all individuals in a collision meet the criteria for not injured—null values in the injury status and injury nature fields.

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% of collisions involving speeding result in a fatality and 1% of collisions not involving speeding result in a fatality, the relative risk of a fatality when speed is involved equals two (2%/1%); 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
For passenger vehicle occupants ages 16 and older, restraints include lap belts, shoulder belts, or automatic belts. Restraints for passenger vehicle occupants under age 16 are classified by child age and weight and include car seats or booster seats in combination with seat belts or LATCH anchors/tethers (IC 9-19-11).

Roadway
The part of a trafficway designed, improved, and ordinarily used for motor vehicle travel.

Rollover
Any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. This 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 to carry property and is built that part of its weight rest upon or is carried by the power unit.

Semi-tractor
A motor vehicle consisting of a single power unit device designed primarily for pulling semi-trailers.

Single-unit truck
A medium or heavy truck in which the engine, cab, drive train, and cargo area are all on one chassis. Such a vehicle can have two axles and six tires on the ground, or three or more axles.

Speed-related
For the purposes of this report, 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; or (2) a vehicle driver is issued a speeding citation.

Sport utility vehicle (SUV)
A multipurpose motor vehicle—other than a pickup truck—that is designed to carry fewer than 10 people. An SUV is constructed on a truck chassis or with special features for occasional off-road operation. These vehicles are generally four-wheel-drive (4x4), have increased ground clearance, and a gross vehicle weight rating of 10,000 pounds or less.

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, yellow, and green signal and/or a flashing signal.

Unit
Denotes a motor vehicle, pedestrian, pedalcyclist, or other entity involved in the collision.

Unknown injury
Injuries reported as (1) refused [treatment], (2) unknown, (3) not reported, and (4) invalid codes. Refused [treatment], unknown, and not reported are normally included in the non-incapacitating injury category.

Unsafe backing
Backing up increases the risk of a crash because it is much more difficult for drivers to see obstacles behind them 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. Vans are identifiable by their 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 (VMT)
The annual vehicle distance traveled in miles (VMT).

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

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

Work zone
An area of a trafficway where construction, maintenance, or utility work activities are identified by warning signs/signals/indicators, including those on transport devices (e.g., signs, flashing lights, channelizing devices, barriers, pavement markings, flagmen, warning signs, and arrow boards mounted onto 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 with ongoing, mobile work activity, such as painting lane lines or mowing along the roadside. They are considered work zones only if warning signs or signals designate the beginning of the ongoing, mobile work activity.

Young driver
For the purposes of the analysis in this report, a young driver is a driver of a motor vehicle between the ages of 15 and 20.