

## DANGEROUS DRIVING, 2014

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A *dangerous driving* collision is defined as any collision where a driver takes one or more of the following actions: *aggressive driving*, *disregarding a signal*, or *speeding* (see last page for a full list of definitions, references, and data sources). This fact sheet summarizes Indiana *dangerous driving* data trends at state and county levels. Collision data come from the Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 23, 2015.

The annual count of Indiana collisions involving *dangerous driving* increased for the second consecutive year (from 24,794 collisions in 2013 to 31,216 collisions in 2014) (Figure 1). *Dangerous driving* collisions accounted for 15.2 percent of all Indiana crashes in 2014, a 2.4 percentage point increase from 2013.

In 2014:

- 31,216 of the 205,532 traffic collisions that occurred in Indiana involved one or more driver actions defined as *dangerous driving*, a 26 percent increase from 2013.
- Thirty-one percent (229 of 743) of Indiana traffic fatalities occurred in *dangerous driving* collisions.
- Young drivers, ages 15 to 20, represented the highest percentage of drivers in crashes engaged in *dangerous driving* behaviors for both males and females.

*Note: Data discrepancies may exist between the 2014 Indiana traffic safety reports and previous traffic safety publications due to updates to the Indiana State Police ARIES data that have occurred since the original publication dates.*

*The most recent ARIES upgrade added a clarification to reporting officers on the definition of incapacitating injuries criteria to include "transported from scene for treatment"; therefore, 2014 increases in incapacitating injuries should be interpreted with caution.*

Figure 1. Indiana collisions that involve dangerous driving, 2010-2014



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015



# TRAFFIC SAFETY FACTS

## GENERAL TRENDS

Nearly 30 percent (208 of 702) of all fatal collisions involved *dangerous driving* in 2014 (Table 1). While the number of *dangerous driving* collisions increased 26 percent from 2013 to 2014, the number of fatal *dangerous driving* collisions decreased more than 6 percent. When looking closer at specific *dangerous driving* actions, 3 percent (6,209) of all 2014 Indiana collisions involved *aggressive driving*, and 2 percent (4,198) involved a driver disregarding a signal. Twelve percent (24,810) of all Indiana collisions

involved speeding, and 26 percent (184/702) of all fatal collisions involved *speeding* (calculated from Table 1).

The percent of all Indiana traffic fatalities that occurred in a *dangerous driving* collision decreased from 32.7 percent in 2013 to 30.8 percent in 2014. Individuals killed in *dangerous driving* collisions decreased 11 percent from 256 in 2013 to 229 in 2014 (Figure 2). The number of individuals killed decreased in 2014 across all *dangerous driving* categories. Total injuries in *dangerous driving* collisions grew 10 percent between 2013 and 2014, increasing from 9,982 to 10,999 (Table 2).

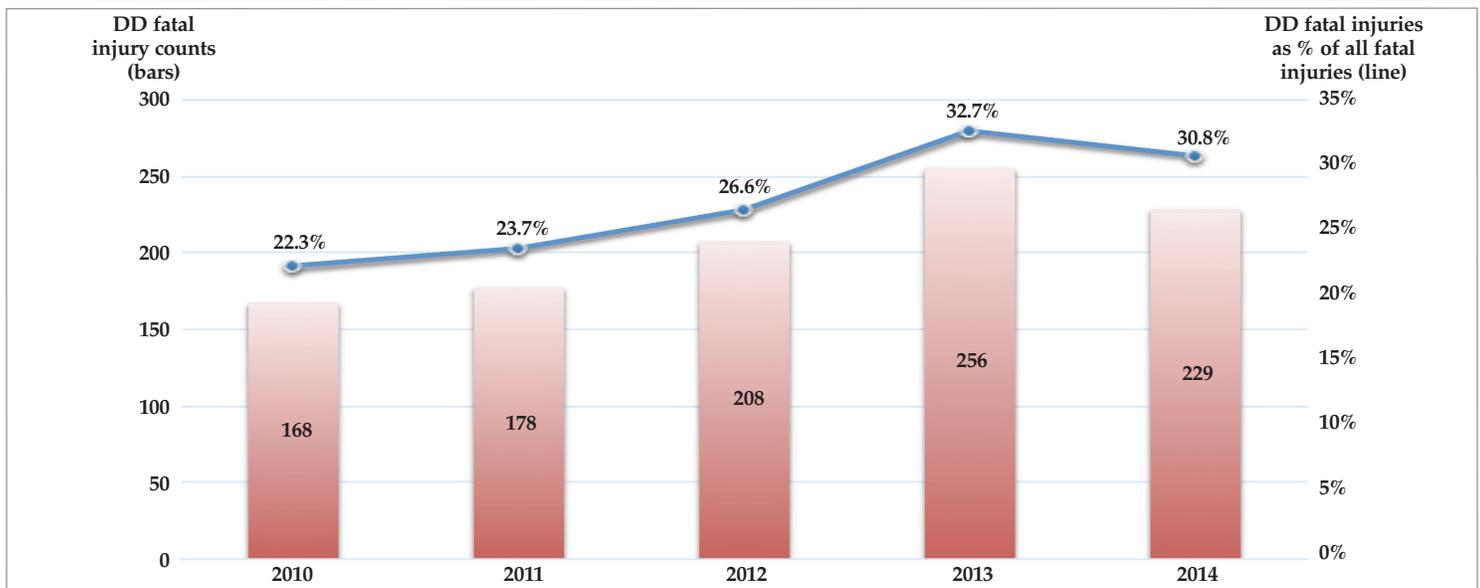
**Table 1. Indiana collisions, by dangerous driving involvement and collision severity, 2010-2014**

Dangerous driving type/ Collision severity	Count of collisions					Annual rate of change	
	2010	2011	2012	2013	2014	2013-14	2010-14
<b>Total collisions</b>	<b>193,379</b>	<b>188,453</b>	<b>189,160</b>	<b>193,205</b>	<b>205,532</b>	<b>6.4%</b>	<b>1.5%</b>
Fatal	700	675	720	710	702	-1.1%	0.1%
Non-fatal injury	34,147	32,789	34,132	32,846	33,823	3.0%	-0.2%
Property damage	158,532	154,989	154,308	159,649	171,007	7.1%	1.9%
<b>All dangerous driving collisions</b>	<b>24,438</b>	<b>23,334</b>	<b>22,559</b>	<b>24,794</b>	<b>31,216</b>	<b>25.9%</b>	<b>6.3%</b>
Fatal	159	156	193	222	208	-6.3%	6.9%
Non-fatal injury	6,091	5,927	6,042	6,244	7,112	13.9%	4.0%
Property damage	18,188	17,251	16,324	18,328	23,896	30.4%	7.1%
<b>Dangerous driving as % of total</b>	<b>12.6%</b>	<b>12.4%</b>	<b>11.9%</b>	<b>12.8%</b>	<b>15.2%</b>	<b>18.4%</b>	<b>4.7%</b>
Fatal	22.7%	23.1%	26.8%	31.3%	29.6%	-5.2%	6.9%
Non-fatal injury	17.8%	18.1%	17.7%	19.0%	21.0%	10.6%	4.2%
Property damage	11.5%	11.1%	10.6%	11.5%	14.0%	21.7%	5.1%
<b>Aggressive</b>	<b>4,143</b>	<b>4,322</b>	<b>4,500</b>	<b>5,043</b>	<b>6,209</b>	<b>23.1%</b>	<b>10.6%</b>
Fatal	22	30	33	55	46	-16.4%	20.2%
Non-fatal injury	1,125	1,121	1,216	1,342	1,578	17.6%	8.8%
Property damage	2,996	3,171	3,251	3,646	4,585	25.8%	11.2%
<b>Disregard signal</b>	<b>4,016</b>	<b>3,957</b>	<b>4,013</b>	<b>4,172</b>	<b>4,198</b>	<b>0.6%</b>	<b>1.1%</b>
Fatal	15	15	22	19	16	-15.8%	1.6%
Non-fatal injury	1,521	1,452	1,578	1,523	1,541	1.2%	0.3%
Property damage	2,480	2,490	2,413	2,630	2,641	0.4%	1.6%
<b>Speed</b>	<b>18,587</b>	<b>17,542</b>	<b>16,632</b>	<b>18,594</b>	<b>24,810</b>	<b>33.4%</b>	<b>7.5%</b>
Fatal	139	132	163	185	184	-0.5%	7.3%
Non-fatal injury	4,154	4,111	4,059	4,262	5,121	20.2%	5.4%
Property damage	14,294	13,299	12,410	14,147	19,505	37.9%	8.1%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: *Dangerous driving* categories are not mutually exclusive. All *dangerous driving* may not equal total of individual categories.

**Figure 2. Fatal injuries in Indiana dangerous driving (DD) collisions, 2010-2014**



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

**Table 2. Injuries in Indiana collisions, by dangerous driving involvement and injury status, 2010-2014**

Dangerous driving type/ Injury status	Count of injuries					Annual rate of change	
	2010	2011	2012	2013	2014	2013-14	2010-14
<b>Total injuries in ALL collisions</b>	<b>50,925</b>	<b>47,975</b>	<b>49,924</b>	<b>48,311</b>	<b>49,262</b>	<b>2.0%</b>	<b>-0.8%</b>
Fatal	753	750	781	784	743	-5.2%	-0.3%
Non-fatal	50,172	47,225	49,143	47,527	48,519	2.1%	-0.8%
<b>All dangerous driving collisions</b>	<b>9,683</b>	<b>9,207</b>	<b>9,593</b>	<b>9,982</b>	<b>10,999</b>	<b>10.2%</b>	<b>3.2%</b>
Fatal	168	178	208	256	229	-10.5%	8.1%
Non-fatal	9,515	9,029	9,385	9,726	10,770	10.7%	3.1%
<b>Dangerous driving as % of total</b>	<b>18.8%</b>	<b>19.0%</b>	<b>19.2%</b>	<b>19.2%</b>	<b>22.3%</b>	<b>16.2%</b>	<b>4.4%</b>
Fatal	26.9%	21.8%	23.6%	26.7%	30.8%	15.4%	3.5%
Non-fatal	18.7%	19.0%	19.1%	19.1%	22.2%	16.2%	4.4%
<b>Aggressive</b>	<b>1,955</b>	<b>1,889</b>	<b>2,046</b>	<b>2,306</b>	<b>2,629</b>	<b>14.0%</b>	<b>7.7%</b>
Fatal	23	39	36	64	53	-17.2%	23.2%
Non-fatal	1,932	1,850	2,010	2,242	2,576	14.9%	7.5%
<b>Disregard signal</b>	<b>2,608</b>	<b>2,387</b>	<b>2,698</b>	<b>2,668</b>	<b>2,573</b>	<b>-3.6%</b>	<b>-0.3%</b>
Fatal	15	17	23	20	18	-10.0%	4.7%
Non-fatal	2,593	2,370	2,675	2,648	2,555	-3.5%	-0.4%
<b>Speed</b>	<b>6,371</b>	<b>6,222</b>	<b>6,195</b>	<b>6,503</b>	<b>7,701</b>	<b>18.4%</b>	<b>4.9%</b>
Fatal	148	151	175	216	201	-6.9%	8.0%
Non-fatal	6,223	6,071	6,020	6,287	7,500	19.3%	4.8%

Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: *Dangerous driving* categories are not mutually exclusive. All *dangerous driving* may not equal total of individual categories.

## DRIVER AGE AND GENDER

*Dangerous driving* behavior can be linked to both age and gender of vehicle operators. Table 3 illustrates that the likelihood of drivers engaging in *dangerous driving* behavior decreases with age. Between 2010 and 2014, male drivers under the age of 25 consistently represented the highest proportion of drivers in *dangerous driving* collisions. In 2014, 16 percent of male drivers and 12 percent of female drivers in the 15- to 20-year-old age group engaged in *dangerous driving* behavior in collisions. The proportion of drivers reported to be driving dangerously in 2014 collisions increased across all age and gender categories.

## GEOGRAPHY OF DANGEROUS DRIVING IN INDIANA

Map 1 shows the percentage of county collisions that involved *dangerous driving* in 2014. The map illustrates clusters of counties with the highest *dangerous driving* collision rates located in the far northern region of the state. LaGrange County, located in northeastern Indiana, had the highest percentage of *dangerous driving* collisions (30 percent), while Ohio County, located in southeastern Indiana, had the lowest percentage of *dangerous driving* collisions (3 percent). The median rate of county *dangerous driving* collisions was 13 percent, and the mean rate was 13.6 percent.

**Table 3. Proportion of drivers engaged in dangerous driving behaviors in Indiana collisions, by age group and gender, 2010-2014**

Age group	2010		2011		2012		2013		2014	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
15-20	14.3%	10.0%	14.0%	10.2%	14.3%	9.5%	14.6%	11.0%	15.9%	11.9%
21-24	12.1%	9.0%	12.2%	9.2%	11.6%	8.3%	12.7%	10.0%	14.8%	11.7%
25-34	9.9%	7.5%	9.4%	7.5%	9.4%	6.8%	10.6%	7.6%	12.8%	9.5%
35-44	7.3%	6.3%	7.1%	6.2%	6.9%	5.6%	7.6%	6.4%	9.3%	7.4%
45-54	6.3%	5.0%	6.3%	5.3%	6.1%	5.1%	6.2%	5.2%	7.9%	6.9%
55-64	5.6%	4.9%	5.3%	4.8%	5.2%	4.4%	5.5%	4.6%	7.0%	5.7%
65-74	4.8%	4.5%	5.0%	4.5%	5.0%	4.7%	4.9%	4.7%	5.9%	5.0%
75 +	5.8%	5.3%	5.5%	5.1%	5.7%	5.1%	5.2%	5.6%	6.4%	5.3%
<b>All ages</b>	<b>8.8%</b>	<b>6.9%</b>	<b>8.5%</b>	<b>7.0%</b>	<b>8.5%</b>	<b>7.0%</b>	<b>8.9%</b>	<b>7.2%</b>	<b>10.5%</b>	<b>8.4%</b>



Source: Indiana State Police Automated Reporting Information Exchange System, as of March 23, 2015

Note: Data limited to drivers with valid gender and age reported.



## DEFINITIONS

- **Aggressive driving** applies when the investigating officer determines that a driver was engaged in at least two of the following: *Unsafe speed; speed too fast for weather conditions; failing to yield right of way; disregarding a traffic signal/sign; improper passing/turning/lane usage; or following too closely*. Indiana Code IC 9-21-8-55 requires three or more of these and similar actions to be considered an aggressive-driving violation.
- **Disregarding a traffic signal** applies when a vehicle driver was involved in a collision at an intersection of two or more roads and disregarded a traffic signal/sign.
- **Speeding** applies when a vehicle driver was issued a speeding citation or driving at an unsafe speed, as indicated by *unsafe speed or speed too fast for weather conditions* as a contributing factor to the collision. Indiana Code 9-21-5-1 delineates this action from the legal perspective.
- **Dangerous driving** in this factsheet applies when a driver takes any of the above actions in a collision.
- **Annual rate of change (ARC)** is the rate that a beginning value must increase/decrease each period (e.g., month, quarter, or year) in a time series to arrive at the ending value in the time series. ARC is a "smoothed" rate of change because it measures change in a variable as if the change occurred at a steady rate each period with compounding. For example, to measure change in a variable from 2010 to 2014, it is calculated as  $(\text{Value in 2014} / \text{Value in 2010})^{1/4} - 1$ .
- **Non-fatal** collision severity applies when no fatalities and at least one *incapacitating, non-incapacitating, or possible* injury occurred.
- **Non-fatal** injury includes *incapacitating, non-incapacitating, possible, not reported, unknown, and refused (treatment)* injury categories.
- **Non-incapacitating** injuries include those injuries reported as *non-incapacitating or possible*.

## DATA SOURCE

Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 23, 2015.



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

This publication is one of a series of fact sheets that, along with the annual Indiana Crash Fact Book, form the analytical foundation of traffic safety program planning and design in the state of Indiana.

Funding for these publications is provided by ICJI and the National Highway Traffic Safety Administration.

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

## Traffic Safety Project

A collision produces three levels of data: collision, unit (vehicles), and individual. For this reason, readers should pay particular attention to the wording of statements about the data to avoid misinterpretations.

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 is collaborating with the Indiana Criminal Justice Institute to analyze 2014 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the ninth year of this partnership. Research findings are summarized in a series of fact sheets on various aspects of traffic collisions, including alcohol-related crashes, trucks, *dangerous driving*, children, motorcycles, occupant protection, and drivers. An additional publication provides information on county and municipality data, and the final publication produced is the annual Indiana Crash Fact Book. These publications serve as the analytical foundation of traffic safety program planning and design in Indiana.

Indiana collision data are obtained from Indiana Crash Reports, as completed by law enforcement officers. As of December 31, 2014, approximately 99 percent of all collisions are entered electronically through ARIES. Trends in collisions incidence as reported in these publications incorporate the effects of changes to data elements on the Crash Report, agency-specific enforcement policy changes, re-engineered roadways, driver safety education programs, and other unspecified effects. If you have questions regarding trends or unexpected results, please contact the Indiana Criminal Justice Institute, Traffic Safety Division for more information.

## The Indiana Criminal Justice Institute

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

## The Governor's Council on Impaired & Dangerous Driving

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

## Indiana University Public Policy Institute

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

## The National Highway Traffic Safety Administration (NHTSA)

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



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