

INDIANA 2011 TRAFFIC SAFETY FACTS

OCCUPANT PROTECTION, 2011

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Occupant Protection Laws and Best Practices

NHTSA identifies safety belt use as the most effective strategy a person can employ to prevent death and minimize injury resulting from traffic collisions. NHTSA reports that states with primary enforcement (PE) laws achieve higher restraint usage than states with secondary enforcement laws.¹ Primary (standard) restraint laws allow a law enforcement officer to stop a vehicle and issue a citation when the officer observes an unrestrained driver or passenger. Secondary enforcement means that a citation for being unrestrained can only be written after the officer stops the vehicle or cites the offender for another infraction. A 2008 NHTSA report also found that states with primary enforcement laws had significantly lower fatality rates than states without primary enforcement—non-PE states were 9 percent higher on the basis of VMT and 15 percent higher on the basis of population.²

Indiana Occupant Protection Laws

Effective July 1, 2007, Indiana law requires all passenger vehicle occupants 16 and older to ride properly restrained in a vehicle. This law applies to all seating positions in all vehicles, including pick-up trucks and SUVs.³ The current Indiana child passenger restraint law requires all child occupants (ages 15 and younger) to be properly restrained in a child restraint device or seat belt in all seating positions in all vehicles.⁴ In addition to legislative efforts, child passenger safety experts have developed recommended safety standards and best practices that include the use of rear facing child safety seats as long as possible, or, at a minimum, until a child is two years old and weighs at least 20 pounds. These guidelines also include the use of booster safety seats for children who have outgrown child safety seats with harnesses. Children then may transition to the use of adult seat belts. It is recommended that all children under the age of 13 ride in the back seat of the vehicle.

¹National Highway Traffic Safety Administration, *Summary of Vehicle Occupant Protection Laws* (April 2011), Washington, DC. DOT HS 811 458.

²National Center for Statistics and Analysis, National Highway Traffic Safety Administration, *Traffic Safety Facts: States with Primary Enforcement Laws have Lower Fatality Rates* (February 2008), Washington, DC. DOT HS 810 921.

³Passenger Restraint Systems, IC 9-19-10-2; available at <http://www.ai.org/legislative/ic/code/title9/ar19/ch10.html>

⁴Passenger Restraint Systems, IC 9-19-10-2; available at <http://www.ai.org/legislative/ic/code/title9/ar19/ch10.html>

In 2011, 41,223 passenger vehicle occupants were injured or killed in Indiana traffic collisions, 88 percent of whom were wearing proper safety restraints. Among those killed in Indiana, 49 percent were properly restrained. The National Highway Traffic Safety Administration (NHTSA) reports that, nationally in 2011, the overall observed seatbelt use rate was 84 percent, down 1 percentage point from 2010 (DOT HS 811 544). Passenger vehicle occupants represented 67 percent (22,187) of the 32,885 people killed in traffic collisions nationwide. Among this group, 51 percent were unrestrained (DOT HS 811 552).

NHTSA identifies safety belt use as the most effective strategy a person can employ to prevent death and minimize injury resulting from traffic collisions (see Text Box). Research shows that primary enforcement laws increase rates of restraint use and decrease traffic fatality rates (DOT HS 811 544). As of May 2011, 31 states (including Indiana) and the District of Columbia have primary enforcement laws in effect (Table 1). With the exception of New Hampshire, the only state with no adult seat belt law, the remaining states have secondary enforcement laws in place.

Vehicle occupants injured in Indiana collisions are counted as having been restrained when the investigating officer selects any one of the following passenger vehicle safety equipment categories on the Indiana Crash Report: (1) lap belt only; (2) harness; (3) airbag deployed and harness; (4) child restraint; or (5) lap and harness. By this standard, 90.6 percent of passenger vehicle occupants involved in 2011 Indiana traffic collisions were wearing the proper safety restraint.

This fact sheet summarizes occupant protection data trends and legislation at national, regional, state, and county levels. Restraint use and injury analyses are limited to those occurring in passenger vehicles (defined as passenger cars, pickup trucks, sport utility vehicles, and vans). Analyses include data from several sources (see last page for a full list of references, data sources, and definitions). Indiana data come primarily from the Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 20, 2012.

Table 1. States with primary enforcement seatbelt laws

Alabama	Georgia	Maine	North Carolina
Alaska	Hawaii	Maryland	Oklahoma
Arkansas	Illinois	Michigan	Oregon
California	Indiana	Minnesota	South Carolina
Connecticut	Iowa	Mississippi	Tennessee
Delaware	Kansas	New Jersey	Texas
District of Columbia	Kentucky	New Mexico	Washington
Florida	Louisiana	New York	Wisconsin

Indicates Great Lakes Region state

Source: *Seat Belt Use in 2011—Overall Results*, DOT HS 811 544, December 2011 (table extracted)

Note: This list is current as of May 31, 2011.

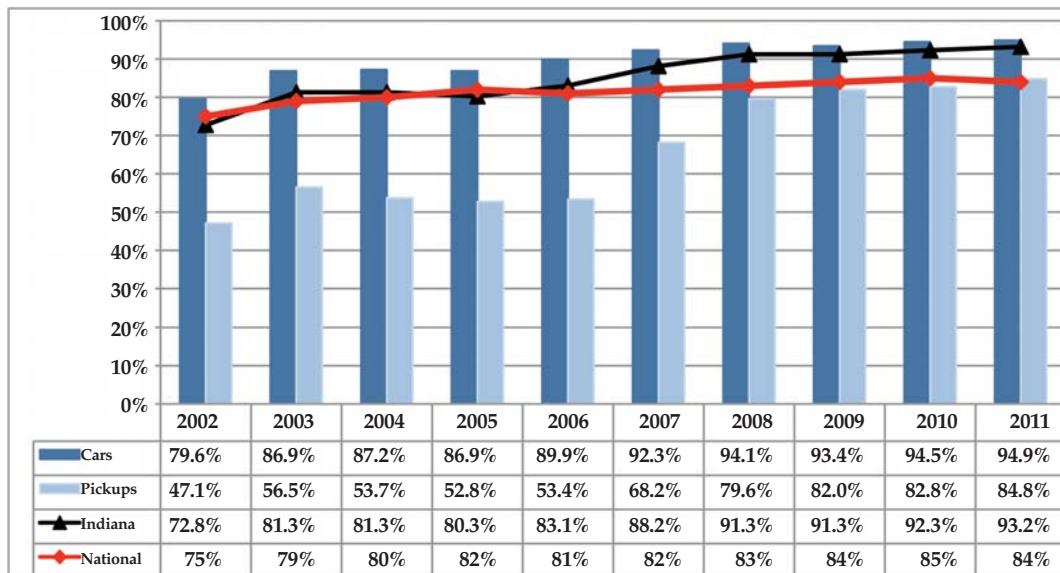


GENERAL TRENDS

Indiana observational studies of seatbelt usage conducted by the Indiana Criminal Justice Institute show that restraint usage rates continue to climb for passenger vehicle occupants. Figure 1 shows that Indiana restraint usage rates for all occupants increased 20 percentage points, from 73 percent in 2002 to 93 percent in 2011. Restraint usage among pickup truck occupants increased the most dramatically (38 percentage points) during this period, increasing from 47 percent in 2002 to 85 percent in 2011. Since 2006, Indiana's overall usage rates exceeded US rates.

Table 2 shows the overall rate of restraint usage among passenger vehicle occupants injured or killed in Indiana crashes increased slightly between 2007 and 2011 (an average annual percent increase of 0.3 percent). Consistent with national trends, rates of restraint usage among passenger vehicle occupants injured in Indiana traffic collisions were lower for individuals suffering more severe injuries. In 2011 among the 514 passenger vehicle occupants killed, 49 percent were properly restrained. Approximately 74 percent of the 2,426 individuals suffering incapacitating injuries were properly restrained.

Figure 1. Observed seat belt use rates in passenger vehicles, 2002 to 2011



Sources: Indiana - Indiana Roadside Observational Survey of Safety Belt and Motorcycle Helmet Use, Center for Road Safety, Purdue University, 2011
National - DOT HS 811 544, December 2011

Notes:

- 1) Indiana data (2002-2010) represent the average annual rates of observed restraint use among all Indiana passenger vehicle occupants in a study previously conducted by ICJI twice per year. Effective in 2011, this study is now conducted only once each year; therefore, averages will no longer apply from this point forward.
- 2) Car and pickup truck restraint usage rates are specific to Indiana only.

Table 2. Restraint use and injury status among individuals involved in Indiana passenger vehicles collisions, 2007-2011

Passenger vehicle occupant injuries	2007	2008	2009	2010	2011	% change ('10-'11)	Average annual % change ('07-'11)
All occupants	304,148	300,918	283,544	288,844	280,481	-2.9%	-2.0%
Properly restrained	271,800	272,300	256,103	262,213	254,152	-3.1%	-1.7%
Restraint use rate	89.4%	90.5%	90.3%	90.8%	90.6%	-0.2%	0.3%
Fatalities	670	588	497	548	514	-6.2%	-6.4%
Properly restrained	295	258	239	261	254	-2.7%	-3.7%
Restraint use rate	44.0%	43.9%	48.1%	47.6%	49.4%	3.8%	2.9%
Incapacitating injuries	2,691	2,508	2,358	2,505	2,426	-3.2%	-2.6%
Properly restrained	1,767	1,820	1,713	1,863	1,799	-3.4%	0.4%
Restraint use rate	65.7%	72.6%	72.6%	74.4%	74.2%	-0.3%	3.1%
Non-incapacitating injuries	43,440	39,936	38,437	38,903	36,575	-6.0%	-4.2%
Properly restrained	37,525	35,182	33,926	34,727	32,628	-6.0%	-3.4%
Restraint use rate	86.4%	88.1%	88.3%	89.3%	89.2%	-0.1%	0.8%
Other injuries	7,670	5,505	3,875	2,272	1,708	-24.8%	-31.3%
Properly restrained	6,550	4,897	3,630	2,018	1,508	-25.3%	-30.7%
Restraint use rate	85.4%	89.0%	93.7%	88.8%	88.3%	-0.6%	0.8%
Not injured	249,677	252,381	238,377	244,616	239,258	-2.2%	-1.1%
Properly restrained	225,663	230,143	216,595	223,344	217,963	-2.4%	-0.9%
Restraint use rate	90.4%	91.2%	90.9%	91.3%	91.1%	-0.2%	0.2%

Source: Indiana State Police

RESTRAINT USE IN THE GREAT LAKES REGION

Traffic fatality rates per 100,000 of the population increased in each of the states in the Great Lakes region except Minnesota and Wisconsin between 2009 and 2010 (Table 3). Indiana continued to have the highest fatality rate of any state in the region in 2010. The proportion of unrestrained occupants killed in collisions decreased in Michigan, Minnesota, Ohio, and

Wisconsin in 2010, while increases occurred in both Indiana and Illinois (Table 4). Minnesota experienced the largest decrease in the proportion of unrestrained fatalities in 2010 (minus 10.6 percentage points) among Great Lakes states, while Illinois experienced the largest increase (plus 0.9 percentage points). Each of the states in the Great Lakes region experienced an average annual decrease in restraint use rates among fatally injured occupants between 2001 and 2010. Ohio is currently the only Great Lakes state with no primary enforcement law in effect.

Table 3. Traffic fatality rates (per 100,000 population) by states in the Great Lakes Region, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Change '09-'10	Average annual change ('01-'10)
Illinois	9.6	9.6	9.9	9.3	9.2	8.5	8.2	6.8	6.0	6.1	0.1	-0.05
Indiana	13.6	11.8	12.3	13.8	13.7	12.7	12.9	11.6	9.9	10.4	0.6	-0.03
Michigan	11.3	10.7	10.7	9.8	9.5	9.1	9.3	8.3	7.3	7.9	0.6	-0.04
Minnesota	10.3	11.9	11.7	10.2	9.9	8.6	9.1	7.8	7.0	6.9	-0.1	-0.04
Ohio	11.0	11.5	10.1	10.1	10.5	9.7	9.8	9.3	7.9	8.4	0.5	-0.03
Wisconsin	13.0	13.6	14.2	13.0	13.5	11.8	12.2	9.6	9.0	8.9	-0.1	-0.04

Sources: Fatality Analysis Reporting System, US Census Bureau

Note: FARS data not yet available for 2011.

Table 4. Proportion of occupants killed in collisions that were unrestrained, by states in the Great Lakes Region, 2001-2010

	<div> <div>Low</div> <div><</div> <div><</div> <div>></div> <div>></div> <div>High</div> </div>										Change '09-'10 (percentage points)	Average annual % change ('01-'10)
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010		
Illinois	71.0%	70.2%	68.2%	60.4%	60.0%	60.6%	62.1%	58.8%	58.3%	59.2%	0.9	-2.0%
Indiana	65.8%	63.2%	58.6%	61.9%	62.2%	63.5%	60.3%	59.2%	57.3%	57.8%	0.5	-1.4%
Michigan	51.0%	45.9%	48.4%	46.1%	42.7%	41.8%	42.5%	44.6%	44.3%	40.5%	-3.8	-2.5%
Minnesota	68.9%	62.4%	60.5%	60.4%	58.9%	62.9%	60.7%	58.8%	61.4%	50.8%	-10.6	-3.3%
Ohio	67.2%	63.9%	64.1%	62.4%	60.4%	61.0%	61.6%	62.2%	66.4%	64.0%	-2.5	-0.6%
Wisconsin	67.9%	67.9%	65.2%	64.7%	66.9%	62.9%	65.8%	64.1%	64.0%	60.6%	-3.4	-1.3%

Source: Fatality Analysis Reporting System

Note: FARS data not yet available for 2011.

RESTRAINT USE AND VEHICLE TYPE

Table 5 shows the relative risk of serious injury increases substantially when vehicle occupants are unrestrained. In each of the four passenger vehicle types in 2011, only one-tenth of a percent of properly restrained individuals involved in collisions were killed. Among unrestrained individuals injured in passenger cars, 4.9 percent were killed, indicating that

an individual is 44 times more likely to be killed in a passenger car when unrestrained. Likewise, unrestrained occupants of pickup trucks were 36 times more likely to be killed and 19 times more likely to suffer incapacitating injuries in traffic collisions than occupants using proper safety restraints. Unrestrained occupants of SUVs (94.1) and vans (100.1) had the highest relative risk of being killed in collisions compared to properly restrained occupants in these same vehicle types.

Table 5. Passenger vehicle occupants involved in Indiana collisions, by vehicle type, restraint use, and injury status, 2011

	Passenger cars		Pickup trucks		SUVs		Vans	
Restrained (R)	162,231	100%	35,287	100%	38,675	100%	17,959	100%
Fatal	181	0.1%	35	0.1%	25	0.1%	13	0.1%
Incapacitating	1,187	0.7%	209	0.6%	276	0.7%	127	0.7%
Non-incapacitating	21,799	13.4%	3,356	9.5%	5,023	13.0%	2,450	13.6%
Other	945	0.6%	237	0.7%	210	0.5%	116	0.6%
No injury	138,119	85.1%	31,450	89.1%	33,141	85.7%	15,253	84.9%
Not restrained (NR)	2,225	100%	791	100%	493	100%	276	100%
Fatal	109	4.9%	28	3.5%	30	6.1%	20	7%
Incapacitating	216	9.7%	90	11.4%	54	11.0%	34	12%
Non-incapacitating	1,148	51.6%	364	46.0%	241	48.9%	135	49%
Other	22	1.0%	2	0.3%	3	0.6%	1	0%
No injury	730	32.8%	307	38.8%	165	33.5%	86	31%
Relative risk of serious injury (% NR / % R)								
Fatal	43.9		35.7		94.1		100.1	
Incapacitating	13.3		19.2		15.3		17.4	

Source: Indiana State Police

Notes:

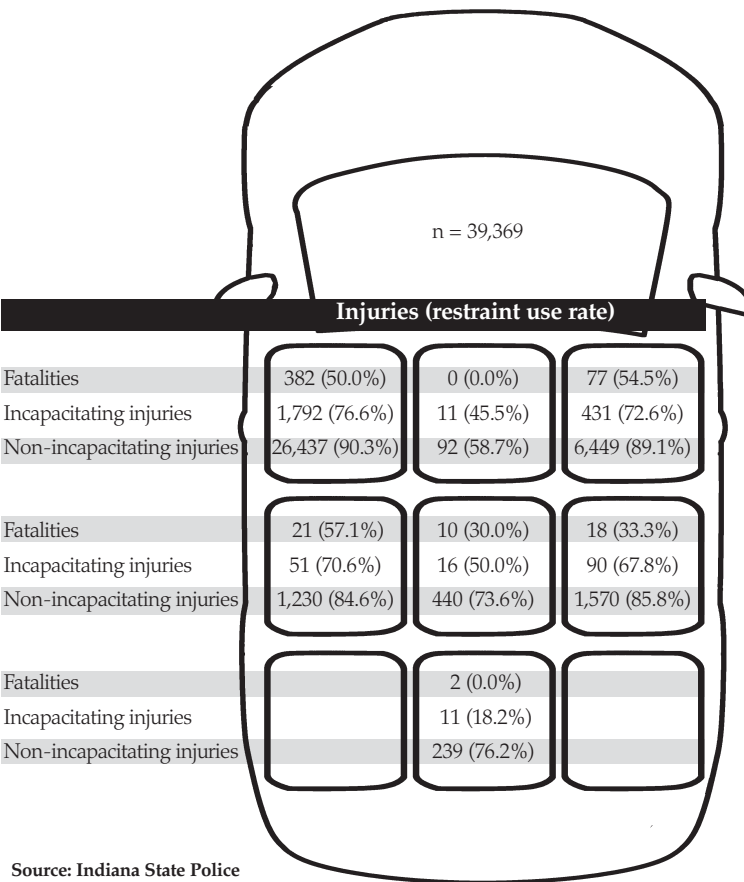
- 1) Excludes individuals involved in collisions where restraint use was unknown.
- 2) Percent totals may not add up to 100 due to rounding.

RESTRAINT USE AND SEATING POSITION

Research shows that vehicle seating position is linked both to the rate of restraint usage and the risk of injury for all passenger vehicle occupants. NHTSA reports that proper restraint use reduces the risk of fatal injury to passenger car occupants riding in the front seat of the vehicle by 45 percent (DOT HS 811 390). Figure 2 shows injury counts and restraint usage rates for 2011 by injury type and vehicle seating position. The greatest number of fatalities occurred in the driver seating position (382), among which 50 percent were properly restrained. About 55 percent of the 77 individuals killed in the front right passenger seat were properly restrained.

In 2011, this risk of serious injury (*fatal and incapacitating*) was greater for unrestrained occupants of passenger vehicles across all seating positions (Table 6). Occupants seated in the driver's position who were unrestrained were nearly 3 times more likely to suffer serious injuries than those wearing the proper restraints. Unrestrained passenger vehicle occupants seated in the *far back/sleeper* position (typically found in SUVs and vans) were nearly 13 times more likely to suffer serious injuries than occupants who were properly restrained.

Figure 2. Individuals in Indiana passenger vehicle collisions by injury status, seating position, and restraint use, 2011



Source: Indiana State Police

Notes:

- 1) Injuries include only individuals obtaining fatal, incapacitating, non-incapacitating, and possible injuries where valid seating position was identified.
- 2) Percentages depicted are the percentage of individuals properly restrained by injury type in each seating position.

Table 6. Risk of serious injury to passenger vehicle occupants involved in Indiana collisions, by seating position, 2011

Seating position	Restrained?	Serious injuries	Non-serious injuries	Total	% Serious injury	Risk
Front left (driver)	No	610	3,347	3,957	15.4%	2.8
	Yes	1,564	26,875	28,439	5.5%	
Front center	No	6	44	50	12.0%	1.6
	Yes	5	61	66	7.6%	
Front right	No	153	863	1,016	15.1%	2.8
	Yes	355	6,142	6,497	5.5%	
Rear left	No	24	214	238	10.1%	2.4
	Yes	48	1,100	1,148	4.2%	
Rear center	No	15	133	148	10.1%	3.3
	Yes	11	344	355	3.1%	
Rear right	No	41	264	305	13.4%	3.0
	Yes	67	1,429	1,496	4.5%	
Far back/sleeper	No	11	69	80	13.8%	12.8
	Yes	2	184	186	1.1%	
Total	No	860	4,934	5,794	14.8%	2.8
	Yes	1,697	29,993	31,690	5.4%	

Source: Indiana State Police

Notes:

- 1) Limited to individuals with valid seating position identified.
- 2) Serious injuries include those reported as *fatal and incapacitating*.
- 3) Non-serious injuries excludes NULL values in the injury status code field.
- 4) Relative risk of serious injury = the percent of unrestrained serious injuries in a given seating position divided by the percent of restrained serious injuries in the same seating position.

RESTRAINT USE AND AGE

Rates of restraint use among passenger vehicle occupants involved in Indiana traffic collisions were lower for individuals suffering serious injuries than the overall passenger vehicle occupant restraint usage rate (Table 7). The lowest rates of restraint use occurred among passenger

vehicle occupants killed in 2011 collisions in the 16 to 20 (26.4 percent), 25 to 34 (42.9 percent), and 35 to 44 (43.8 percent) age groups. When looking at restraint use by age and gender across the 2007 to 2011 period, males in collisions were much more likely to be unrestrained than their female counterparts in the same age groups (Table 8).

Table 7. Individuals involved in Indiana passenger vehicle collisions by age group, injury status, and restraint use, 2011

Age group	All involved			Fatal injuries			Incapacitating injuries		
	Total	Properly restrained	Restraint use rate	Total	Properly restrained	Restraint use rate	Total	Properly restrained	Restraint use rate
< 1	687	350	50.9%	4	2	50.0%	7	5	71.4%
1 - 3	462	431	93.3%	2	1	50.0%	10	9	90.0%
4 - 7	708	634	89.5%	4	3	75.0%	17	13	76.5%
8 - 15	2,124	1,762	83.0%	14	8	57.1%	79	63	79.7%
16 - 20	41,841	37,658	90.0%	72	19	26.4%	339	218	64.3%
21 - 24	31,091	27,917	89.8%	56	26	46.4%	247	162	65.6%
25 - 34	55,371	50,010	90.3%	70	30	42.9%	457	326	71.3%
35 - 44	45,274	41,157	90.9%	64	28	43.8%	359	269	74.9%
45 - 54	43,323	39,644	91.5%	72	33	45.8%	350	269	76.9%
55 - 64	32,137	29,470	91.7%	56	29	51.8%	258	210	81.4%
65 - 74	16,333	14,993	91.8%	37	27	73.0%	178	148	83.1%
75 and over	11,008	10,107	91.8%	63	48	76.2%	125	107	85.6%
Unknown	122	19	15.6%	0	0	n/a	0	0	n/a
Total	280,481	254,152	90.6%	514	254	49.4%	2,426	1,799	74.2%

Source: Indiana State Police

Note: Total columns include individuals reported with unknown and invalid safety equipment type.

Table 8. Proportion of individuals in Indiana collisions who were unrestrained, by age group and gender, 2007-2011

Age group	2007		2008		2009		2010		2011	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
< 1	29.0%	17.0%	29.4%	16.3%	35.9%	22.2%	37.9%	15.6%	42.1%	23.0%
1-3	9.1%	8.8%	10.8%	7.1%	5.9%	7.3%	8.6%	6.9%	8.5%	4.9%
4-7	18.5%	14.8%	17.4%	10.3%	11.0%	9.2%	10.8%	8.4%	11.5%	9.4%
8-15	21.4%	15.7%	21.4%	14.9%	22.8%	14.0%	18.1%	13.6%	17.3%	13.4%
16-20	13.5%	8.8%	11.9%	8.3%	11.7%	8.2%	11.0%	8.6%	11.0%	8.9%
21-24	15.1%	8.1%	12.9%	8.1%	12.5%	8.4%	12.0%	8.2%	11.8%	8.5%
25-34	13.7%	8.2%	12.0%	8.1%	11.9%	8.5%	10.7%	8.1%	10.9%	8.4%
35-44	12.4%	7.8%	10.6%	7.5%	10.3%	7.8%	10.0%	7.8%	10.2%	7.9%
45-54	11.2%	7.5%	9.4%	7.1%	10.0%	7.7%	9.1%	7.2%	9.3%	7.5%
55-64	10.2%	6.4%	8.4%	6.6%	8.8%	7.2%	8.7%	7.1%	8.8%	7.7%
65-74	10.6%	6.6%	8.2%	7.1%	9.2%	7.2%	9.0%	6.8%	8.7%	7.6%
75 +	10.2%	6.8%	9.1%	6.8%	9.3%	7.7%	9.0%	6.7%	8.6%	7.5%
All ages	12.7%	8.0%	10.9%	7.7%	10.9%	8.1%	10.3%	7.8%	10.3%	8.2%

Source: Indiana State Police

Notes:

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

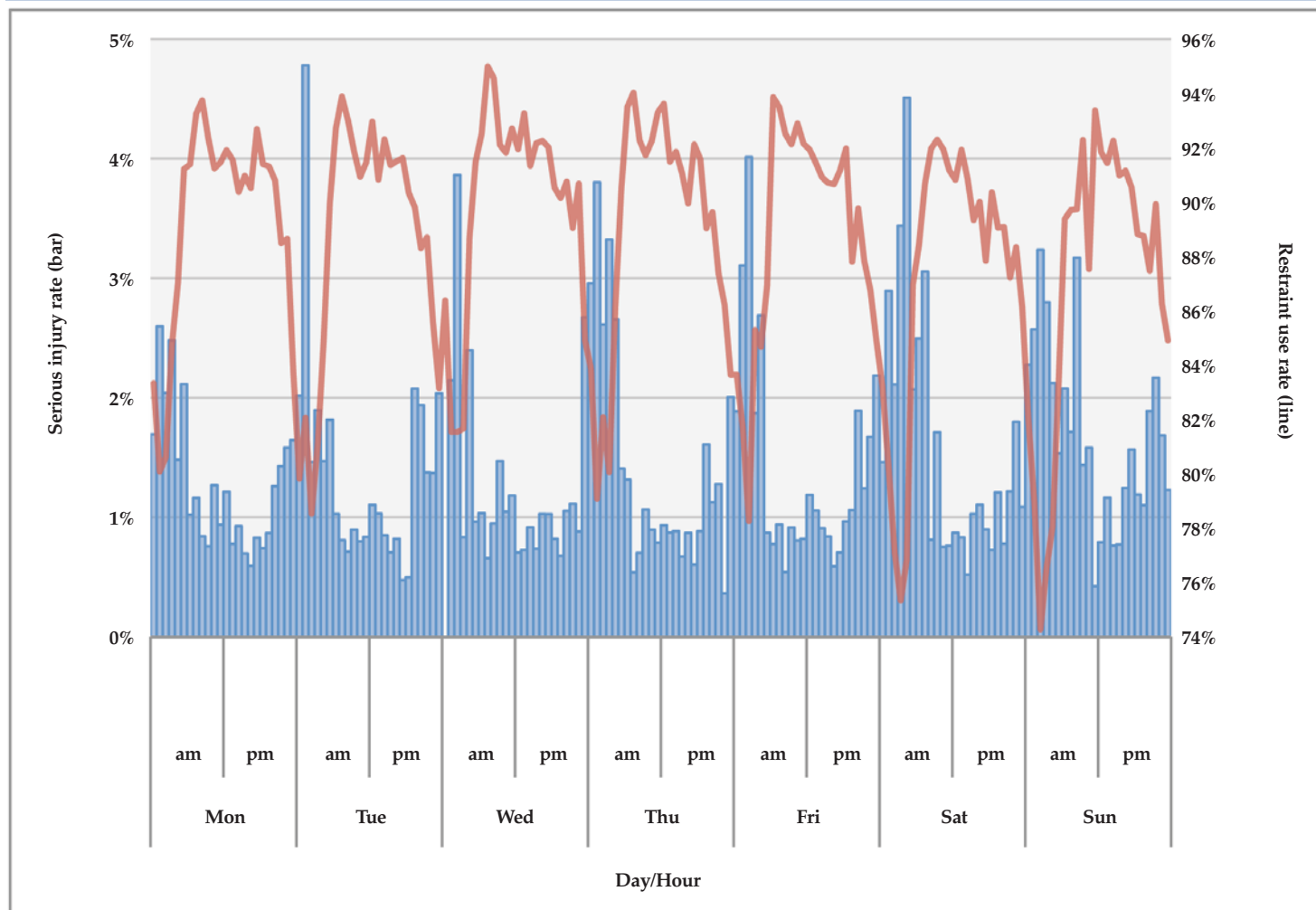
2) Percent unrestrained includes individuals reported with "No restraint" and NULL values in the restraint use code field.

TIME OF DAY AND RESTRAINT USE

In 2011, most serious injuries occurred during morning rush hour periods and late overnight hours (Figure 3). Data also suggest that rates of

restraint usage are noticeably lower and serious injury rates are higher during overnight hours than during other periods of the day, especially in the first few hours after midnight. The lowest hourly rate of restraint use in 2011 occurred at 2am on Sundays.

Figure 3. Indiana serious injuries and restraint use in passenger vehicles, by hour and day of week, 2011



Source: Indiana State Police

Notes:

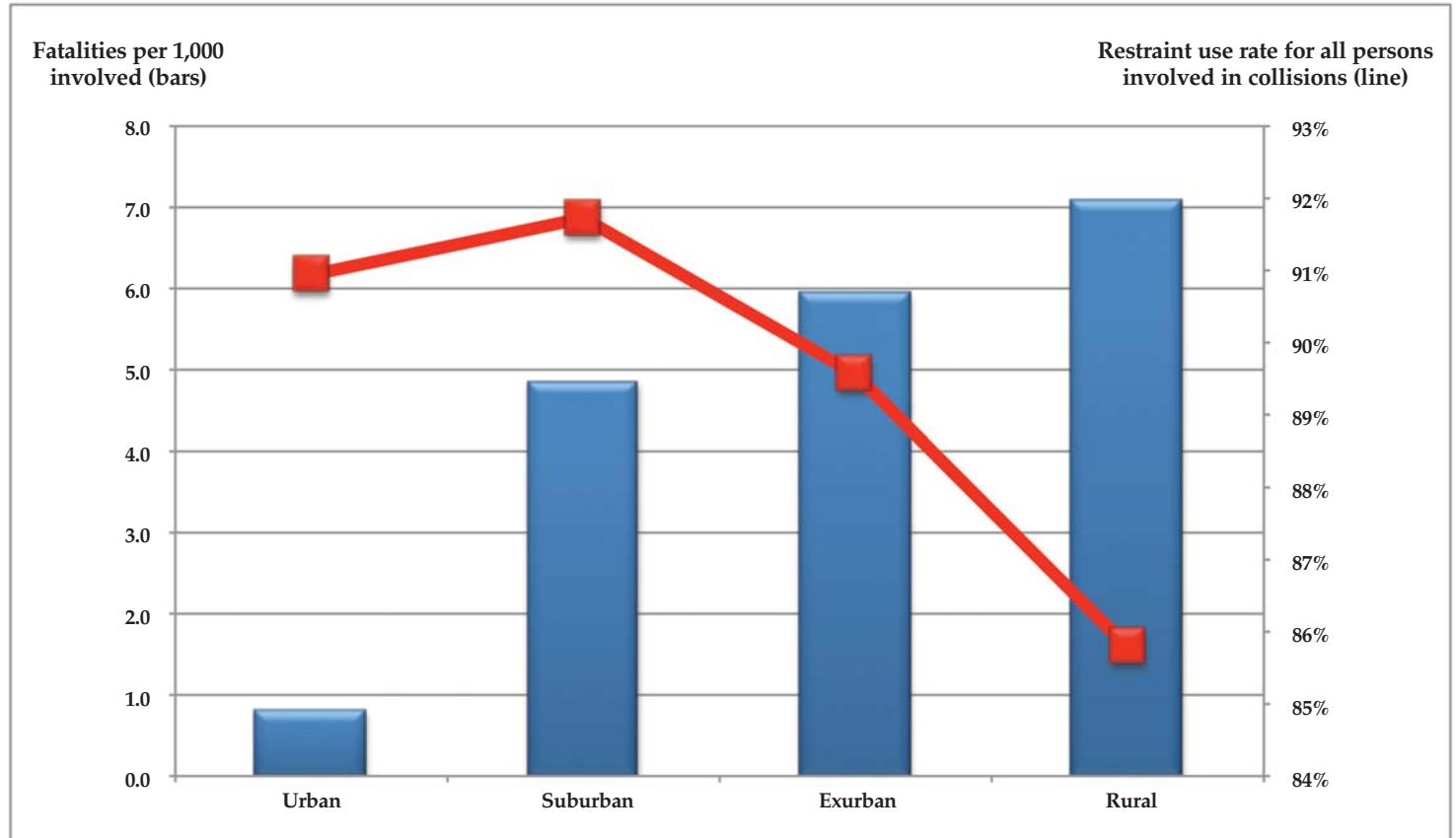
- 1) *Serious injury* rate represents *fatal* or *incapacitating* injuries as a proportion of all individuals involved in collisions.
- 2) Data exclude individuals involved in collisions with invalid time reported.
- 3) Restraint use rate includes individuals reported with *unknown* and invalid safety equipment type.

GEOGRAPHY OF INDIANA RESTRAINT USE

The 2011 fatality rate per 1,000 individuals involved in collisions was lower in Indiana *urban* (0.8 per 1,000) and *suburban* (4.8) locales than in

surrounding *exurban* (5.9) and *rural* (7.1) areas (Figure 4). Conversely, rates of restraint use were higher in *urban* (90.9 percent) and *suburban* (91.7 percent) locales than in areas designated as *exurban* (89.6 percent) and *rural* (85.8 percent).

Figure 4. Indiana traffic fatalities by restraint use and locale, 2011



Source: Indiana State Police

GEOGRAPHY OF INDIANA RESTRAINT USE (continued)

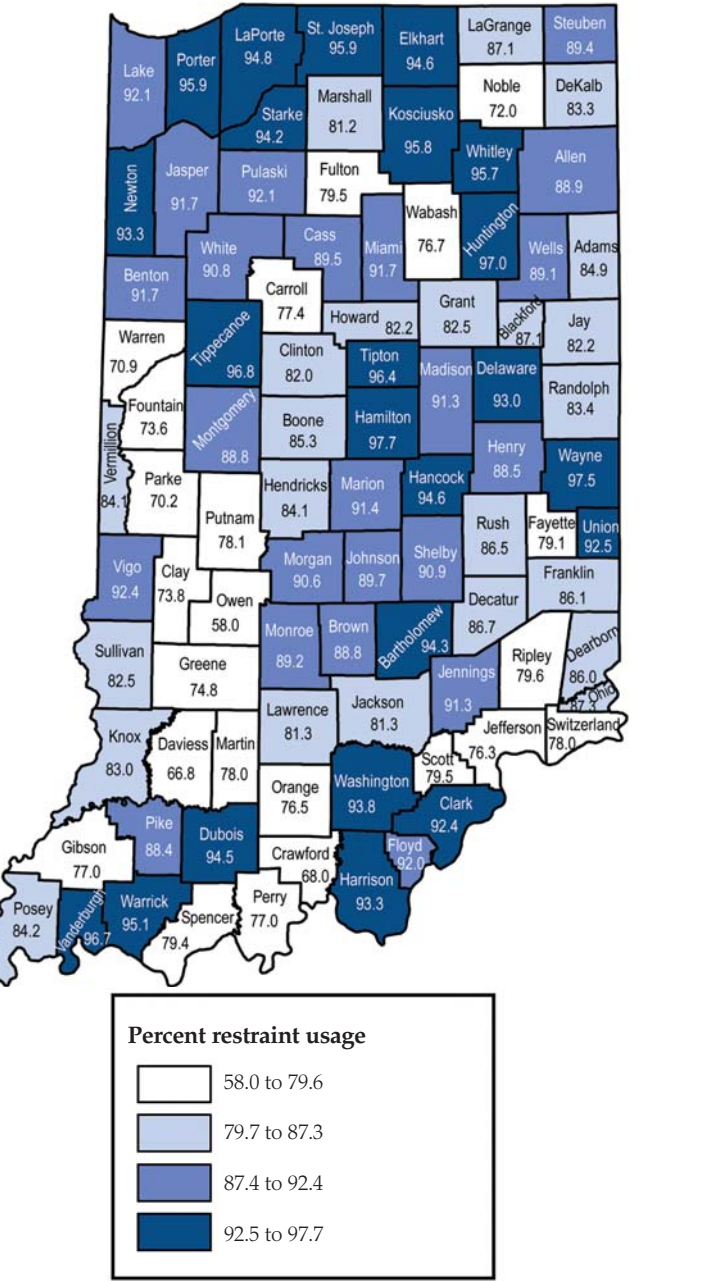
Maps 1 and 2 illustrate 2011 Indiana county restraint use rates for all passenger vehicles and for pickup trucks, respectively. Counties with lower rates of restraint use for both all passenger vehicles (Map 1) and

pickup trucks (Map 2) appear to be clustered in the south and western portions of the state. The median county rate of overall restraint use reported in Indiana collisions was 87.4 percent, while the mean rate was 86.1 percent. The median county rate of pickup truck restraint use was 84.4 percent, and the mean rate was 83.5 percent.

Restraint use rates in Indiana traffic collisions by county, 2011

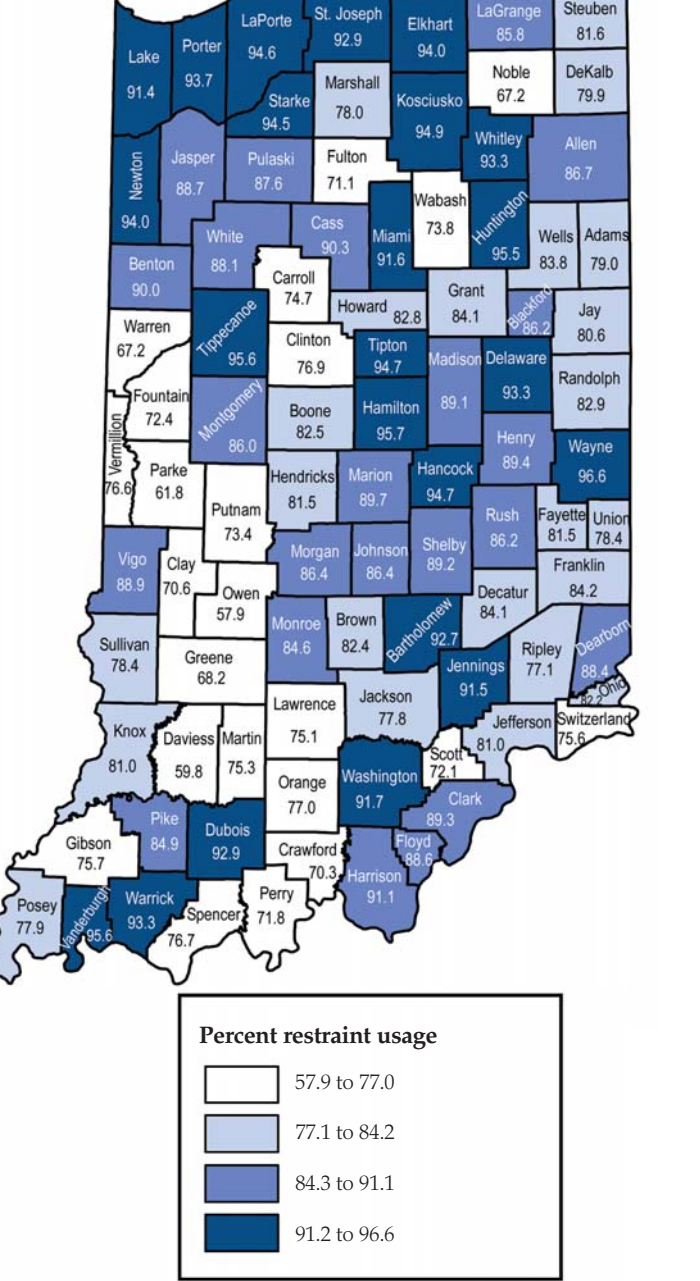
Map 1. All passenger vehicle restraint use rates

Indiana overall restraint use rate = 90.6
Median county restraint use = 87.4
Mean county restraint use = 86.1
n= 280,481 individuals injured or involved in collisions



Map 2. Pickup truck restraint use rates

Indiana overall restraint use rate = 87.8
Median county restraint use = 84.4
Mean county restraint use = 83.5
n= 40,198 individuals injured or involved in collisions



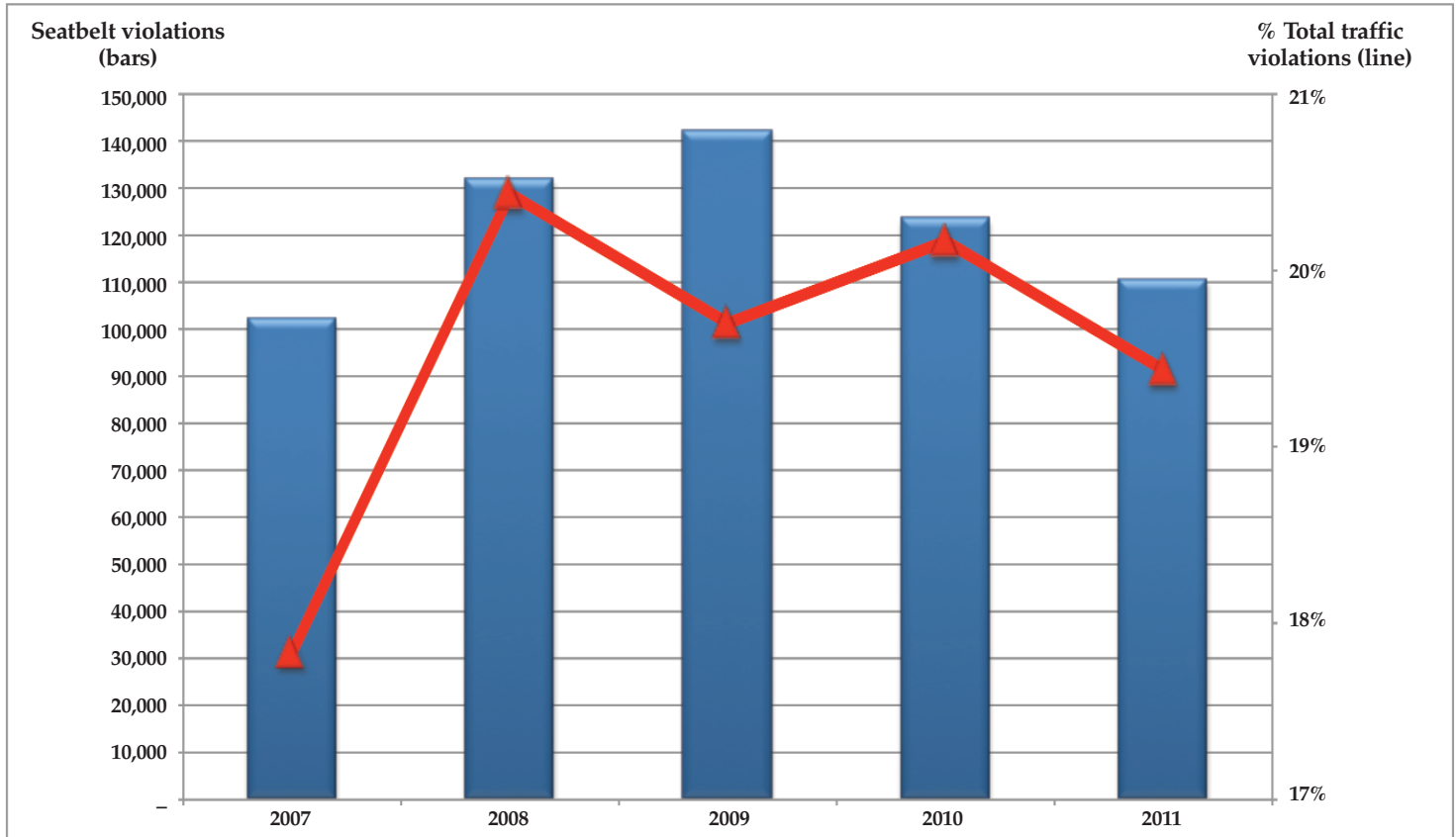
Source: Indiana State Police

INDIANA TRAFFIC OFFENSES

In 2011, more than 110,000 seatbelt violations were issued and convicted by Indiana police officers, accounting for nearly 20 percent of all traffic offense convictions (Figure 5). Both the number and percentage of seatbelt violation convictions decreased between 2010 (123,218, 20.2 percent) and 2011 (110,343, 19.4 percent). A large increase in seatbelt violation

convictions occurred between 2007 (101,774) and 2008 (131,667); however, since 2009, the number of seatbelt violation convictions has been on the decline. The 2008 increase is likely due in part to the change in the Indiana passenger restraint law in July 2007 requiring all passengers to be properly restrained in all passenger vehicles, including pickup trucks and SUVs (registered as trucks) that were previously exempted from the law.

Figure 5. Indiana seatbelt violations, 2007-2011



Source: Indiana Bureau of Motor Vehicles

Note: Limited to offenses with a disposition of *guilty*; excludes non-pointable (i.e., violations that do not incur points on a driver's record) and non-vehicle related violations.

DEFINITIONS

Urban is defined as Census 2000 Urban Areas (2007-2009) or Census 2010 Urban Areas (2010-2011), *suburban* as areas within 2.5 miles of urban boundaries, *exurban* as areas within 2.5 miles of suburban boundaries, and *rural* as areas beyond exurban boundaries (i.e., everything else).

Not injured status includes individuals involved in collisions reported as *null* values in the injury status code field.

Non-incapacitating injuries include those injuries reported as *non-incapacitating* or *possible*.

Other injury status includes *not reported*, *unknown*, and *refused* (treatment) status codes.

Passenger vehicles are defined as *passenger cars*, *pickup trucks*, *sport utility vehicles*, and *vans*.

Restraint use - Vehicle occupants injured in Indiana collisions are counted as having been restrained when the investigating officer selects any one of the following passenger vehicle safety equipment categories on the Indiana Crash Report: (1) *lap belt only*; (2) *harness*; (3) *airbag deployed and harness*; (4) *child restraint*; or (5) *lap and harness*.

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DATA SOURCES

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This publication was prepared on behalf of the Indiana Criminal Justice Institute (ICJI) by the Indiana University Center for Criminal Justice Research (CCJR). 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 the ICJI and the National Highway Traffic Safety Administration.

An electronic copy of this document can be accessed via the CCJR website (www.ccjr.iupui.edu), the ICJI website (www.in.gov/cji/), or you may contact the Center for Criminal Justice Research at 317-261-3000.



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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 Center for Criminal Justice Research is collaborating with the Indiana Criminal Justice Institute to analyze 2011 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the sixth year of this partnership. Research findings will be summarized in a series of fact sheets on various aspects of traffic collisions, including alcohol-related crashes, light and large trucks, dangerous driving, children, motorcycles, occupant protection, and drivers. An additional publication will provide information on county and municipality data and the final publication will be 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, 2011, approximately 99 percent of all collisions are entered electronically through ARIES. Trends in collisions incidence as reported in these publications could 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 Indiana University (IU) Public Policy Institute is a collaborative, multidisciplinary research institute within the Indiana University School of Public and Environmental Affairs (SPEA), Indianapolis. The Institute serves as an umbrella organization for research centers affiliated with SPEA, including the Center for Urban Policy and the Environment and the Center for Criminal Justice Research. The Institute also supports the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

The Center for Criminal Justice Research

The Center for Criminal Justice Research, one of two applied research centers currently affiliated with the Indiana University Public Policy Institute, works with public safety agencies and social services organizations to provide impartial applied research on criminal justice and public safety issues. CCJR provides analysis, evaluation, and assistance to criminal justice agencies; and community information and education on public safety questions. CCJR research topics include traffic safety, crime prevention, criminal justice systems, drugs and alcohol, policing, violence and victimization, and youth.

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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