

INDIANA 2009 TRAFFIC SAFETY FACTS

May 2009



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 accidents. 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 2008 vehicle crash data from the Automated Reporting Information Exchange System (ARIES), maintained by the Indiana State Police. This marks the third 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, 2008, approximately 98 percent of all collisions are entered electronically through the 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.



YOUNG DRIVERS₂₀₀₈

Ages 15-20

Motor vehicle collisions are consistently the leading cause of death and one of the leading causes of non-fatal injury for young people ages 15 to 20.¹ In 2008 in Indiana, this age group represented 9 percent of the population, 6 percent of licensed drivers, and 17 percent of drivers involved in collisions.² This fact sheet provides an overview of young driver involvement in collisions in Indiana in 2008, including rates of involvement, contributing factors, restraint and alcohol use, and county comparisons. The impending amendment to the state's Graduated Driver Licensing system (GDL) is also discussed. Collision data are taken from the Indiana State Police Automated Reporting Information Exchange System as of March 1, 2009.

Trends in collisions involving young drivers

The number of collisions in Indiana involving young drivers generally decreased from 2004 to 2008 (Table 1). In 2008, 22.6 percent of all collisions involved a young driver compared to 23.5 percent in 2007. A total of 50,885 young drivers were involved in collisions in Indiana in 2008, four percent fewer than in 2007 (Table 2). However, young driver fatalities increased ten percent in 2008 (from 68 to 75) with 1 in every 679 young drivers involved in collisions suffering a fatal injury.

Table 1: Indiana collisions, by young driver involvement and collision severity, 2004-2008

Young driver involvement and collision severity	Count of collisions					Rate: As % all by severity		
	2004	2005	2006	2007	2008	2007	2008	Rate change ('07 - '08)
Yes	53,189	51,522	47,123	48,222	46,305	23.5%	22.6%	-1.0%
Fatal	194	160	167	146	136	18.2%	18.9%	0.7%
Non-fatal	12,569	11,841	11,129	10,445	9,173	27.9%	26.0%	-1.9%
Property damage	40,426	39,521	35,827	37,631	36,996	22.6%	21.9%	-0.7%
No	155,493	156,837	145,598	156,777	158,976	76.5%	77.4%	1.0%
Fatal	663	695	650	658	585	81.8%	81.1%	-0.7%
Non-fatal	30,734	29,920	27,720	26,971	26,154	72.1%	74.0%	1.9%
Property damage	124,096	126,222	117,228	129,148	132,237	77.4%	78.1%	0.7%
All	208,682	208,359	192,721	204,999	205,281	100%	100%	--
Fatal	857	855	817	804	721	100%	100%	--
Non-fatal	43,303	41,761	38,849	37,416	35,327	100%	100%	--
Property damage	164,522	165,743	153,055	166,779	169,233	100%	100%	--

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Note:
Non-fatal includes incapacitating and non-incapacitating collisions.

Table 2: Injuries in collisions involving young drivers, 2004-2008

Injury status	2004	2005	2006	2007	2008
All	101,399	97,115	89,027	89,688	85,081
Young driver (< 21)	59,017	56,949	52,100	53,024	50,885
Other	42,382	40,166	36,927	36,664	34,196
Fatality	221	187	192	174	157
Young driver (< 21)	99	81	89	68	75
Other	122	106	103	106	82
Incapacitating	1,038	977	970	873	806
Young driver (< 21)	436	401	381	369	338
Other	602	576	589	504	468
Non-incapacitating	17,857	16,706	15,940	14,742	12,611
Young driver (< 21)	7,724	7,147	6,741	6,137	5,314
Other	10,133	9,559	9,199	8,605	7,297
Other injury	8958	10213	6462	2442	1725
Young driver (< 21)	5,333	6,055	3,824	1,473	1,015
Other	3,625	4,158	2,638	969	710
Not injured	73,325	69,032	65,463	71,457	69,782
Young driver (< 21)	45,425	43,265	41,065	44,977	44,143
Other	27,900	25,767	24,398	26,480	25,639

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:

Non-incapacitating is defined as an individual with injury type of *non-incapacitating* or *possible*.

Other injury is defined as an individual with injury type of *not reported, unknown, refused, or invalid (+)*.

Not injured is defined as an individual with no injury type (NULL) reported and should only apply to drivers involved in collisions.

From 1999 to 2007, the rate of young drivers involved in Indiana fatal collisions per 100,000 licensed young drivers decreased an average of 3.3 percent each year (Table 3). For the same period, Indiana young drivers fatally injured per 100,000 licensed decreased an average of 3.8 percent each year—a greater decrease than the Great Lakes region (3.6 percent) and United States (1.8 percent). While the rate of young drivers involved in fatal collisions decreased further in 2008 to 48.4, the rate of young drivers fatally injured increased slightly from 24 to 25.6 in 2008.³

Research consistently demonstrates that younger drivers have substantially higher collision rates—and thus, greater risk of injury or death—than older drivers.^{4,5} In 2008, young drivers in

Indiana had the highest rates of involvement in fatal collisions (Figure 1). For every 10,000 licensed 16-17 year olds, 19.6 were involved in a fatal collision—a rate 5.5 times greater than 18-20 year old drivers and more than seven times greater than any older driver age group.

Young driver contributing factors

Inexperience, inadequate driving skills, greater propensity for risk-taking, driving while impaired, and in-vehicle driver distractions put young drivers at greater risk for involvement in collisions.⁶ In 2008, young driver actions were more often reported as contributing factors in collisions compared to older drivers (drivers age 21 and over); *driver not a factor* represented only 30 percent of young driver contributing factors but 46 percent of older driver factors (Table 4).⁷ More than half (55 percent) of young driver contributing factors were attributable to *errant/risky driving* compared to 40 percent for older drivers. Certain contributing factors were also more common in different young driver age groups. A 16-17 year old driver was 1.9 times more likely than a 15-year old driver and 1.3 times more likely than an 18-20 year old driver to have been distracted. Drivers 18-20 years old were 1.6 times more likely than 15-year old drivers and 2.5 times more likely than 16-17 year old drivers to be impaired (not shown).

Young drivers with passengers are consistently at greater risk of collisions due to the combination of passenger-induced distractions, driver inexperience, and greater propensity for driver risk-taking.⁸ In 2008 in Indiana, young drivers of all ages involved in collisions were more likely than older drivers to be driving with passengers (Table 5). Specifically, young drivers were 1.3 times more likely than older drivers to have passengers with them and 1.6 times more likely to have passengers in fatal collisions. Additionally, 16-17 year old drivers in fatal collisions were 1.9 times more likely than older drivers to have passengers, and 1.4 times more likely to have passengers in multiple vehicle collisions.

Table 3: Young drivers in fatal collisions, per 100,000 licensed young drivers, 1999-2008

Region	1999	2000	2001	2002	2003	2004	2005	2006	2007	Avg % change 1999-2007	2008	% Change ('07-'08)
Young drivers (< 21) involved in fatal collisions												
Indiana	75.1	62.8	64	51	59.9	68.4	54.3	58.5	52.4	-3.3%	48.4	-7.7%
Great Lakes	59.7	56.7	53.9	54.9	53.2	50.1	45.5	44.2	41.6	-4.4%	n/a	n/a
United States	64.6	63.3	64.6	66.2	63.4	63.1	59.3	57.7	52.8	-2.4%	n/a	n/a
Young drivers (< 21) fatally injured												
Indiana	35.9	28.2	31.4	27.3	27.4	32.9	26.8	29.1	24.0	-3.8%	25.6	6.5%
Great Lakes	26.2	24.3	24.7	25.8	24.3	22.8	21.3	20.6	19.5	-3.6%	n/a	n/a
United States	28.1	27.9	28.7	30.6	29.4	28.9	27.5	26.9	24.0	-1.8%	n/a	n/a

Source:

1999-2007: Fatality Analysis Reporting System; Federal Highway Administration, State Transportation Statistics.

2008: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009; Indiana Bureau of Motor Vehicles, as of February 16, 2008.

Note:

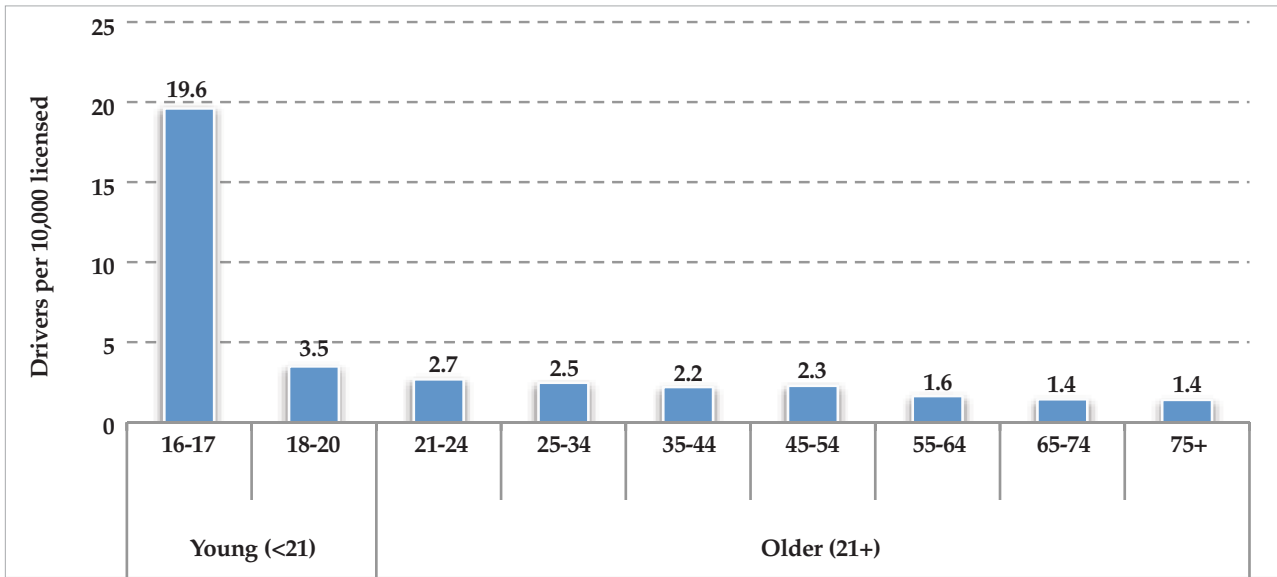
Great Lakes region is defined as Indiana, Illinois, Michigan, Minnesota, Ohio, and Wisconsin.

sions. In response to studies that demonstrate the increased risk posed by passenger distractions, Indiana is debating amending its GDL system to prohibit probationary license holders between 16.5 years old and 17 years old from carrying passengers “for the first 180 days unless accompanied by a licensed instructor or 25 year old licensed driver.”⁹

Safety equipment use and alcohol use

Considering drivers involved in collisions where safety equipment use was known, young drivers—with the exception of 15 year old drivers—were generally just as likely as older drivers to have used safety equipment (97.4 percent versus 97.6 percent) (Table 6). Over half of young drivers killed were using safety

Figure 1: Drivers involved in Indiana fatal collisions per 10,000 licensed drivers, 2008



Sources: Collision: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009. Licensed driver: Indiana Bureau of Motor Vehicles, as of February 16, 2008.

Note: Includes drivers with a valid age reported in collision and licensed driver data.

Table 4: Young driver contributing factors in Indiana collisions, 2008

	Count of driver factors					Percent of driver factors				
	<21	15	16-17	18-20	21+	<21	15	16-17	18-20	21+%
All driver factors assigned	54,717	459	20,366	33,892	271,486	100.0%	100.0%	100.0%	100.0%	100.0%
Errant/risky driving	30,179	221	11,953	18,005	107,363	55.2%	48.1%	58.7%	53.1%	39.5%
Driver not a factor	16,357	152	5,424	10,781	126,085	29.9%	33.1%	26.6%	31.8%	46.4%
Other driving condition	4,347	64	1,658	2,625	21,054	7.9%	13.9%	8.1%	7.7%	7.8%
Distracted driving	2,493	13	1,071	1,409	7,496	4.6%	2.8%	5.3%	4.2%	2.8%
Driver Distracted (Explained in Narrative)	2,069	11	914	1,144	6,524	3.8%	2.4%	4.5%	3.4%	2.4%
Cell phone and other telematics	363	0	125	238	817	0.7%	0.0%	0.6%	0.7%	0.3%
Passenger distraction	61	2	32	27	155	0.1%	0.4%	0.2%	0.1%	0.1%
Impaired driving	1,341	9	260	1,072	9,488	2.5%	2.0%	1.3%	3.2%	3.5%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:

Counts are for drivers with a valid age reported.

Counts may be greater than the number of drivers because multiple factors can be reported for a single driver.

Percent values represent the percent of all factors for each group (i.e., of the 459 factors attributed to 15 year old drivers involved in collisions, *distracted driving* accounted for 2.8%).

Driver impaired is defined as contributing factors reported as one or more of the following: 1) *Alcoholic beverages*, 2) *Driver Asleep or Fatigued*, 3) *Driver Illness*, 4) *Illegal Drugs*, and 5) *Prescription Drugs*.

Errant/risky driving is defined as contributing factors reported as one or more of the following: 1) *Disregard Signal/Reg Sign*, 2) *Failure to Yield Right of Way*, 3) *Following Too Closely*, 4) *Improper Lane Usage*, 5) *Improper Passing*, 6) *Improper Turning*, 7) *Jackknifing*, 8) *Left of Center*, 9) *Overcorrecting/Oversteering*, 10) *Ran Off Road Left*, 11) *Ran Off Road Right*, 12) *Speed too Fast for Weather Conditions*, 13) *Unsafe Backing*, 14) *Unsafe Speed*, and 15) *Wrong Way on One Way*.

Other driving condition is defined as contributing factors reported as one or more of the following: 1) *Other (Explained in Narrative) - driver*, 2) *Pedestrian Action*, and 3) *Violation of License Restriction*.

Unknown is defined as contributing factors reported as multiple codes.

Other driving condition includes *unknown* driver factors

equipment compared to 42 percent of older drivers. Safety equipment use rates for all age groups were generally higher for less severe injuries, suggesting that the use of safety equipment reduced the incidence of more serious injuries. Fifteen year old drivers were the least likely to use safety equipment (86.3 percent).

Approximately two percent (965 of 50,852) of young drivers involved in collisions in 2008 had been drinking (Table 7).¹⁰ Drivers suffering more serious injuries were more likely to have been drinking and drinking was more common for males than females. More than one-fifth of all young drivers killed and 23.6 percent of 18-20 year old drivers killed had been drinking.

Young male drivers killed were 1.9 times (23.7 percent / 12.5 percent) more likely than females to have been drinking.

Table 5: Drivers in Indiana collisions by passenger presence, 2008

Drivers in...	Young drivers				
	<21	15	16-17	18-20	21+
All collisions	50,885	429	18,970	31,486	257,327
With passengers	17,780	324	7,066	10,390	71,106
% With passengers	34.9%	75.5%	37.2%	33.0%	27.6%
Ratio % < 21 with passengers to % 21+	1.3	2.7	1.3	1.2	n/a
Fatal collisions	142	1	48	93	967
With passengers	67	0	27	40	280
% With passengers	47.2%	0.0%	56.3%	43.0%	29.0%
Ratio % < 21 with passengers to % 21+	1.6	0.0	1.9	1.6	n/a
Single vehicle collisions	11,739	106	4,480	7,153	52,876
With passengers	3,701	76	1,545	2,080	13,511
% With passengers	31.5%	71.7%	34.5%	29.1%	25.6%
Ratio % < 21 with passengers to % 21+	1.1	2.6	1.2	1.1	n/a
Multiple vehicle collisions	39,146	323	14,490	24,333	204,451
With passengers	14,079	248	5,521	8,310	57,595
% With passengers	36.0%	76.8%	38.1%	34.2%	28.2%
Ratio % < 21 with passengers to % 21+	1.3	2.8	1.4	1.2	n/a

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:
Counts are for drivers with a valid age reported.
With passengers defined as units with more than one occupant.

Table 6: Safety equipment use among young drivers in Indiana, 2008

Driver injury status	Young drivers				
	<21	15	16-17	18-20	21+
All injury statuses	46,908	371	17,544	28,993	237,700
Used safety equipment	45,699	320	17,171	28,208	231,958
% Used safety equipment	97.4%	86.3%	97.9%	97.3%	97.6%
Fatal	67	1	16	50	431
Used safety equipment	34	0	13	21	182
% Used safety equipment	50.7%	0.0%	81.3%	42.0%	42.2%
Incapacitating	307	4	95	208	1,836
Used safety equipment	223	2	71	150	1,265
% Used safety equipment	72.6%	50.0%	74.7%	72.1%	68.9%
Non-incapacitating	5,003	50	1,869	3,084	24,704
Used safety equipment	4,482	28	1,708	2,746	22,301
% Used safety equipment	89.6%	56.0%	91.4%	89.0%	90.3%
Other injury	918	10	408	500	4,226
Used safety equipment	889	10	401	478	4,139
% Used safety equipment	96.8%	100.0%	98.3%	95.6%	97.9%
Not injured	40,613	306	15,156	25,151	206,503
Used safety equipment	40,071	280	14,978	24,813	204,071
% Used safety equipment	98.7%	91.5%	98.8%	98.7%	98.8%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:
Counts are for drivers with a valid age reported where restraint use was known.
Used safety equipment applies to a motor vehicle occupant involved in a collision when the safety equipment type reported is one of the following: 1) Lapbelt only, 2) Harness, 3) Airbag deployed + harness, 4) Child restraint, or 5) Lap + harness. Also applies to a motorcycle rider involved in a collision when the safety equipment type reported is Helmet.
Non-incapacitating injuries include those injuries reported as non-incapacitating or possible.
Other injury status includes not reported, unknown, refused (treatment), or invalid (+) injury status codes.
Not injured status includes individuals involved in collisions reported as null values in the injury status code field and should only apply to drivers involved in collisions.

Young drivers in collisions by time of day

Nighttime driving (6pm-6am) may be particularly problematic and challenging for young drivers because of inexperience driving at night, lower visibility, fatigue, and alcohol/drug use.¹¹ Because of this, many states have incorporated nighttime driving restrictions into their graduated driver licensing systems, and as a result, some states have reduced collisions during restricted hours by as much as 60 percent.¹² In Indiana in 2008, the proportion of young drivers involved in collisions during curfew hours (11pm-5am) decreased each hour from 11pm (2.6 percent) to 4am (0.5 percent) with a slight increase at 5am (0.6 percent) (Figure 2). Similar to older drivers, the distributions of young driver involvement in collisions (Figure 2) and young driver injuries (Figure 3) exhibit two peaks around 7am (perhaps when going to school/work) and 3pm (perhaps when leaving school/work). However, young driver fatalities are most common around 2am (10.7 percent) and 5pm (10.7 percent) (Figure 3).

Indiana county comparisons

Maps 1 and 2 show two different measures of young driver involvement in collisions in Indiana counties. The maps classify counties based on their deviation from the mean percent young drivers in collisions (Map 1) and mean rate per 1,000 licensed young drivers (Map 2). In 2008, the counties with the highest proportions (i.e., those greater than two standard deviations above the mean) of young drivers involved in collisions were Pike, Franklin, Warren, Wells, and Dubois (Map 1). Two of these (Wells and Dubois) also ranked in the top ten in the proportion of licensed drivers in the county who are young (not shown). Marion and Lake counties experienced the smallest proportions

of young driver involvement in collisions while ranking 92nd and 85th respectively in the proportion of licensed drivers in the county who are young.

The mean county rate of young driver involvement in collisions per 1,000 licensed young drivers was 150.4 in 2008 (Map 2). Three counties—Tippecanoe, Monroe, Delaware—experienced young driver involvement rates well above this. These findings may be attributable to the presence of major college campuses (e.g., Indiana University, Purdue University, Ball State University) in these counties—a hypothesis further supported by the fact that the counties have smaller proportions of licensed drivers in the county who are young (rank 64th, 89th, and 86th, respectively).

Graduated driver licensing system

GDL systems are intended to delay full licensure of young drivers while they gain driving experience under lower risk conditions.¹³ These systems generally consist of three stages—learners, intermediate, full licensure—with decreasing levels of supervision and restraints. All 50 states and the District of Columbia have implemented GDL systems.

In May 2009, Indiana passed legislation amending several of the state's GDL provisions. The amendments focus on giving young drivers more driving experience before advancing to less restrictive licensing stages by pushing back minimum age requirements for learners permits and probationary licenses, increasing the holding period for learners permits, reducing driver distractions, and restricting driving times. Effective July 1, 2009:

- Drivers under the age of 18 are not allowed to use a "telecommunications device" while driving (talking on a cell phone, texting, etc.) with the exception of making a 911 emergency call.
- Drivers under the age of 18 may not operate a vehicle between 11pm and 5am Sunday through Thursday, and

between 1am and 5am Friday and Saturday for the first 180 days of holding a license.

- For the first 180 days of holding a license, drivers under the age of 18 may not drive with passengers unless the passenger is: over 25 years of age and holds a driver's license; a certified driving instructor; or a parent or guardian over the age of 21. Drivers may transport their child, sibling, or spouse.

A number of additional provisions will take effect July 1, 2010. Complete information on the GDL bill can be accessed at the Indiana Legislative Services Agency's website (<http://www.in.gov/apps/lsa/session/billwatch/billinfo?year=2009&session=1&request=getBill&docno=16>).

Summary

The rate of young drivers involved in fatal collisions and fatally injured has decreased on average during the last decade in Indiana. Nevertheless, there remains opportunity for improvement. The number and rate of young drivers killed in collisions increased in 2008, and young drivers—especially 16-17 year olds—are experiencing significantly higher rates of involvement in fatal collisions than older age groups. A review of young driver contributing factors reveals that the actions of young drivers are more often reported as having contributed to their involvement in collisions than older drivers, and errant/risky driving and distracted driving are more common for young drivers involved in collisions. Passenger presence and alcohol use—particularly male driver alcohol use—also continue to be points of concern for young drivers. Indiana has experienced favorable results in its efforts to increase restraint use; 97 percent of young drivers and 98 percent of older drivers involved in collisions in 2008 were restrained. As of this writing, efforts are underway to amend the state's GDL system with the intent of addressing the other risks discussed here associated with young drivers.¹⁴

Table 7: Indiana young drivers and alcohol use, 2008

	Count of drivers					Percent of drivers				
	<21	15	16-17	18-20	21+	<21	15	16-17	18-20	21+%
All drivers	50,852	429	18,961	31,462	257,141	1.9%	1.2%	2.6%	2.6%	3.2%
Fatal injury	75	1	19	55	473	21.3%	0.0%	15.8%	23.6%	27.1%
Female	16	0	7	9	122	12.5%	0.0%	0.0%	22.2%	14.8%
Male	59	1	12	46	351	23.7%	0.0%	25.0%	23.9%	31.3%
Incapacitating injury	338	6	106	226	1,992	9.8%	0.0%	5.7%	11.9%	14.9%
Female	150	2	48	100	727	6.0%	0.0%	0.0%	9.0%	5.9%
Male	188	4	58	126	1,265	12.8%	0.0%	10.3%	14.3%	20.1%
Non-incapacitating injury	5,314	63	1,967	3,284	26,073	5.2%	3.2%	2.1%	7.1%	7.1%
Female	2,803	29	1,071	1,703	13,317	2.6%	3.4%	1.3%	3.4%	2.9%
Male	2,511	34	896	1,581	12,756	8.1%	2.9%	3.0%	11.1%	11.5%
Other injury	1,011	12	437	562	4,647	2.0%	0.0%	0.5%	3.2%	3.6%
Female	433	2	198	233	1,987	0.9%	0.0%	0.5%	1.3%	1.9%
Male	578	10	239	329	2,660	2.8%	0.0%	0.4%	4.6%	4.8%
Not injured	44,114	347	16,432	27,335	223,956	1.4%	0.9%	0.6%	1.9%	2.6%
Female	20,025	155	7,583	12,287	94,881	0.6%	1.3%	0.2%	0.8%	1.4%
Male	24,089	192	8,849	15,048	129,075	2.1%	0.5%	0.9%	2.8%	3.5%

Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:

Counts are for drivers with a valid age and gender reported.

Percent values represent the percent of drivers who had been drinking (i.e., Of the nineteen 16-17 year old drivers involved in collisions who suffered fatal injuries, 15.8% had been drinking).

Non-incapacitating injuries include those injuries reported as both non-incapacitating and possible.

Other injury status includes not reported, unknown, refused (treatment), or invalid (+) injury status codes.

Not injured status includes individuals involved in collisions reported as null values in the injury status code field and should only apply to drivers involved in collisions.

Drivers Who Had Been Drinking defined as a driver involved in a collision where any one of the following conditions are met: (1) alcoholic beverages was listed as a driver contributing circumstance; (2) driver had a positive blood alcohol content (BAC) test result, (3) as a measure of apparent physical condition, the officer determined that driver had been drinking, or (4) an Operating While Intoxicated (OWI) citation was issued to the driver.

Figure 2: Percent of young drivers involved in Indiana collisions by time of day, 2008

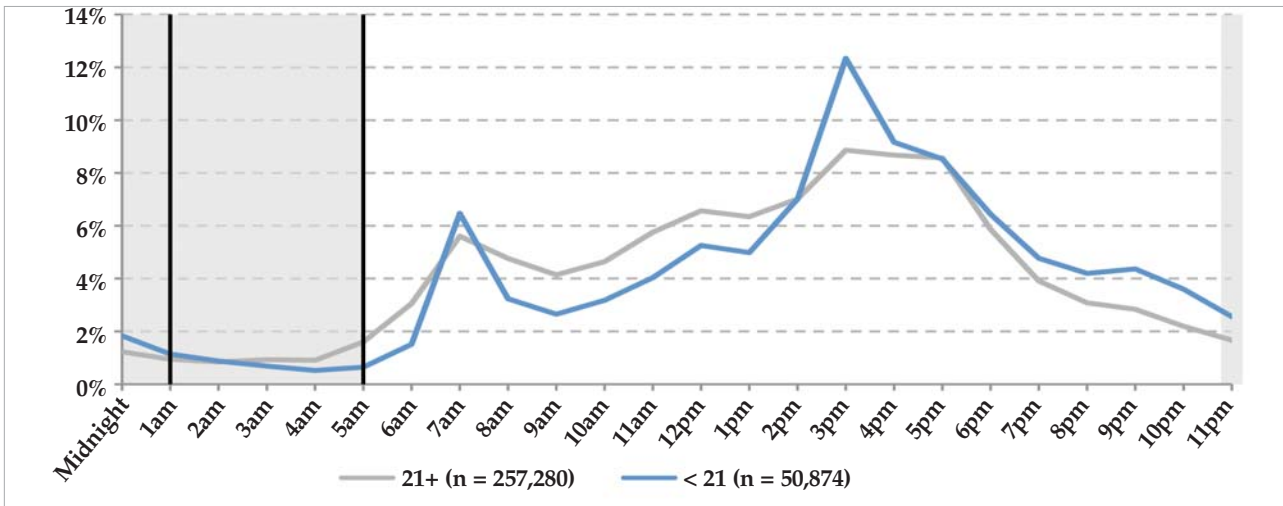
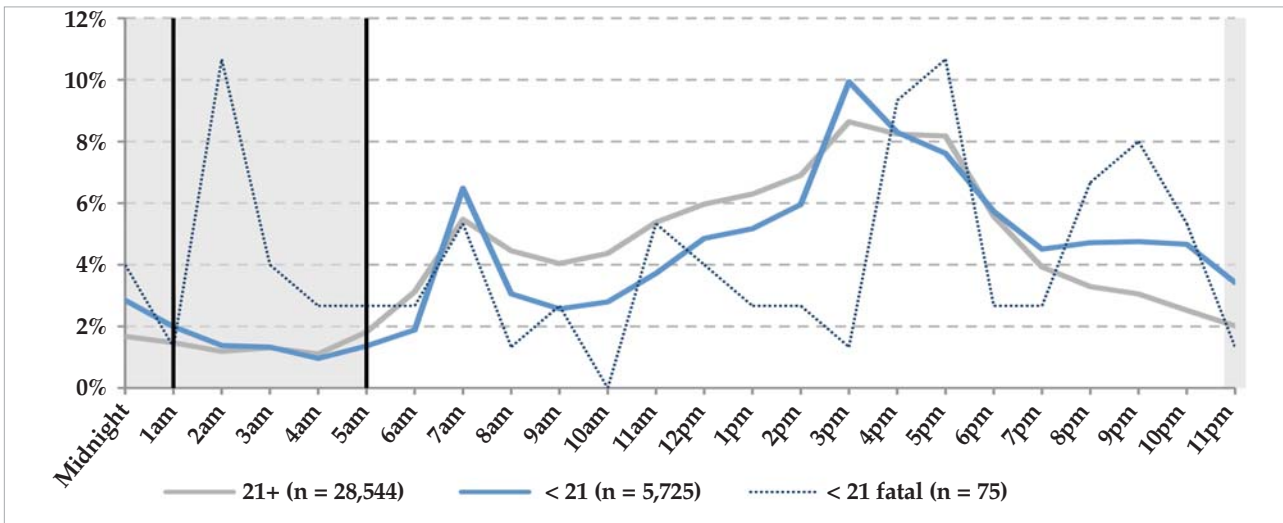


Figure 3: Percent of drivers with fatal/non-fatal injuries and young driver fatal injuries only by time of day, 2008



Source: Indiana State Police Automated Reporting Information Exchange System (ARIES), as of March 1, 2009.

Notes:

Counts are for drivers with a valid age and collision time reported.
 Shaded area represents weekday curfew hours: Sun. - Thurs. 11pm until 5am.
 Black vertical lines represent weekend curfew hours: Fri. & Sat. 1am until 5am.
 Fatal/non-fatal totals equal the sum of *fatal*, *incapacitating*, and *non-incapacitating* (including possible) injuries.

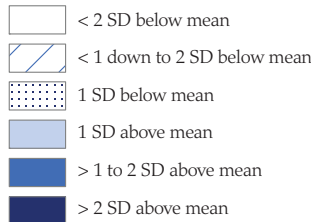
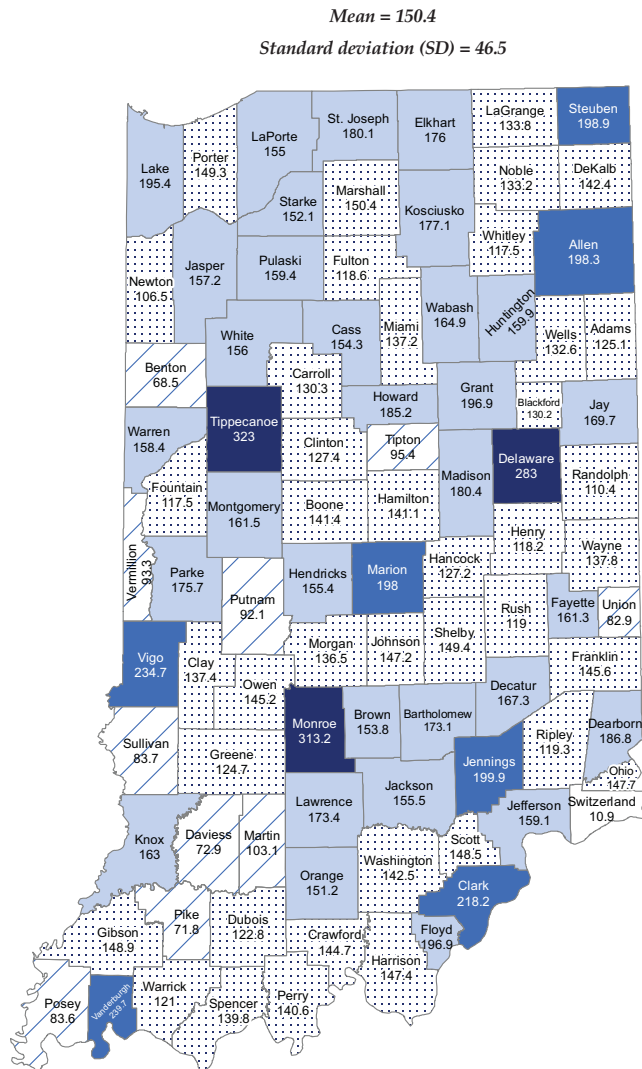
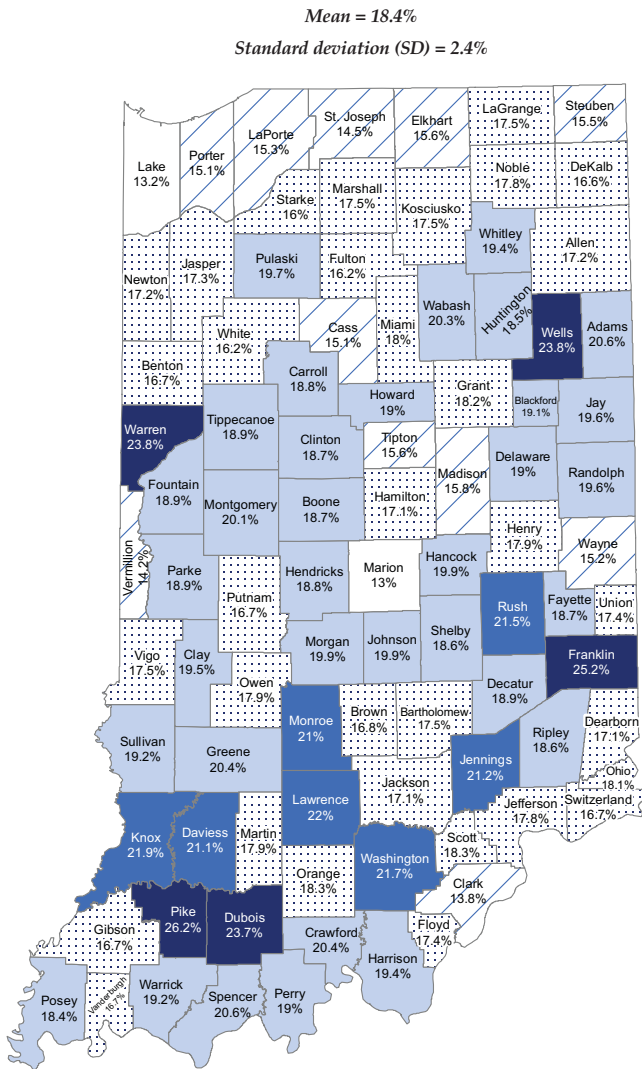
Endnotes:

¹Centers for Disease Control and Injury Prevention, Web-Based Injury Statistics Query and Reporting System. *Leading causes of death reports (1999-2005)*; Centers for Disease Control and Injury Prevention, Web-Based Injury Statistics Query and Reporting System. *Leading causes of non-fatal injury reports (2001-2007)*.
²Population proportion estimated based on average change in population from 2003-07 using Census Bureau population estimates.
³Because 2008 rates were calculated using different data sources, readers should use caution when comparing 2008 rates to earlier years.
⁴Insurance Institute for Highway Safety. (September 2008). *Effects of age and experience on young driver crashes: Review of recent literature*.
⁵The term "older drivers" is used throughout the fact sheet and refers to drivers between 21 and 109.
⁶National Highway Traffic Safety Administration (NHTSA). (2008). *Traffic safety facts, laws - Graduated driver licensing system*.

⁷Up to two driver factors can be selected for each driver. Because of this, the number of factors is generally greater than the number of drivers and some factors that might have contributed may not have been selected.
⁸Williams, A., Ferguson, S., McCart, A. (2007). *Passenger effects on teenage driving and opportunities for reducing the risks of such travel*.
⁹Indiana General Assembly. ENGROSSED SENATE BILL No. 16, April 3, 2009.
¹⁰Counts of drivers may be different than those cited earlier due to unknown gender.
¹¹National Safety Council. (2007). *What you should know about nighttime driving restrictions*.
¹²NHTSA, 2008.
¹³Insurance Institute for Highway Safety. (March 2009). *U.S. licensing systems for young drivers*.
¹⁴As of April 21, 2009, Senate Bill 16 has passed the Indiana Full Senate and House of Representatives. Final reviews of the bill are underway.

Map 1: Percent of all Indiana drivers involved in collisions who were young, 2008

Map 2: Indiana young drivers involved in collisions per 1,000 licensed young drivers, 2008



Sources: Collisions Automated Reporting Information Exchange System, March 1, 2009.
Licensed drivers: Indiana Bureau of Motor Vehicles, as of February 16, 2008.

Notes:
Includes drivers age 15 to 20 with a valid county reported.
The *standard deviation* is the average difference between any given county value and the average (mean) of all county values together; it is a measure of the variation in county data and provides a natural grouping mechanism for comparing county values. A larger standard deviation value indicates that the county values are more dispersed relative to one another. A county whose value falls beyond 2 or 3 standard deviations from the mean indicates that county is generally at the extreme (high or low) relative to all other counties.

This publication was prepared on behalf of the Indiana Criminal Justice Institute 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 Indiana Criminal Justice Institute and the National Highway Traffic Safety Administration.

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

The Indiana Criminal Justice Institute (ICJI)

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, the Center for Health Policy, and the Center for Criminal Justice Research. The Institute also supports the Office of International Community Development and the Indiana Advisory Commission on Intergovernmental Relations (IACIR).

The Center for Criminal Justice Research (CCJR)

The Center for Criminal Justice Research, one of three 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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