



Indiana Traffic Safety Facts 2004

Large Trucks

<http://www.in.gov/cji>

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Nearly one out of six Indiana traffic fatalities in 2004 resulted from a collision involving a large truck.

In 2004, 416,000 large trucks¹ were involved in traffic crashes in the United States; 4,862 were involved in fatal crashes. A total of 5,190 people died—12 percent of all the traffic fatalities reported in 2004. In Indiana, 166 large trucks were involved in fatal traffic crashes. A total of 157 people died in crashes involving large trucks, representing 16.6 percent (157 of 947) of all traffic fatalities reported in Indiana in 2004, down 2.1 percent from 2003. This equates to a vehicle involvement rate per 100 million vehicle miles of 1.69.

Table 1. Involvement in Fatal Crashes and Involvement Rates of Large Trucks in Indiana, 2000–2004

Year	Number of Large Trucks Involved in Fatal Crashes	Number of Large Trucks Registered	Vehicle Involvement Rate ¹	Average Annual Vehicle Miles Traveled (millions)	Vehicle Involvement Rate ²
2000	167	75,295	22.2	95.03	1.76
2001	133	75,630	17.6	97.94	1.36
2002	120	75,093	16.0	96.48	1.24
2003	166	76,589	21.7	96.59	1.72
2004	166	78,201	21.2	98.00	1.69

¹ Rate per 10,000 registered vehicles

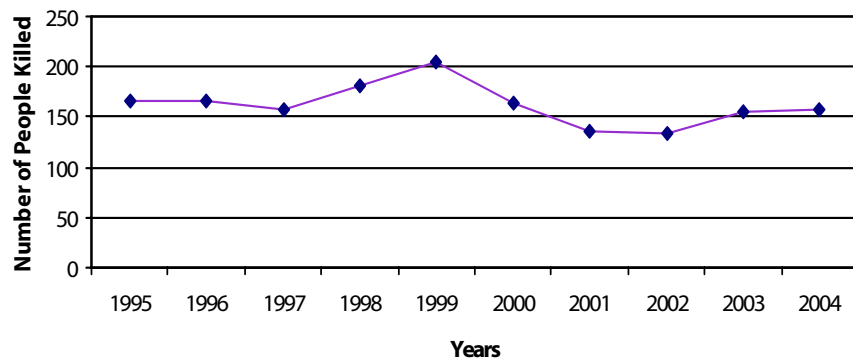
² Rate per annual million vehicle miles traveled

Source: Vehicle miles traveled: Federal Highway Administration

Registered large trucks: Indiana Bureau of Motor Vehicles

The number of people killed in large truck crashes increased by one to 157 in 2004. Nearly 1 out of 6 Indiana fatalities in 2004 resulted from a collision involving a large truck.

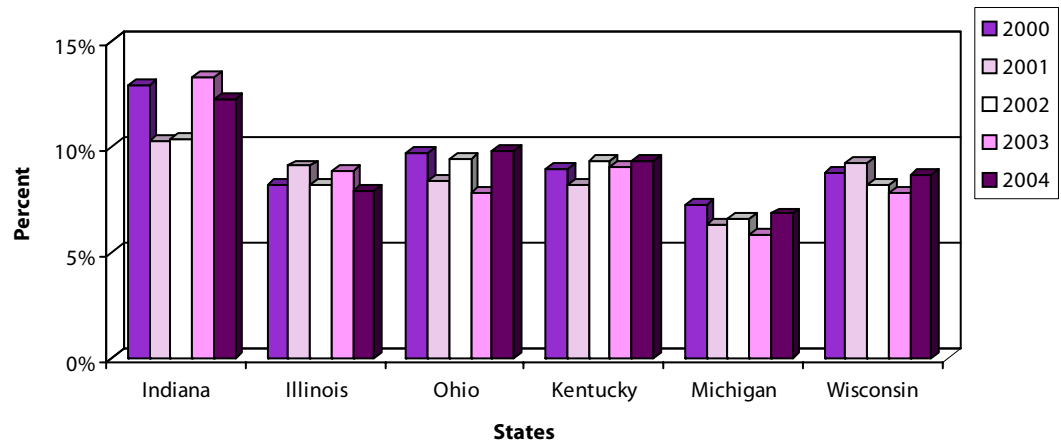
Figure 1. People Killed in Crashes Involving a Large Truck in Indiana, 1995–2004



¹ Large trucks are defined as those with a gross vehicle weight rating greater than 10,000 pounds.

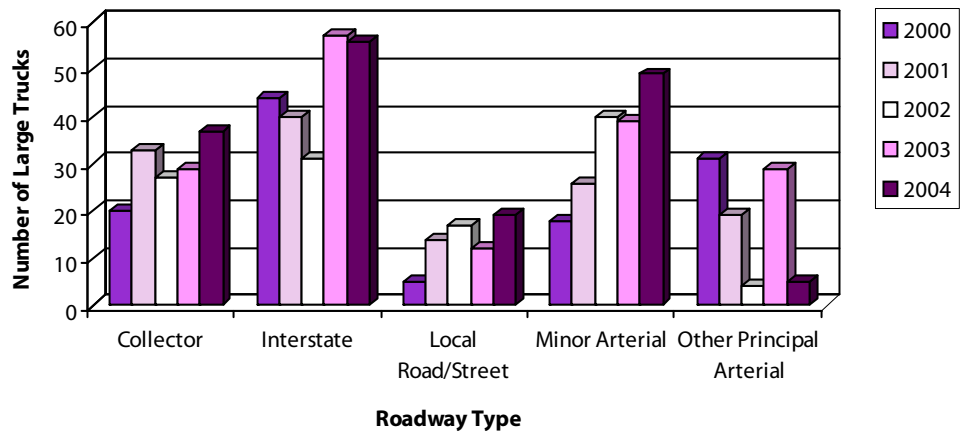
As compared to its contiguous states, Indiana has the highest large truck involvement rate in fatal crashes.

Figure 2. Percentage of Large Truck Fatal Crashes in Indiana and Contiguous States, 2000–2004



Indiana has the highest percent of all large truck fatal crashes, when compared to other Midwest states.

Figure 3. Large Trucks Involved in Fatal Crashes by Roadway Type for Indiana, 2000–2004



More than 1 out of 4 fatal large truck crashes occurred on Interstates in 2004 as compared with 1 out of 10 of all fatal crashes. Minor arterial large truck involvement had a 26 percent increase from 39 in 2003 to 49 in 2004.

In fatal multiple-vehicle crashes involving a large truck, only 8.9 percent of the fatalities were occupants of a large truck.

Table 2. Fatalities Involving Large Trucks in Indiana, 2004

Type of Fatality	Number	Percent of Total
Occupant of Large Truck	27	17.2
Single-Vehicle Crashes	13	8.3
Multiple-Vehicle Crashes	14	8.9
Occupant of Other Vehicles in Crashes Involving Large Trucks	114	72.6
Nonoccupant (Pedestrians, Pedalcyclists, etc.)	16	10.2

When large trucks are involved in fatal crashes, the occupant of the other vehicle is much more likely to die. During 2004, of the fatalities from crashes involving large trucks, 72.6 percent (114 of 157) were occupants of another vehicle, 10.2 percent (16 of 157) were nonoccupants, and 17.2 percent (27 of 157) were occupants of a large truck.

More than 2 out of 3 fatal two-vehicle crashes with a large truck involved striking the front of the large truck.

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Drivers of large trucks in fatal crashes are much more likely to have been convicted of speeding than drivers of other vehicles.

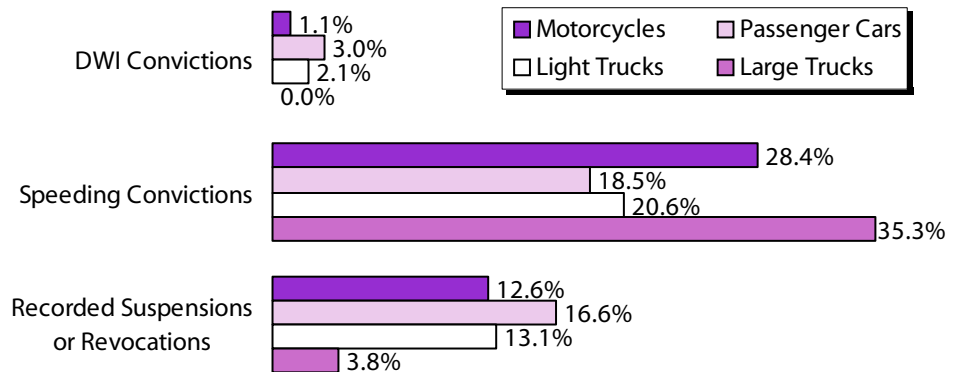
Table 3. Principle Impact Points in Two-Vehicle Fatal Crashes Involving Large Trucks for Indiana, 2004

Impact Point on Large Truck	Impact Point on Other Vehicle					Total
	Front	Left Side	Right Side	Rear	Other	
Front	20	18	14	4	0	56
Left Side	9	0	0	0	0	9
Right Side	11	0	0	0	0	11
Rear	6	0	0	0	0	6
Other	0	0	0	0	0	0
Total	46	18	14	4	0	82

In 24.3 percent (20 of 82) of the two-vehicle fatal crashes in Indiana involving a large truck and another vehicle, both vehicles were impacted in the front.

In 2004, there were only 4 large trucks that struck the rear of another vehicle, compared to 14 in 2003.

Figure 4. Previous Driving Record of Drivers Involved in Fatal Traffic Crashes by Type of Vehicle for Indiana, 2004



None of the drivers of large trucks involved in fatal crashes in 2004 reported a DWI conviction as compared to drivers of passenger cars (3.0 percent).

Large truck drivers are more likely to have had a speeding conviction than drivers of other vehicle types. In 35.3 percent of Indiana’s 2004 large truck fatal crashes, the driver had a previous speeding conviction as compared to the national average of 27.4 percent.

Table 4. Large Truck Involvement in Fatal Crashes by Time of Day and Day of the Week for Indiana, 2004

Time	Total
12:00 AM - 2:59 AM	10
3:00 AM - 5:59 AM	20
6:00 AM - 8:59 AM	19
9:00 AM - 11:59 AM	29
12:00 PM - 2:59 PM	42
3:00 PM - 5:59 PM	15
6:00 PM - 8:59 PM	17
9:00 PM - 11:59 PM	14
Total	166

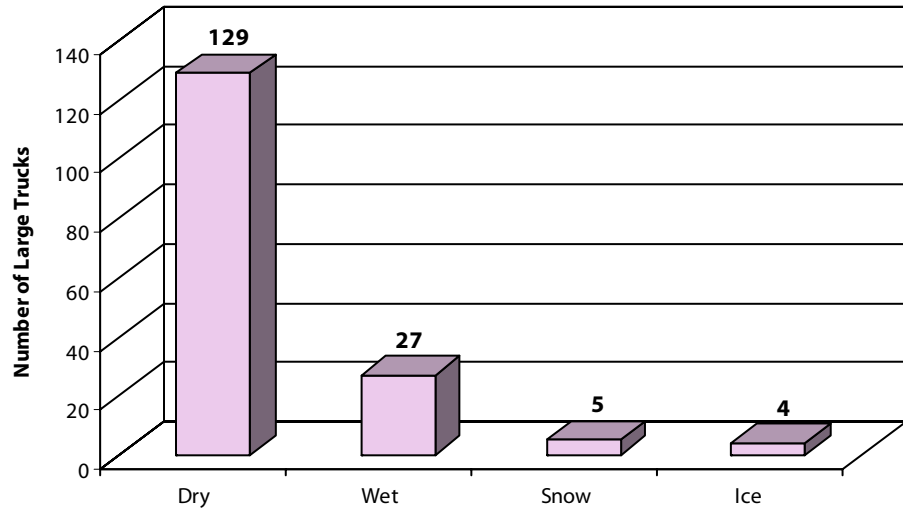
Day	Total
Monday	27
Tuesday	21
Wednesday	29
Thursday	40
Friday	26
Saturday	14
Sunday	9
Total	166

Most 2004 large truck fatal crashes were between 12:00 PM and 2:59 PM.

Twenty five percent (42 of 166) of fatal crashes involving large trucks happened between 12:00 pm and 2:59 pm. Twenty-four percent (40 of 166) of large truck fatal crashes occurred on Thursdays in 2004.

Nearly 78 percent of large truck fatal crashes occurred during dry road conditions in 2004.

Figure 5. Large Truck Involvement in Fatal Crashes by Road Conditions for Indiana, 2004



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Table 5. 2004 Alcohol Involvement (Driver BAC) in Large Truck Fatal Crashes

Blood Alcohol Content (BAC) per 100 g/dl	Large Truck BAC Total	Passenger Vehicle BAC Total
.00	71	61
.01 to .07	0	3
.08 and over	0	7

Table 6. Large Truck Vehicles in Fatal Crashes by Body Type, 2004

Cargo Body Type	Number	Percent
Van/Enclosed Box	103	62.0
Cargo Tank	10	6.0
Flatbed	17	10.2
Dump	12	7.3
Garbage/Refuse	5	3.0
Grain, Chips, Gravel	11	6.6
Other	6	3.6
Unknown	2	1.2

Almost two-thirds of the large truck fatal crashes involved a van/enclosed box body type.

Marion County accounted for 11.2 percent of all fatal crashes, but only 4.1 percent of large truck fatal crashes.

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LaPorte County accounted for only 3.5 percent of all fatal crashes, but 6.0 percent of large truck fatal crashes.

Table 7. Large Truck Involvement in Fatal Crashes for Indiana by County, 2004

County	Total Fatal Crashes	Large Truck Fatal Crashes		
		Number	Percent of Total Large Truck Crashes	Cumulative Total Large Truck Crashes
LaPorte	30	10	6.90	6.90
Lake	58	9	6.21	13.11
Allen	31	7	4.83	17.93
Kosciusko	17	6	4.14	22.07
Marion	96	6	4.14	26.21
Madison	21	5	3.45	29.66
Elkhart	29	5	3.45	33.11
Saint Joseph	24	5	3.45	36.56
Delaware	14	5	3.45	40.00
Vigo	22	4	2.76	42.76
LaGrange	12	4	2.76	45.52
Porter	32	3	2.07	47.59
Boone	7	3	2.07	49.66
Montgomery	10	3	2.07	51.73
Morgan	12	3	2.07	53.80
Stark	8	3	2.07	55.87
Clark	13	2	1.38	57.24
Newton	7	2	1.38	58.62
Hendricks	12	2	1.38	60.00
Marshall	11	2	1.38	61.38
Tippecanoe	20	2	1.38	62.76
Whitley	6	2	1.38	64.14
Daviess	6	2	1.38	65.52
Gibson	5	2	1.38	66.90
Monroe	12	2	1.38	68.28
Shelby	4	2	1.38	69.66
Wayne	7	2	1.38	71.04
Clinton	13	2	1.38	72.42
Dearborn	9	2	1.38	73.80
Dubois	11	2	1.38	75.18
Grant	8	2	1.38	76.56
Owen	13	2	1.38	77.93
Ripley	3	2	1.38	79.31
Henry	10	2	1.38	80.69
Noble	11	1	0.69	81.38
Steuben	6	1	0.69	82.07
Cass	7	1	0.69	82.76
Hamilton	20	1	0.69	83.45
Pike	1	1	0.69	84.14
Vanderburgh	18	1	0.69	84.83
Vermillion	6	1	0.69	85.52
White	7	1	0.69	86.21
Bartholomew	11	1	0.69	86.90
Crawford	2	1	0.69	87.59
Hancock	8	1	0.69	88.28
Lawrence	7	1	0.69	88.97
Perry	4	1	0.69	89.66
Adams	7	1	0.69	90.35
Brown	12	1	0.69	91.04
Carroll	4	1	0.69	91.73
Clay	8	1	0.69	92.42
Jackson	13	1	0.69	93.11
Jasper	9	1	0.69	93.80
Jefferson	5	1	0.69	94.49
Jennings	7	1	0.69	95.18
Johnson	8	1	0.69	95.87
Martin	3	1	0.69	96.56
Posey	4	1	0.69	97.24
Rush	4	1	0.69	97.93
Washington	7	1	0.69	98.62
Wells	4	1	0.69	99.31
Switzerland	6	1	0.69	100.00
Total	802	145	100.00	100.00

Counties not shown did not have a large truck fatal crash in 2004.

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Conclusion

After a three year decline during 2000 to 2002, Indiana's large-truck-involved fatalities increased in 2004 to 157. For all fatalities, the state increased from 833 in 2003 to 947 in 2004. Drivers of large trucks involved in fatal crashes have fewer violations on their driving records with the exception of speeding convictions. By time of day a majority of the large truck fatal crashes occur between 12:00 pm and 2:59 pm, and by day of week the highest number happen later in the week on a Thursday. LaPorte County in 2004 accounted for the most large truck fatal crashes in Indiana with 10.

While the use of safety equipment and the design of new cars is greatly reducing crash injuries and deaths in the United States, when large, heavy trucks are involved, safety equipment and passenger vehicle designs are not enough. A combined approach using education, enforcement, and engineering must be done to further reduce the occurrence of large truck crashes, and the resulting injuries and deaths that follow.

Given the size disparity in crashes between large trucks and other vehicle types, nearly 9 out of the 10 occupant fatalities were not in the large truck. Nearly 70 percent of the fatal crashes involved striking the front of the large truck, involving a high rate of combined speeds at impact.

More than one out of four large truck fatal crashes occur on Interstates, well above the typical 10 percent of all vehicles.

A combined 14 counties (of 92 total) accounted for more than 50 percent of the large truck fatal crashes.

This publication was prepared on behalf of the Indiana Criminal Justice Institute by Purdue University's Center for the Advancement of Transportation Safety. All information contained within was gathered from the Fatality Analysis Reporting System (FARS) Web-Based Encyclopedia provided by the National Highway Traffic Safety Administration (NHTSA) available at <http://www.fars.nhtsa.dot.gov>. All figures are considered current as of December 2005. Please direct any questions concerning data in this document to the Center for the Advancement of Transportation Safety, Purdue University, 1291-F Cumberland Ave., West Lafayette, IN 47906-1385, 765-494-7038.