pennsylvania
DEPARTMENT OF TRANSPORTATION

2016

PENNSYLVANIA CRASH FACTS & STATISTICS

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Introduction

The *2016 Pennsylvania Crash Facts and Statistics* booklet is a report published by the Bureau of Maintenance And Operations, Pennsylvania Department of Transportation. Permission is given to freely copy and distribute this booklet and the information within it. This booklet can now be found on the web at http://www.dotcrashinfo.pa.gov

This publication is a statistical review of reportable motor vehicle crashes in the Commonwealth of Pennsylvania for calendar year 2016. The figures are compiled from the traffic crash reports that are submitted to the Pennsylvania Department of Transportation by state, county, municipal, and other law enforcement agencies, as specified in the Pennsylvania Vehicle Code (75 Pa. C.S., Chapter 37, Subchapter C).

Specific questions regarding data presented in this report should be addressed to:

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Special Thanks

Quality information is important for creating a highly accurate publication. Our analysts and the police officers that report the crashes that make it to this publication have dedicated many of their days to providing good data. Many police departments have taken the plunge to report electronically which has improved the quality and timeliness of the data we receive. We appreciate everyone's hard work because without this effort, a book like this would not be possible.

How to Use This Booklet

This booklet is divided into sections by topic. In most cases, the topics are presented at a general level and become more specific. This year's booklet is similar to last year's format with only a few minor changes related to the data. Please read the narrative and notes associated with the tables/graphs to make sure the data presented are understood.

Look over the *Table of Contents* on the next page to see the list of topics and sections. If you are trying to find a particular piece of information, you might be able to locate it more quickly by looking at the *Index* on page 70.

Skim through the *Definitions* beginning on page 4. Some terms can be misleading or confusing, even to experienced readers. For example, an "alcohol-related" crash does not necessarily mean the driver of the vehicle causing the crash was drunk. The driver of the vehicle not at fault might have been drinking, or even a pedestrian involved with the crash might have been drinking.

Black squares containing the section title are located near the outer margins to make it easier for you to thumb through this booklet to find the section you are looking for.

After you have used this booklet, please complete and return the feedback survey form on the last page. We read every survey returned and consider every response important. We are planning many changes with this publication in the upcoming year or two and your opinions are vital to determining what is important to include.

About the Cover

The picture on the front cover shows the result of a crash involving a young driver. In 2016 the percentage of young drivers involved in crashes was 12.8 percent. Crashes involving young drivers are a special concern to the Pennsylvania Department of Transportation. Additional information on crashes involving young drivers can be found on pages 10, 24 – 26 and 31 - 33.

Table of Contents

Crash: A reportable crash is one in which an injury or a fatality occurs or at least one of the vehicles involved requires towing from the scene.

General Terms

Alcohol-Related Crash: Any reportable crash in which one or more of the drivers was reported to have been drinking, or a drinking pedestrian was involved.

Distracted Driving: any activity that could divert a person's attention away from the primary task of driving. Examples of distracted driving include, but are not limited to, texting, eating, grooming, talking to passengers, etc.

DUI: Driving Under the Influence – specifically a driver was drinking.

Child Passenger Restraint System: A combination of an approved child safety seat and existing vehicle safety belt restraints. Mandatory in Pennsylvania for all passengers under age four.

Harmful Event: An action which occurs within a crash (e.g., hitting a tree, hitting a deer, hitting a pedestrian, hitting another vehicle, etc.) and often results in personal injury or property damage.

Holidays: The holiday weekend begins at 6:00 PM of the last working day before the holiday and ends at midnight on the last day of the holiday. Pre-holiday weekends and post holiday weekends are time periods equivalent to that of the weekend before or the weekend after the holiday, respectively. The same applies to holidays during the middle of the work week where no weekend is involved. It is significant to look at pre- and post-holiday statistics because, in many instances, the number of crashes and/or fatalities/injuries are equal to, or greater than, those occurring on the actual holiday weekend.

Passive Restraint: A safety restraint, i.e., air bag, automatic lap/shoulder harness, that is not actively engaged by a vehicle occupant.

Reportable Crash: A crash resulting in a fatality within 30 days of the crash; or injury in any degree, to any person involved; or crashes resulting in damage to any vehicle serious enough to require towing.

Speed-Related Crash: Any reportable crash in which speed was listed as a contributing factor, whether or not the driver was noted as going over the posted speed limit.

TCD: Traffic Control Device. Includes traffic signals, stop signs, yield signs, and railroad crossing controls.
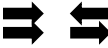
Vehicle Defect: A fault in the vehicle, due to improper maintenance or other reasons, that can cause the driver to lose control, possibly resulting in a crash.

Vehicle-Miles of Travel: A measure that indicates the number of miles traveled by vehicles on PA roadways.

Work Zone: An area, usually marked by signs, barricades, or other devices indicating that highway construction or maintenance activities are going on.

Crash Types

A description which characterizes the first harmful event of the crash and is described as one of the following:

Non-Collision: A harmful event that does not involve a collision with a fixed object or a non-fixed object. These events include explosion, fire, overturn, immersion and vehicle struck by flying object.

Angle: A crash in which two vehicles on opposite roadways collide at a point of junction, such as a road intersection, driveway, or entrance ramp.

Rear-End: A crash in which vehicles traveling in the same direction, on the same road, collide (vehicle front into vehicle rear).

Head-On: A crash in which vehicles traveling in opposite directions, on the same road, collide (vehicle front into vehicle front).

Sideswipe: A crash between two vehicles (traveling in same direction or opposite direction) in which the sides of both vehicles engage.

Hit Fixed Object: A collision in which a vehicle collides with stationary object(s) along and adjacent to the roadway, (i.e. bridge piers, trees, utility poles, embankment, guiderail, etc.).

Hit Pedestrian: A collision between a motor vehicle and any person(s) not in or upon the vehicle.

Crash Severity

Fatal Crash: A crash in which one or more of the involved persons died within 30 days of the crash and the fatality(ies) are attributable to the crash.

Injury Crash: A crash in which none of the involved persons were fatally injured, but at least one was injured.

Property Damage Only (PDO): A reportable crash where no one was fatally injured or injured, but damage occurred to a vehicle requiring towing.

Injury Severity*

Fatal Injury: The person dies as a result of injuries sustained in the crash within 30 days of the crash.

Suspected Serious Injury: Any injury other than fatal which results in one or more of the following: severe laceration, significant loss of blood, broken or distorted extremity, crush injuries, suspected skull, chest or abdominal injury, significant burns, unconsciousness, or paralysis.

Suspected Minor Injury: Any injury that is evident at the scene of the crash, other than fatal or serious injuries. Examples include lump on the head, abrasions, bruises, minor lacerations (cuts on the skin surface with minimal bleeding and no exposure of deeper tissue/muscle).

Possible Injury: Any injury reported or claimed which is not a fatal, suspected serious or suspected minor injury. Examples include momentary loss of consciousness, claim of injury, limping, or complaint of pain or nausea. Possible injuries are those which are reported by the person or are indicated by his/her behavior, but no wounds or injuries are readily evident.

Note: In 2016, the injury severity descriptions and definitions changed to match federal standards.

Person Type

Driver: The occupant of a vehicle who is in actual physical control of a vehicle in transport or, for an out-of-control vehicle, the occupant who was in control before control was lost.

Occupant: Any person who is in or upon a vehicle, including the driver, passenger, and person riding on the outside of the vehicle.

Passenger: Any occupant of a vehicle who is not the driver.

Pedestrian: Any person not in or upon a vehicle.

Road Types

Local Roads: Any roadway that is maintained by an entity other than the state. Includes county, township, town, borough, and private.

State Highway (Interstate): Any state-maintained roadway that carries the interstate designation and is marked with red, white, and blue shield-shaped sign.

State Highway (Other): Any state-maintained roadway that is not designated as an interstate. Many (but not all) such roads are marked with a black and white keystone-shaped sign.

Turnpike: The Pennsylvania Turnpike system, which includes the main Turnpike and other toll facilities maintained by the Pennsylvania Turnpike Commission.

Vehicle Types

Passenger Car: Vehicle designed to transport eight people or less. Includes: convertible, hardtop, sedan, station wagon, limousine, etc.

Light Truck / SUV / Van: Single vehicle designed for carrying a load of property on or in the vehicle. Includes: pickup truck, sport utility vehicle, van, jeep, tow truck, etc.

Heavy Truck: Single vehicle or tractor-trailer combination designed for carrying a heavy load of property on or in the vehicle. Includes: single unit trucks (e.g., coal truck), tractor-trailers, motor homes, etc.

Bus: Vehicle designed to transport more than fifteen people. Includes school bus, cross-country bus, urban transit, trackless trolley.

Motorcycle: Includes: motorcycle, mo-ped, mini-bike, motor scooter, trike (motorized tricycle), go-cart, vendor cycle.

Bicycle: As used in this booklet, any non-motorized vehicle propelled by pedaling. Includes: unicycle, bicycle, tricycle, "Big Wheel".

Track/Non-Motorized Vehicle: Includes: train, trolley, horse and buggy, horse and rider.

Overview

The Commonwealth of Pennsylvania consists of 67 counties. Each county includes local municipalities, a combination of cities, boroughs, first class townships, and/or second class townships. In total, there are approximately 2,500 municipalities throughout the 67 counties. One of these municipalities, the Town of Bloomsburg in Columbia County, is the only official "town" in Pennsylvania.

Pennsylvania has over 120,000 miles* of roads and highways; 33% (39,756 miles*) are state highways maintained by the Pennsylvania Department of Transportation (PennDOT), and the remaining 67% (80,334 miles*) are maintained by local municipalities and other entities.

Motor-vehicle traffic crashes that occur on Pennsylvania roads and highways are investigated and reported by both the Pennsylvania State Police and the approximately 1,300 local municipal police departments. The valuable information originating from these police crash reports is the basis for the statistics that are presented throughout this booklet.

In 2016, there were 129,395 reportable traffic crashes in Pennsylvania. These crashes claimed the lives of 1,188 people and injured another 82,971 people. To add some perspective, the 2016 total of reportable traffic crashes is the thirteenth lowest total since 1950 when 113,748 crashes were reported.

Last year, there were approximately 100.9 billion vehicle-miles* of travel on Pennsylvania's roads and highways. The 2016 fatality rate of 1.18 fatalities per hundred million vehicle-miles of travel* was the second lowest ever recorded in Pennsylvania since the department started keeping records of this in 1935.

2016 Briefs

On Average in Pennsylvania:
- Each day 355 reportable traffic crashes occurred (about 15 crashes every hour).
- Each day 3 persons were fatally injured in reportable traffic crashes (one fatality every 7 hours).
- Each day 227 persons were injured in reportable crashes (about 9 injuries every hour).

Based on Pennsylvania's 2016 population (12,784,227 people):
- 1 out of every 43 people was involved in a reportable traffic crash.
- 1 out of every 10,761 people was fatally injured in a reportable traffic crash.
- 1 out of every 154 people was injured in a reportable traffic crash.

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* For consistency purposes, the prior year's data is used at the time of publication because of timing issues. For this Crash Facts & Statistics book, 2015 information was used.

All Crashes and Fatalities
—WHO WAS INVOLVED—

Crashes by Injury Severity

Crashes involving fatalities and major injuries are always devastating to the family and friends of the victims. Thankfully, the vast majority of crashes are not fatal. Most crashes, however, do cause varying types of injuries. Of the total people involved in crashes in Pennsylvania in 2016, most were not injured. The 1,188 fatalities in 2016 represent the lowest number of fatalities in Pennsylvania motor vehicle crashes over the last 86 years.

Total Crashes

Fatal Crashes (1,088)

Injury Crashes (59,856)

PDO Crashes (68,451)

All Crashes

Total People

Fatalities (1,188)

Injuries (82,971)

No Injuries (215,909)

Total People--Injured

Susp Serious (4,397)

Unk Severity (29,240)

Possible (23,050)

Susp Minor (26,284)
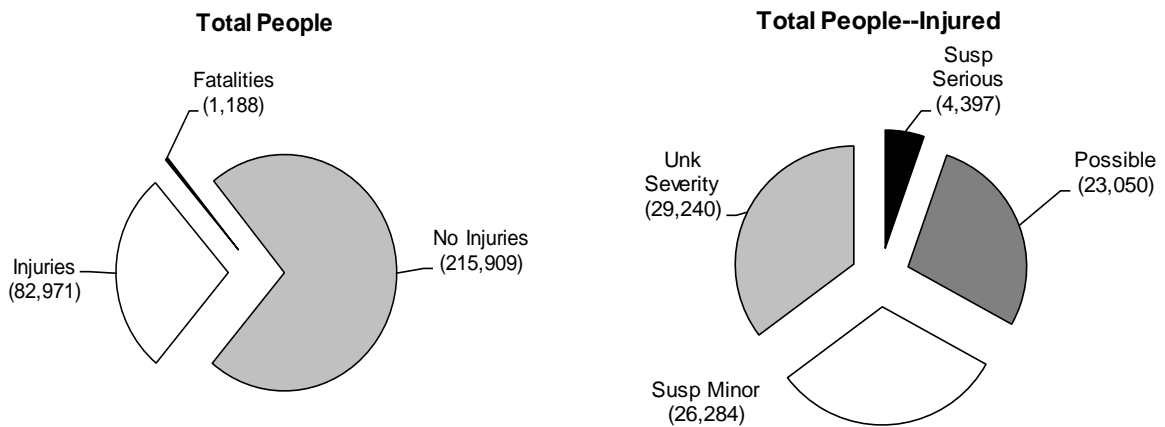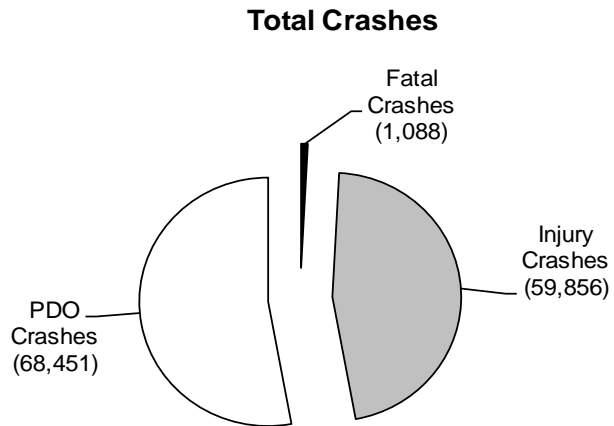
Please note that beginning January 1, 2016, PennDOT adopted the Federal standard for collecting injury severity data. The field descriptions and definitions changed from the state standard that had been in use for decades. This resulted in a substantial shift in severity levels. Therefore, comparison of the "Suspected Serious Injury", "Suspected Minor Injury" and "Possible Injury" categories will not be consistent for crashes taking place before versus after the adoption of the new standard.

Fatalities and Injuries—Five-Year Trends

Total reported crashes in 2016 increased 1.8% compared to 2015; fatalities decreased by 1.0% while total injuries increased by 1.2%.

	2012	2013	2014	2015	2016
Reported Crashes	124,092	124,149	121,317	127,127	129,395
Total Fatalities	1,310	1,208	1,195	1,200	1,188
Total Injuries	86,846	83,089	79,758	82,004	82,971
Suspected Serious Injury	*3,458*	*3,254*	*3,042*	*3,030*	*4,397*
Suspected Minor Injury	*13,519*	*12,662*	*12,075*	*12,503*	*26,284*
Possible Injury	*43,441*	*41,755*	*40,071*	*40,364*	*23,050*
Unknown Severity	*26,428*	*25,418*	*24,570*	*26,107*	*29,240*
Pedestrian Fatalities	168	151	166	153	172
Pedestrian Injuries	4,548	4,413	3,985	4,002	4,218
Motorcyclist Fatalities	210	181	186	179	192
Motorcyclist Injuries	3,919	3,322	3,207	3,312	3,321
Bicyclist Fatalities	16	11	19	16	16
Bicyclist Injuries	1,377	1,374	1,298	1,268	1,298
Heavy-Truck-Related Fatalities	159	147	151	149	162
Alcohol-Related Fatalities	404	381	333	345	297
Speed-Related Fatalities	371	322	312	302	316
Billions of Vehicle-Miles*	100.2	99.5	98.6	99.8	100.9
Deaths per 100 Million Vehicle-Miles*	1.31	1.21	1.21	1.20	1.18

Note: Speed-Related Fatalities only count those crashes where speed was considered the prime contributing factor in the crash.

* Vehicle mileage uses the prior years' vehicle mileage information (because at the time of publication, the current year's vehicle mileage is not available).

Economic Loss Due to Reportable Traffic Crashes

Severity	Number	Average Cost	Estimated Total Costs
Fatalities (persons)	1,188	$6,685,345	$7,942,189,658
Suspected Serious Injury (persons)	4,397	$1,478,907	$6,502,754,255
Suspected Minor Injury (persons)	26,284	$99,235	$2,608,280,387
Possible Injury (persons)	23,050	$7,755	$178,752,750
Property Damage Only (crashes)	68,447	$3,102	$212,322,594
Unknown Severity (persons)	29,240	$7,755	$226,756,200
		TOTAL	**$17,671,055,843**

In 2016, the economic loss due to traffic crashes was
$1,382
to every man, woman, and child in Pennsylvania.

The economic loss per Pennsylvania citizen is based on the ratio of estimated total cost to the estimated total population of Pennsylvania. Also note that the Federal guidelines changed for determining the average cost of a fatality in 2016.

Crashes by Crash Type

Many different types of crashes occur on Pennsylvania roads, but certain types of crashes are more prevalent. More crashes involved a single vehicle hitting a fixed object (tree, guide rail, etc.) than any other type. Hit pedestrian crashes, though they occur much less frequently, cause the third highest number of fatalities.

Hit Fixed Object — Crashes 29.6%, Fatalities 33.8%
Angle — Crashes 26.9%, Fatalities 21.2%
Rear End — Crashes 22.8%, Fatalities 7.0%
Sideswipe — Crashes 6.6%, Fatalities 4.4%
Hit Pedestrian — Crashes 3.2%, Fatalities 14.0%
Head On — Crashes 3.7%, Fatalities 11.1%
All Others — Crashes 7.3%, Fatalities 8.6%
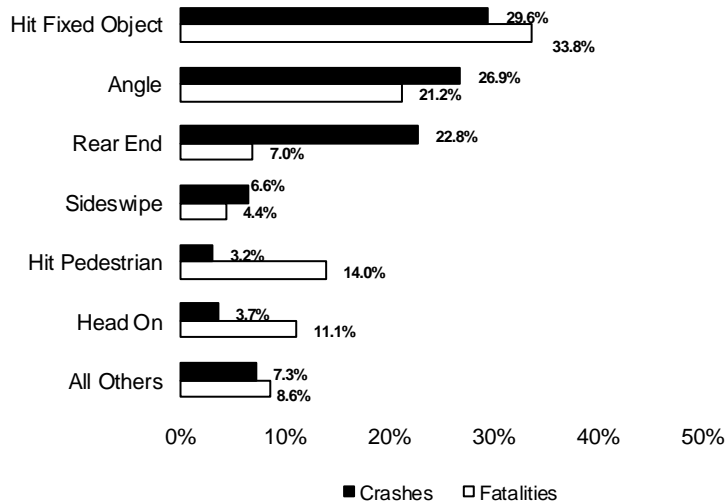
■ Crashes   □ Fatalities

Crash Type	Crashes	Fatalities
Angle	34,811	252
Backing Up	388	1
Head On	4,764	132
Hit Fixed Object	38,244	401
Hit Pedestrian	4,099	166
Non-Collision	4,318	84
Rear End	29,511	83
Sideswipe	8,530	52
Other	4,730	17
TOTAL	**129,395**	**1,188**

*Note that, by definition, a Hit Pedestrian Crash only involves those crashes where the pedestrian being struck was the first harmful event. Therefore, the pedestrian crashes and deaths shown in this section are slightly different than those shown elsewhere in this book, which include all pedestrian harmful events.

Vehicles Involved in Crashes

Passenger cars were involved in more crashes than all other vehicle types combined. Coupled with light trucks, vans, and SUVs they accounted for the vast majority of crashes and occupant fatalities. Compared with previous years, light truck, van, and SUV vehicles in 2016 were involved in a higher percentage of crashes. Occupant fatalities of motorcycles increased from 179 in 2015 to 192 in 2016.

Passenger Car — Vehicles 55.9%, Fatalities 48.6%
Lt Trk/Van/SUV — Vehicles 37.3%, Fatalities 26.1%
All Others — Vehicles 6.9%, Fatalities 25.3%

■ Vehicles   □ Fatalities
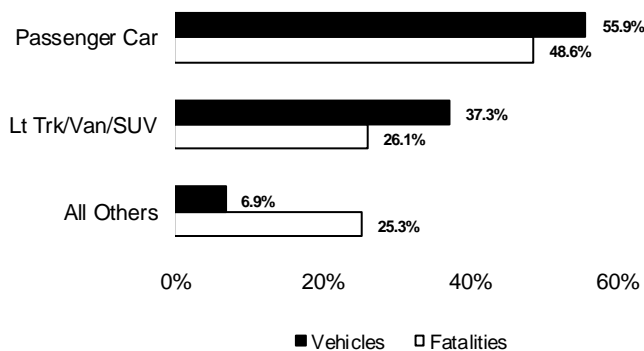
	Vehicles	Occupant Fatalities
Passenger Car	120,817	494
Lt Trk/Van/SUV	80,599	265
Heavy Truck	7,366	26
Motorcycle	3,547	192
Bicycle	1,316	16
Commercial Bus	593	1
School Bus	349	0
Other	1,648	22

Driver Involvement in Crashes by Age and Sex

In every age group, male drivers are involved in more crashes than female drivers. Male drivers ages 21-25 were involved in more crashes than drivers in any other age group (male or female).

Driver	Male	Female	Total Drivers
Under 16	115 (0.1%)	35 (0.0%)	150
16-20	14,002 (11.4%)	10,514 (12.1%)	24,516
21-25	17,470 (14.2%)	12,924 (14.9%)	30,394
26-30	14,537 (11.8%)	10,403 (12.0%)	24,940
31-35	11,551 (9.4%)	8,125 (9.4%)	19,676
36-40	9,537 (7.7%)	6,684 (7.7%)	16,221
41-45	9,102 (7.4%)	6,347 (7.3%)	15,449
46-50	9,400 (7.6%)	6,343 (7.3%)	15,743
51-55	9,379 (7.6%)	6,457 (7.5%)	15,836
56-60	8,459 (6.9%)	5,490 (6.3%)	13,949
61-65	6,502 (5.3%)	4,217 (4.9%)	10,719
66-70	4,679 (3.8%)	3,184 (3.7%)	7,863
71-75	3,109 (2.5%)	2,274 (2.6%)	5,383
Over 75	4,339 (3.5%)	3,278 (3.8%)	7,617
Unknown	1,026 (0.8%)	355 (0.4%)	1,381
DRIVERS	**123,207 (100.0%)**	**86,630 (100.0%)**	**209,837**
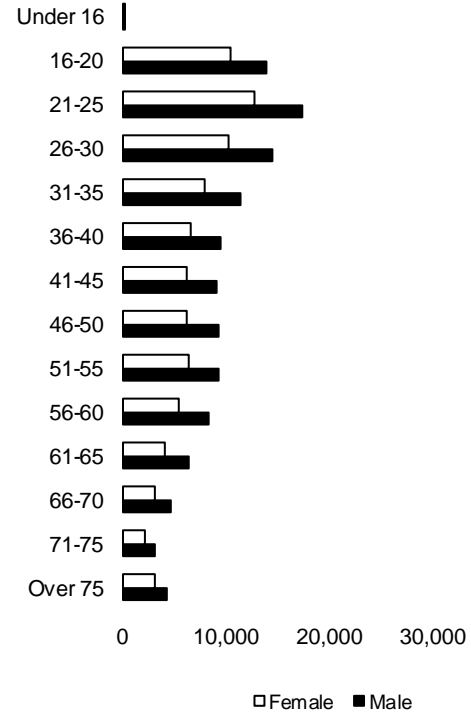
Note: Does not include 3,434 drivers of unknown sex or drivers of non-motorized vehicles.

□ Female ■ Male

Highway Crash Historical Data

Fatality rates have fallen dramatically over the past 60 years as vehicles, roadways, and other factors have improved. Pennsylvania's fatality rate has also been lower than the US average for most years since 1937. Please note that the 2016 US average fatality rate was not finalized by the time of this publication. The chart below shows the periodic fatality rates since 1970.

Fatality Rates
Per 100 Million Vehicle-Miles*

■ PA Fatality Rate   □ US Fatality Rate
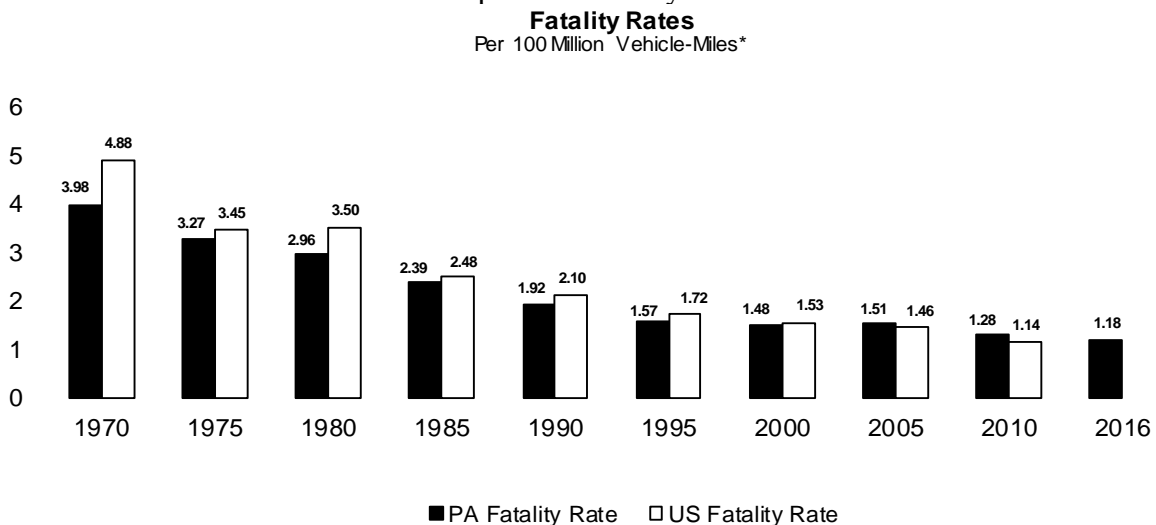
*　Beginning in 1999, vehicle mileage uses the prior years' vehicle mileage information (because at the time of publication, the current years' vehicle mileage is not available).

Year	Total Crashes	Total Fatalities	Total Injuries	Registered Vehicles	Motor Vehicle Mileage*	PA Fatality Rate**	US Fatality Rate**
1949	102,098	1,624	54,290	2,993,903	25.8	6.30	7.50
1950	113,748	1,624	62,103	3,262,243	27.1	6.00	7.60
1951	123,088	1,642	65,643	3,413,836	28.8	5.70	7.10
1952	126,820	1,680	67,143	3,510,064	30.5	5.50	7.10
1953	129,791	1,643	70,531	3,684,468	31.6	5.20	6.70
1954	130,326	1,538	68,571	3,903,917	32.0	4.80	6.10
1955	147,837	1,737	76,836	4,045,995	34.5	5.00	6.10
1956	160,371	1,790	84,813	4,175,217	36.5	4.90	6.10
1957	161,080	1,698	84,755	4,250,576	37.7	4.50	5.80
1958	156,825	1,654	86,733	4,355,813	38.5	4.30	5.40
1959	157,191	1,685	90,807	4,507,262	39.2	4.30	5.40
1960	159,051	1,609	92,792	4,707,055	40.2	4.00	5.30
1961	156,559	1,486	73,997	4,842,400	40.2	3.70	5.20
1962	161,557	1,625	81,936	4,849,400	41.7	3.90	5.30
1963	174,527	1,830	86,892	5,117,229	44.6	4.10	5.50
1964	183,910	1,889	93,564	5,351,350	46.1	4.10	5.70
1965	213,769	2,079	111,123	5,436,349	48.3	4.30	5.60
1966	254,450	2,180	116,537	5,497,000	55.1	4.27	5.70
1967	243,798	2,331	126,417	5,673,000	53.4	4.37	5.50
1968	279,663	2,410	138,389	5,791,000	56.1	4.29	5.40
1969	292,192	2,401	141,728	5,879,000	58.6	4.10	5.21
1970	311,981	2,255	136,518	5,947,000	56.7	3.98	4.88
1971	301,374	2,299	127,318	6,079,000	60.9	3.78	4.57
1972†	277,556	2,352	135,938	6,244,000	67.0	3.51	4.43
1973	307,648	2,444	145,452	7,007,192	66.5	3.67	4.24
1974	277,271	2,155	132,689	8,354,063	63.9	3.37	3.59
1975	288,245	2,082	134,969	8,654,333	63.7	3.27	3.45
1976	303,771	2,025	135,308	9,124,915	69.4	2.92	3.33
1977	234,702	2,071	148,725	8,833,745	72.3	2.87	3.35
1978‡	158,361	2,137	146,403	7,254,893	72.7	2.94	3.39
1979	156,622	2,204	144,300	7,451,021	70.3	3.14	3.50
1980	142,489	2,114	133,716	7,307,974	71.3	2.96	3.50
1981	138,764	2,049	131,301	7,252,836	71.5	2.87	3.30
1982	131,579	1,848	126,026	7,417,311	71.3	2.59	2.88
1983	131,081	1,752	126,707	7,562,726	72.3	2.42	2.69
1984	139,914	1,752	134,714	7,724,686	74.1	2.36	2.68
1985	143,244	1,809	140,067	7,860,497	75.6	2.39	2.48
1986	150,683	1,928	148,044	7,793,921	77.2	2.50	2.48
1987	152,631	2,006	151,457	8,313,799	78.9	2.54	2.40
1988	152,906	1,932	154,018	8,452,365	81.3	2.38	2.32
1989	151,461	1,878	152,589	8,605,747	84.5	2.22	2.20
1990	141,340	1,646	142,945	8,675,835	85.7	1.92	2.10
1991	130,404	1,661	130,446	8,757,129	87.3	1.90	1.90
1992	133,913	1,545	133,113	8,915,621	89.0	1.74	1.80
1993	134,315	1,530	131,503	9,044,901	90.8	1.68	1.80
1994	134,171	1,440	130,678	9,255,714	92.3	1.56	1.83
1995	136,804	1,480	133,177	9,271,517	94.5	1.57	1.72
1996	142,867	1,470	136,949	9,411,261	96.4	1.53	1.69
1997	143,981	1,562	138,820	9,692,499	98.3	1.59	1.64
1998	140,972	1,486	134,092	9,842,427	100.4	1.48	1.58
1999+	144,171	1,549	133,783	9,901,148	100.4	1.54	1.55
2000	147,253	1,520	131,471	10,085,392	102.5	1.48	1.53
2001	131,358	1,532	117,915	10,629,896	103.5	1.48	1.51
2002	138,115	1,618	109,900	10,519,757	103.5	1.56	1.51
2003	140,197	1,577	112,615	10,768,222	104.8	1.50	1.48
2004	137,410	1,490	108,146	10,921,683	106.1	1.40	1.46
2005	132,840	1,616	102,223	11,058,567	107.2	1.51	1.46
2006	128,342	1,525	97,971	11,086,810	107.9	1.41	1.41
2007	130,675	1,491	95,585	11,220,816	108.1	1.38	1.36
2008	125,327	1,468	88,711	11,301,853	108.4	1.35	1.27
2009	121,242	1,256	87,132	11,324,357	107.0	1.17	1.13
2010	121,312	1,324	87,948	11,373,291	103.3	1.28	1.11
2011	125,395	1,286	87,835	11,477,916	101.2	1.27	1.10
2012	124,092	1,310	86,846	11,508,559	100.2	1.31	1.16
2013	124,149	1,208	83,089	11,616,715	99.5	1.21	1.10
2014	121,317	1,195	79,758	11,715,722	98.6	1.21	1.07
2015	127,127	1,200	82,004	11,974,651	99.8	1.20	1.13
2016	129,395	1,188	82,971	12,066,651	100.9	1.18	---

*   In billions

** Per 100 million vehicle-miles

†   From 1972 to 1978, reportable crashes defined as over $200 in damage

‡   From 1978 to present, reportable crashes defined as involving any type of injury and/or vehicle(s) requiring towing from the scene

+   Beginning in 1999, motor vehicle mileage and PA Fatality Rate uses the prior years' motor vehicle mileage information (because at the time of publication, the current years' roadway mileage is not available)

—WHAT CONDITIONS WERE—

Crashes by Weather and Road Surface Conditions

Adverse weather and road surface conditions negatively affect vehicle handling and driver sight. Interestingly, the vast majority of crashes occurred under no adverse conditions. This can be attributed to: 1) weather and roads being clear and dry most of the time and 2) drivers failing to use caution under optimal road conditions. The figures shown in both tables are for all highway types.

Weather Condition	Crashes	Fatalities
No Adverse Conditions	105,846 (81.8%)	1,033 (87.0%)
Rain/Rain & Fog	14,606 (11.3%)	102 (8.6%)
Snow/Sleet/Freezing Rain	7,132 (5.5%)	32 (2.7%)
Fog/Smoke, Etc.	627 (0.5%)	14 (1.2%)
Other	1,184 (0.9%)	7 (0.6%)
TOTAL	129,395 (100.0%)	1,188 (100.0%)

Road Surface Condition	Crashes	Fatalities
Dry	99,039 (76.5%)	980 (82.5%)
Wet	20,515 (15.9%)	170 (14.3%)
Snow/Slush	5,302 (4.1%)	14 (1.2%)
Ice/Ice Patches	3,866 (3.0%)	17 (1.4%)
Other	673 (0.5%)	7 (0.6%)
TOTAL	129,395 (100.0%)	1,188 (100.0%)

Crashes Involving Vehicle Defects

Improperly-maintained vehicles can lead to crashes. In 2016, tire/wheel and brake-related failures again contributed to the majority of vehicle defect related crashes. The percentages in the graph below refer to the number of crashes involving vehicle defects.

Tire/Wheel-Related: 38.7%
Brake-Related: 28.1%
Total Steering System Failure: 13.9%
All Other Defects: 19.4%
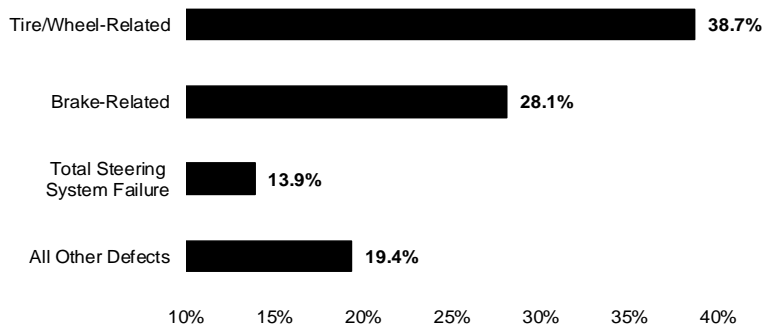
Vehicle Defect	Crashes
Tire/Wheel-Related	996
Brake-Related	723
Total Steering System Failure	357
Power Train Failure	265
Suspension	86
Unsecure/Shifted Trailer Load	42
Body/Doors/Hood, Etc.	33
Vehicle Lighting-Related	20
Other Known Defects	52

Note: The above list only counts crashes where a vehicle defect was the primary contributing factor in the crash.

Work Zone Crashes

Work zones are potentially dangerous areas because conditions are constantly changing. Drivers do not always anticipate these changes nor exercise the appropriate level of caution. 44 percent of work zone crashes in 2016 contained fatalities or injuries.
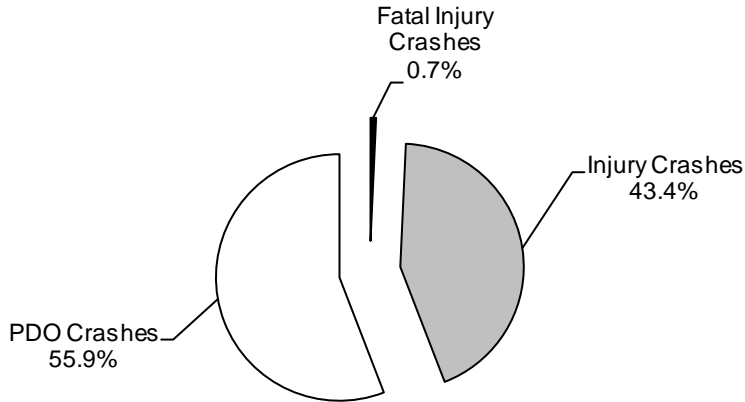
Total Crashes: **2,075**

Total Fatally Injured: **16** (Workers Fatally Injured: 2)

Total Injured: **1,273**

Work Zone Crashes—Vehicles Involved

Vehicle Type	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road
Passenger Car	609 (46.5%)	966 (52.6%)	197 (35.4%)	67 (46.9%)
Light Truck/SUV	462 (35.3%)	724 (39.4%)	180 (32.4%)	59 (41.3%)
Heavy Truck/Bus	205 (15.7%)	104 (5.7%)	169 (30.4%)	11 (7.7%)
Motorcycle	20 (1.5%)	26 (1.4%)	5 (0.9%)	2 (1.4%)
Other	14 (1.1%)	16 (0.9%)	5 (0.9%)	4 (2.8%)
TOTAL	**1,310 (100.0%)**	**1,836 (100.0%)**	**556 (100.0%)**	**143 (100.0%)**

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates. Legally parked vehicles are not included in the above table.

*Work Zone Crashes by Road Type—Five-Year Trends**

Year	Road Type	Crashes		Fatalities	
		Number	*% Total*	*Number*	*% Total*
2012	State Hwy (Interstate)	390	23.5%	4	19.1%
	State Hwy (Other)	928	55.9%	15	71.4%
	Turnpike	228	13.7%	2	9.5%
	Local Road	115	6.9%	0	0.0%
	Other/Unknown Road	0	0.0%	0	0.0%
	TOTAL	**1,661**	**100.0%**	**21**	**100.0%**
2013	State Hwy (Interstate)	506	27.4%	3	18.8%
	State Hwy (Other)	958	51.9%	11	68.8%
	Turnpike	269	14.6%	2	12.5%
	Local Road	112	6.1%	0	0.0%
	Other/Unknown Road	0	0.0%	0	0.0%
	TOTAL	**1,845**	**100.0%**	**16**	**100.0%**
2014	State Hwy (Interstate)	530	28.7%	12	50.0%
	State Hwy (Other)	952	51.6%	7	29.2%
	Turnpike	244	13.2%	4	16.7%
	Local Road	119	6.5%	1	4.2%
	Other/Unknown Road	0	0.0%	0	0.0%
	TOTAL	**1,845**	**100.0%**	**24**	**100.0%**
2015	State Hwy (Interstate)	610	31.5%	4	17.4%
	State Hwy (Other)	962	49.7%	13	56.5%
	Turnpike	264	13.6%	5	21.7%
	Local Road	99	5.1%	1	4.4%
	Other/Unknown Road	0	0.0%	0	0.0%
	TOTAL	**1,935**	**100.0%**	**23**	**100.0%**
2016	State Hwy (Interstate)	660	31.8%	4	25.0%
	State Hwy (Other)	971	46.8%	9	56.3%
	Turnpike	348	16.8%	1	6.3%
	Local Road	95	4.6%	2	12.5%
	Other/Unknown Road	1	0.1%	0	0.0%
	TOTAL	**2,075**	**100.0%**	**16**	**100.0%**

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Crashes with Roadside Objects and Animals

Unfortunately, roadside objects were hit often in Pennsylvania crashes. While there are many different roadside objects, a few are more predominant in crashes than others. The table below lists crashes with various types of roadside objects no matter the sequence of harmful events.

Roadside Object	Crashes	% Total	Fatalities	% Total
Hit Bridge	604	0.5%	14	1.2%
Hit Building	1,366	1.1%	18	1.5%
Hit Culvert	731	0.6%	21	1.8%
Hit Curb	4,082	3.2%	55	4.6%
Hit Ditch	3,090	2.4%	28	2.4%
Hit Embankment	6,760	5.2%	114	9.6%
Hit Fence or Wall	2,781	2.2%	32	2.7%
Hit Fire Hydrant	444	0.3%	6	0.5%
Hit Guiderail	6,688	5.2%	129	10.9%
Hit Impact Attenuator	189	0.2%	3	0.3%
Hit Mailbox(es)	1,329	1.0%	23	1.9%
Hit Median Barrier	4,564	3.5%	32	2.7%
Hit Other Fixed Object	4,027	3.1%	63	5.3%
Hit Parked Vehicle	7,995	6.2%	44	3.7%
Hit Rock(s) or Obstacle on Roadway	511	0.4%	1	0.1%
Hit Signal/Sign Support	2,396	1.9%	50	4.2%
Hit Snow Bank	261	0.2%	5	0.4%
Hit Temporary Construction Barrier	68	0.1%	0	0.0%
Hit Traffic Island or Channelization	228	0.2%	3	0.3%
Hit Tree(s) or Shrubs/Hedges	8,849	6.8%	214	18.0%
Hit Utility Pole(s)	8,852	6.8%	99	8.3%
Hit Deer	4,018	3.1%	12	1.0%
Hit Other Animal	205	0.2%	1	0.1%

Note: "% Total" lists the percentage compared to *all* crashes or fatalities, not only the ones listed in this table. Also note that a single crash can involve a collision with multiple objects.

—WHERE THEY HAPPENED—

Crashes by Road Type***

	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road	Other
Crashes	10,688	83,882	2,498	32,309	18
Persons Fatally Injured	107	884	17	180	0
Persons Injured	6,147	55,908	1,076	19,834	14
Miles of Maintained Road	1,374	39,206	554	79,765	---
100 MVM* Traveled	201.1	567.8	60.1	180.4	---
Crashes/MVM*	0.53	1.48	0.42	1.79	---
Persons Fatally Injured/100 MVM*	0.53	1.56	0.28	1.00	---
Persons Injured/MVM*	0.31	0.98	0.18	1.10	---

* MVM = million vehicle-miles

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates. The road mileage and MVM data are from the 2015 Highway Performance Monitoring System (HPMS) package and reflects 2015 length and travel activity data. Ramps are included as part of the roadway to which it is connected.

***Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Crashes Between Trains and Other Vehicles—Five-Year Trends

Motor vehicle/train crashes make up a very small percentage of total crashes. In the last five years, only 14 fatalities have occurred in this type of crash. In 2016, two fatalities occurred.
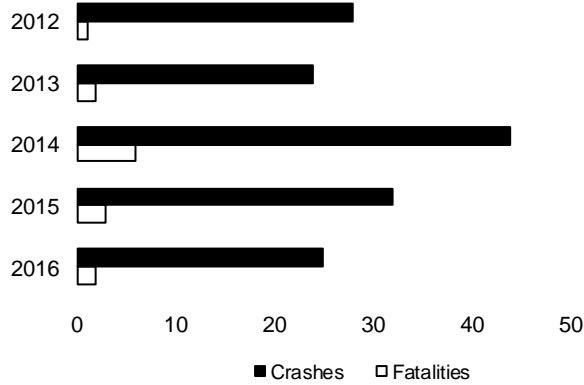
Year	Crashes	Fatalities
2012	28	1
2013	24	2
2014	44	6
2015	32	3
2016	25	2

■ Crashes   □ Fatalities

All Crashes

Train/Vehicle Crashes by Vehicle Type

Passenger cars, light trucks, vans, and SUVs were the predominant vehicle types involved in crashes with trains in 2016. In 2016, heavy truck involvement with trains decreased to 2 crashes from 3 in 2015.

Passenger Car — 44.0% / 0.0%

Light Truck — 48.0% / 100.0%

Heavy Truck — 8.0% / 0.0%

■ Crashes   □ Fatalities
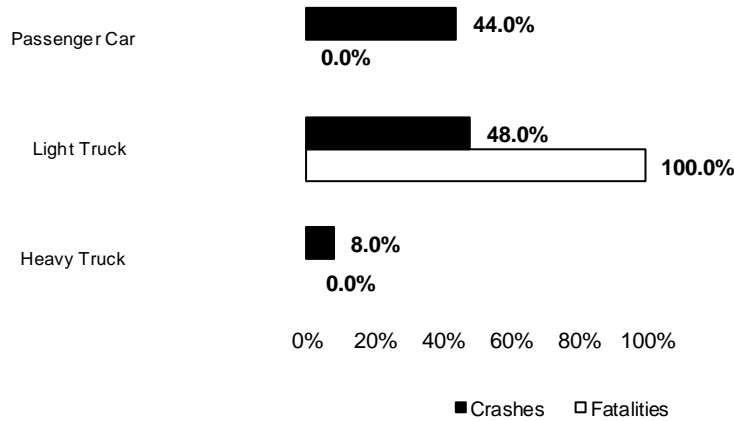
Vehicle Type	Crashes	Fatalities
Light Truck	12	2
Passenger Car	11	0
Heavy Truck	2	0
Bicycle	0	0
Commercial Bus	0	0
Motorcycle	0	0
School Bus	0	0
Unknown	0	0
TOTAL	**25**	**2**

Train/Vehicle Crashes by Road Type*

Road Type	Crashes	Fatalities
Local Road	16	2
State Hwy (Other)	9	0
TOTAL	**25**	**2**

All Crashes

*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Train/Vehicle Crashes by Light Level
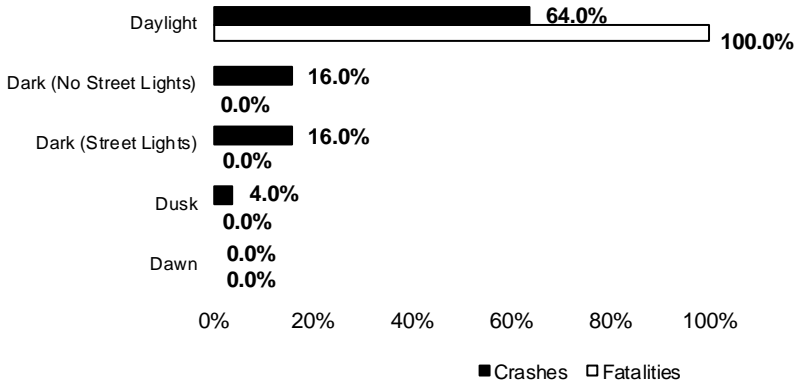
Light Level	Crashes	Fatalities
Daylight	16	2
Dark (No Street Lights)	4	0
Dark (Street Lights)	4	0
Dusk	1	0
Dawn	0	0
TOTAL	**25**	**2**

Train/Vehicle Crashes by County

County	Crashes	Fatalities
Allegheny	6	0
Berks	1	0
Blair	1	0
Butler	1	0
Cumberland	1	0
Dauphin	1	1
Delaware	1	0
Erie	1	1
Franklin	1	0
Greene	1	0
Jefferson	1	0
Lackawanna	1	0
Lancaster	1	0
Lehigh	1	0
Luzerne	2	0

County	Crashes	Fatalities
Mercer	1	0
Northumberland	1	0
Washington	1	0
Westmoreland	1	0
Cambria	0	0
Cameron	0	0
Carbon	0	0
Centre	0	0
Chester	0	0
Clarion	0	0
Clearfield	0	0
TOTAL	**25**	**2**

—WHEN THEY HAPPENED—

Crashes by Month
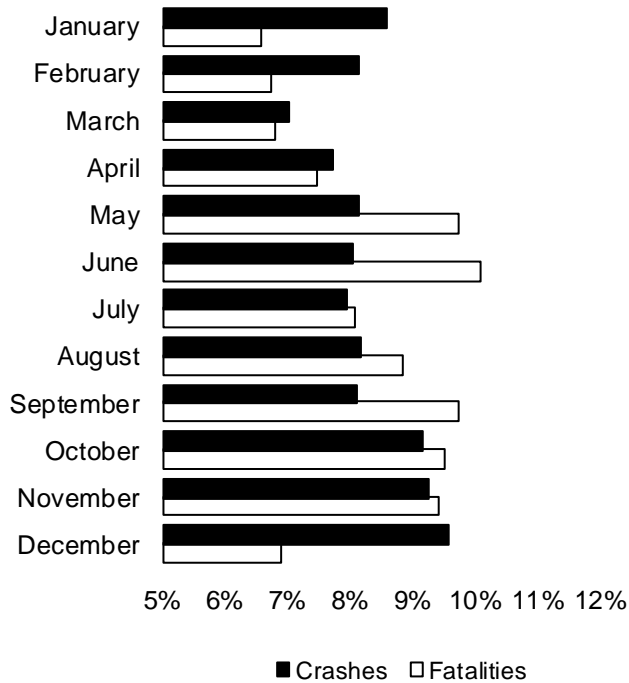
Month	Crashes	Fatalities
January	11,137 (8.6%)	78 (6.6%)
February	10,533 (8.1%)	80 (6.7%)
March	9,107 (7.0%)	81 (6.8%)
April	10,006 (7.7%)	89 (7.5%)
May	10,552 (8.2%)	116 (9.8%)
June	10,430 (8.1%)	120 (10.1%)
July	10,288 (8.0%)	96 (8.1%)
August	10,588 (8.2%)	105 (8.8%)
September	10,490 (8.1%)	116 (9.8%)
October	11,854 (9.2%)	113 (9.5%)
November	12,001 (9.3%)	112 (9.4%)
December	12,409 (9.6%)	82 (6.9%)
TOTAL	**129,395 (100.0%)**	**1,188 (100.0%)**

All Crashes

■ Crashes ☐ Fatalities

Crashes by Day of Week

More crashes occurred on Thursday and Friday. The number of fatalities on weekends (Saturday and Sunday) is proportionally greater than the number of crashes. This could be attributed to alcohol use. (See ***Victims of Fatal Crashes by Day of Week***, page 29).
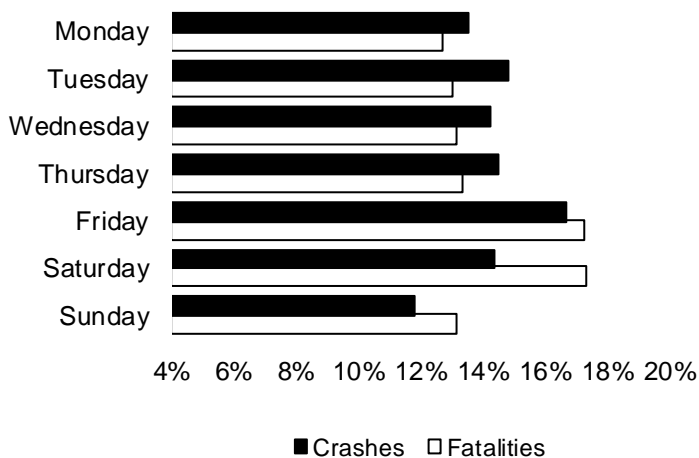
Day	Crashes	Fatalities
Monday	17,513 (13.5%)	151 (12.7%)
Tuesday	19,173 (14.8%)	155 (13.1%)
Wednesday	18,447 (14.3%)	156 (13.1%)
Thursday	18,791 (14.5%)	159 (13.4%)
Friday	21,620 (16.7%)	205 (17.3%)
Saturday	18,598 (14.4%)	206 (17.3%)
Sunday	15,253 (11.8%)	156 (13.1%)
TOTAL	**129,395 (100.0%)**	**1,188 (100.0%)**

■ Crashes ☐ Fatalities

Crashes by Hour of Day

Some hours of the day are more dangerous than others with regard to crashes and fatalities. Not surprisingly, crashes and fatalities were higher during peak traffic times. Some hours of the day experience a low percentage of crashes, but they are much more deadly. For example, only 4.3% of all crashes in 2016 occurred in the 7:00 PM hour, but 5.1% of all fatalities —the fourth highest percentage—occurred then. The higher volume of traffic itself is a factor during peak traffic hours, particularly the rush-hours.
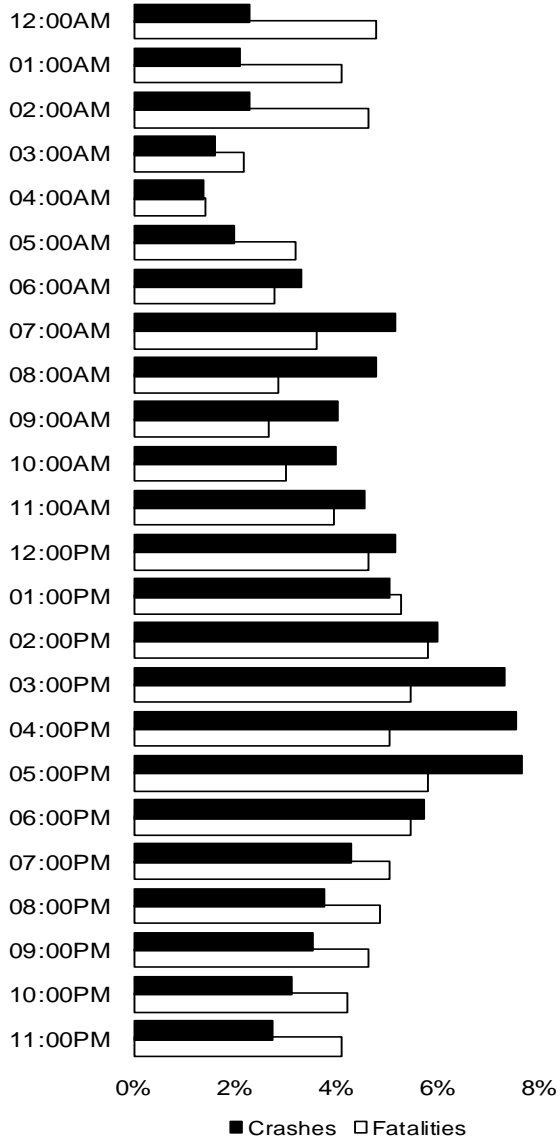
Hour	Crashes	Fatalities
12:00AM	2,955	57
01:00AM	2,719	49
02:00AM	2,949	55
03:00AM	2,068	26
04:00AM	1,769	17
05:00AM	2,589	38
06:00AM	4,272	33
07:00AM	6,687	43
08:00AM	6,193	34
09:00AM	5,204	32
10:00AM	5,188	36
11:00AM	5,930	47
12:00PM	6,675	55
01:00PM	6,563	63
02:00PM	7,773	69
03:00PM	9,489	65
04:00PM	9,787	60
05:00PM	9,948	69
06:00PM	7,411	65
07:00PM	5,557	60
08:00PM	4,863	58
09:00PM	4,591	55
10:00PM	4,031	50
11:00PM	3,530	49

Crashes by Light Level

In 2016, more crashes occurred in daylight than all other light levels combined. This is not surprising, since more vehicles are on the road during daylight. However, fatalities in 2016 occurred slightly less often during non-daylight hours (dark and dusk/dawn conditions). If 2016 fatalities per 1000 crashes are compared (Daylight—7.5 fatalities per 1000 crashes versus Non-Daylight—12.1 fatalities per 1000 crashes), it is apparent that non-daylight crashes resulted in fatalities more often than daylight crashes.

Crashes

Dawn
1.6%

Other/Unknown
0.1%

Dusk
1.9%

Dark (No/Unk Street Lights)
15.6%

Dark (Street Lights)
17.0%

Daylight
63.8%

All Crashes

Fatalities

Dawn
1.7%

Dusk
1.9%

Other/Unknown
0.0%

Dark (No/Unk Street Lights)
27.3%

Dark (Street Lights)
16.8%
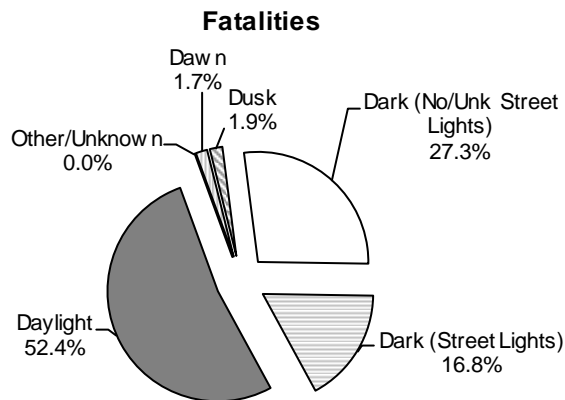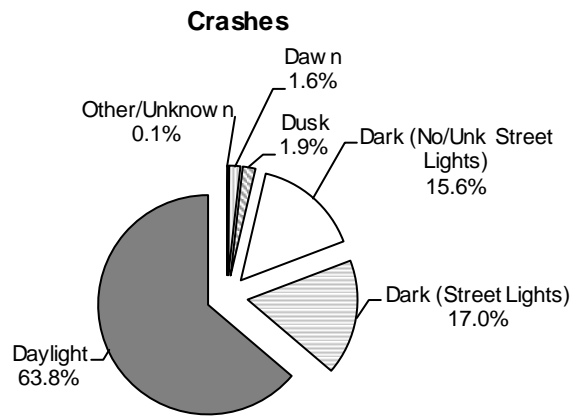
Daylight
52.4%

Light Level	Crashes	Fatalities
Daylight	82,502	622
Dark (Street Lights)	22,031	200
Dark (No/Unk Street Lights)	20,142	324
Dusk	2,430	22
Dawn	2,124	20
Other/Unknown	166	0
TOTAL	**129,395**	**1,188**

Crashes by Holiday

Crashes increased during holiday periods due to the volume of traffic on the roadway. Many times the weekend before and the weekend after the holiday have nearly as many crashes and fatalities, and sometimes more. The graphs below illustrate the ranking in descending order, of total crashes and fatalities, respectively, for each holiday period. The table shows a breakdown of crashes and fatalities for each holiday period in 2016.

Crashes

Period	Percent
Pre-Thanksgiving	10.1%
Pre-Christmas	8.8%
Post-Thanksgiving	7.8%
Post New Years	7.6%
Thanksgiving	6.8%
Pre-Memorial Day	6.4%
Post Memorial Day	6.3%
Pre-Independence Day	5.6%
Post-Labor Day	5.6%
Pre-Labor Day	5.4%
Memorial Day	5.4%
Christmas	5.3%
Post-Independence Day	5.3%
Independence Day	4.9%
Labor Day	4.7%
New Years	4.3%
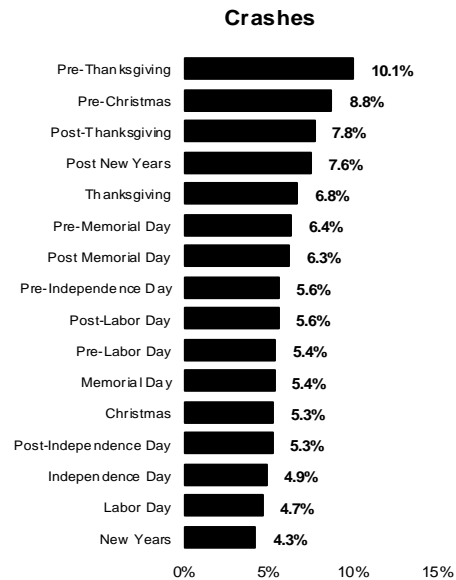
Period*	Crashes	Fatalities
New Years	787	6
Post New Years	1,392	12
Pre-Memorial Day	1,177	10
Memorial Day	988	11
Post Memorial Day	1,155	16
Pre-Independence Day	1,041	21
Independence Day	906	10
Post-Independence Day	969	10
Pre-Labor Day	1,002	14
Labor Day	860	18
Post-Labor Day	1,037	14
Pre-Thanksgiving	1,854	24
Thanksgiving	1,248	17
Post-Thanksgiving	1,429	13
Pre-Christmas	1,623	9
Christmas	981	8
TOTAL	**18,449**	**213**
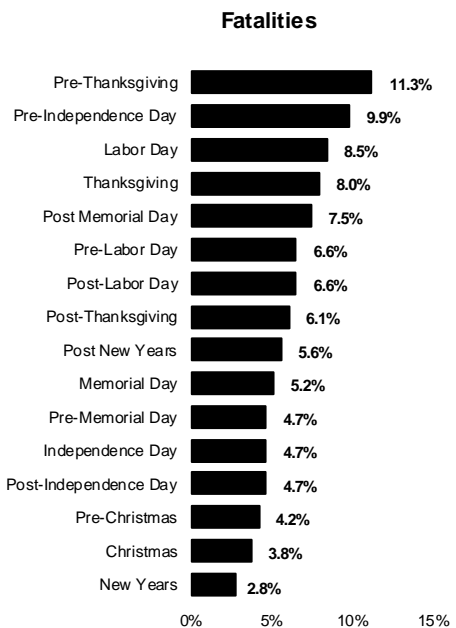
Fatalities

Period	Percent
Pre-Thanksgiving	11.3%
Pre-Independence Day	9.9%
Labor Day	8.5%
Thanksgiving	8.0%
Post Memorial Day	7.5%
Pre-Labor Day	6.6%
Post-Labor Day	6.6%
Post-Thanksgiving	6.1%
Post New Years	5.6%
Memorial Day	5.2%
Pre-Memorial Day	4.7%
Independence Day	4.7%
Post-Independence Day	4.7%
Pre-Christmas	4.2%
Christmas	3.8%
New Years	2.8%

*   See *Holidays* under **Definitions** for explanation of pre- and post-holiday weekends.

** Not part of a holiday weekend in 2016.

Drivers

Drivers Overview

Every traffic crash involves 3 elements: the driver, roadway, and vehicle. It has been stated nationally that 85-90% of all traffic crashes involve some sort of driver error that contributes to the crash. Therefore, as drivers, we can greatly impact traffic safety by driving smart and driving defensively.

Of all drivers represented in crashes, the young driver and the mature driver are two groups that stand out. Young drivers (ages 16-21) are the least experienced drivers and they are also prone to over zealous driving performance, perhaps due to their youth and peer pressure. Mature drivers (ages 65 & over) on the other hand experience driving difficulties related to deteriorating physical abilities (eyesight, hearing, head movement, etc.).

Drivers

Crashes Involving Driver Error

Some form of poor/degraded driver performance is present in the majority of crashes. Alcohol use and speeding continue to be big contributors to fatal crashes.

Contributing Factor	Crashes	Fatal Crashes
Speed-Related	31,083	458
Drinking Driver	9,221	150
Distracted Driver	16,036	61
Improper Turning-Related	14,123	61
Proceeded Without Clearance	9,004	60
Careless/Illegal Passing	4,665	41
Drowsy Drivers	2,625	25
Tailgating	6,879	7

Note: Drinking driver and drowsy driver factors determined from the driver's condition field.

Single and Multiple Vehicle Crashes of Young and Mature Drivers

As the table below shows, mature drivers are over-represented in multiple vehicle crashes, due in part to the loss of physical and cognitive abilities. Younger drivers are also over-represented in multi-vehicle crashes as younger drivers are more easily distracted while driving.

Number of Vehicles	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
Single Vehicle Crash	44.1% 56,940 crashes	37.1% 10,742 crashes	20.4% 2,779 crashes	20.2% 1,668 crashes
Multiple Vehicle Crash	55.9% 72,258 crashes	62.9% 18,186 crashes	79.6% 10,840 crashes	79.8% 6,572 crashes

Drivers in Crashes by Age Group

Looking at the 2016 Pennsylvania driver data, as driver age groups increased in age, the percentage of Pennsylvania total drivers involved in crashes within each age group decreased considerably. Note the percentage of 16-year old drivers involved in crashes. This number is significantly lower than other young driver age groups due to a law enacted in December 1999 that required a mandatory six month waiting period between obtaining a Learner's Permit and testing for licensure. It also reflected the limited time 16-year old drivers used the roads and the more controlled situations in which they are permitted to drive during the permit process. Driver inexperience and less cautious driving often are attributed characteristics given to the reason all young driver ages have higher rates.

Age Group	PA Drivers Involved in Crashes	*PA Total Drivers	% Involved in Crashes
16	1,942	72,452	2.7%
17	4,732	107,468	4.4%
18	5,588	118,741	4.7%
19	5,268	125,537	4.2%
20	5,334	130,034	4.1%
21	5,503	134,293	4.1%
22-24	16,393	421,070	3.9%
25-29	23,599	742,730	3.2%
30-39	33,810	1,416,209	2.4%
40-54	42,273	2,252,847	1.9%
55-59	13,103	880,245	1.5%
60-64	10,463	807,428	1.3%
65-69	7,751	679,976	1.1%
70-74	5,337	484,490	1.1%
75 and Over	8,037	770,185	1.0%
Unknown	33	N/A	N/A

* PA Total Drivers includes total PA Licensed Drivers and PA Drivers
  who have their Learner's Permit (no driver's license).

Comparison of Young and Mature Drivers by Crash Type

Young drivers are slightly over-represented in hit fixed object crashes (single vehicle run-off-the-road type crashes), while mature drivers are heavily over-represented in angle and rear-end crashes (multiple vehicle interaction type crashes).

Crash Type	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
Non-Collision	3.3%	2.6%	2.1%	1.0%
	4,310 crashes	747 crashes	279 crashes	80 crashes
Rear-End	22.8%	25.2%	28.8%	23.0%
	29,499 crashes	7,300 crashes	3,927 crashes	1,892 crashes
Head-On	3.7%	4.2%	4.7%	5.2%
	4,754 crashes	1,211 crashes	643 crashes	432 crashes
Backing Up	0.3%	0.2%	0.4%	0.4%
	387 crashes	56 crashes	60 crashes	30 crashes
Angle	26.9%	30.0%	39.6%	46.6%
	34,794 crashes	8,685 crashes	5,394 crashes	3,840 crashes
Sideswipe	6.6%	5.1%	6.8%	7.0%
	8,517 crashes	1,487 crashes	925 crashes	578 crashes
Hit Fixed Object	29.6%	30.1%	12.7%	13.0%
	38,176 crashes	8,703 crashes	1,728 crashes	1,070 crashes
Hit Pedestrian	3.1%	0.9%	2.4%	2.5%
	4,034 crashes	272 crashes	324 crashes	202 crashes
Other	3.7%	1.6%	2.5%	1.4%
	4,727 crashes	467 crashes	339 crashes	116 crashes

* Crash Type refers to the first event of the *crash* which may or may not be an event of the drivers above.

Intersection vs. Non-Intersection Crashes of Young and Mature Drivers

In keeping with the data presented previously on single vehicle versus multiple vehicle crashes, mature drivers are more likely to be involved in crashes at intersections compared to other age groups. Intersections can be confusing and problematic for the mature driver, as numerous and complex movements are present.

	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
Intersection	38.3%	40.0%	49.6%	54.0%
	49,487 crashes	11,566 crashes	6,758 crashes	4,447 crashes
Non-Intersection	61.7%	60.0%	50.4%	46.0%
	79,711 crashes	17,362 crashes	6,861 crashes	3,793 crashes

Alcohol-Related Crashes

Alcohol Overview

► In Pennsylvania, drinking and driving remains a top safety issue. In 2016, alcohol-related crashes decreased to 10,256 from 10,558 alcohol-related crashes in 2015. In 2016, alcohol-related fatalities decreased to 297 from 345 alcohol-related fatalities in 2015.

► Of particular concern is the involvement of drinking drivers under the age of 21. 12% of the driver fatalities in the 16-20 age group were drinking drivers, down from 16% in 2015. Improvement in this age group is a very important need.

► Of equal focus is the 21 to 25 age group, in which 29% of the driver fatalities were drinking drivers. This age group had the fifth worst percentage of all groups, and was down from 44% in 2015. The 26 to 30 age group decreased to 32% from 37% in 2015.

► In 2016, alcohol-related fatalities were 25% of the total traffic fatalities, less than in 2013, 2014 and 2015.

► Pennsylvania continues to take an aggressive posture to prevent and deter drinking and driving (particularly through the widespread use of sobriety checkpoints and saturation patrols).

2016 Briefs

    ► 297 people died in alcohol-related crashes.

    ► 90% of the alcohol-related occupant fatalities (drivers and passengers) were in the vehicle driven by the drinking driver; 72% were the drinking drivers themselves.

    ► 74% of the drinking drivers in traffic crashes were male.

    ► 73% of the alcohol-related crashes were during the hours of darkness, usually on weekends.

    ► On average each day, 28 alcohol-related traffic crashes occurred.

    ► On average each day, 0.8 persons were fatally injured in alcohol-related traffic crashes.

    ► On average each day, 18 persons were injured in alcohol-related traffic crashes.

Alcohol Involvement in Crashes

Although alcohol-related crashes accounted for approximately 8% of the total crashes in 2016, they resulted in 25% of all persons fatally injured in crashes. Alcohol-related crashes were 3.8 times more likely to result in fatal injury than those not related to alcohol (3.0% of the alcohol-related crashes resulted in fatal injury, compared to 0.7% of crashes which were not alcohol-related). "PDO Crashes" in the table below refers to property damage only crashes.

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	PDO Crashes
Alcohol-Related	270 (24.8%)	297 (25.0%)	4,911 (8.2%)	6,589 (7.9%)	5,075 (7.4%)
Non-Alcohol-Related	818 (75.2%)	891 (75.0%)	54,949 (91.8%)	76,390 (92.1%)	63,364 (92.6%)
TOTAL	**1,088 (100.0%)**	**1,188 (100.0%)**	**59,860 (100.0%)**	**82,979 (100.0%)**	**68,439 (100.0%)**

Alcohol-Related Crashes—Five-Year Trends

Alcohol-related crashes decreased in 2016, and were the lowest total in the last five years. Alcohol-related fatalities decreased in 2016, and were the lowest total in the last five years. Alcohol-related fatalities are trending downward.

Alcohol-Related Crashes
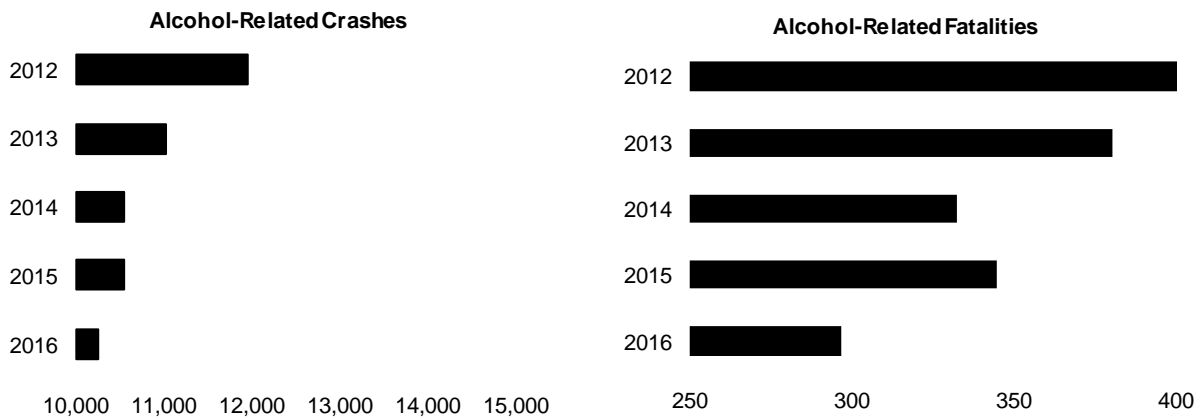
Alcohol-Related Fatalities

	2012	2013	2014	2015	2016
Crashes	11,956	11,041	10,550	10,558	10,256
Fatal Crashes	375	363	311	321	270
Injury Crashes	6,425	5,864	5,377	5,274	4,911
PDO Crashes	5,156	4,814	4,862	4,963	5,075
Fatalities	404	381	333	345	297
Injuries	8,724	7,900	7,265	7,055	6,589
Fatal Crashes per 100,000 Licensed Drivers	4.2	4.1	3.5	3.6	3.0
Fatalities per 100,000 Licensed Drivers	4.6	4.3	3.7	3.9	3.3

Victims of Alcohol-Related Fatal Crashes

There were 245 driver and passenger fatalities in alcohol-related crashes in 2016, while 221 (90%) were the drinking drivers or their passengers.

Persons Involved	Fatalities
Drivers	**190**
Drinking Drivers	*176 (92.6%)*
Non-Drinking Drivers	*14 (7.4%)*
Passengers	**55**
Passengers with Drinking Driver	*45 (81.8%)*
Passengers with Non-Drinking Driver	*10 (18.2%)*
Pedestrians	**49**
Drinking Pedestrian	*35 (71.4%)*
Non-Drinking Pedestrian	*14 (28.6%)*
TOTAL FATALITIES*	**297**

Includes 3 victims, status unknown

Victims of Fatal Crashes by Time of Day

Alcohol-related crashes occurring between 8:00 PM and 4:00 AM produced the vast majority of fatalities (64% of alcohol-related fatalities). In contrast, under half of the fatalities (48%) from non-alcohol-related crashes resulted from crashes occurring between noon and 8:00 PM.

Midnight-3:59 AM — Alcohol-Related: 36.4%, Non-Alcohol-Related: 8.9%
4:00-07:59 AM — Alcohol-Related: 6.7%, Non-Alcohol-Related: 12.5%
8:00-11:59 AM — Alcohol-Related: 3.0%, Non-Alcohol-Related: 15.7%
Noon-3:59 PM — Alcohol-Related: 5.7%, Non-Alcohol-Related: 26.4%
4:00-7:59 PM — Alcohol-Related: 20.5%, Non-Alcohol-Related: 21.7%
8:00-11:59 PM — Alcohol-Related: 27.3%, Non-Alcohol-Related: 14.7%

0%   10%   20%   30%   40%
■ Alcohol-Related   □ Non-Alcohol-Related

Time of Occurrence	Non-Alcohol-Related	Alcohol-Related
Midnight-3:59 AM	79	108
4:00-07:59 AM	111	20
8:00-11:59 AM	140	9
Noon-3:59 PM	235	17
4:00-7:59 PM	193	61
8:00-11:59 PM	131	81
Time Unknown	2	1
TOTAL FATALITIES	**891**	**297**

Victims of Fatal Crashes by Day of Week

Under half (46%) of alcohol-related fatal crash victims were the result of crashes occurring on Saturday and Sunday, while fatal crash victims of non-alcohol-related crashes tended to be distributed more evenly throughout the work week with the fewest occurring on Monday, Thursday and Sunday.
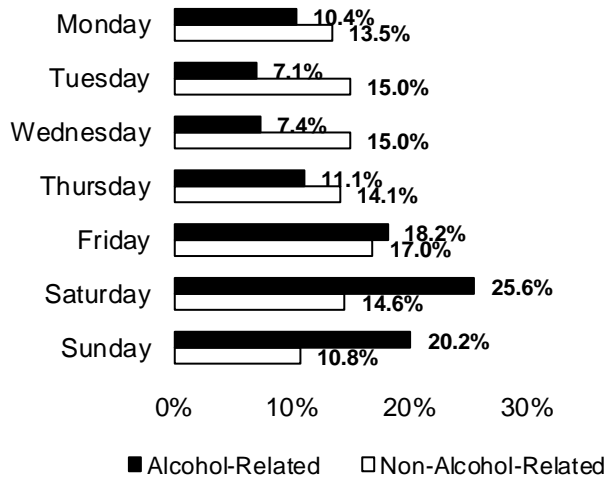
Day of Occurrence	Non-Alcohol-Related	Alcohol-Related
Monday	120	31
Tuesday	134	21
Wednesday	134	22
Thursday	126	33
Friday	151	54
Saturday	130	76
Sunday	96	60
TOTAL FATALITIES	**891**	**297**

Chart values:

Day	Alcohol-Related	Non-Alcohol-Related
Monday	10.4%	13.5%
Tuesday	7.1%	15.0%
Wednesday	7.4%	15.0%
Thursday	11.1%	14.1%
Friday	18.2%	17.0%
Saturday	25.6%	14.6%
Sunday	20.2%	10.8%

■ Alcohol-Related   □ Non-Alcohol-Related

Alcohol-Related Crashes—Day vs. Night

73.0% of alcohol-related crashes occurred at night. The graph below shows the breakdown of alcohol-related crashes by day and night.

Night 73.0%
Day 27.0%
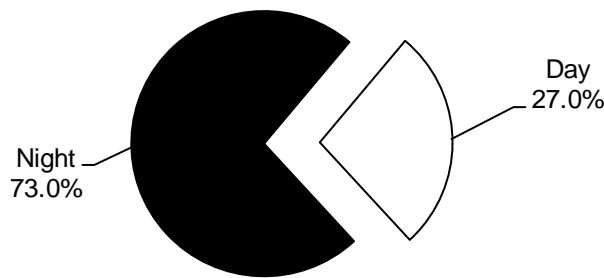
Alcohol-Related Holiday Crashes

In 2016, 11% of all holiday crashes involved alcohol use; however, 32% of fatalities that occurred during holiday weekends were related to alcohol use. (See *Crashes by Holiday*, page 22.)

Total Crashes

Period	%
Thanksgiving	7.5%
Independence Day	7.4%
Pre-Thanksgiving	7.3%
Post New Years	7.0%
Pre-Memorial Day	6.8%
Pre-Christmas	6.8%
Christmas	6.7%
Memorial Day	6.4%
Post-Thanksgiving	6.0%
Post Memorial Day	5.8%
Pre-Labor Day	5.7%
Labor Day	5.7%
New Years	5.6%
Post-Labor Day	5.3%
Post-Independence Day	5.1%
Pre-Independence Day	4.9%
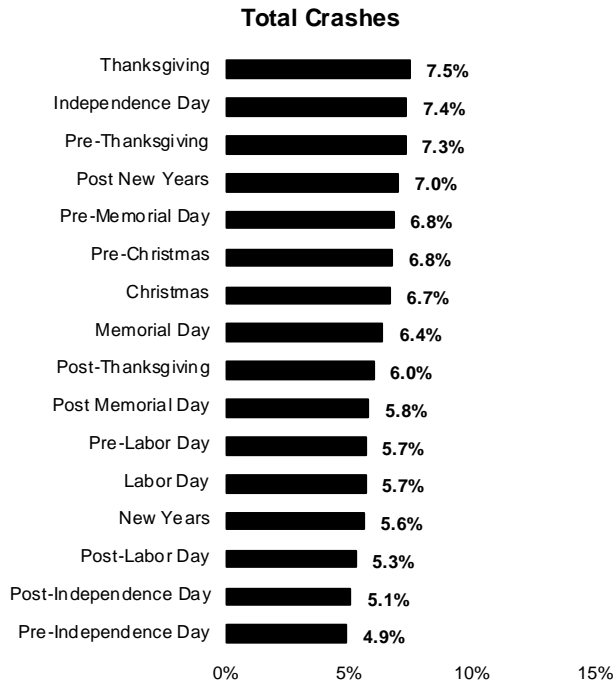
Period*	Crashes	Fatalities
New Years	117	0
Post New Years	146	3
Pre-Memorial Day	142	5
Memorial Day	133	3
Post Memorial Day	121	7
Pre-Independence Day	102	4
Independence Day	153	6
Post-Independence Day	106	3
Pre-Labor Day	118	6
Labor Day	118	9
Post-Labor Day	110	3
Pre-Thanksgiving	152	6
Thanksgiving	156	4
Post-Thanksgiving	125	3
Pre-Christmas	141	3
Christmas	139	3
TOTAL	**2,079**	**68**
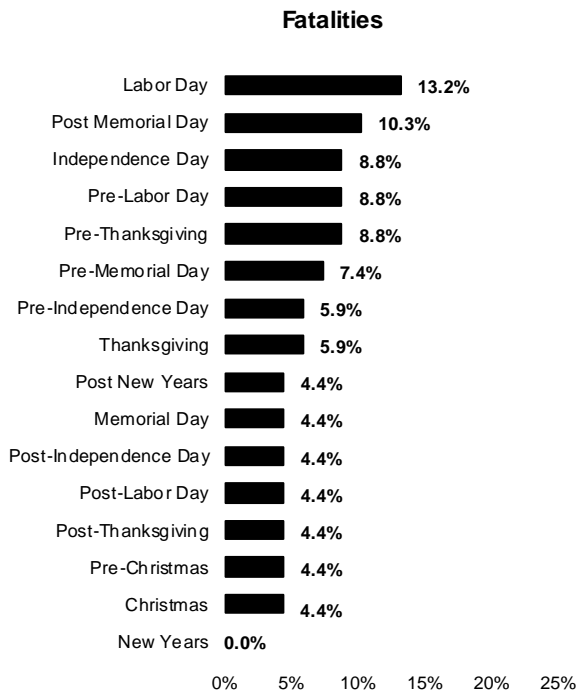
Fatalities

Period	%
Labor Day	13.2%
Post Memorial Day	10.3%
Independence Day	8.8%
Pre-Labor Day	8.8%
Pre-Thanksgiving	8.8%
Pre-Memorial Day	7.4%
Pre-Independence Day	5.9%
Thanksgiving	5.9%
Post New Years	4.4%
Memorial Day	4.4%
Post-Independence Day	4.4%
Post-Labor Day	4.4%
Post-Thanksgiving	4.4%
Pre-Christmas	4.4%
Christmas	4.4%
New Years	0.0%

* See *Holidays* under **Definitions** for explanation of pre- and post-holiday weekends.

** Not part of a holiday weekend in 2016.

Driver Involvement in Alcohol-Related Crashes by Vehicle Type

Motorcyclists had the largest percentage of drinking drivers to total drivers compared to the drivers of other types of vehicles. Drinking drivers of passenger cars, light trucks, vans, and sport utility vehicles were equal to or just above the average for drivers of all vehicle types. Bus and heavy truck drivers accounted for very few of the drinking drivers in crashes.

Total Drivers in Crashes **213,271**	Passenger Car		120,071
	Lt Trk/SUV/Van		80,113
	Heavy Truck		7,271
	Motorcycle		3,539
	Bus		938
	Other		1,339
Drinking Drivers in Crashes **10,059 (4.7% of total)**	Passenger Car	5,871	(4.9% of total)
	Lt Trk/SUV/Van	3,803	(4.7% of total)
	Heavy Truck	41	(0.6% of total)
	Motorcycle	274	(7.7% of total)
	Bus	0	(0.0% of total)
	Other	70	(5.2% of total)

Drinking Drivers in Crashes by Age and Sex

In 2016, roughly 3 out of 4 drinking drivers in crashes were male (across most age groups), with only slight variations among the age groups. The table below does not include an additional 62 drivers for whom age and/or sex were not known.
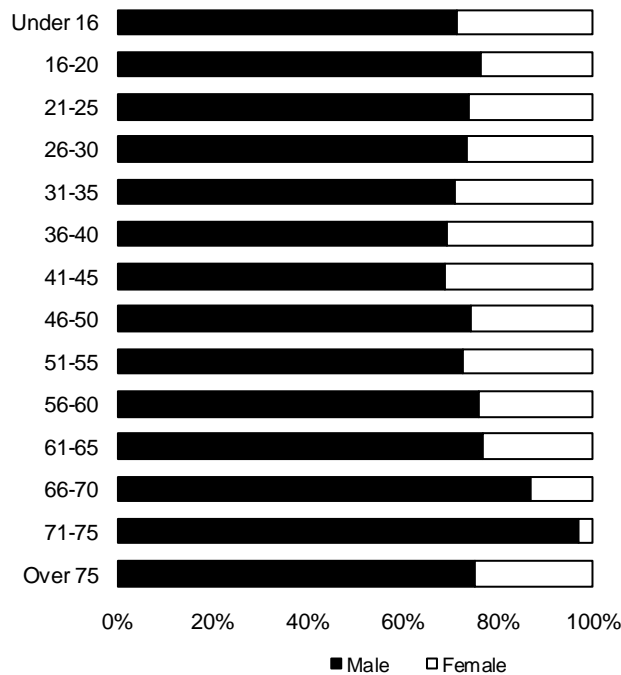
Age Group	Male	Female	Total
Under 16	5	2	7
16-20	464	140	604
21-25	1,580	546	2,126
26-30	1,267	449	1,716
31-35	863	347	1,210
36-40	624	272	896
41-45	548	243	791
46-50	571	195	766
51-55	556	206	762
56-60	427	132	559
61-65	211	62	273
66-70	154	23	177
71-75	67	2	69
Over 75	31	10	41
Total	**7,368**	**2,629**	**9,997**

Drinking Drivers vs. Non-Drinking Drivers Involved in Crashes by Age Group

In 2016, as the table and graph below show, the two age groups from 21 to 30 had the highest percentage of drinking drivers within their respective age groups. After age 40, the percentage of drinking drivers within the succeeding age groups steadily declined. The Under 16 age group continues to be of particular concern, as it included 8 drinking drivers.

Age Group	Drinking Driver	Non-Drinking Driver
Under 16	8 (5.0%)	152 (95.0%)
16-20	605 (2.5%)	23,960 (97.5%)
21-25	2,128 (7.0%)	28,359 (93.0%)
26-30	1,718 (6.9%)	23,300 (93.1%)
31-35	1,211 (6.1%)	18,527 (93.9%)
36-40	896 (5.5%)	15,374 (94.5%)
41-45	791 (5.1%)	14,701 (94.9%)
46-50	768 (4.9%)	15,020 (95.1%)
51-55	763 (4.8%)	15,109 (95.2%)
56-60	559 (4.0%)	13,410 (96.0%)
Over 60	562 (1.8%)	31,085 (98.2%)
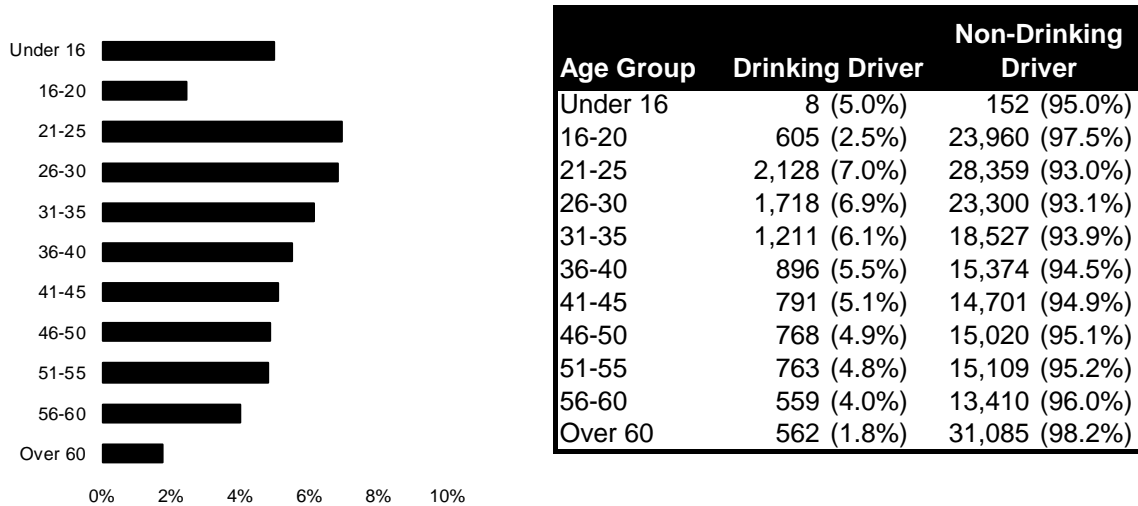
Drinking Driver Fatalities as a Percentage of Total Driver Fatalities, by Age Group

The graph below shows drinking driver fatalities as a percentage of total driver fatalities within each respective age group for 2016 crashes. The age group from 31 to 35 had the highest percentage, with 38% of the driver fatalities in this age group being a drinking driver. The 16-20 age group decreased from 16.0% in 2015. In 2016, there were no drivers under the age of 16 who chose to combine alcohol usage and driving without a license.

Age Group	Percentage
Under 16	0.0%
16-20	12.3%
21-25	28.7%
26-30	31.7%
31-35	38.3%
36-40	33.3%
41-45	19.6%
46-50	29.2%
51-55	27.4%
56-60	25.8%
61-65	15.0%
66-70	10.5%
71-75	3.7%
Over 75	2.4%
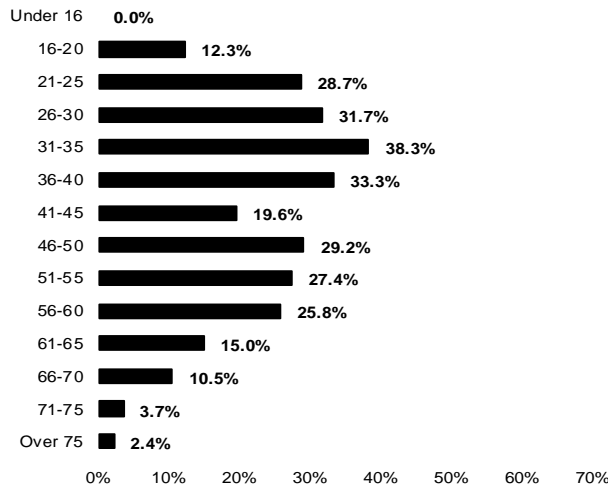
Underage Drinking Drivers in Pennsylvania Crashes—Historical Data

Act 31, commonly known as the "*Underage Drinking Law*," went into effect on May 24, 1988. From that year, and until 1994, the number of underage drinking drivers involved in Pennsylvania crashes declined each year. From 1997 until 2002, the amount of underage drinking drivers remained consistently high. From that point until 2015 there has been a downward trend with 2009, 2010, 2012 and 2016 disrupting the steady decrease.

Year	Value
2007	1,305
2008	1,239
2009	1,294
2010	1,265
2011	943
2012	954
2013	782
2014	672
2015	585
2016	613

Alcohol-Related
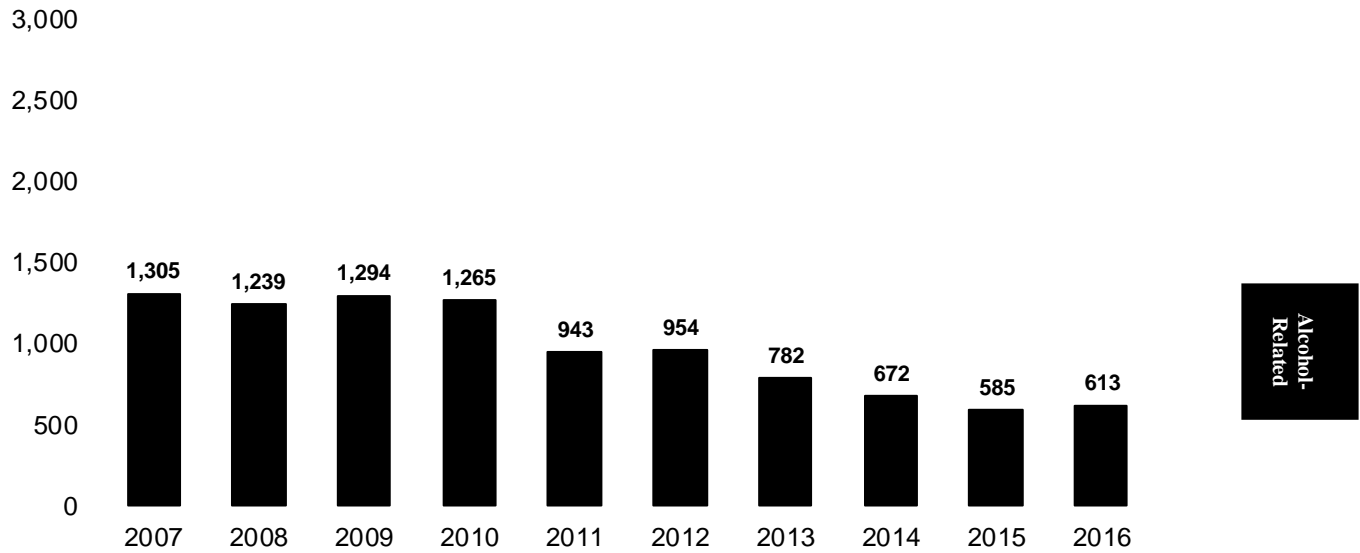
Seat Belts, Child Safety Seats, and Air Bags

Restraints Overview
Safety Belts

- Pennsylvania's seat belt law requires that drivers and front seat passengers be properly buckled when riding in a passenger car, Class 1 and Class 2 truck, or motor home. Children age 8 and older, but under age 18, are required to be secured in a seat belt system anywhere in the vehicle due to the law becoming effective on February 21, 2003.

- A driver under the age of 18 may not operate a motor vehicle when the number of passengers exceeds the number of available seat belts in the vehicle.

- The combination of lap/shoulder seat belts, when used, reduces the risk of fatal injuries to front seat passenger car occupants by 45% and the risk of suspected minor-to-critical injuries by 50%. For light truck occupants, seat belts reduce the risk of fatal injuries by 60% and the risk of suspected minor -to-critical injuries by 65%.

- All passengers should wear a seat belt whenever riding in a motor vehicle—even for short distances. Three out of four crashes occur within 25 miles of home.

- If everyone wore seat belts when riding in a motor vehicle, hundreds of lives in Pennsylvania alone would be saved (see page 36). Research shows that children are likely to be buckled 92% of the time when adults are buckled and only 72% of the time when adults are *not* buckled. Everyone should buckle up, every time!

Child Safety Seats

- Pennsylvania law requires that children under the age of 4 to be properly restrained in a child passenger restraint system when riding anywhere in a vehicle. Children under 2 must be secured in a rear-facing car seat until the child outgrows the maximum weight and height limits designated by the car seat manufacturer. Children age 4 up to age 8, are required to be in an appropriately fitting child booster seat when riding anywhere in a vehicle. Children from age 8 up to age 18 must be in a seat belt.

- Research shows that child safety seats, when properly installed, reduce the risk of fatal injury by 71% for infants and 54% for toddlers.

- When placing a child safety seat in a vehicle, follow the manufacturer's instructions for the vehicle and the child safety seat instructions exactly. There are different types of child safety seats—infant, convertible, and booster. Children ages 2 to 3 should be kept rear-facing as long as possible, until they reach the top height or weight limit allowed by the car seat's manufacturer. Children ages 4 to 7 should be kept forward-facing with a harness until they reach the top height or weight limit allowed by the car seat's manufacturer. Children ages 8 to 12 should be kept in a booster seat until they are big enough to fit the seat belt properly, that is, the lap belt must lie snugly across the upper thighs and the shoulder belt should lie snugly across the shoulder and chest and not cross the neck or face.

- Children should ride in the rear seat whenever possible, and should always be properly buckled.

Air Bag Safety

- Driver and front seat passenger air bags have been required in new passenger cars since 1998 and light trucks since 1999. However, air bags are supplemental protection devices. Everyone should still buckle up with both lap and shoulder belts on every trip.

- *Child Safety*
  - Children age 12 and under should ride buckled up in the back seat.
  - Infants in rear-facing child safety seats should **NEVER** ride in the front seat of a vehicle equipped with a passenger-side air bag.
  - If an older child must ride in a front seat equipped with a passenger-side air bag, put the child in a front-facing seat or belt-positioning booster seat for the proper weight of the child, or use a correctly fitting lap/shoulder belt, **and** move the vehicle seat as far back as possible.

- *Adult Safety*
  - Everyone should buckle up with both lap and shoulder belts on every trip.
  - The lap belt should be worn under the abdomen and low across the hips. The shoulder portion should come over the collarbone away from the neck and cross over the breastbone.
  - Driver and front passenger seats should be moved as far back as practical, particularly for shorter people.

Seat Belt Use in Crashes—Total People Involved

Seat belts have proven to be effective in reducing the severity of injuries sustained in a crash. In 2016, as shown in the two pie graphs below, 79.5% of all people involved in crashes were wearing seat belts. 52.2% of all people who died in crashes were not wearing seat belts. The table at the bottom shows the total number of people involved in crashes in 2016 by severity of injury and belt use.

Total People Involved in Crashes

Belts in Use
79.5%

Belts Not in Use
6.9%

Belt Use Unknown
13.6%
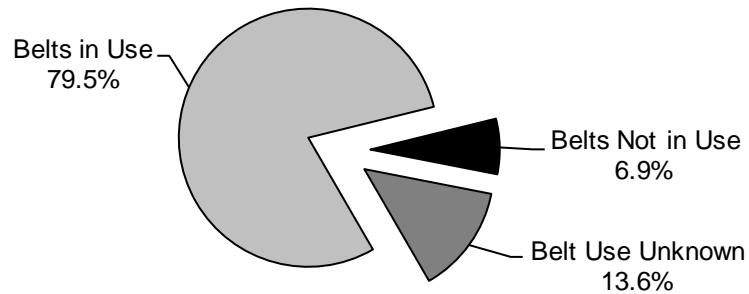
Total Fatalities

Belts in Use
33.3%

Belt Use Unknown
14.5%

Belts Not in Use
52.2%

Seat Belts,
Etc.
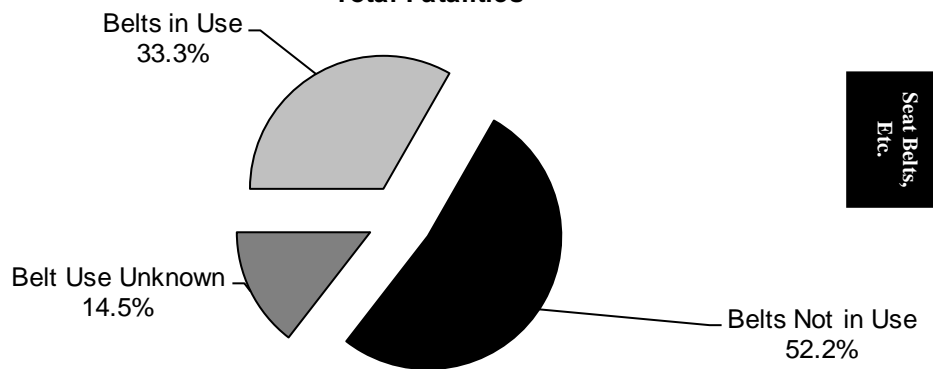
	Belts in Use	Belts Not in Use	Belt Use Unknown
Fatal Injury	261	410	114
Suspected Serious Injury	1,574	1,008	466
Suspected Minor Injury	18,368	2,931	1,916
Possible Injury	15,257	1,667	3,592
Unknown Severity	18,105	2,891	4,853
No Injury	169,897	10,593	27,283
TOTAL	**223,462**	**19,500**	**38,224**

Note: Vehicles involved include passenger cars, light trucks, SUVs, vans, and heavy trucks.   "Belts Not Available" is included in "Belts Not In Use".

Seat Belt Use in Crashes—Impact on Fatalities and Injuries

The table and graph below display the estimated impact that seat belts worn 100% of the time would have on traffic fatalities and injuries. The numbers in parentheses, in the last row, are the estimated decreases in 2016 fatalities and injuries if 100% seat belt use was achieved. (***Note***: The data below is for passenger cars, small trucks, SUVs and vans.) The estimated economic savings of 100% seat belt use for occupants of passenger cars, small trucks, SUVs and vans in 2016 would have been **$3,839,451,558** or approximately **$300** for every man, woman, and child in Pennsylvania. More importantly, 373 people would have survived if they had worn their belts.

	Fatalities	**Injuries**			
		Susp Ser	*Susp Min*	*Possible*	*None*
Belts Used	237	1,487	17,265	31,631	148,536
Belts Not Used	393	966	2,829	4,401	9,467
TOTAL	**630**	**2,453**	**20,094**	**36,032**	**158,003**
If 100% Belt Use	*257*	*1,627*	*18,969*	*34,407*	*161,952*
Net Increase/(Decrease)	**(373)**	**(826)**	**(1,125)**	**(1,625)**	**3,949**
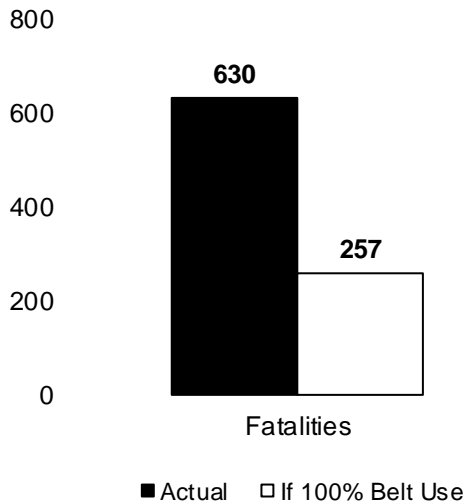
Note: "No Belts" is included in "Belts Not Used".

 Note: Starting in 2016, the data presented is for passenger cars, small trucks, SUVs and vans. Prior to 2016 only passenger cars were evaluated.

Seat Belt Use in Crashes—Historical Data

On November 1, 1983, Pennsylvania passed a primary law requiring that drivers secure children under age 4 in an approved child passenger restraint system when riding in a passenger car, Class I truck, Class II truck, classic motor vehicle, antique motor vehicle, or motor home registered in Pennsylvania. Children ages 1 to 4 could be in the back seat in a child safety belt in lieu of a child passenger restraint system. Fines began taking effect January 1, 1985.

On November 23, 1987, Pennsylvania passed a safety belt law. The law requires that drivers and front seat passengers of a passenger car, Class I and Class II trucks, or motor home wear a properly-adjusted and fastened safety belt. The driver is responsible for securing children ages 4 to 18 in a safety belt when riding in the front seat. This is a secondary violation. Fines began taking effect March 23, 1988.

Effective August 21, 1993, the child passenger restraint law was upgraded requiring that drivers (not just those with vehicles registered in Pennsylvania) secure a child up to age 4 in a child passenger restraint system when sitting anywhere in the vehicle.

Effective February 21, 2003, the child passenger restraint law was upgraded requiring that children ages 4 through 7 be in an appropriately fitting child booster seat and those children ages 8 through 17 be secured in a seat belt system whenever riding anywhere in a vehicle.

The graph below shows the percentage of seat belt users in Pennsylvania since 1983. A sharp upward trend was experienced in the year following the passage of the seat belt law. The recent trend shows that the usage rate is still on the rise in crashes.
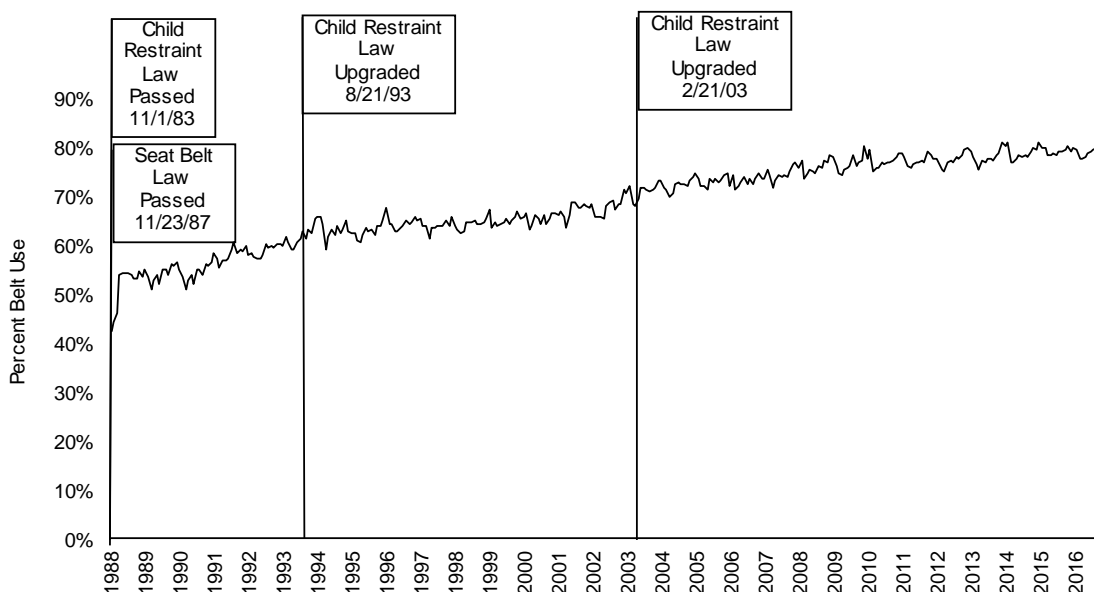
Seat Belts, Etc.

Note: Data shown for passenger cars only.

Seat Belt Observational Surveys—Historical Data

Observed seat belt use (the percent of front seat vehicle occupants wearing seat belts) is based upon a statewide statistical sampling of front seat occupants in passenger cars and light trucks. The observed seat belt use in 2008 is slightly lower than the previous 2 years, most likely due to the redesign of the study methodology in 2008, that provided more detailed accounts.

Period	Percent
	71.0%
Fall '96	65.0%
	64.7%
Fall '98	67.8%
	69.7%
Fall '00	70.7%
	70.5%
Fall '02	75.7%
	79.0%
Fall '04	81.8%
	83.3%
Fall '06	86.3%
	86.7%
Fall '08	85.1%
	87.9%
Fall '10	86.0%
	83.8%
Summer '12	83.5%
	84.0%
Summer '14	84.0%
	83.0%
Summer '16	85.2%

Percent Belt Use
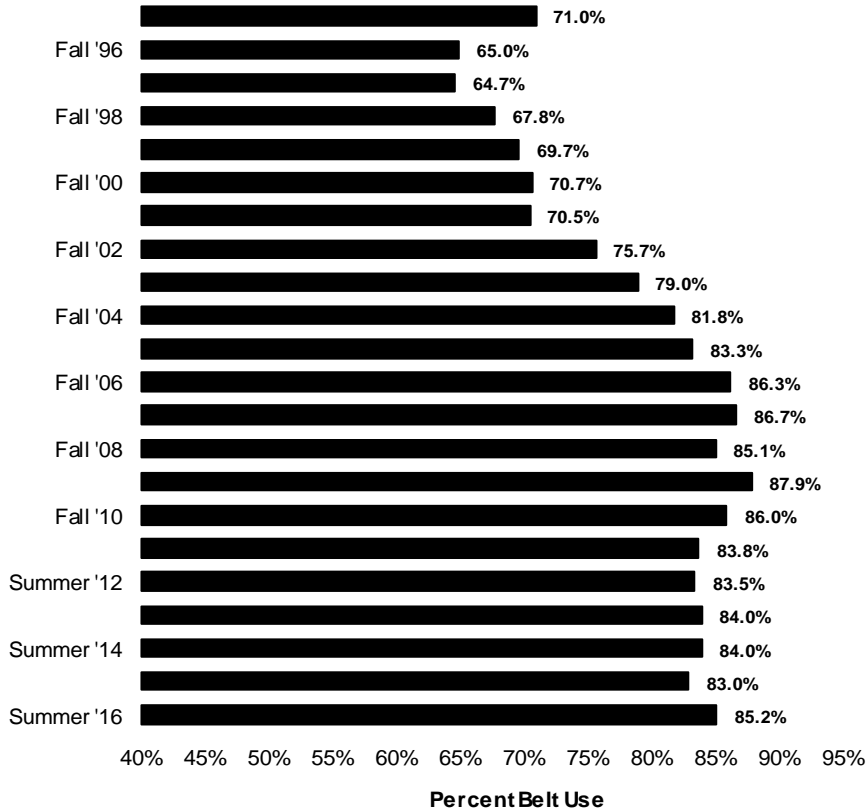
Child Passenger Restraints in Crashes—Five Year Data

Since August 21, 1993, all drivers traveling in Pennsylvania have been required to secure children up to age 4 in a child passenger restraint system while sitting anywhere in a vehicle. As shown in the table below (for 2012-2016 crashes involving children under age 4), the percentages of fatalities and injuries (within restraint type by row) were lower when restraints were used. From 2012-2016, 82% of the children under age 4 who were involved in crashes and restrained in a child seat sustained no injury.

Child Restraint	Fatalities	*Susp Ser*	*Susp Min*	*Possible*	*Unknown*	*No Injury*	Total Persons
				Injuries			**Total**
Child Seat In Use	26 (0.1%)	74 (0.3%)	349 (1.3%)	1,722 (6.6%)	2,452 (9.4%)	21,374 (82.2%)	**25,997**
No Restraint In Use	6 (0.4%)	12 (0.7%)	39 (2.3%)	199 (11.9%)	456 (27.2%)	962 (57.5%)	**1,674**
Other Restraint In Use	0 (0.0%)	5 (0.3%)	38 (2.5%)	158 (10.6%)	140 (9.4%)	1,156 (77.2%)	**1,497**

Note: "Child Seat Not In Use" and "Other Restraint Not In Use" have been combined into "No Restraint in Use".

Air Bag Deployment in Crashes—Injuries and Fatalities

Air bags are becoming more prevalent for vehicles in crashes due to the manufacturing laws of the late 1990s, however some vehicles in crashes still do not have airbags as there are still older vehicles in use. Additionally, not all seats in a vehicle have an air bag. The table and graph below show the safety benefits of wearing a seat belt, both with and without air bag deployment. (Table percentages are listed within restraint type by row.)

Passive Restaint Status	Seat Belt Status	Fatalities	Injuries					Total Persons
			Susp Ser	*Susp Min*	*Possible*	*Unknown*	*No Injury*	
None	n/a	212 (0.2%)	806 (0.7%)	5,888 (5.4%)	7,660 (7.0%)	11,312 (10.4%)	83,170 (76.3%)	**109,048**
Air Bag Deployed	Used	153 (0.3%)	964 (1.8%)	8,306 (15.6%)	5,530 (10.4%)	7,819 (14.7%)	30,497 (57.3%)	**53,269**
Air Bag Deployed	Not Used	221 (4.3%)	510 (9.8%)	1,201 (23.2%)	527 (10.2%)	1,167 (22.5%)	1,558 (30.1%)	**5,184**
Air Bag Deployed	Unknown	42 (0.7%)	226 (3.5%)	690 (10.8%)	877 (13.7%)	1,815 (28.4%)	2,731 (42.8%)	**6,381**
Air Bag Not Deployed	Used	39 (0.1%)	264 (0.3%)	5,598 (6.7%)	4,504 (5.4%)	5,458 (6.6%)	67,221 (80.9%)	**83,084**
Air Bag Not Deployed	Not Used	78 (2.4%)	149 (4.5%)	708 (21.6%)	278 (8.5%)	604 (18.4%)	1,465 (44.6%)	**3,282**
Air Bag Not Deployed	Unknown	8 (0.2%)	38 (0.9%)	233 (5.7%)	329 (8.0%)	555 (13.5%)	2,944 (71.7%)	**4,107**
Unknown If Deployed	n/a	16 (0.9%)	36 (2.0%)	159 (8.7%)	138 (7.6%)	331 (18.2%)	1,139 (62.6%)	**1,819**

In crashes that are severe enough to deploy an airbag (for vehicles and seats so equipped), the data below shows that you are 12 times more likely to die if you are not wearing a seat belt (6.2 fatalities vs. 0.5 fatalities per 100 crashes).

Fatalities per 100 Crashes

Air Bag Deployed/Seat Belt Not Used	6.2
Air Bag Not Deployed/Seat Belt Not Used	3.9
Air Bag Deployed/Seat Belt Unknown	1.1
Air Bag Deployed/Seat Belt Used	0.5
Air Bag Not Deployed/Seat Belt Unknown	0.4
Air Bag Not Deployed/Seat Belt Used	0.1

0   1   2   3   4   5   6   7   8
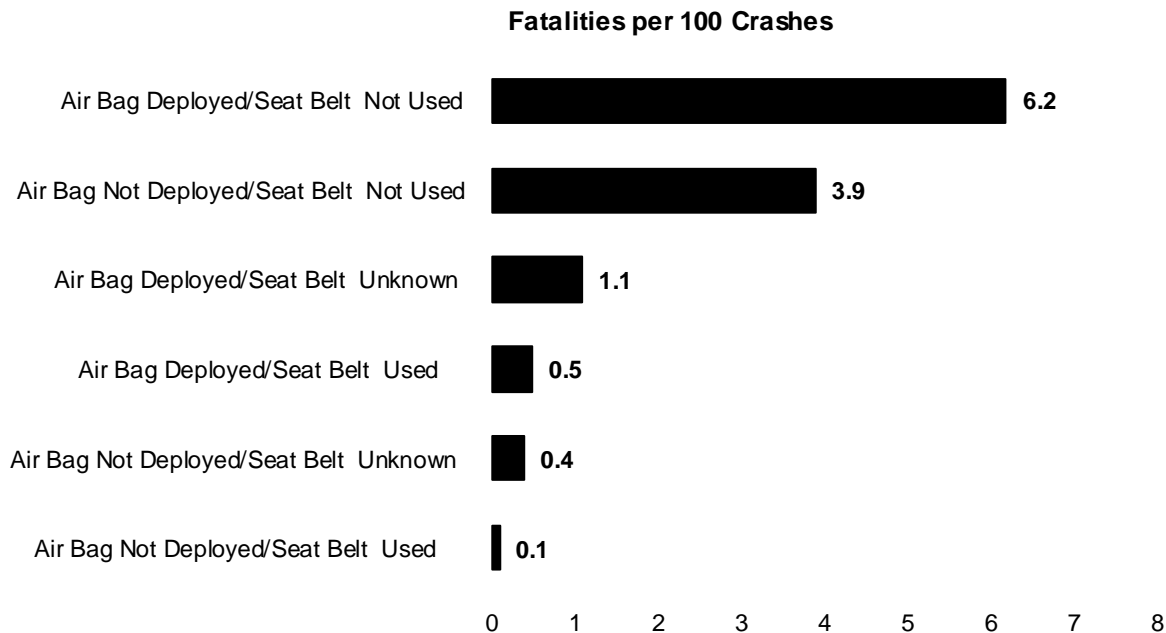
Seat Belts, Etc.

Air Bag Deployment by Initial Vehicle Impact Point

Most air bags are designed to deploy in frontal impacts, but side impact air bags are also common for newer model year vehicles. The table below shows the initial vehicle impact points for all 2016 crashes. It is probable that a vehicle which is initially impacted in the rear may be pushed into the vehicle in front (secondary impact), thus deploying the air bag (such as the 1408 occasions in which air bags deployed in center rear impacts).
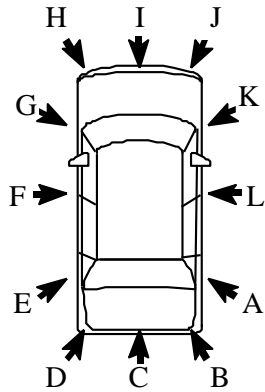
Impact Point	Vehicles	Air Bag Not Present	Air Bag Present Deployed	Air Bag Present, Not Deployed	Unknown/ Other
Right Side Rear (A)	2,546	843	597 (39.8%)	902 (60.2%)	204
Right Rear (B)	5,715	2,013	663 (20.6%)	2,558 (79.4%)	481
Center Rear (C)	31,438	11,936	1,408 (8.2%)	15,742 (91.8%)	2,352
Left Rear (D)	5,373	1,884	618 (20.1%)	2,459 (79.9%)	412
Left Side Rear (E)	2,565	800	578 (37.2%)	976 (62.8%)	211
Left Side Center (F)	6,631	2,087	1,979 (50.5%)	1,943 (49.5%)	622
Left Side Forward (G)	6,959	2,284	1,683 (41.5%)	2,377 (58.6%)	615
Left Front (H)	27,235	7,998	7,739 (45.9%)	9,125 (54.1%)	2,373
Center Front (I)	66,993	17,251	25,264 (57.6%)	18,586 (42.4%)	5,892
Right Front (J)	25,342	7,390	7,693 (49.7%)	7,797 (50.3%)	2,462
Right Side Forward (K)	10,915	3,670	2,714 (43.7%)	3,493 (56.3%)	1,038
Right Side Center (L)	8,061	2,591	2,304 (49.9%)	2,315 (50.1%)	851
Other	4,814	1,594	822 (38.4%)	1,320 (61.6%)	1,078
None	3,467	1,132	361 (17.9%)	1,652 (82.1%)	322
TOTAL	**208,054**	**63,473**	**54,423 (43.3%)**	**71,245 (56.7%)**	**18,913**

Air Bag Deployment by Age Group

While air bags are an important safety feature, they must be used with a seat belt for maximum effectiveness. Air bag deployment without seat belts can be dangerous. As the table below shows (from a percentage perspective), people using seat belts were less likely to suffer suspected serious and minor injuries, and even fatal injury, during crashes involving air bag deployment. (Percentages listed in the table are by age group.)

Seat Belts Used

Age Group	Fatalities	Susp Ser	Susp Min	Injuries Possible	Unknown	No Injury	Total Persons
0-4	0 (0.0%)	1 (1.2%)	13 (15.1%)	11 (12.8%)	12 (14.0%)	49 (57.0%)	86
5-8	1 (0.4%)	3 (1.3%)	28 (12.0%)	25 (10.7%)	27 (11.5%)	150 (64.1%)	234
9-12	0 (0.0%)	5 (1.0%)	92 (17.6%)	51 (9.8%)	77 (14.7%)	298 (57.0%)	523
13-64	87 (0.2%)	777 (1.7%)	6,968 (15.0%)	4,692 (10.1%)	6,472 (13.9%)	27,437 (59.1%)	46,433
65-74	27 (0.8%)	104 (3.0%)	692 (19.8%)	405 (11.6%)	684 (19.6%)	1,586 (45.3%)	3,498
75+	38 (1.5%)	74 (3.0%)	513 (20.6%)	346 (13.9%)	547 (21.9%)	977 (39.2%)	2,495
Total	**153 (0.3%)**	**964 (1.8%)**	**8,306 (15.6%)**	**5,530 (10.4%)**	**7,819 (14.7%)**	**30,497 (57.3%)**	**53,269**

Seat Belts Not Used

Age Group	Fatalities	Susp Ser	Susp Min	Injuries Possible	Unknown	No Injury	Total Persons
0-4	0 (0.0%)	0 (0.0%)	2 (18.2%)	1 (9.1%)	3 (27.3%)	5 (45.5%)	11
5-8	0 (0.0%)	1 (7.7%)	5 (38.5%)	1 (7.7%)	2 (15.4%)	4 (30.8%)	13
9-12	0 (0.0%)	4 (28.6%)	2 (14.3%)	1 (7.1%)	3 (21.4%)	4 (28.6%)	14
13-64	171 (3.6%)	469 (9.7%)	1,123 (23.3%)	505 (10.5%)	1,076 (22.3%)	1,477 (30.6%)	4,821
65-74	17 (9.9%)	25 (14.6%)	36 (21.1%)	8 (4.7%)	44 (25.7%)	41 (24.0%)	171
75+	33 (21.4%)	11 (7.1%)	33 (21.4%)	11 (7.1%)	39 (25.3%)	27 (17.5%)	154
Total	**221 (4.3%)**	**510 (9.8%)**	**1,201 (23.2%)**	**527 (10.2%)**	**1,167 (22.5%)**	**1,558 (30.1%)**	**5,184**

Pedestrian and Bicycle Crashes

Pedestrian and Bicycles Overview

► Pedestrian-related crashes represent 3.2% of the total reported traffic crashes; however, they account for 14.5% of all traffic crash fatalities. (See also ***Pennsylvania County Crashes***, pages 62, 63, and 68.)

► Bicycle crashes represent 1.0% of the total reported crashes and 1.3% of all traffic fatalities. Although these percentages are small, they still represent 16 bicyclist fatalities and 1,298 injuries in 2016.

Pedestrian Crashes—Five-Year Trends

Reported crashes involving pedestrians have increased in the last year. Pedestrian fatalities have fluctuated over the same period, and have increased in the past year.

Total Crashes

Year	
2012	4,538
2013	4,375
2014	4,001
2015	4,001
2016	4,201

Fatalities

Year	
2012	168
2013	151
2014	166
2015	153
2016	172

Peds & Bikes
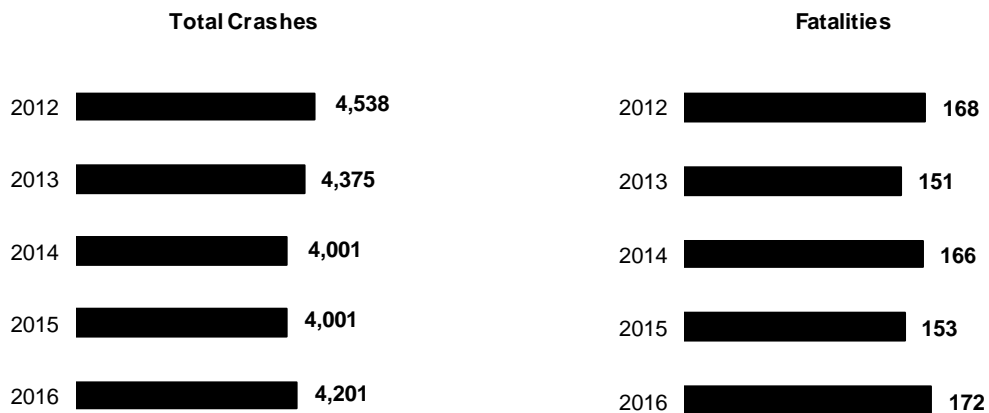
Year	Total Crashes	Fatalities
2012	4,538	168
2013	4,375	151
2014	4,001	166
2015	4,001	153
2016	4,201	172

Pedestrian-Related Crashes

Referring to the table and pie charts below, many pedestrian crashes and fatalities occurred while pedestrians were "entering crossing/specified location". This means that a pedestrian was most likely crossing the street at an intersection, mid-block crossing, or driveway entrance.

Top Crash-Related Pedestrian Actions

Walking/Running/Jogging/Playing
30.2%

Standing
5.0%

All Others
22.0%

Entering Crossing/Specified Location
42.8%
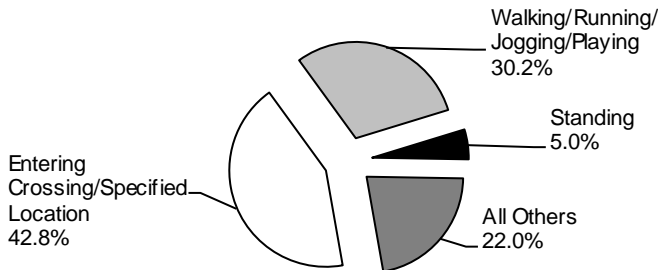
Top Fatal Pedestrian Actions

Walking/Running/Jogging/Playing
22.1%

Standing
6.4%

All Others
25.6%

Entering Crossing/Specified Location
45.9%

Peds & Bikes
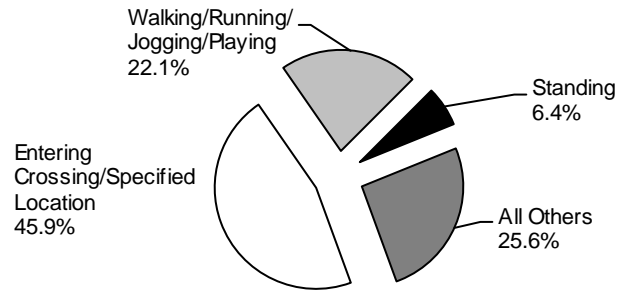
Pedestrian Action	Fatalities	Pedestrians Involved
Entering Crossing/Specified Location	79	1,899
Walking/Running/Jogging/Playing	38	1,342
Working	2	91
Pushing a Vehicle	0	6
Working on Vehicle	2	23
Standing	11	223
Approaching/Leaving a Vehicle	4	157
Other/Unknown	36	697
Total	**172**	**4,438**

Pedestrian Fatalities by Age and Sex

Pedestrians ages 75 and over represent a sizable portion of pedestrian fatalities as displayed in the chart below. Overall, male pedestrian fatalities consisted of 71% of all pedestrian fatalities, and were greater than in 2015 (65%). *Note:* Pedestrians of unknown sex are not included in the numbers below.
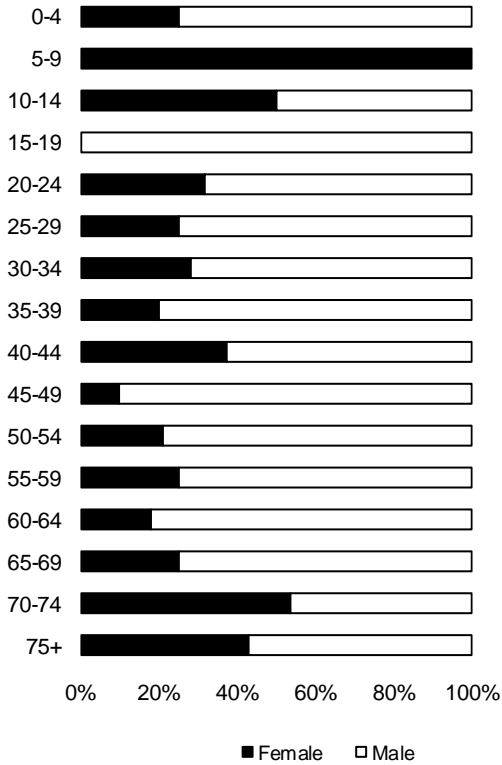
Age Group	Female	Male	Total
0-4	1	3	4
5-9	2	0	2
10-14	1	1	2
15-19	0	9	9
20-24	8	17	25
25-29	3	9	12
30-34	2	5	7
35-39	2	8	10
40-44	3	5	8
45-49	1	9	10
50-54	4	15	19
55-59	3	9	12
60-64	2	9	11
65-69	2	6	8
70-74	7	6	13
75 and over	6	8	14
Unknown	3	3	6
TOTAL	**50**	**122**	**172**

■ Female   □ Male

Pedestrian Injury Severity by Municipality Type

The majority of pedestrian injuries occurred in cities; however, the percentage of pedestrian fatalities in townships was higher, perhaps due to higher vehicle speeds on rural roads.

Municipality Type	Fatalities	Injuries	Non-Injury	Total
City	73 (42.4%)	2,760 (65.4%)	28 (58.3%)	**2,861 (64.5%)**
Borough/Town	22 (12.8%)	626 (14.8%)	10 (20.8%)	**658 (14.8%)**
Township	77 (44.8%)	827 (19.6%)	10 (20.8%)	**914 (20.6%)**
Other	0 (0.0%)	5 (0.1%)	0 (0.0%)	**5 (0.1%)**
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**	**48 (100.0%)**	**4,438 (100.0%)**

Note: "Other" includes colleges/universities, parks, etc.

Peds & Bikes

Pedestrian Fatalities and Injuries by Age

Elderly pedestrians, although involved in fewer pedestrian crashes, are more likely to be fatally injured if struck by a moving vehicle. Younger pedestrians (age 19 and under) account for 28% of the pedestrian injuries.

Note: The totals in the table do not include an additional 48 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

Pedestrian Age	Fatalities	Injuries
0-4	4 (2.3%)	113 (2.7%)
5-9	2 (1.2%)	296 (7.0%)
10-14	2 (1.2%)	370 (8.8%)
15-19	9 (5.2%)	416 (9.9%)
20-24	25 (14.5%)	407 (9.7%)
25-29	12 (7.0%)	387 (9.2%)
30-34	7 (4.1%)	287 (6.8%)
35-39	10 (5.8%)	277 (6.6%)
40-44	8 (4.7%)	208 (4.9%)
45-49	10 (5.8%)	243 (5.8%)
50-54	19 (11.1%)	257 (6.1%)
55-59	12 (7.0%)	257 (6.1%)
60-64	11 (6.4%)	214 (5.1%)
65-69	8 (4.7%)	169 (4.0%)
70-74	13 (7.6%)	96 (2.3%)
75 and over	14 (8.1%)	169 (4.0%)
Unknown	6 (3.5%)	52 (1.2%)
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**

Peds & Bikes

■ Fatalities   □ Injuries
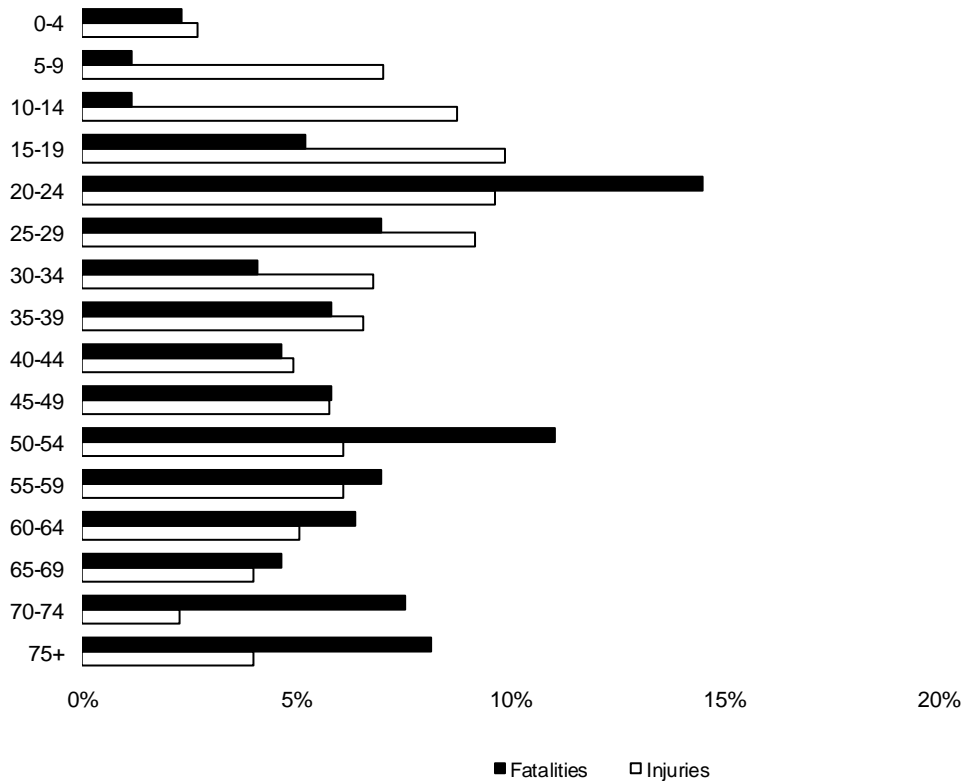
Pedestrian Fatalities and Injuries by Light Level

The majority of pedestrians were injured in the daytime (63.5%), but more pedestrian fatalities occurred during non-daylight hours (72.1%). As shown in the bar chart, pedestrians were more likely to be fatally injured if struck in a non-daylight crash as compared to a day crash.
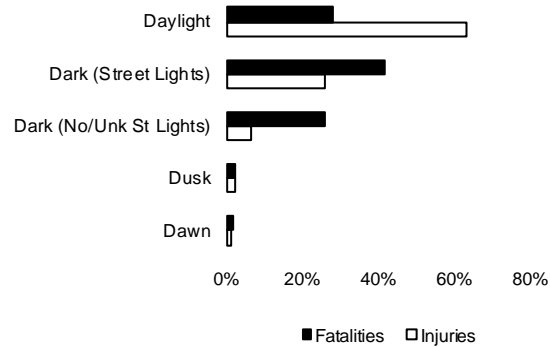
Light Level	Fatalities	Injuries
Dawn	3 (1.7%)	60 (1.4%)
Daylight	48 (27.9%)	2,679 (63.5%)
Dark (Street Lights)	72 (41.9%)	1,091 (25.9%)
Dark (No/Unk St Lights)	45 (26.2%)	274 (6.5%)
Dusk	4 (2.3%)	110 (2.6%)
Other/Unknown	0 (0.0%)	4 (0.1%)
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**

Note: The totals in the table do not include an additional 48 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

Pedestrian Fatalities and Injuries by Intersection Type

67.4% of pedestrian fatalities and 43.9% of pedestrian injuries occurred in areas other than intersections. "Non-intersections" as used below includes mid-block crossings, driveway crossings, etc.
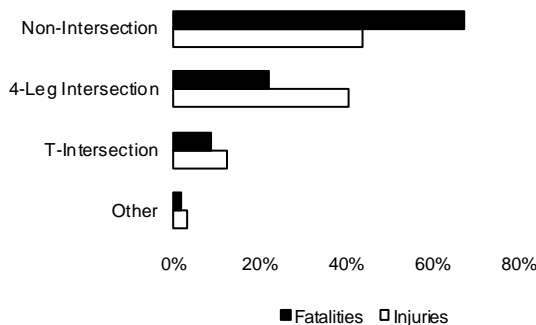
Intersection	Fatalities	Injuries
Non-Intersection	116 (67.4%)	1,853 (43.9%)
4-Leg Intersection	38 (22.1%)	1,710 (40.5%)
T-Intersection	15 (8.7%)	518 (12.3%)
Other	3 (1.7%)	137 (3.3%)
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**

Note: The totals in the table do not include an additional 48 pedestrians who were not fatally injured or injured or where their injury severity was

Peds & Bikes

Pedestrian Fatalities and Injuries by Road Type*

As the graph shows, just under half of pedestrians were injured on local roads, whereas the majority of pedestrian fatalities occurred on non-interstate state roadways.
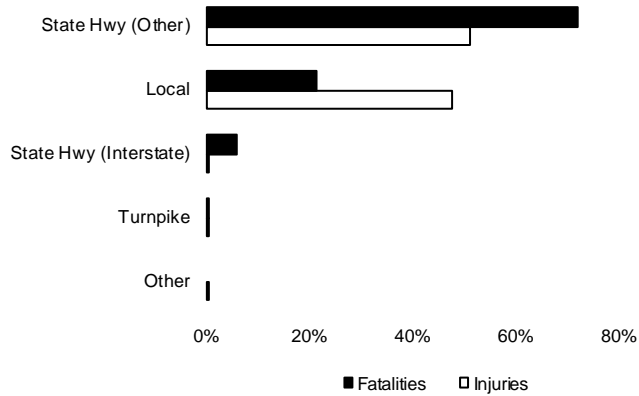
Note: The totals in the table do not include an additional 48 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

Road Type	Fatalities	Injuries
State Hwy (Other)	124 (72.1%)	2,162 (51.3%)
Local	37 (21.5%)	2,019 (47.9%)
State Hwy (Interstate)	10 (5.8%)	25 (0.6%)
Turnpike	1 (0.6%)	8 (0.2%)
Other	0 (0.0%)	4 (0.1%)
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**

*Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Pedestrian Fatalities and Injuries

As the graph shows, most pedestrian fatalities and injuries occurred in areas without traffic control devices (TCDs). These areas accounted for 124 pedestrian fatalities and 2,171 injuries.
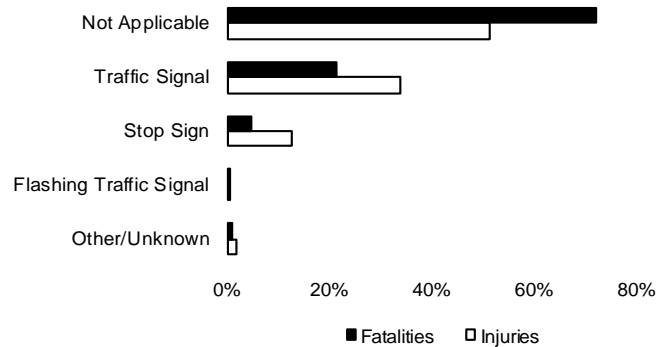
Note: The totals in the table do not include an additional 48 pedestrians who were not fatally injured or injured or where their injury severity was unknown.

Traffic Control Device	Fatalities	Injuries
Not Applicable	124 (72.1%)	2,171 (51.5%)
Traffic Signal	37 (21.5%)	1,429 (33.9%)
Stop Sign	8 (4.7%)	528 (12.5%)
Flashing Traffic Signal	1 (0.6%)	14 (0.3%)
Other/Unknown	2 (1.2%)	76 (1.8%)
TOTAL	**172 (100.0%)**	**4,218 (100.0%)**

Bicycle Crashes—Five-Year Trends

The total number of bicycle crashes increased in 2016, but remained very consistent over the last 5 years; bicycle fatalities have fluctuated over the same time period, however, and in 2013 were the lowest.

Year	Total Crashes	Fatalities
2012	1,369	16
2013	1,383	11
2014	1,309	19
2015	1,272	16
2016	1,304	16

Total Crashes

2012	1,369
2013	1,383
2014	1,309
2015	1,272
2016	1,304

Fatalities

2012	16
2013	11
2014	19
2015	16
2016	16

Bicycle Fatalities and Injuries by Age

Children ages 5 to 14 were the most vulnerable to fatal injury and injury while riding a bicycle. A fifth of the injuries involving bicycles were suffered by this age group. 2 of the 16 bicyclist fatalities were in this age group. Another vulnerable group, persons ages 15 to 19, suffered 1 fatality and accounted for 14.6% of the total injuries.

Victim's Age	Fatalities	Injuries
0-4	0 (0.0%)	4 (0.3%)
5-9	0 (0.0%)	67 (5.2%)
10-14	2 (12.5%)	188 (14.5%)
15-19	1 (6.3%)	189 (14.6%)
20-34	2 (12.5%)	429 (33.1%)
35-44	2 (12.5%)	127 (9.8%)
45-54	5 (31.3%)	143 (11.0%)
55-64	3 (18.8%)	101 (7.8%)
65-74	1 (6.3%)	29 (2.2%)
75+	0 (0.0%)	11 (0.9%)
Unknown	0 (0.0%)	10 (0.8%)
TOTAL	**16 (100.0%)**	**1,298 (100.0%)**

The totals in the table do not include an additional 12 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

Peds & Bikes

Bicycle Fatalities and Injuries by Light Level

The majority of bicyclists' injuries occurred during daylight hours. However, several of the fatalities occurred during non-daylight conditions. These fatalities totaled 38% of total bicyclists' fatalities in 2016 compared to 44% in 2015.

Light Level	Fatalities	Injuries
Dawn	1 (6.3%)	18 (1.4%)
Daylight	10 (62.5%)	983 (75.7%)
Dark (Street Lights)	3 (18.8%)	226 (17.4%)
Dark (No/Unk St Lights)	2 (12.5%)	39 (3.0%)
Dusk	0 (0.0%)	32 (2.5%)
Other/Unknown	0 (0.0%)	0 (0.0%)
TOTAL	**16 (100.0%)**	**1,298 (100.0%)**

Note: The totals in the table do not include an additional 12 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

Bicycle Fatalities and Injuries by Intersection

In 2016, the majority of bicyclists were injured at intersections and fatally injured at non-intersections.
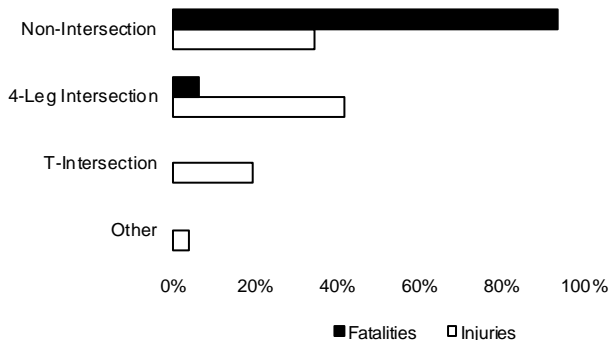
Intersection	Fatalities	Injuries
Non-Intersection	15 (93.8%)	449 (34.6%)
4-Leg Intersection	1 (6.3%)	545 (42.0%)
T-Intersection	0 (0.0%)	254 (19.6%)
Other	0 (0.0%)	50 (3.9%)
TOTAL	**16 (100.0%)**	**1,298 (100.0%)**

Note: The totals in the table do not include an additional 12 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

Bicycle Fatalities and Injuries by Traffic Control Device

In 2016, injuries occurred more often at traffic control devices (TCD) than where there were no controls, but 88% of fatalities occurred where there were no controls.

Traffic Control Device	Fatalities	Injuries
Not Applicable	14 (87.5%)	599 (46.2%)
Stop Sign	1 (6.3%)	334 (25.7%)
Traffic Signal	1 (6.3%)	355 (27.4%)
Flashing Traffic Signal	0 (0.0%)	2 (0.2%)
Other/Unknown	0 (0.0%)	8 (0.6%)
TOTAL	16 (100.0%)	1,298 (100.0%)
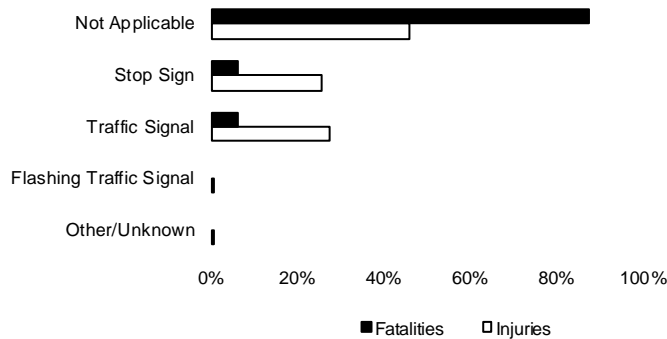
Note: The totals in the table do not include an additional 12 bicyclists who were not fatally injured or injured or where their injury severity was unknown.
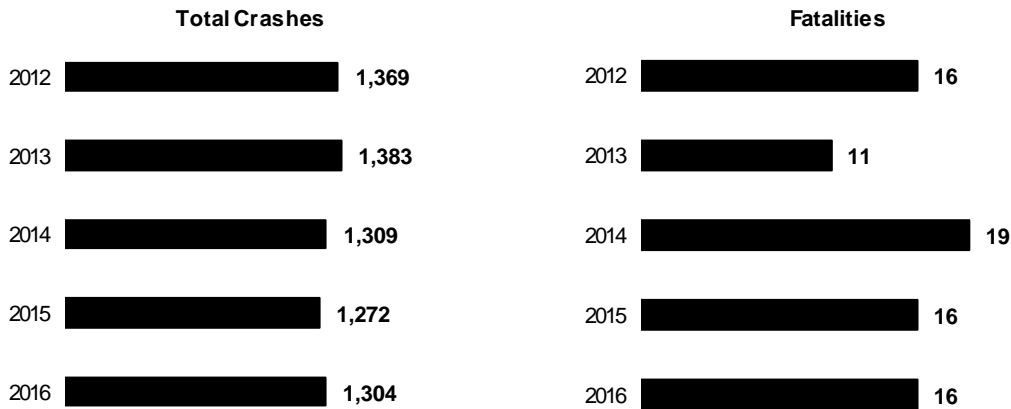
*Bicycle Fatalities and Injuries by Road Type**

88% of the fatalities of bicyclists occurred on state roads in 2016, while 51% of the injuries occurred on non-state roads.
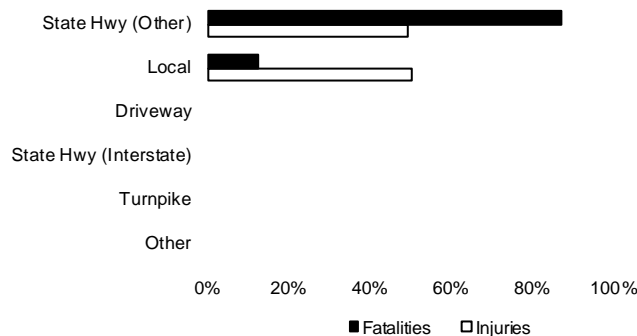
* Crashes, fatalities and injuries on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Note: The totals in the table do not include an additional 12 bicyclists who were not fatally injured or injured or where their injury severity was unknown.

Road Type	Fatalities	Injuries
State Hwy (Other)	14 (87.5%)	642 (49.5%)
Local	2 (12.5%)	656 (50.5%)
Driveway	0 (0.0%)	0 (0.0%)
State Hwy (Interstate)	0 (0.0%)	0 (0.0%)
Turnpike	0 (0.0%)	0 (0.0%)
Other	0 (0.0%)	0 (0.0%)
TOTAL	16 (100.0%)	1,298 (100.0%)

Peds & Bikes

Crashes by Motor Vehicle Type

Vehicle Crashes by Vehicle Types

	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes
Passenger Car	55.9%	70.7%	71.4%	71.0%
	608 crashes	42,322 crashes	48,893 crashes	91,823 crashes
Lt Trk/Van/SUV	43.9%	51.6%	50.1%	50.8%
	478 crashes	30,872 crashes	34,321 crashes	65,671 crashes
Heavy Truck	12.8%	4.7%	5.5%	5.2%
	139 crashes	2,831 crashes	3,770 crashes	6,740 crashes
Bicycle	1.5%	2.2%	0.0%	1.0%
	16 crashes	1,288 crashes	0 crashes	1,305 crashes
Motorcycle	17.4%	5.1%	0.3%	2.7%
	189 crashes	3,033 crashes	232 crashes	3,454 crashes
School Bus	0.4%	0.3%	0.2%	0.3%
	4 crashes	187 crashes	152 crashes	343 crashes
Commercial Bus	1.3%	0.7%	0.3%	0.5%
	14 crashes	397 crashes	175 crashes	586 crashes
Other	3.4%	1.6%	0.9%	1.2%
	37 crashes	981 crashes	585 crashes	1,603 crashes

The percentages in the table above compare the number of crashes with the total number of crashes in the crash severity category (for example, passenger cars were involved in 55.9% of all fatal injury crashes). Percentage totals exceed 100% due to multiple vehicle crashes.

Vehicle Crashes—Single Vehicle Hitting Fixed Objects

Crashes in Which a Single Vehicle Hit a Fixed Object:	**37,439**		
	Passenger Car	22,556	60.3%
	Lt Trk/Van/SUV	13,291	35.5%
	Heavy Truck	948	2.5%
	Motorcycle	527	1.4%
	School Bus	16	0.0%
	Commercial Bus	15	0.0%
	Other	86	0.2%

Vehicle Crashes—Two-Vehicle Collisions

				Vehicle Struck					
Striking Vehicle	Passenger Car	Heavy Truck	Lt Trk/ Vn/Sv	Motor-cycle	Bicycle	School Bus	Commer-cial Bus	Other/ Unknown	Total
Passenger Car	19,405	1,329	14,393	341	484	98	158	220	**36,428**
Lt Trk/Van/SUV	10,906	784	9,091	216	304	73	112	144	**21,630**
Heavy Truck	1,010	328	620	13	12	3	11	8	**2,005**
Motorcycle	465	29	379	50	6	0	4	15	**948**
Bicycle	233	8	158	1	0	0	6	6	**412**
School Bus	64	3	20	0	0	5	1	1	**94**
Commercial Bus	85	7	49	0	7	0	5	0	**153**
Other/Unknown	280	9	144	9	43	0	1	24	**510**

Passenger Car Crashes—Five-Year Trends

Total passenger car crashes in 2014 and fatal crashes in 2015 were the lowest in the last five years.

Total Crashes

Year	Crashes
2012	89,509
2013	88,512
2014	85,084
2015	89,882
2016	91,823

50,000   70,000   90,000   110,000

Fatal Injury Crashes

Year	Crashes
2012	681
2013	627
2014	610
2015	579
2016	608

400   600   800   1,000   1,200
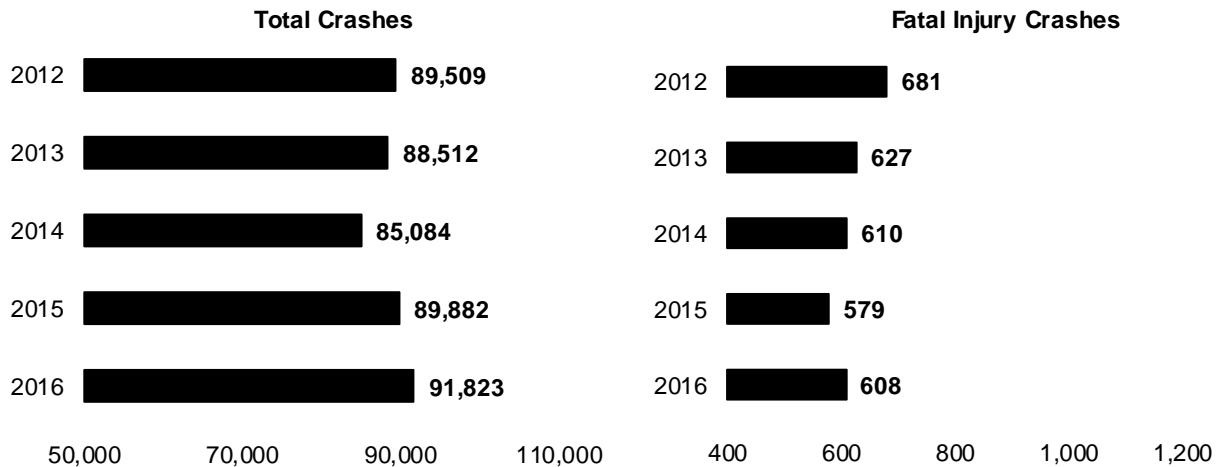
Passenger Car Fatalities by Seating Position

In 2016, 42% of crash fatalities involved passenger car occupants. The table below depicts the passenger car fatalities in 2016 by seating position.

		Position		
	Drivers 366 (74.1%)		1 →	
		Center Front 0 (0.0%)	2 →	
		Right Front 80 (16.2%)	3 →	
Total Fatalities 494	Total Passengers 121 (24.5%)	*Left Rear* 19 (3.9%)	4 →	
		Center Rear 7 (1.4%)	5 →	
		Right Rear 15 (3.0%)	6 →	
	Others 7 (1.4%)			

1 2 3
4 5 6
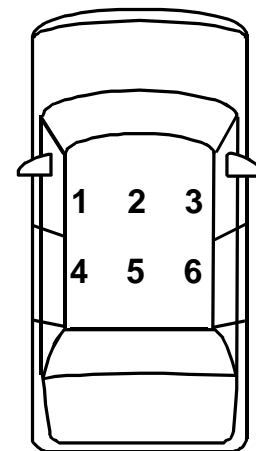
"Others" might be passengers in the rearmost seat of a station wagon; persons in a towed unit; or any person on or attached to the outside of the car.

Motorcycle Crashes—Five-Year Trends

In 2016, total motorcycle crashes increased 1.2% from 2015 while motorcycle fatal injury crashes increased 7.3% from 2015.

Total Crashes

Year	Crashes
2012	3,985
2013	3,427
2014	3,284
2015	3,413
2016	3,454

Fatal Injury Crashes

Year	Crashes
2012	205
2013	175
2014	184
2015	176
2016	189
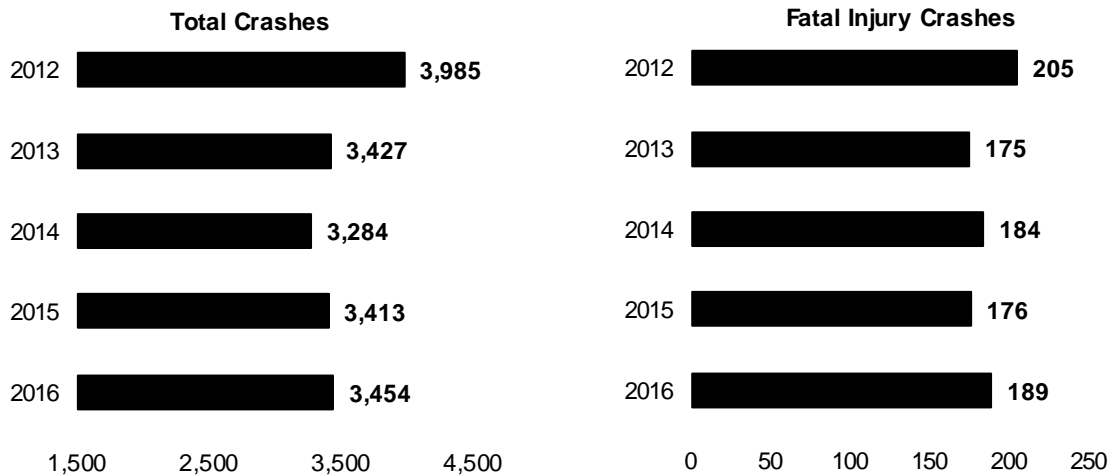
Year	Fatalities
2012	210
2013	181
2014	186
2015	179
2016	192
TOTAL	**948**

Motorcycle Fatalities—Five-Year Trends

Of the 192 fatalities in 2016 involving motorcycle drivers or passengers:

► 174 (90.6%) were drivers
► 18 (9.4%) were passengers

Motorcycle Helmet Use in Crashes

The table below shows the injury severity of motorcycle riders (driver or passenger) by helmet usage.

	Fatalities	Injuries	Not Injured	Total Motorcyclists
Helmets	90 (46.9%)	1,924 (57.9%)	233 (57.4%)	2,247 (57.3%)
No Helmets	94 (49.0%)	1,245 (37.5%)	136 (33.5%)	1,475 (37.6%)
Unknown	8 (4.2%)	152 (4.6%)	37 (9.1%)	197 (5.0%)
TOTAL	**192 (100.0%)**	**3,321 (100.0%)**	**406 (100.0%)**	**3,919 (100.0%)**

Light Truck / SUV / Van Crashes—Five-Year Trends

Pickups, minivans, and sport utility vehicles have become more popular over the last 10 years. Crashes involving these vehicles increased 3.4% in 2016 from 2015 and remain high in comparison to other years.

Total Crashes

Year	Crashes
2012	59,111
2013	60,282
2014	61,307
2015	63,536
2016	65,671

20,000　35,000　50,000　65,000　80,000

Fatal Injury Crashes

Year	Crashes
2012	532
2013	498
2014	488
2015	526
2016	478

250　350　450　550
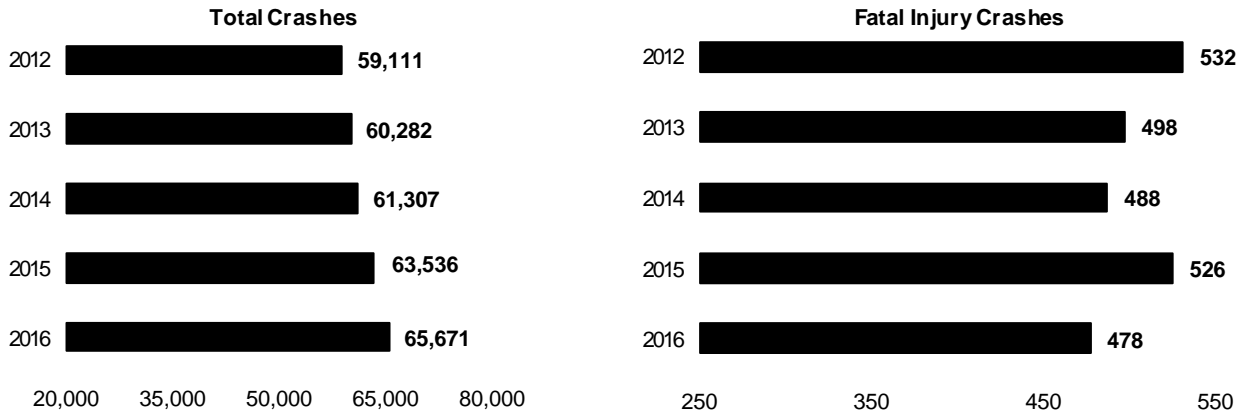
Light Truck / SUV / Van Rollovers Compared to Passenger Cars

► The percentage of 2016 light truck / SUV / van crashes were higher than passenger cars in crashes involving rollovers (5.6% of all light truck / SUV / van crashes compared to 3.6% of all passenger car crashes).

	Rollover Crashes	Rollover Fatalities
Lt Trk/Van/SUV	3,694 (5.6%)	112 (42.3%)
Passenger Cars	3,346 (3.6%)	95 (19.2%)

► In 2016 rollover crashes, the percentage of light truck / SUV / van occupant fatalities were nearly 120% higher than passenger car occupant fatalities (42.3% of fatalities compared to 19.2%).

Light Truck / SUV / Van Deaths by Seating Position

In 2016, 22.3% of crash fatalities involved occupants in light trucks, vans, and sport utility vehicles. The table below depicts these fatalities in 2016 by seating position.

	Drivers **197 (74.3%)**		1 →
		Center Front **1 (0.4%)**	2 →
		Right Front **39 (14.7%)**	3 →
Total Fatalities 265	Total Passengers **61 (23.0%)**	Left Rear **8 (3.0%)**	4 →
		Center Rear **4 (1.5%)**	5 →
		Right Rear **9 (3.4%)**	6 →
	Truck Bed/Cargo Area/Veh Extr **2 (0.8%)**		
	Towed Unit/Other **5 (1.9%)**		
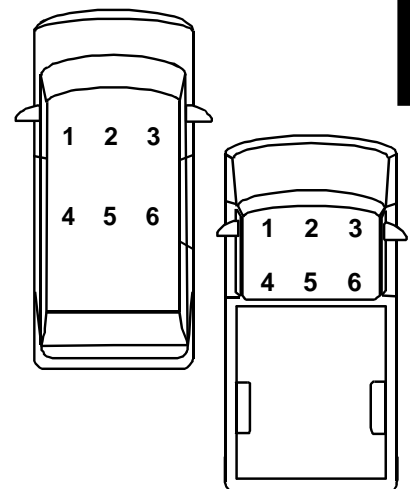
Heavy Truck Crashes—Five Year Trends

Total crashes involving heavy trucks in 2015 were the highest since 2012. Fatal injury crashes in 2015 were the lowest over the last 5 years. The totals for fatal injury crashes have stayed somewhat consistent over a number of years.

Total Crashes

Year	Crashes
2012	5,891
2013	6,124
2014	6,596
2015	6,916
2016	6,740

1,000 3,000 5,000 7,000 9,000

Fatal Injury Crashes

Year	Crashes
2012	143
2013	136
2014	136
2015	130
2016	139

80 100 120 140 160
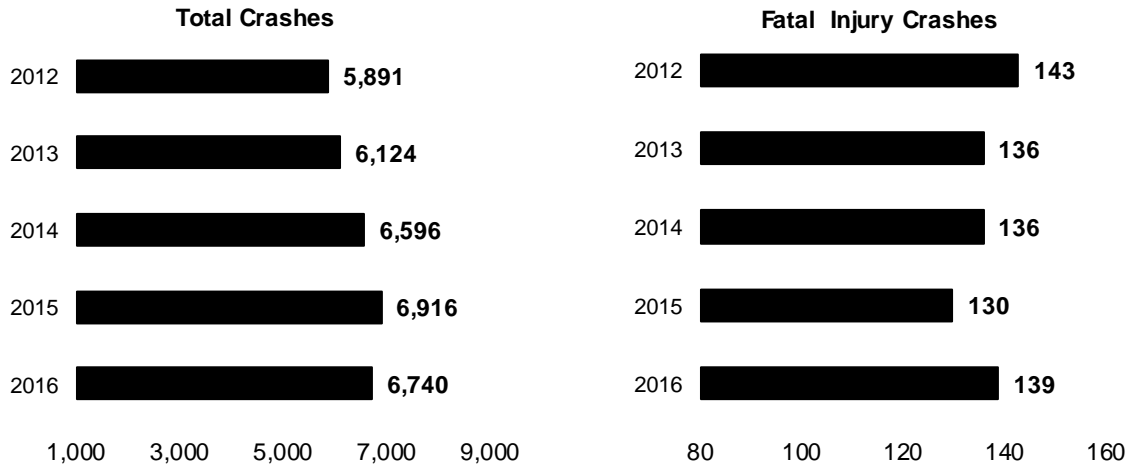
Heavy Truck Crashes Involving Vehicle Failures

The vast majority of primary factors in heavy truck vehicle failure crashes were related to tires and wheels, brakes, power train failure and total steering system failure.

Vehicle Defect	Crashes
Tire/Wheel-Related	100
Brake-Related	65
Power Train Failure	32
Total Steering System Failure	32
Unsecure Trailer/Overloaded	27
Trailer Hitch/Improper Towing	7
Suspension	6
Other Failure	5
Exhaust System Failure	0
Vehicle Lighting Related	0

Crashes by Vehicle

*Heavy Truck Crashes by Road Type**

Road Type	Crashes	Occupant Fatalities
State Hwy (Interstate)	1,850 (27.5%)	12 (46.2%)
State Hwy (Other)	3,712 (55.1%)	8 (30.8%)
Turnpike	490 (7.3%)	3 (11.5%)
Local Road	687 (10.2%)	3 (11.5%)
Other	1 (0.0%)	0 (0.0%)
TOTAL	**6,740 (100.0%)**	**26 (100.0%)**

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes and fatalities on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Hazardous Material Crashes by Road Type

Road Type	Crashes	HazMat Released
State Hwy (Interstate)	40 (26.5%)	6 (20.0%)
State Hwy (Other)	86 (57.0%)	16 (53.3%)
Turnpike	9 (6.0%)	2 (6.7%)
Local Road	16 (10.6%)	6 (20.0%)
Other	0 (0.0%)	0 (0.0%)
TOTAL	**151 (100.0%)**	**30 (100.0%)**

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.

Heavy Truck Fatalities by Seating Position

In 2016, only 2.2% of crash fatalities involved heavy truck occupants. The table below depicts the heavy truck fatalities in 2016 by seating position.

	Drivers		1 →
	25 (96.2%)		
		Center Front	2 →
Total Fatalities	Total Passengers	**0 (0.0%)**	
26	**1 (3.9%)**	*Right Front*	3 →
		1 (3.9%)	
	Others		
	0 (0.0%)		

1　2　3

"Others" might be persons in the sleeping compartment; persons in the cargo trailer; or someone on, or attached to, the outside of the truck.

Crashes by Vehicle

School Bus Crashes

Of the almost 4,000 persons involved in school bus crashes in 2016, 5 were fatally injured, and 89% suffered no injury at all. See the tables at the bottom of page 57 for a breakdown of the persons involved. As shown, no fatalities were school bus passengers.

Total persons involved: **3,960**

Persons Involved

Fatalities
(5)

Injuries
(449)
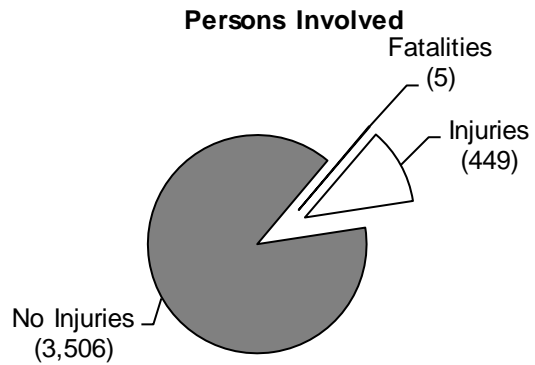
No Injuries
(3,506)

Over one half (54.5%) of school bus crashes in 2016 were injury crashes. However, as the pie chart above shows, most persons involved in school bus crashes suffer no injuries at all.

Total Crashes

Fatal Injury Crashes
(4)

PDO Crashes
(152)

Injury Crashes
(187)
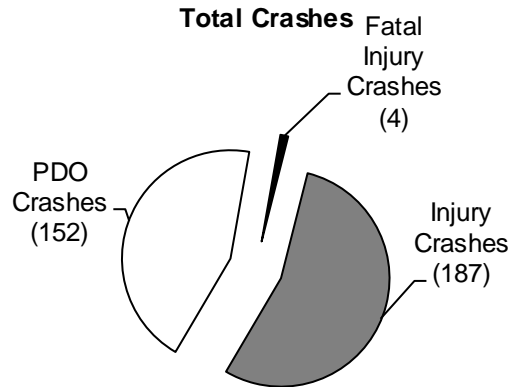
School Bus Crashes by Road Type*

Road Type	Crashes	
State Hwy (Interstate)	11	3.2%
State Hwy (Other)	234	68.2%
Turnpike	0	0.0%
Local Road	98	28.6%
Other	0	0.0%
TOTAL	**343**	**100.0%**

Note: "State Highway (Other)" includes state-maintained roads that are not designated as interstates.

*Crashes on this page occurring at locations involving multiple road types are listed once, ranked from highest class to lowest: Interstate/Turnpike, Non-Interstate State Road, and then Local.
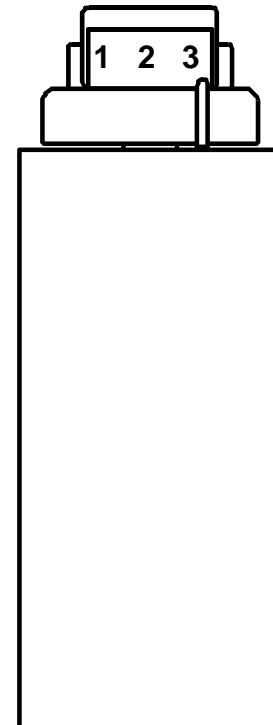
School Bus Crashes—Five-Year Trends

The total number of school bus crashes increased and the involved fatalities decreased in 2016. School bus related fatalities were 0.4% of total fatalities in 2016. None of the persons fatally injured were school bus passengers at the time of the crash, and none were school bus drivers.

Total Crashes

Year	Value
2012	393
2013	389
2014	365
2015	312
2016	343

Total Fatalities

Year	Value
2012	3
2013	5
2014	3
2015	6
2016	5
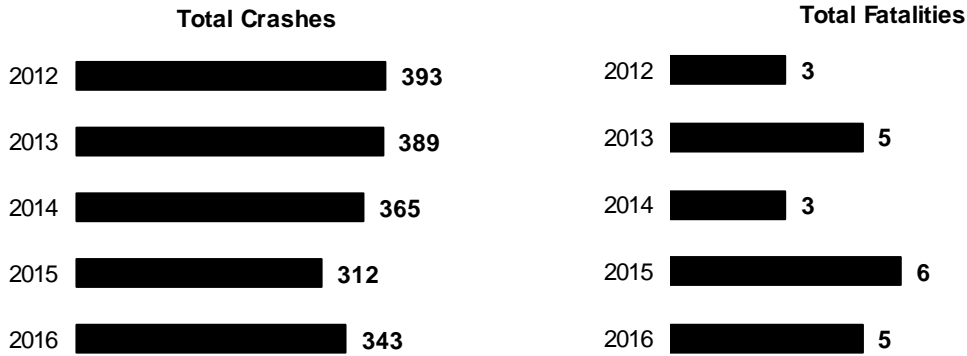
	Crash Severity					
Year	*Fatal*	*Injury*	*PDO*	*Total*	Fatalities	Injuries
2012	3	207	183	393	3	515
2013	5	203	181	389	5	397
2014	3	206	156	365	3	485
2015	6	156	150	312	6	296
2016	4	187	152	343	5	449
TOTAL	**21**	**959**	**822**	**1,802**	**22**	**2,142**

School Bus Fatalities/Injuries by Persons Involved—Five-Year Trends

The tables below show the breakdown of persons fatally injured and injured in school bus crashes. None of the persons who were fatally injured in these crashes were school bus passengers.

FATALITIES	School Bus	School Bus	School-Age	Other	Driver/ Passenger of	Other/	Total
Year	Drivers	Passengers	Pedestrians	Pedestrians	Other Vehicle	Unknown	Fatalities
2012	0	0	0	1	2	0	**3**
2013	0	0	0	3	2	0	**5**
2014	0	0	0	1	2	0	**3**
2015	0	0	1	0	5	0	**6**
2016	0	0	0	1	4	0	**5**
TOTAL	**0**	**0**	**1**	**6**	**15**	**0**	**22**

INJURIES	School Bus	School Bus	School-Age	Other	Driver/ Passenger of	Other/	Total
Year	Drivers	Passengers	Pedestrians	Pedestrians	Other Vehicle	Unknown	Injuries
2012	33	297	6	8	163	7	**514**
2013	38	198	5	8	142	6	**397**
2014	36	266	3	5	170	5	**485**
2015	29	128	0	3	126	10	**296**
2016	44	204	8	5	156	32	**449**
TOTAL	**180**	**1,093**	**22**	**29**	**757**	**60**	**2,141**

Crashes by Vehicle

Pennsylvania County Crashes

County Overview

The Commonwealth of Pennsylvania consists of 67 counties. Each county includes local municipalities, a combination of cities, boroughs, first class townships, and/or second class townships. In total, there are approximately 2,500 municipalities throughout the 67 counties. In 2016, Pennsylvania's total population was 12,784,227 people.

The ten most populated counties were:

Philadelphia (12.3%)	Allegheny (9.6%)	Montgomery (6.4%)
Bucks (4.9%)	Delaware (4.4%)	Lancaster (4.2%)
Chester (4.0%)	York (3.5%)	Berks (3.2%)
Lehigh (2.8%)	*See page 59.*	

The ten least populated counties were:

Cameron (0.04%)	Sullivan (0.05%)	Forest (0.06%)
Fulton (0.11%)	Potter (0.13%)	Montour (0.14%)
Juniata (0.19%)	Wyoming (0.22%)	Elk (0.24%)
Greene (0.29%)	*See page 59.*	

The ten counties with the most miles of state highways (maintained by PENNDOT) were:*

Westmoreland (2.98%)	Allegheny (2.96%)	York (2.85%)
Washington (2.74%)	Lancaster (2.62%)	Chester (2.56%)
Bucks (2.43%)	Crawford (2.29%)	Bradford (2.25%)
Somerset (2.22%)		

The ten counties with the most miles of local roads and streets (maintained by local municipalities) were:*

Allegheny (5.94%)	Montgomery (3.65%)	Lancaster (3.61%)
York (3.40%)	Chester (3.32%)	Bucks (3.21%)
Westmoreland (3.11%)	Berks (3.07%)	Philadelphia (2.84%)
Luzerne (2.30%)		

The ten counties with the most reported traffic crashes were:

Allegheny (9.9%)	Philadelphia (9.4%)	Montgomery (6.8%)
Bucks (4.8%)	Lancaster (4.6%)	Delaware (3.9%)
Lehigh (3.8%)	Berks (3.8%)	Chester (3.8%)
York (3.6%)	*See page 59.*	

The ten counties with the most traffic-related fatalities were:

Philadelphia (8.5%)	Allegheny (6.0%)	Bucks (4.4%)
Lancaster (3.7%)	York (3.3%)	Berks (2.9%)
Westmoreland (2.8%)	Luzerne (2.7%)	Montgomery (2.7%)
Butler (2.5%)	*See page 61.*	

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*Information provided by PENNDOT's Bureau of Planning and Research, Performance Monitoring Division. For consistency purposes, the prior year's data is used at the time of publication because of timing issues. For this Crash Facts & Statistics book, 2015 information was used.

Pennsylvania Crashes by County

The percentages compare the number to the statewide total at the bottom of the columns.

County	Population	Fatal InjuryCrashes	Injury Crashes	PDO Crashes	Total Crashes
Adams	102,180 (0.8%)	15 (1.4%)	402 (0.7%)	601 (0.9%)	**1,018 (0.8%)**
Allegheny	1,225,365 (9.6%)	67 (6.2%)	5,434 (9.1%)	7,357 (10.7%)	**12,858 (9.9%)**
Armstrong	66,486 (0.5%)	6 (0.6%)	207 (0.4%)	298 (0.4%)	**511 (0.4%)**
Beaver	167,429 (1.3%)	4 (0.4%)	527 (0.9%)	770 (1.1%)	**1,301 (1.0%)**
Bedford	48,325 (0.4%)	9 (0.8%)	284 (0.5%)	425 (0.6%)	**718 (0.6%)**
Berks	414,812 (3.2%)	35 (3.2%)	2,067 (3.5%)	2,800 (4.1%)	**4,902 (3.8%)**
Blair	124,650 (1.0%)	20 (1.8%)	636 (1.1%)	781 (1.1%)	**1,437 (1.1%)**
Bradford	60,770 (0.5%)	7 (0.6%)	239 (0.4%)	306 (0.5%)	**552 (0.4%)**
Bucks	626,399 (4.9%)	50 (4.6%)	2,815 (4.7%)	3,294 (4.8%)	**6,159 (4.8%)**
Butler	186,847 (1.5%)	28 (2.6%)	652 (1.1%)	1,152 (1.7%)	**1,832 (1.4%)**
Cambria	134,732 (1.1%)	11 (1.0%)	498 (0.8%)	718 (1.1%)	**1,227 (1.0%)**
Cameron	4,677 (0.0%)	0 (0.0%)	18 (0.0%)	22 (0.0%)	**40 (0.0%)**
Carbon	63,594 (0.5%)	10 (0.9%)	272 (0.5%)	423 (0.6%)	**705 (0.5%)**
Centre	161,464 (1.3%)	20 (1.8%)	550 (0.9%)	741 (1.1%)	**1,311 (1.0%)**
Chester	516,312 (4.0%)	24 (2.2%)	1,834 (3.1%)	3,031 (4.4%)	**4,889 (3.8%)**
Clarion	38,513 (0.3%)	4 (0.4%)	173 (0.3%)	240 (0.4%)	**417 (0.3%)**
Clearfield	80,596 (0.6%)	8 (0.7%)	364 (0.6%)	466 (0.7%)	**838 (0.7%)**
Clinton	39,233 (0.3%)	6 (0.6%)	180 (0.3%)	210 (0.3%)	**396 (0.3%)**
Columbia	66,420 (0.5%)	6 (0.6%)	333 (0.6%)	450 (0.7%)	**789 (0.6%)**
Crawford	86,257 (0.7%)	12 (1.1%)	388 (0.7%)	544 (0.8%)	**944 (0.7%)**
Cumberland	248,506 (1.9%)	25 (2.3%)	1,021 (1.7%)	1,598 (2.3%)	**2,644 (2.0%)**
Dauphin	273,707 (2.1%)	27 (2.5%)	1,447 (2.4%)	1,795 (2.6%)	**3,269 (2.5%)**
Delaware	563,402 (4.4%)	28 (2.6%)	2,428 (4.1%)	2,545 (3.7%)	**5,001 (3.9%)**
Elk	30,480 (0.2%)	9 (0.8%)	132 (0.2%)	181 (0.3%)	**322 (0.3%)**
Erie	276,207 (2.2%)	27 (2.5%)	1,292 (2.2%)	1,397 (2.0%)	**2,716 (2.1%)**
Fayette	132,733 (1.0%)	19 (1.8%)	533 (0.9%)	582 (0.9%)	**1,134 (0.9%)**
Forest	7,321 (0.1%)	3 (0.3%)	32 (0.1%)	35 (0.1%)	**70 (0.1%)**
Franklin	153,851 (1.2%)	18 (1.7%)	637 (1.1%)	880 (1.3%)	**1,535 (1.2%)**
Fulton	14,640 (0.1%)	2 (0.2%)	96 (0.2%)	130 (0.2%)	**228 (0.2%)**
Greene	37,197 (0.3%)	5 (0.5%)	129 (0.2%)	236 (0.3%)	**370 (0.3%)**
Huntingdon	45,634 (0.4%)	4 (0.4%)	185 (0.3%)	226 (0.3%)	**415 (0.3%)**
Indiana	86,364 (0.7%)	17 (1.6%)	328 (0.6%)	378 (0.6%)	**723 (0.6%)**
Jefferson	44,073 (0.3%)	8 (0.7%)	182 (0.3%)	268 (0.4%)	**458 (0.4%)**
Juniata	24,863 (0.2%)	6 (0.6%)	135 (0.2%)	146 (0.2%)	**287 (0.2%)**
Lackawanna	211,321 (1.7%)	15 (1.4%)	1,238 (2.1%)	1,437 (2.1%)	**2,690 (2.1%)**
Lancaster	538,500 (4.2%)	43 (4.0%)	2,665 (4.5%)	3,223 (4.7%)	**5,931 (4.6%)**
Lawrence	87,294 (0.7%)	10 (0.9%)	345 (0.6%)	425 (0.6%)	**780 (0.6%)**
Lebanon	138,863 (1.1%)	17 (1.6%)	672 (1.1%)	763 (1.1%)	**1,452 (1.1%)**
Lehigh	363,147 (2.8%)	23 (2.1%)	2,358 (3.9%)	2,589 (3.8%)	**4,970 (3.8%)**
Luzerne	316,383 (2.5%)	31 (2.9%)	1,641 (2.7%)	2,008 (2.9%)	**3,680 (2.8%)**
Lycoming	115,248 (0.9%)	14 (1.3%)	489 (0.8%)	598 (0.9%)	**1,101 (0.9%)**
McKean	41,883 (0.3%)	7 (0.6%)	182 (0.3%)	200 (0.3%)	**389 (0.3%)**
Mercer	112,913 (0.9%)	15 (1.4%)	545 (0.9%)	740 (1.1%)	**1,300 (1.0%)**
Mifflin	46,342 (0.4%)	3 (0.3%)	171 (0.3%)	277 (0.4%)	**451 (0.4%)**
Monroe	166,098 (1.3%)	21 (1.9%)	1,126 (1.9%)	1,474 (2.2%)	**2,621 (2.0%)**
Montgomery	821,725 (6.4%)	32 (2.9%)	4,062 (6.8%)	4,705 (6.9%)	**8,799 (6.8%)**
Montour	18,343 (0.1%)	3 (0.3%)	99 (0.2%)	115 (0.2%)	**217 (0.2%)**
Northampton	302,294 (2.4%)	24 (2.2%)	1,487 (2.5%)	1,608 (2.4%)	**3,119 (2.4%)**
Northumberland	92,541 (0.7%)	15 (1.4%)	329 (0.6%)	378 (0.6%)	**722 (0.6%)**
Perry	45,820 (0.4%)	11 (1.0%)	174 (0.3%)	278 (0.4%)	**463 (0.4%)**
Philadelphia	1,567,872 (12.3%)	93 (8.6%)	8,809 (14.7%)	3,288 (4.8%)	**12,190 (9.4%)**
Pike	55,562 (0.4%)	6 (0.6%)	252 (0.4%)	324 (0.5%)	**582 (0.5%)**
Potter	16,885 (0.1%)	2 (0.2%)	61 (0.1%)	73 (0.1%)	**136 (0.1%)**
Schuylkill	143,573 (1.1%)	13 (1.2%)	574 (1.0%)	762 (1.1%)	**1,349 (1.0%)**
Snyder	40,468 (0.3%)	4 (0.4%)	169 (0.3%)	211 (0.3%)	**384 (0.3%)**
Somerset	75,061 (0.6%)	6 (0.6%)	328 (0.6%)	442 (0.7%)	**776 (0.6%)**
Sullivan	6,137 (0.1%)	1 (0.1%)	33 (0.1%)	42 (0.1%)	**76 (0.1%)**
Susquehanna	40,862 (0.3%)	10 (0.9%)	202 (0.3%)	281 (0.4%)	**493 (0.4%)**
Tioga	41,467 (0.3%)	12 (1.1%)	165 (0.3%)	250 (0.4%)	**427 (0.3%)**
Union	45,565 (0.4%)	2 (0.2%)	189 (0.3%)	201 (0.3%)	**392 (0.3%)**
Venango	52,582 (0.4%)	9 (0.8%)	233 (0.4%)	300 (0.4%)	**542 (0.4%)**
Warren	40,025 (0.3%)	4 (0.4%)	193 (0.3%)	214 (0.3%)	**411 (0.3%)**
Washington	207,981 (1.6%)	22 (2.0%)	812 (1.4%)	1,202 (1.8%)	**2,036 (1.6%)**
Wayne	50,710 (0.4%)	10 (0.9%)	222 (0.4%)	286 (0.4%)	**518 (0.4%)**
Westmoreland	355,458 (2.8%)	31 (2.9%)	1,405 (2.4%)	1,852 (2.7%)	**3,288 (2.5%)**
Wyoming	27,521 (0.2%)	2 (0.2%)	127 (0.2%)	159 (0.2%)	**288 (0.2%)**
York	443,744 (3.5%)	37 (3.4%)	2,026 (3.4%)	2,633 (3.9%)	**4,696 (3.6%)**
TOTAL	**12,784,227 (100.0%)**	**1,088 (100.0%)**	**59,833 (100.0%)**	**68,474 (99.8%)**	**129,395 (99.9%)**

Counties

Crashes by County—Five-Year Trends

The percentages compare the number to the statewide total at the bottom of the columns.

County	2012 Crashes	2013 Crashes	2014 Crashes	2015 Crashes	2016 Crashes
Adams	995 (0.8%)	1,063 (0.9%)	1,026 (0.9%)	990 (0.8%)	1,018 (0.8%)
Allegheny	12,109 (9.8%)	11,952 (9.6%)	12,154 (10.0%)	12,665 (10.0%)	12,858 (9.9%)
Armstrong	527 (0.4%)	624 (0.5%)	526 (0.4%)	517 (0.4%)	511 (0.4%)
Beaver	1,458 (1.2%)	1,459 (1.2%)	1,404 (1.2%)	1,445 (1.1%)	1,301 (1.0%)
Bedford	669 (0.5%)	665 (0.5%)	650 (0.5%)	749 (0.6%)	718 (0.6%)
Berks	4,704 (3.8%)	4,573 (3.7%)	4,593 (3.8%)	4,831 (3.8%)	4,902 (3.8%)
Blair	1,374 (1.1%)	1,400 (1.1%)	1,277 (1.1%)	1,453 (1.1%)	1,437 (1.1%)
Bradford	776 (0.6%)	662 (0.5%)	650 (0.5%)	605 (0.5%)	552 (0.4%)
Bucks	5,900 (4.8%)	5,891 (4.8%)	5,779 (4.8%)	5,932 (4.7%)	6,159 (4.8%)
Butler	1,969 (1.6%)	2,092 (1.7%)	1,951 (1.6%)	1,847 (1.5%)	1,832 (1.4%)
Cambria	1,212 (1.0%)	1,293 (1.0%)	1,218 (1.0%)	1,197 (0.9%)	1,227 (1.0%)
Cameron	57 (0.1%)	60 (0.1%)	56 (0.1%)	42 (0.0%)	40 (0.0%)
Carbon	702 (0.6%)	722 (0.6%)	690 (0.6%)	735 (0.6%)	705 (0.5%)
Centre	1,287 (1.0%)	1,242 (1.0%)	1,210 (1.0%)	1,300 (1.0%)	1,311 (1.0%)
Chester	4,310 (3.5%)	4,517 (3.6%)	4,676 (3.9%)	4,938 (3.9%)	4,889 (3.8%)
Clarion	466 (0.4%)	496 (0.4%)	451 (0.4%)	432 (0.3%)	417 (0.3%)
Clearfield	955 (0.8%)	940 (0.8%)	840 (0.7%)	801 (0.6%)	838 (0.7%)
Clinton	428 (0.3%)	446 (0.4%)	440 (0.4%)	406 (0.3%)	396 (0.3%)
Columbia	748 (0.6%)	717 (0.6%)	727 (0.6%)	734 (0.6%)	789 (0.6%)
Crawford	874 (0.7%)	963 (0.8%)	857 (0.7%)	872 (0.7%)	944 (0.7%)
Cumberland	2,620 (2.1%)	2,564 (2.1%)	2,393 (2.0%)	2,633 (2.1%)	2,644 (2.0%)
Dauphin	2,878 (2.3%)	3,025 (2.4%)	2,969 (2.5%)	3,163 (2.5%)	3,269 (2.5%)
Delaware	4,573 (3.7%)	4,611 (3.7%)	4,546 (3.8%)	4,865 (3.8%)	5,001 (3.9%)
Elk	300 (0.2%)	325 (0.3%)	327 (0.3%)	293 (0.2%)	322 (0.3%)
Erie	2,608 (2.1%)	2,719 (2.2%)	2,736 (2.3%)	2,759 (2.2%)	2,716 (2.1%)
Fayette	1,178 (1.0%)	1,185 (1.0%)	1,184 (1.0%)	1,237 (1.0%)	1,134 (0.9%)
Forest	86 (0.1%)	84 (0.1%)	68 (0.1%)	55 (0.0%)	70 (0.1%)
Franklin	1,452 (1.2%)	1,370 (1.1%)	1,441 (1.2%)	1,504 (1.2%)	1,535 (1.2%)
Fulton	281 (0.2%)	286 (0.2%)	246 (0.2%)	264 (0.2%)	228 (0.2%)
Greene	411 (0.3%)	367 (0.3%)	382 (0.3%)	387 (0.3%)	370 (0.3%)
Huntingdon	378 (0.3%)	392 (0.3%)	358 (0.3%)	401 (0.3%)	415 (0.3%)
Indiana	786 (0.6%)	781 (0.6%)	779 (0.6%)	750 (0.6%)	723 (0.6%)
Jefferson	438 (0.4%)	508 (0.4%)	431 (0.4%)	456 (0.4%)	458 (0.4%)
Juniata	258 (0.2%)	287 (0.2%)	260 (0.2%)	285 (0.2%)	287 (0.2%)
Lackawanna	2,588 (2.1%)	2,636 (2.1%)	2,580 (2.1%)	2,587 (2.0%)	2,690 (2.1%)
Lancaster	5,249 (4.2%)	5,251 (4.2%)	5,339 (4.4%)	5,605 (4.4%)	5,931 (4.6%)
Lawrence	740 (0.6%)	748 (0.6%)	741 (0.6%)	740 (0.6%)	780 (0.6%)
Lebanon	1,403 (1.1%)	1,458 (1.2%)	1,356 (1.1%)	1,493 (1.2%)	1,452 (1.1%)
Lehigh	4,633 (3.7%)	4,632 (3.7%)	4,501 (3.7%)	4,738 (3.7%)	4,970 (3.8%)
Luzerne	3,336 (2.7%)	3,360 (2.7%)	3,297 (2.7%)	3,690 (2.9%)	3,680 (2.8%)
Lycoming	1,248 (1.0%)	1,187 (1.0%)	1,091 (0.9%)	1,161 (0.9%)	1,101 (0.9%)
McKean	351 (0.3%)	383 (0.3%)	398 (0.3%)	371 (0.3%)	389 (0.3%)
Mercer	1,280 (1.0%)	1,287 (1.0%)	1,216 (1.0%)	1,260 (1.0%)	1,300 (1.0%)
Mifflin	354 (0.3%)	418 (0.3%)	366 (0.3%)	459 (0.4%)	451 (0.4%)
Monroe	2,256 (1.8%)	2,269 (1.8%)	2,163 (1.8%)	2,504 (2.0%)	2,621 (2.0%)
Montgomery	8,385 (6.8%)	8,332 (6.7%)	8,104 (6.7%)	8,499 (6.7%)	8,799 (6.8%)
Montour	224 (0.2%)	211 (0.2%)	221 (0.2%)	251 (0.2%)	217 (0.2%)
Northampton	3,026 (2.4%)	2,954 (2.4%)	2,927 (2.4%)	3,077 (2.4%)	3,119 (2.4%)
Northumberland	707 (0.6%)	710 (0.6%)	749 (0.6%)	679 (0.5%)	722 (0.6%)
Perry	477 (0.4%)	508 (0.4%)	498 (0.4%)	463 (0.4%)	463 (0.4%)
Philadelphia	11,336 (9.1%)	11,146 (9.0%)	10,627 (8.8%)	11,544 (9.1%)	12,190 (9.4%)
Pike	593 (0.5%)	579 (0.5%)	591 (0.5%)	604 (0.5%)	582 (0.5%)
Potter	120 (0.1%)	144 (0.1%)	98 (0.1%)	105 (0.1%)	136 (0.1%)
Schuylkill	1,464 (1.2%)	1,425 (1.2%)	1,373 (1.1%)	1,381 (1.1%)	1,349 (1.0%)
Snyder	366 (0.3%)	382 (0.3%)	333 (0.3%)	398 (0.3%)	384 (0.3%)
Somerset	793 (0.6%)	808 (0.7%)	710 (0.6%)	776 (0.6%)	776 (0.6%)
Sullivan	93 (0.1%)	75 (0.1%)	70 (0.1%)	60 (0.1%)	76 (0.1%)
Susquehanna	511 (0.4%)	533 (0.4%)	523 (0.4%)	467 (0.4%)	493 (0.4%)
Tioga	511 (0.4%)	483 (0.4%)	407 (0.3%)	370 (0.3%)	427 (0.3%)
Union	345 (0.3%)	382 (0.3%)	350 (0.3%)	411 (0.3%)	392 (0.3%)
Venango	606 (0.5%)	539 (0.4%)	547 (0.5%)	541 (0.4%)	542 (0.4%)
Warren	405 (0.3%)	412 (0.3%)	382 (0.3%)	379 (0.3%)	411 (0.3%)
Washington	2,084 (1.7%)	1,972 (1.6%)	1,956 (1.6%)	1,925 (1.5%)	2,036 (1.6%)
Wayne	490 (0.4%)	507 (0.4%)	428 (0.4%)	503 (0.4%)	518 (0.4%)
Westmoreland	3,326 (2.7%)	3,209 (2.6%)	3,272 (2.7%)	3,318 (2.6%)	3,288 (2.5%)
Wyoming	348 (0.3%)	371 (0.3%)	322 (0.3%)	330 (0.3%)	288 (0.2%)
York	4,442 (3.6%)	4,472 (3.6%)	4,412 (3.6%)	4,747 (3.7%)	4,696 (3.6%)
TOTAL	**124,092 (99.8%)**	**124,149 (99.9%)**	**121,317 (99.9%)**	**127,127 (99.9%)**	**129,395 (99.9%)**

Counties

Traffic Fatalities by County—Five-Year Trends

The percentages compare the number to the statewide totals at the bottom of the columns.

County	2012 Fatalities	2013 Fatalities	2014 Fatalities	2015 Fatalities	2016 Fatalities
Adams	14 (1.1%)	5 (0.4%)	6 (0.5%)	14 (1.2%)	**15 (1.3%)**
Allegheny	67 (5.1%)	65 (5.4%)	59 (4.9%)	54 (4.5%)	**72 (6.1%)**
Armstrong	10 (0.8%)	6 (0.5%)	14 (1.2%)	14 (1.2%)	**6 (0.5%)**
Beaver	19 (1.5%)	12 (1.0%)	10 (0.8%)	12 (1.0%)	**5 (0.4%)**
Bedford	17 (1.3%)	12 (1.0%)	13 (1.1%)	7 (0.6%)	**11 (0.9%)**
Berks	50 (3.8%)	42 (3.5%)	33 (2.8%)	39 (3.3%)	**35 (3.0%)**
Blair	19 (1.5%)	24 (2.0%)	13 (1.1%)	23 (1.9%)	**22 (1.9%)**
Bradford	15 (1.2%)	15 (1.2%)	8 (0.7%)	16 (1.3%)	**10 (0.8%)**
Bucks	65 (5.0%)	44 (3.6%)	44 (3.7%)	55 (4.6%)	**52 (4.4%)**
Butler	28 (2.1%)	18 (1.5%)	25 (2.1%)	16 (1.3%)	**30 (2.5%)**
Cambria	17 (1.3%)	11 (0.9%)	13 (1.1%)	9 (0.8%)	**12 (1.0%)**
Cameron	2 (0.2%)	2 (0.2%)	1 (0.1%)	2 (0.2%)	**0 (0.0%)**
Carbon	6 (0.5%)	16 (1.3%)	10 (0.8%)	11 (0.9%)	**12 (1.0%)**
Centre	14 (1.1%)	12 (1.0%)	12 (1.0%)	15 (1.3%)	**20 (1.7%)**
Chester	31 (2.4%)	33 (2.7%)	34 (2.9%)	35 (2.9%)	**24 (2.0%)**
Clarion	7 (0.5%)	12 (1.0%)	5 (0.4%)	4 (0.3%)	**4 (0.3%)**
Clearfield	20 (1.5%)	15 (1.2%)	14 (1.2%)	20 (1.7%)	**9 (0.8%)**
Clinton	12 (0.9%)	9 (0.8%)	9 (0.8%)	10 (0.8%)	**6 (0.5%)**
Columbia	9 (0.7%)	6 (0.5%)	11 (0.9%)	14 (1.2%)	**7 (0.6%)**
Crawford	15 (1.2%)	29 (2.4%)	14 (1.2%)	8 (0.7%)	**12 (1.0%)**
Cumberland	18 (1.4%)	15 (1.2%)	25 (2.1%)	13 (1.1%)	**28 (2.4%)**
Dauphin	24 (1.8%)	25 (2.1%)	17 (1.4%)	19 (1.6%)	**30 (2.5%)**
Delaware	28 (2.1%)	27 (2.2%)	26 (2.2%)	21 (1.8%)	**29 (2.4%)**
Elk	4 (0.3%)	8 (0.7%)	7 (0.6%)	4 (0.3%)	**11 (0.9%)**
Erie	28 (2.1%)	35 (2.9%)	30 (2.5%)	31 (2.6%)	**27 (2.3%)**
Fayette	20 (1.5%)	17 (1.4%)	18 (1.5%)	28 (2.3%)	**22 (1.9%)**
Forest	1 (0.1%)	5 (0.4%)	0 (0.0%)	0 (0.0%)	**4 (0.3%)**
Franklin	19 (1.5%)	20 (1.7%)	26 (2.2%)	25 (2.1%)	**20 (1.7%)**
Fulton	4 (0.3%)	1 (0.1%)	9 (0.8%)	5 (0.4%)	**2 (0.2%)**
Greene	16 (1.2%)	8 (0.7%)	12 (1.0%)	6 (0.5%)	**5 (0.4%)**
Huntingdon	5 (0.4%)	14 (1.2%)	11 (0.9%)	7 (0.6%)	**4 (0.3%)**
Indiana	8 (0.6%)	15 (1.2%)	9 (0.8%)	17 (1.4%)	**21 (1.8%)**
Jefferson	9 (0.7%)	8 (0.7%)	5 (0.4%)	7 (0.6%)	**11 (0.9%)**
Juniata	3 (0.2%)	6 (0.5%)	5 (0.4%)	12 (1.0%)	**6 (0.5%)**
Lackawanna	16 (1.2%)	23 (1.9%)	17 (1.4%)	19 (1.6%)	**20 (1.7%)**
Lancaster	47 (3.6%)	45 (3.7%)	62 (5.2%)	48 (4.0%)	**44 (3.7%)**
Lawrence	11 (0.8%)	7 (0.6%)	10 (0.8%)	11 (0.9%)	**10 (0.8%)**
Lebanon	16 (1.2%)	18 (1.5%)	8 (0.7%)	19 (1.6%)	**21 (1.8%)**
Lehigh	42 (3.2%)	30 (2.5%)	37 (3.1%)	38 (3.2%)	**28 (2.4%)**
Luzerne	35 (2.7%)	39 (3.2%)	38 (3.2%)	39 (3.3%)	**32 (2.7%)**
Lycoming	15 (1.2%)	10 (0.8%)	18 (1.5%)	23 (1.9%)	**15 (1.3%)**
McKean	8 (0.6%)	15 (1.2%)	8 (0.7%)	7 (0.6%)	**7 (0.6%)**
Mercer	17 (1.3%)	28 (2.3%)	14 (1.2%)	13 (1.1%)	**15 (1.3%)**
Mifflin	4 (0.3%)	9 (0.8%)	5 (0.4%)	4 (0.3%)	**3 (0.3%)**
Monroe	27 (2.1%)	25 (2.1%)	23 (1.9%)	34 (2.8%)	**29 (2.4%)**
Montgomery	44 (3.4%)	40 (3.3%)	38 (3.2%)	35 (2.9%)	**32 (2.7%)**
Montour	0 (0.0%)	1 (0.1%)	2 (0.2%)	5 (0.4%)	**3 (0.3%)**
Northampton	23 (1.8%)	18 (1.5%)	29 (2.4%)	27 (2.3%)	**29 (2.4%)**
Northumberland	9 (0.7%)	15 (1.2%)	6 (0.5%)	9 (0.8%)	**16 (1.4%)**
Perry	18 (1.4%)	9 (0.8%)	7 (0.6%)	11 (0.9%)	**11 (0.9%)**
Philadelphia	107 (8.2%)	89 (7.4%)	97 (8.1%)	94 (7.8%)	**101 (8.5%)**
Pike	6 (0.5%)	8 (0.7%)	9 (0.8%)	7 (0.6%)	**6 (0.5%)**
Potter	2 (0.2%)	3 (0.3%)	0 (0.0%)	4 (0.3%)	**2 (0.2%)**
Schuylkill	33 (2.5%)	23 (1.9%)	29 (2.4%)	15 (1.3%)	**14 (1.2%)**
Snyder	8 (0.6%)	4 (0.3%)	7 (0.6%)	9 (0.8%)	**4 (0.3%)**
Somerset	12 (0.9%)	11 (0.9%)	16 (1.3%)	12 (1.0%)	**8 (0.7%)**
Sullivan	2 (0.2%)	0 (0.0%)	1 (0.1%)	2 (0.2%)	**1 (0.1%)**
Susquehanna	15 (1.2%)	8 (0.7%)	10 (0.8%)	10 (0.8%)	**15 (1.3%)**
Tioga	10 (0.8%)	11 (0.9%)	10 (0.8%)	5 (0.4%)	**13 (1.1%)**
Union	9 (0.7%)	5 (0.4%)	7 (0.6%)	3 (0.3%)	**2 (0.2%)**
Venango	18 (1.4%)	5 (0.4%)	8 (0.7%)	2 (0.2%)	**11 (0.9%)**
Warren	7 (0.5%)	4 (0.3%)	3 (0.3%)	6 (0.5%)	**4 (0.3%)**
Washington	29 (2.2%)	29 (2.4%)	29 (2.4%)	23 (1.9%)	**22 (1.9%)**
Wayne	8 (0.6%)	6 (0.5%)	11 (0.9%)	8 (0.7%)	**12 (1.0%)**
Westmoreland	55 (4.2%)	29 (2.4%)	35 (2.9%)	41 (3.4%)	**33 (2.8%)**
Wyoming	7 (0.5%)	5 (0.4%)	8 (0.7%)	4 (0.3%)	**2 (0.2%)**
York	26 (2.0%)	44 (3.6%)	45 (3.8%)	40 (3.3%)	**39 (3.3%)**
TOTAL	**1,310 (100.0%)**	**1,208 (100.0%)**	**1,195 (100.0%)**	**1,200 (100.0%)**	**1,188 (100.0%)**

Counties

Pedestrian Fatalities by County—Five-Year Trends

County	2012	2013	2014	2015	2016
Adams	0	1	1	0	1
Allegheny	9	13	11	15	15
Armstrong	2	0	1	2	1
Beaver	3	1	0	1	1
Bedford	1	1	2	0	2
Berks	8	4	5	3	6
Blair	2	2	0	3	1
Bradford	0	0	0	4	0
Bucks	10	6	8	8	8
Butler	2	0	3	0	1
Cambria	1	0	0	3	1
Cameron	0	0	1	0	0
Carbon	0	1	1	1	0
Centre	0	1	2	1	3
Chester	2	5	5	3	4
Clarion	1	0	0	2	0
Clearfield	0	2	0	3	1
Clinton	0	0	2	0	0
Columbia	1	0	0	0	0
Crawford	2	0	0	2	0
Cumberland	2	1	1	2	3
Dauphin	7	2	0	4	6
Delaware	10	3	8	2	7
Elk	0	1	0	1	0
Erie	1	4	3	5	3
Fayette	1	1	0	2	2
Forest	0	0	0	0	0
Franklin	2	2	2	0	1
Fulton	0	0	0	1	0
Greene	1	0	0	0	0
Huntingdon	0	2	2	0	0
Indiana	1	0	0	2	1
Jefferson	0	0	0	0	0
Juniata	1	1	1	1	0
Lackawanna	2	7	3	4	5
Lancaster	3	4	11	7	8
Lawrence	1	2	3	1	2
Lebanon	1	0	1	1	1
Lehigh	10	6	9	4	1
Luzerne	6	8	3	6	4
Lycoming	2	0	2	1	3
McKean	1	0	0	0	0
Mercer	0	2	2	0	1
Mifflin	0	4	1	0	2
Monroe	1	0	1	4	1
Montgomery	11	9	4	9	5
Montour	0	0	0	0	0
Northampton	3	4	6	4	5
Northumberland	0	0	2	0	1
Perry	0	0	0	1	2
Philadelphia	34	37	38	26	44
Pike	1	1	0	0	0
Potter	0	0	0	0	0
Schuylkill	4	1	5	2	3
Snyder	2	1	0	1	0
Somerset	1	0	0	0	1
Sullivan	0	0	1	0	0
Susquehanna	2	0	2	1	0
Tioga	0	0	0	0	0
Union	1	0	0	0	0
Venango	1	0	2	0	1
Warren	0	0	0	0	0
Washington	1	4	4	3	2
Wayne	1	0	1	0	0
Westmoreland	6	0	3	4	5
Wyoming	1	0	0	0	0
York	2	7	3	3	7
TOTAL	**168**	**151**	**166**	**153**	**172**

Counties

Pedestrian Fatalities and Injuries by Age Group by County

County	Age 0-4 Fatality	Age 0-4 Injury	Age 5-9 Fatality	Age 5-9 Injury	Age 10-14 Fatality	Age 10-14 Injury	Age 15-59 Fatality	Age 15-59 Injury	Age 60+ Fatality	Age 60+ Injury	Total Fatality	Total Injury
Adams	0	0	0	1	0	4	1	8	0	4	1	17
Allegheny	0	6	0	17	0	24	12	273	3	81	15	401
Armstrong	0	0	0	0	0	0	1	0	0	3	1	3
Beaver	0	1	0	0	0	0	1	6	0	3	1	10
Bedford	0	0	0	1	0	1	1	3	1	2	2	7
Berks	0	7	0	19	0	13	4	83	2	23	6	145
Blair	0	0	0	0	0	4	1	16	0	3	1	23
Bradford	0	0	0	0	0	0	0	3	0	0	0	3
Bucks	0	1	0	2	0	6	6	63	2	11	8	83
Butler	0	0	0	1	0	0	1	5	0	4	1	10
Cambria	1	0	0	0	0	1	0	6	0	4	1	11
Cameron	0	0	0	0	0	0	0	0	0	0	0	0
Carbon	0	1	0	0	0	0	0	4	0	0	0	5
Centre	0	0	0	2	0	1	1	38	2	2	3	43
Chester	0	1	0	1	0	11	4	49	0	16	4	78
Clarion	0	0	0	0	0	2	0	5	0	1	0	8
Clearfield	0	0	0	2	0	0	1	4	0	0	1	6
Clinton	0	0	0	2	0	0	0	4	0	1	0	7
Columbia	0	0	0	0	0	1	0	8	0	1	0	10
Crawford	0	0	0	1	0	2	0	9	0	4	0	16
Cumberland	0	1	0	4	0	3	2	19	1	6	3	33
Dauphin	0	8	0	8	0	10	5	43	1	14	6	83
Delaware	0	4	0	18	0	18	4	118	3	29	7	187
Elk	0	0	0	0	0	2	0	2	0	2	0	6
Erie	0	2	0	10	0	13	3	59	0	8	3	92
Fayette	0	1	0	0	0	1	2	8	0	2	2	12
Forest	0	0	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	0	2	0	12	1	3	1	17
Fulton	0	0	0	0	0	0	0	1	0	0	0	1
Greene	0	0	0	0	0	0	0	1	0	0	0	1
Huntingdon	0	0	0	0	0	1	0	4	0	0	0	5
Indiana	0	0	0	0	0	0	1	6	0	1	1	7
Jefferson	0	0	0	0	0	0	0	2	0	3	0	5
Juniata	0	0	0	0	0	1	0	1	0	2	0	4
Lackawanna	0	0	0	5	0	7	4	64	1	15	5	91
Lancaster	1	2	0	10	1	14	4	77	2	22	8	125
Lawrence	0	0	0	0	0	2	2	13	0	1	2	16
Lebanon	0	0	0	5	0	3	1	13	0	5	1	26
Lehigh	0	8	0	16	0	24	1	102	0	26	1	176
Luzerne	0	2	0	4	0	4	4	53	0	18	4	81
Lycoming	0	0	0	4	0	1	3	15	0	9	3	29
McKean	0	0	0	1	0	2	0	5	0	1	0	9
Mercer	0	0	0	0	0	1	0	7	1	5	1	13
Mifflin	0	0	0	1	0	1	2	2	0	0	2	4
Monroe	0	0	0	0	0	1	1	16	0	2	1	19
Montgomery	0	2	1	11	0	11	1	160	3	34	5	218
Montour	0	0	0	0	0	0	0	1	0	2	0	3
Northampton	0	1	0	4	0	5	3	55	2	10	5	75
Northumberland	0	0	0	0	0	1	1	9	0	2	1	12
Perry	0	1	0	0	1	1	1	2	0	2	2	6
Philadelphia	1	60	1	134	0	154	22	1,140	15	213	39	1,701
Pike	0	0	0	1	0	0	0	3	0	2	0	6
Potter	0	0	0	0	0	0	0	0	0	0	0	0
Schuylkill	0	0	0	4	0	3	2	13	0	6	2	26
Snyder	0	0	0	0	0	0	0	5	0	3	0	8
Somerset	0	0	0	0	0	0	1	4	0	0	1	4
Sullivan	0	0	0	0	0	0	0	1	0	0	0	1
Susquehanna	0	0	0	0	0	0	0	0	0	0	0	0
Tioga	0	0	0	0	0	0	0	0	0	2	0	2
Union	0	0	0	0	0	2	0	1	0	1	0	4
Venango	0	0	0	0	0	0	1	6	0	1	1	7
Warren	0	0	0	1	0	0	0	5	0	3	0	9
Washington	0	0	0	0	0	1	2	14	0	5	2	20
Wayne	0	0	0	0	0	0	0	1	0	0	0	1
Westmoreland	0	1	0	0	0	1	3	24	2	10	5	36
Wyoming	0	0	0	0	0	0	0	2	0	1	0	3
York	1	3	0	6	0	10	2	63	4	14	7	96
TOTAL	**4**	**113**	**2**	**296**	**2**	**370**	**112**	**2,739**	**46**	**648**	**166**	**4,166**

Note: The above totals do not include any additional pedestrians of unknown age.

Percent Seat Belt Use in Crashes by County—Five-Year Trends

County	2012 Belt Use	2013 Belt Use	2014 Belt Use	2015 Belt Use	2016 Belt Use
Adams	85	87	86	86	88
Allegheny	77	78	78	80	80
Armstrong	83	81	80	87	82
Beaver	67	68	69	72	70
Bedford	86	85	88	86	90
Berks	79	78	80	80	79
Blair	87	87	86	86	84
Bradford	82	86	89	88	87
Bucks	82	81	83	85	84
Butler	87	88	88	89	89
Cambria	75	74	78	77	76
Cameron	81	84	94	95	84
Carbon	76	78	80	80	82
Centre	86	87	87	89	89
Chester	86	87	87	87	89
Clarion	86	85	89	89	88
Clearfield	81	83	80	82	85
Clinton	86	84	91	89	89
Columbia	87	88	87	88	89
Crawford	82	84	85	87	88
Cumberland	88	89	89	89	90
Dauphin	85	83	85	86	86
Delaware	75	76	77	79	79
Elk	77	73	78	79	77
Erie	79	81	81	83	83
Fayette	81	80	81	81	81
Forest	82	87	82	83	82
Franklin	82	83	84	83	87
Fulton	90	89	88	88	87
Greene	79	82	77	82	81
Huntingdon	79	79	84	83	82
Indiana	86	82	84	82	85
Jefferson	81	79	85	87	84
Juniata	85	83	81	85	79
Lackawanna	73	77	78	77	81
Lancaster	86	87	86	88	88
Lawrence	76	76	75	76	80
Lebanon	85	86	88	87	86
Lehigh	76	77	79	78	80
Luzerne	78	78	79	79	81
Lycoming	80	83	81	80	80
McKean	76	78	76	81	78
Mercer	77	80	80	78	81
Mifflin	79	79	82	82	80
Monroe	86	87	87	91	91
Montgomery	86	86	87	87	87
Montour	93	91	91	92	92
Northampton	84	86	85	87	85
Northumberland	75	75	77	80	81
Perry	84	84	84	87	86
Philadelphia	40	40	40	41	40
Pike	91	90	92	92	92
Potter	73	79	80	83	81
Schuylkill	80	82	84	85	83
Snyder	89	86	89	90	90
Somerset	84	86	86	85	84
Sullivan	77	86	92	90	90
Susquehanna	86	85	84	86	83
Tioga	87	86	86	90	91
Union	87	87	86	89	89
Venango	83	84	80	86	80
Warren	83	85	91	88	90
Washington	79	77	81	82	82
Wayne	86	84	86	83	88
Westmoreland	82	83	85	85	87
Wyoming	85	79	85	87	88
York	86	87	87	86	87
STATEWIDE	**78**	**78**	**79**	**80**	**80**

Counties

Note: Applicable Motor Vehicle Occupants who were properly restrained compared to those who were not properly restrained or where restraint usage was not reported or was not known.

Alcohol-Related Fatalities by County—Five-Year Trends

County	2012 Fatalities	2013 Fatalities	2014 Fatalities	2015 Fatalities	2016 Fatalities
Adams	8	3	1	2	4
Allegheny	10	19	19	11	19
Armstrong	1	4	7	4	1
Beaver	6	3	3	0	2
Bedford	4	3	2	2	2
Berks	17	13	6	14	11
Blair	9	8	1	8	5
Bradford	2	7	4	7	1
Bucks	26	11	14	13	16
Butler	9	1	9	3	6
Cambria	8	5	6	2	2
Cameron	1	1	1	0	0
Carbon	1	6	4	2	1
Centre	1	3	2	6	3
Chester	12	17	11	15	5
Clarion	1	6	2	1	0
Clearfield	8	3	2	9	1
Clinton	3	1	4	3	0
Columbia	2	2	3	4	1
Crawford	4	10	5	2	6
Cumberland	3	4	8	2	6
Dauphin	6	5	3	6	7
Delaware	8	7	6	7	6
Elk	2	4	4	0	1
Erie	10	13	9	6	4
Fayette	5	8	5	5	7
Forest	0	1	0	0	0
Franklin	5	2	3	2	2
Fulton	2	0	1	1	0
Greene	3	0	3	2	0
Huntingdon	1	2	6	2	2
Indiana	4	3	3	9	14
Jefferson	3	1	2	4	1
Juniata	2	0	2	3	1
Lackawanna	5	7	5	5	9
Lancaster	15	18	16	16	13
Lawrence	2	2	2	2	2
Lebanon	3	6	1	1	1
Lehigh	13	11	7	14	8
Luzerne	13	13	17	18	8
Lycoming	6	5	9	5	3
McKean	2	5	4	2	2
Mercer	9	8	3	1	3
Mifflin	1	2	0	0	1
Monroe	9	8	8	6	11
Montgomery	19	12	11	6	9
Montour	0	0	1	1	0
Northampton	4	9	8	10	14
Northumberland	2	0	0	1	4
Perry	7	7	0	1	0
Philadelphia	37	22	18	31	16
Pike	0	1	4	4	0
Potter	1	1	0	0	0
Schuylkill	5	5	6	4	3
Snyder	0	2	0	4	2
Somerset	6	7	4	3	0
Sullivan	2	0	0	1	0
Susquehanna	8	5	6	2	6
Tioga	2	2	3	1	4
Union	3	1	2	2	0
Venango	3	1	4	0	2
Warren	1	1	0	0	0
Washington	7	9	12	9	8
Wayne	2	2	1	4	7
Westmoreland	16	16	7	16	13
Wyoming	3	1	2	1	0
York	11	16	11	17	11
TOTAL	**404**	**381**	**333**	**345**	**297**

Counties

Pennsylvania Counties

Use the map below as a key to county names for other maps.

The following county-by-county maps have their data broken into five groups, with roughly the same number of counties in each group.

Total Crashes by County

Urban counties, with their higher populations, number of vehicles, and vehicle-miles of travel, lend themselves to a higher number of crashes. Referring to the map below, 57% of the total traffic crashes occurred in only 11 of Pennsylvania's 67 counties. These 11 counties appear in black on the map.
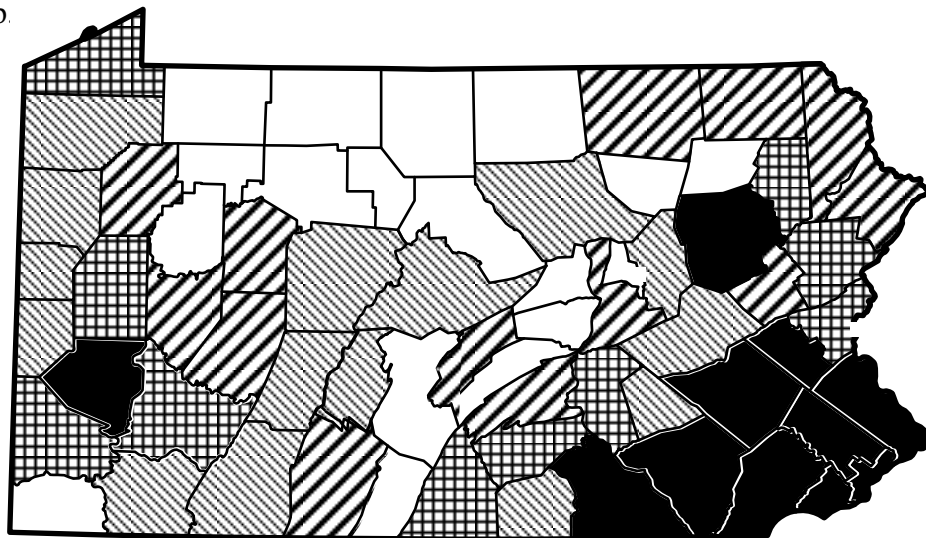
Total Crashes: ☐ 450 or less   ▨ 451-750   ▨ 751-1,500

▦ 1,501-3,600   ■ 3,601 or more

Traffic Fatalities by County

Referring to the map below, 37% of the total traffic fatalities occurred in only 9 of Pennsylvania's 67 counties. These 9 counties appear in black on the map.

Deaths:　☐ 8 or less　▨ 9-13　▨ 14-18　▦ 19-30　■ 31 or more
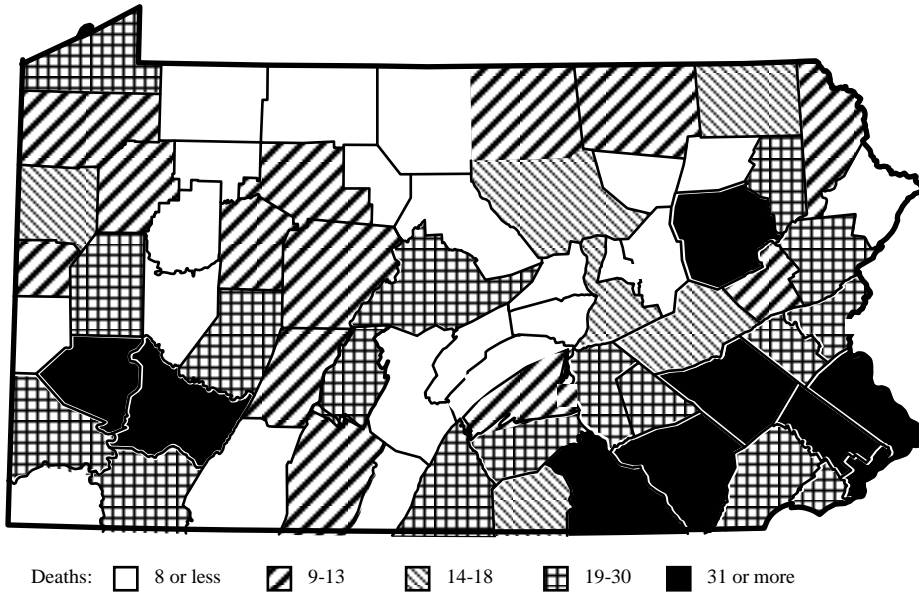
Alcohol-Related Fatalities by County

Referring to the map below, 35% of the total alcohol-related fatalities occurred in only 7 of Pennsylvania's 67 counties. These 7 counties appear in black on the map.

Deaths:　☐ 2 or less　▨ 3-4　▨ 5-7　▦ 8-11　■ 12 or more
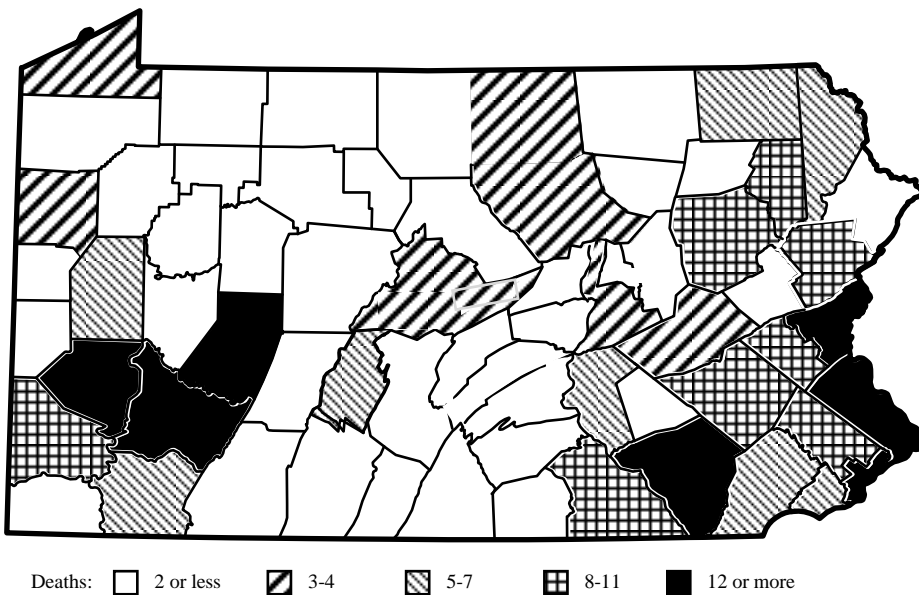
Percent Seat Belt Use in Crashes by County

While the percentage of seat belt use in crashes tended to be lower in counties with major urban areas, some rural areas also had lower seat belt use in crashes. Below the worst 2 counties having 74% or less seat belt use in crashes are shown in black on the map.
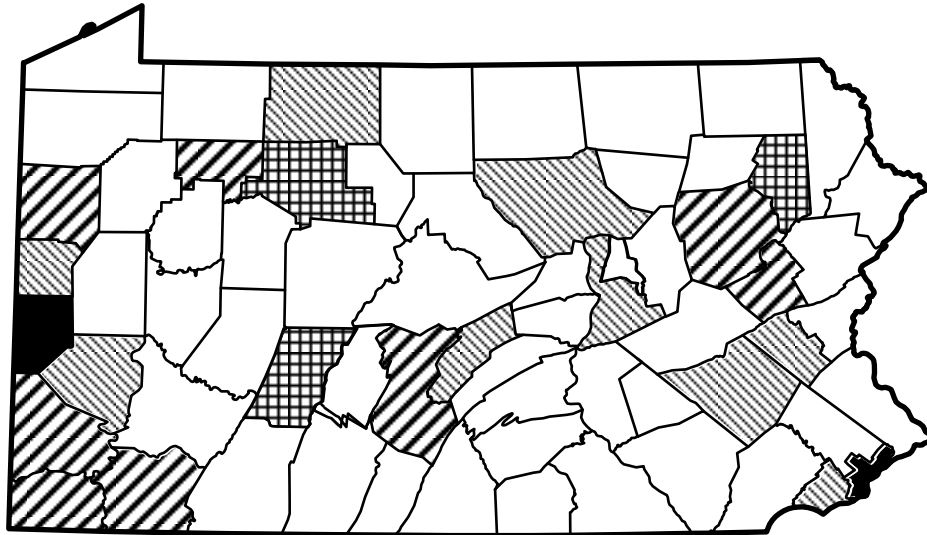
Belt Usage:
☐ 83% or more   ▨ 81%-82%   ▨ 78%-80%
▦ 75%-77%   ■ 74% or less

Pedestrian Fatalities by County

Referring to the map below, 59% of the total pedestrian fatalities occurred in only 8 of Pennsylvania's 67 counties. These 8 counties appear in black on the map.
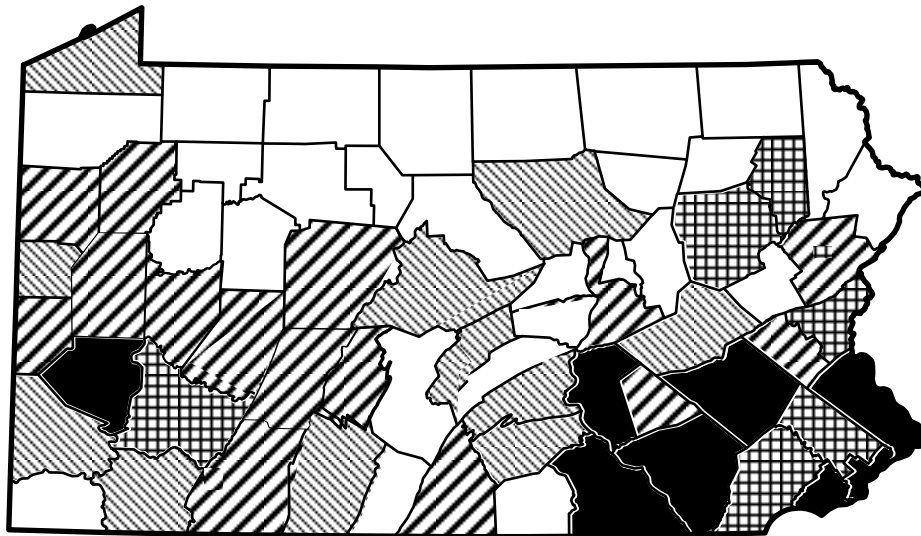
Deaths: ☐ None   ▨ 1   ▨ 2-3   ▦ 4-5   ■ 6 or more

Counties

Counties

Crashes by Engineering District

The map below illustrates the 11 PENNDOT engineering districts in Pennsylvania. The table below lists a breakdown of the number of crashes, fatalities, and injuries in 2016 by engineering district.

District	Crashes	Fatalities	Injuries
01	5,983	73	3,763
02	4,170	64	2,380
03	4,660	71	2,837
04	8,251	87	5,000
05	17,666	147	10,981
06	37,038	238	28,099
08	21,008	208	12,489
09	4,801	59	2,734
10	3,941	72	2,131
11	14,939	87	8,565
12	6,828	82	3,960
Total	**129,395**	**1,188**	**82,939**

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NEW 2016 Pennsylvania Crash Facts & Statistics Feedback Survey

The 2016 edition of the *Pennsylvania Crash Facts and Statistics* booklet continues to use the format that began with the 1996 edition. In our continuing effort to make this booklet as useful as possible, we would appreciate your taking the time to fill out this survey. Your opinions will help shape future editions including a planned major revision in the next few years.

Does this booklet provide information which is useful to you? (check one) ❑ Yes ❑ No

What information would you like to see included in a new version? _____

_____

_____

Is the format easy to follow? (check one) ❑ Yes ❑ No   Keeping in mind a new version may be electronic and possibly interactive, what suggestions do you have to make the format better and easier for you?

_____

_____

_____

Please rate the following sections of the booklet as to whether you find them Useful, Somewhat Useful, or Not Useful.

	Useful	Somewhat	Not Useful
How to Use This Booklet	❑	❑	❑
Definitions	❑	❑	❑
Overview	❑	❑	❑
All Crashes and Fatalities	❑	❑	❑
Drivers	❑	❑	❑
Alcohol-Related Crashes	❑	❑	❑
Seat Belt, Child Safety Seats, etc.	❑	❑	❑
Pedestrians and Bicycle Crashes	❑	❑	❑
Crashes by Motor Vehicle Type	❑	❑	❑
Pennsylvania County Crashes	❑	❑	❑
Index	❑	❑	❑

If you had only one suggestion for a new electronic version what would that suggestion be?

_____

Your name and organization (optional): _____

Thank you for your involvement and response.

1. Cut this page out of the booklet.
2. Fold along the dotted lines and tape shut.
3. Place a stamp where indicated.
4. Drop into the nearest mailbox.

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Pennsylvania Department and Transportation
Bureau of Maintenance And Operations
P.O. Box 2047
Harrisburg, PA 17105-2047

2016 Pennsylvania Crash Facts & Statistics Survey Form

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Dedication

The Commonwealth of Pennsylvania would like to extend its deepest sympathy to the families and friends of the victims of fatal injury motor vehicle crashes here in Pennsylvania.

We look to the day when publications such as this will no longer be necessary. Until that time, however, the Commonwealth of Pennsylvania will continue to strive to make our roads safer.

Pennsylvania Department of Transportation
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