



1996

PENNSYLVANIA CRASH FACTS & STATISTICS



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Introduction

The ***1996 Pennsylvania Crash Facts and Statistics*** booklet is a report published by the Bureau of Highway Safety and Traffic Engineering, Pennsylvania Department of Transportation. Permission is given to freely copy and distribute this booklet and the information within it.

This publication is a statistical review of reportable motor vehicle traffic crashes in the Commonwealth of Pennsylvania for calendar year 1996. 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).

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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. The format of this year's booklet differs from earlier versions, so take a little extra time to get acquainted with the layout, even if you have experience with ***Pennsylvania Crash Facts and Statistics*** booklets from previous years.

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*** 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 have been added near the outer margins to make it easier for you to thumb through the 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.

About the cover

The vehicle on the front cover was involved in a head-on collision and appraised to be a total loss. The vehicle's air bag deployed during the collision, and the driver had her seat belt fastened. She suffered a broken foot.

Head-on crashes such as the one on the cover caused 362 deaths in 1996. See page 9.

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Definitions

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.

DUI: Driving Under the Influence.

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 deaths/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 death 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 which 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 which caused the crash to be reportable 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 an road intersection, driveway, 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 engaged in minimal impact.
-  **Hit Fixed Object:** A collision in which a vehicle collides with stationary objects(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 death(s) are attributable to the crash.

Crash Severity (continued)

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

Property Damage Only (PDO): A reportable crash where no one was killed or injured, but damage to the vehicle required towing.

Injury Severity

Death: As used in this booklet, any injury which causes death within 30 days of a crash and the death is attributable to the crash.

Major Injury: Any injury, other than fatal, which by its severity requires immediate emergency transport, such as an ambulance, to a hospital or clinic for medical treatment and/or hospitalization. Major injuries would include amputation of limb(s), severe burns, etc.

Moderate Injury: Any injury which may require some form of medical treatment, but is not life-threatening or incapacitating. These injuries should be visible. Moderate injuries would include a cut which requires several stitches, or a broken finger or toe.

Minor Injury: Any injury which can be treated by first aid application, whether at the scene of the crash or in a medical facility. Complaints of injuries which are not visible, and do not appear to be of any major or moderate nature, should be considered as minor injuries.

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, passengers, and persons 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 Road: 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 a 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: Single vehicle designed for carrying a load of property on or in the vehicle. Includes: pickup truck, sport utility vehicle, van (excluding moving horse), 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 eight 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.

Special Motorized Vehicle: Includes ambulance, hearse, snowmobile, farm tractor, motorized farm equipment, self-propelled campers and homes, motorized construction equipment, dune/swamp buggy (ATV).

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

Overview

The Commonwealth of Pennsylvania is comprised of 67 counties. Each county is made up of 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 almost 119,000 miles of roads and highways; 34% (40,327 miles) are state highways maintained by the Pennsylvania Department of Transportation (PennDOT), and the remaining 66% (78,120 miles) are maintained by local municipalities.

Motor-vehicle traffic crashes which occur on Pennsylvania roads and highways are investigated and reported on by both the Pennsylvania State Police and the many (approximately 1,500) 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 1996, there were 142,867 reportable traffic crashes in Pennsylvania. These crashes claimed the lives of 1,470 people and injured another 136,949 people. To add some perspective, the 1996 total traffic deaths is 10 less than the 1,480 in 1995, and the fourth lowest since 1944, when a record low 1,328 people died on Pennsylvania highways.

In 1996, there were approximately 96.4 billion vehicle-miles of travel on Pennsylvania's roads and highways. The 1996 fatality rate of 1.52 deaths per hundred million vehicle-miles of travel was the lowest ever recorded in Pennsylvania.

1996 Briefs

On Average in Pennsylvania:

- ▶ Each day 391 reportable traffic crashes occurred (about 16 crashes every hour).
- ▶ Each day 4 persons were killed in reportable traffic crashes (one death every 6 hours).
- ▶ Each day 375 persons were injured in reportable traffic crashes (about 16 injuries every hour).

Based on Pennsylvania's 1996 population (12,056,112 people):

- ▶ 1 out of every 84 people were involved in a reportable traffic crash.
- ▶ 1 out of every 8,201 people were killed in a reportable traffic crash.
- ▶ 1 out of every 88 people were injured in a reportable traffic crash.

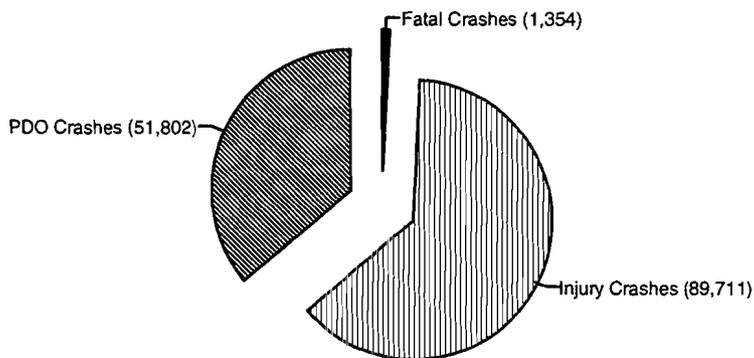
All Crashes and Deaths

—WHO WAS INVOLVED—

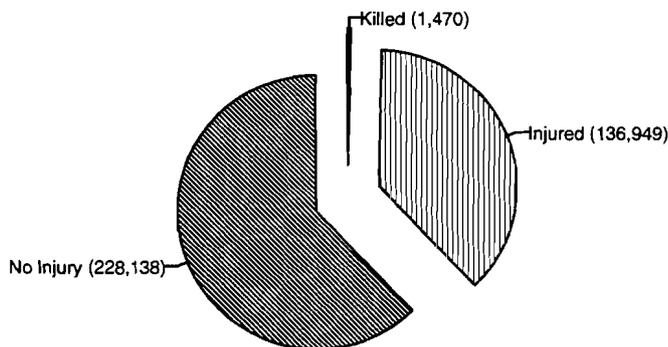
Crashes by Injury Severity

Crashes involving deaths 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 1996, most were not injured, and the vast majority who were injured suffered only minor injuries.

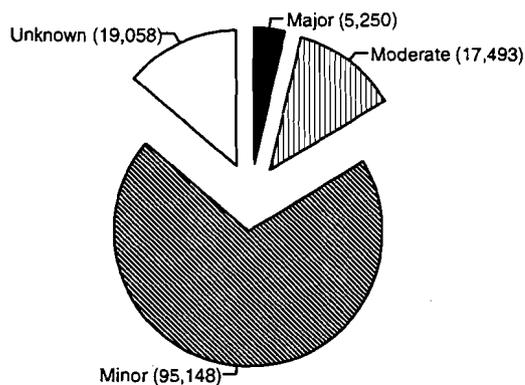
Total Crashes



Total People



Total People—Injured



Deaths and Injuries—Five-Year Trends

Total reported crashes in 1996 increased by 4.4% compared to 1995; total injuries increased by 2.8% and deaths decreased by 0.7%. Alcohol-related deaths decreased by 2.1%.

	1992	1993	1994	1995	1996
Reported Crashes	133,913	134,315	134,171	136,804	142,867
Total Deaths	1,545	1,530	1,440	1,480	1,470
Total Injuries	133,113	131,503	130,678	133,177	136,949
Major Injury	6,191	5,669	5,215	5,474	5,250
Moderate Injury	20,276	20,528	17,914	17,073	17,493
Minor Injury	84,982	85,825	89,087	92,332	95,148
Unknown Injury	21,644	19,481	18,462	18,298	19,058
Pedestrian Deaths	231	214	179	198	218
Pedestrian Injuries	6,580	6,154	6,269	6,197	5,863
Motorcyclist Deaths	90	113	112	85	98
Motorcyclist Injuries	2,675	2,811	2,626	2,584	2,320
Bicyclist Deaths	12	23	19	19	26
Bicyclist Injuries	2,659	2,628	2,619	2,742	2,403
Heavy-Truck-Related Deaths	181	200	222	198	192
Alcohol-Related Deaths	634	596	523	514	503
Speed-Related Deaths	346	401	478	468	482
Billions of Vehicle-Miles	89.0	90.8	92.3	94.5	96.4
Deaths per 100 Million Vehicle-Miles	1.74	1.68	1.56	1.57	1.52

Economic Loss Due to Reportable Traffic Crashes

Severity	Number	Average Cost	Estimated Total Costs
Deaths (persons)	1,470	\$2,718,976	\$3,996,894,720
Major Injuries (persons)	5,250	\$986,931	\$5,181,387,750
Moderate Injuries (persons)	17,493	\$65,937	\$1,153,435,941
Minor Injuries (persons)	95,148	\$5,229	\$497,528,892
Property Damage Only (crashes)	51,802	\$2,092	\$108,369,784
Unknown	19,058	\$5,229	\$99,654,282
	TOTAL		\$11,037,271,369

In 1996, the economic loss due to traffic crashes was

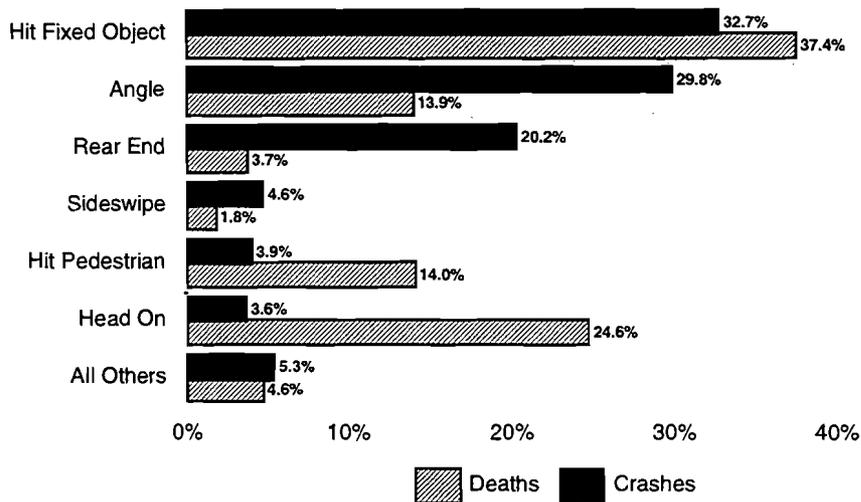
\$915

to every man, woman, and child in Pennsylvania.

Figures are based on latest PennDOT estimates (in 1996 dollars). The economic loss per Pennsylvania citizen is based on the ratio of estimated total cost to the estimated total population of Pennsylvania.

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. Head-on collisions, though they occur much less frequently, cause the second highest number of deaths.



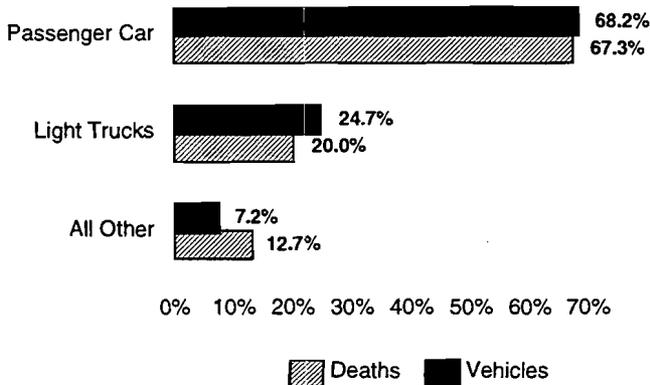
All Crashes

Crash Type	Crashes	Deaths
Angle	42,538	205
Backing Up	572	1
Head On	5,104	362
Hit Fixed Object	46,652	550
Hit Pedestrian*	5,558	206
Non-Collision	4,792	61
Rear End	28,862	54
Sideswipe	6,633	26
Other	2,156	5
TOTAL	142,867	1,470

*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, they accounted for the vast majority of crashes and occupant deaths.



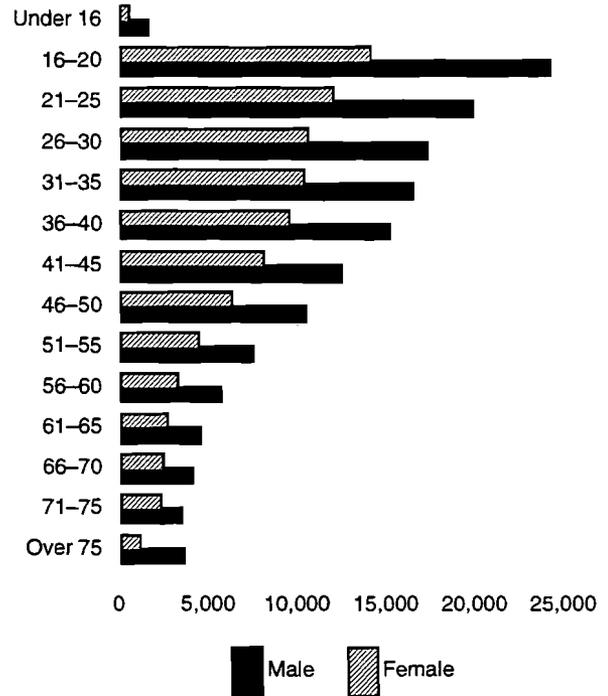
	Vehicles	Occupant Deaths
Passenger Car	164,735	842
Light Truck	59,626	251
Heavy Truck	8,320	22
Bicycle	2,407	26
Motorcycle	2,372	98
School Bus	576	0
Commercial Bus	661	1
Other	2,970	12

Driver Involvement in Crashes by Age and Sex

In every age group, male drivers are involved in more crashes than female drivers. Male drivers age 16-20 are involved in more crashes than drivers in any other age group (male or female).

All Crashes

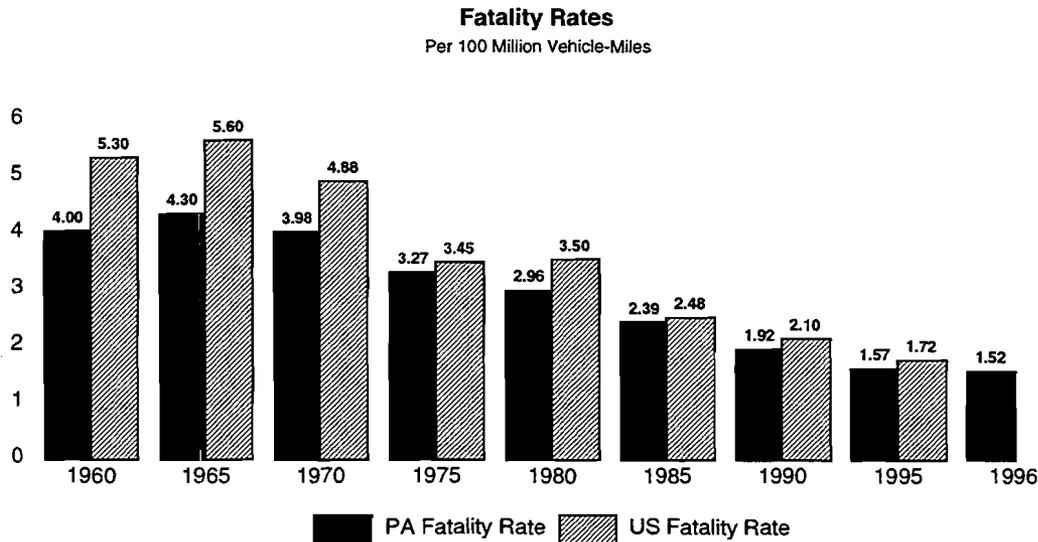
Driver	Male	Female	Total Drivers
Under 16	1,409 (0.9%)	326 (0.4%)	1,735
16-20	24,058 (16.2%)	13,934 (15.8%)	37,992
21-25	19,647 (13.2%)	11,783 (13.4%)	31,430
26-30	17,156 (11.6%)	10,392 (11.8%)	27,548
31-35	16,310 (11.0%)	10,173 (11.5%)	26,483
36-40	14,947 (10.1%)	9,367 (10.6%)	24,314
41-45	12,325 (8.3%)	7,901 (9.0%)	20,226
46-50	10,314 (7.0%)	6,180 (7.0%)	16,494
51-55	7,363 (5.0%)	4,321 (4.9%)	11,684
56-60	5,541 (3.7%)	3,079 (3.5%)	8,620
61-65	4,367 (2.9%)	2,560 (2.9%)	6,927
66-70	3,956 (2.7%)	2,284 (2.6%)	6,240
71-75	3,287 (2.2%)	2,153 (2.4%)	5,440
Over 75	4,284 (2.9%)	2,647 (3.0%)	6,931
Unknown	3,408 (2.3%)	1,016 (1.2%)	4,424
DRIVERS	148,372 (100.0%)	88,116 (100.0%)	236,488



Note: Does not include 4,418 drivers of unknown sex.

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 per 100 million vehicle-miles driven has decreased to 7% of the rate in 1935, and has been lower than the US average since 1936.



Year	Total Crashes	Total Killed	Total Injured	Registered Vehicles	Motor Vehicle Mileage*	PA Fatality Rate**	US Fatality Rate**
1928	27,082	2,080	20,223	1,713,920	-	-	-
1929	43,776	2,331	35,648	1,829,685	-	-	-
1930	47,917	2,566	99,793	1,843,539	-	-	-
1931	46,588	2,503	40,800	1,826,736	-	-	-
1932	41,004	2,131	41,836	1,750,664	-	-	-
1933	45,374	2,279	47,908	1,716,104	-	-	-
1934	52,157	2,535	51,847	1,791,870	-	-	-
1935	50,436	2,361	48,398	1,851,945	11.1	21.30	15.90
1936	55,727	2,426	50,854	1,989,507	12.6	19.20	15.10
1937	73,534	2,564	61,445	2,124,525	17.6	14.60	14.70
1938	63,153	1,892	50,598	2,101,299	16.3	11.60	12.00
1939	69,950	1,871	55,821	2,237,960	18.5	10.10	11.30
1940	78,625	2,074	58,664	2,307,723	19.8	10.50	11.40
1941	83,507	2,298	60,499	2,432,319	21.3	10.80	12.00
1942	59,280	1,745	41,122	2,267,301	17.6	9.90	10.60
1943	37,419	1,374	27,312	2,084,332	13.9	9.90	11.50
1944	42,699	1,328	29,928	2,010,163	14.4	9.20	11.50
1945	53,304	1,453	35,686	2,145,452	16.0	9.10	11.30
1946	70,065	1,794	45,889	2,387,542	22.1	8.10	9.80
1947	89,190	1,678	49,938	2,604,741	22.4	7.50	8.80
1948	103,478	1,671	52,709	2,804,056	23.9	7.00	8.10
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	67,134	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	3,803,917	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	82,792	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	51.1	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	303,774	2,025	135,308	9,124,915	69.4	2.92	3.33
1977	243,702	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	1.52	—

All Crashes

* 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

—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 occur under no adverse conditions. This can be attributable 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.

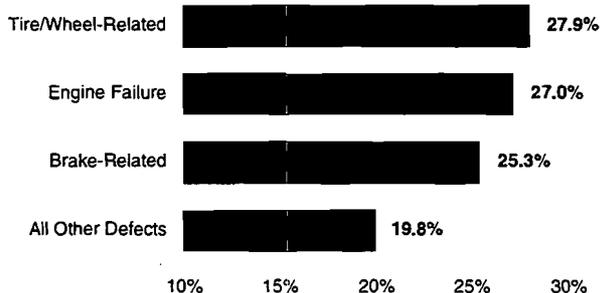
All Crashes

Weather Condition	Crashes	Deaths
No Adverse Condition	105,406 (73.8%)	1,178 (80.1%)
Rain/Rain & Fog	23,523 (16.5%)	196 (13.3%)
Snow/Sleet/Freezing Rain	11,567 (8.1%)	69 (4.7%)
Fog/Smoke, Etc.	1,542 (1.1%)	26 (1.8%)
Other	829 (0.6%)	1 (0.1%)
TOTAL	142,867 (100.0%)	1,470 (100.0%)

Road Surface Condition	Crashes	Deaths
Dry	91,338 (63.9%)	1,081 (73.5%)
Wet	32,696 (22.9%)	286 (19.5%)
Ice/Ice Patches	8,893 (6.2%)	54 (3.7%)
Snow	6,733 (4.7%)	35 (2.4%)
Other	3,207 (2.2%)	14 (1.0%)
TOTAL	142,867 (100.0%)	1,470 (100.0%)

Crashes Involving Vehicle Defects

Improperly-maintained vehicles can lead to crashes. In 1996, tire/wheel, engine, and brake-related failures contributed to the majority of vehicle defect related crashes. The percentages in the graph below refer to the number of crashes involving vehicle defects.

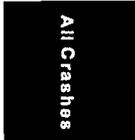
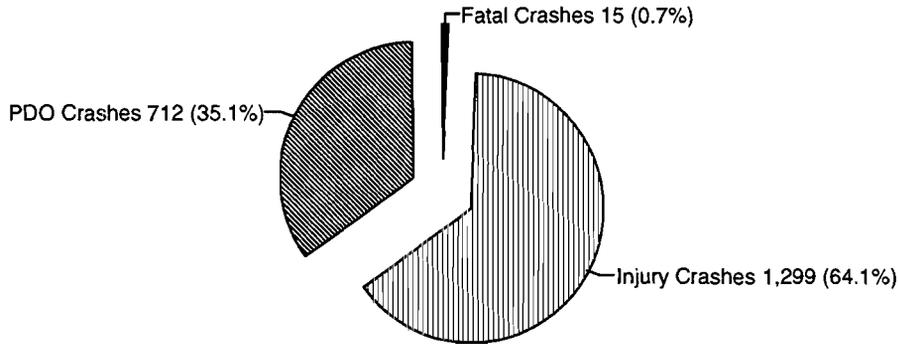


Vehicle Defect	Crashes
Tire/Wheel-Related	1,339
Engine Failure	1,299
Brake-Related	1,216
Total Steering System Failure	359
Dirty/Frosty Windshield	239
Vehicle Lighting-Related	158
Transmission Problem	107
Suspension	54
Defective Wipers	17
Defective Defrosting	13
Exhaust System Failure	6

Note that a crash may involve more than one contributing vehicle defect, such as a blowout and a brake failure in the same crash.

Work Zone Crashes

Work zones are potentially dangerous areas because conditions are constantly changing, and drivers do not always anticipate these changes and exercise the appropriate level of caution. Nearly two-thirds of work zone crashes in 1996 caused injuries.



Total Crashes: **2,026**

Total Killed: **15** (Workers Killed: **1**)

Total Injured: **1,995** (Workers Injured: **23**)

Work Zone Crashes—Vehicles Involved

Vehicle Type	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road
Passenger Car	446 (53.3%)	1,277 (64.7%)	105 (47.1%)	366 (66.5%)
Light Truck	194 (23.2%)	519 (26.3%)	53 (23.8%)	135 (24.5%)
Heavy Truck/Bus	176 (21.1%)	136 (6.9%)	60 (26.9%)	22 (4.0%)
Motorcycle	9 (1.1%)	21 (1.1%)	3 (1.3%)	7 (1.3%)
Other	11 (1.3%)	21 (1.1%)	2 (0.9%)	20 (3.6%)
TOTAL	836 (100.0%)	1,974 (100.0%)	223 (100.0%)	550 (100.0%)

Note: State highway (other) includes state-maintained roads that are not designated as interstates.

Work Zone Crashes by Road Type—Five-Year Trends

Year	Road Type	Crashes		Deaths	
		Number	% Total	Number	% Total
1992	State Hwy (Interstate)	269	19.6%	1	5.0%
	State Hwy (Other)	834	60.8%	15	75.0%
	Turnpike	104	7.6%	3	15.0%
	Local Road	165	12.0%	1	5.0%
	TOTAL	1,372	100.0%	20	100.0%
1993	State Hwy (Interstate)	441	23.2%	19	51.4%
	State Hwy (Other)	1,121	59.1%	12	32.4%
	Turnpike	136	7.2%	4	10.8%
	Local Road	199	10.5%	2	5.4%
	TOTAL	1,897	100.0%	37	100.0%
1994	State Hwy (Interstate)	525	27.1%	8	42.1%
	State Hwy (Other)	1,012	52.3%	7	36.8%
	Turnpike	133	6.9%	2	10.5%
	Local Road	265	13.7%	2	10.5%
	TOTAL	1,935	100.0%	19	100.0%
1995	State Hwy (Interstate)	477	23.9%	4	20.0%
	State Hwy (Other)	1,118	56.1%	9	45.0%
	Turnpike	87	4.4%	2	10.0%
	Local Road	312	15.6%	5	25.0%
	TOTAL	1,994	100.0%	20	100.0%
1996	State Hwy (Interstate)	448	22.1%	4	26.7%
	State Hwy (Other)	1,086	53.6%	8	53.3%
	Turnpike	130	6.4%	1	6.7%
	Local Road	273	13.5%	1	6.7%
	Ramp	89	4.4%	1	6.7%
	TOTAL	2,026	100.0%	15	100.0%

Note: State highway (other) includes state-maintained roads that are not designated as interstates.

1996 was the first year ramps were treated as a separate road type. In previous years, ramps were included within the associated road type.

Crashes with Roadside Objects and Animals

Unfortunately, roadside objects are 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 whether or not they were the first object struck.

Roadside Object	Crashes	% Total	Deaths	% Total
Hit Bridge	1,325	0.9%	39	2.7%
Hit Building	1,728	1.2%	21	1.4%
Hit Culvert	906	0.6%	25	1.7%
Hit Curb	3,968	2.8%	40	2.7%
Hit Ditch	2,933	2.1%	43	2.9%
Hit Embankment	10,857	7.6%	198	13.5%
Hit Fence	2,204	1.5%	40	2.7%
Hit Fire Hydrant	471	0.3%	3	0.2%
Hit Guiderail	6,587	4.6%	154	10.5%
Hit Impact Attenuator	47	0.0%	0	0.0%
Hit Mailbox(es)	1,543	1.1%	31	2.1%
Hit Median Barrier	3,493	2.4%	28	1.9%
Hit Obstacle on Roadway	628	0.4%	2	0.1%
Hit Other Fixed Object	1,944	1.4%	54	3.7%
Hit Overhead Structure	69	0.0%	7	0.5%
Hit Parked Vehicle	6,203	4.3%	48	3.3%
Hit Rock(s)	1,059	0.7%	18	1.2%
Hit Shrubs/Hedges	3,011	2.1%	16	1.1%
Hit Signal/Sign Support	3,202	2.2%	62	4.2%
Hit Snowbank	1,606	1.1%	15	1.0%
Hit Temporary Construction Barrier	113	0.1%	3	0.2%
Hit Traffic Island or Channelization	335	0.2%	0	0.0%
Hit Tree(s)	9,065	6.3%	255	17.3%
Hit Utility Pole(s)	10,246	7.2%	161	11.0%
Hit Wall	1,455	1.0%	23	1.6%
Hit Deer	1,904	1.3%	3	0.2%
Hit Other Animal	189	0.1%	2	0.1%

Note: “% Total” lists the percentage compared to *all* crashes or deaths, not only the ones listed in this table.

—WHERE THEY HAPPENED—

Crashes by Road Type

	State Hwy (Interstate)	State Hwy (Other)	Turnpike	Local Road	Ramp
Crashes	7,524	89,925	1,996	41,405	2,017
Persons Killed	100	1,087	19	250	14
Persons Injured	6,162	88,650	1,379	38,918	1,840
Miles of Maintained Road	1,277	39,050	505	78,120	---
100 MVM* Traveled	149.4	588.8	48.1	177.6	---
Crashes/MVM*	0.50	1.53	0.41	2.33	---
Persons Killed/100 MVM*	0.67	1.85	0.40	1.41	---
Persons Injured/MVM*	0.41	1.51	0.29	2.19	---

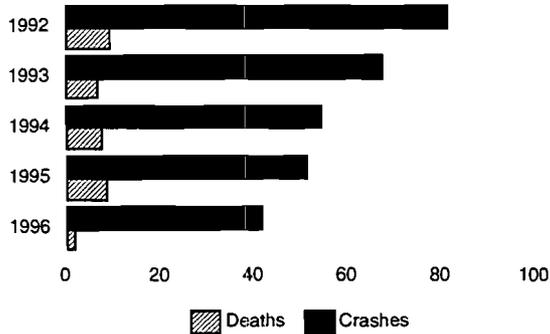
* MVM = million vehicle-miles

Note: State highway (other) includes state-maintained roads that are not designated as interstates. The road mileage and MVM data are from the 1997 Highway Performance Monitoring System (HPMS) package and reflects 1996 length and travel activity data. Ramp miles are not included in any category or total.

9

Crashes Between Trains and Other Vehicles—Five-Year Trends

Motor vehicle/train crashes are not a big problem in Pennsylvania, and they have been steadily declining over the last five years.

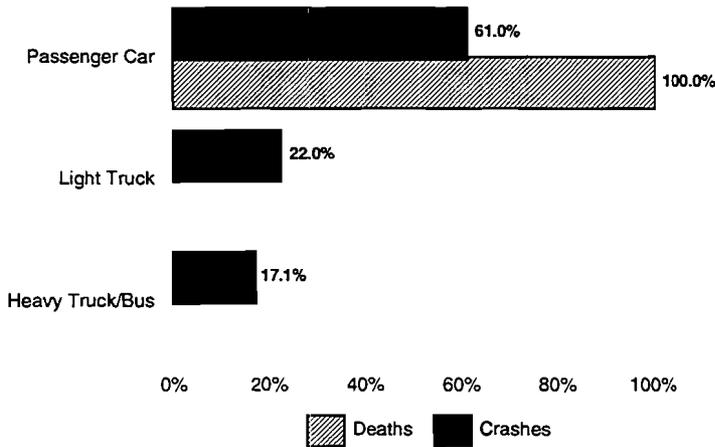


Year	Crashes	Deaths
1992	81	9
1993	67	6
1994	54	7
1995	51	8
1996	41	1

All Crashes

Train/Vehicle Crashes by Vehicle Type

Passenger cars, light trucks, and heavy trucks were the only vehicle types involved in crashes with trains in 1996.



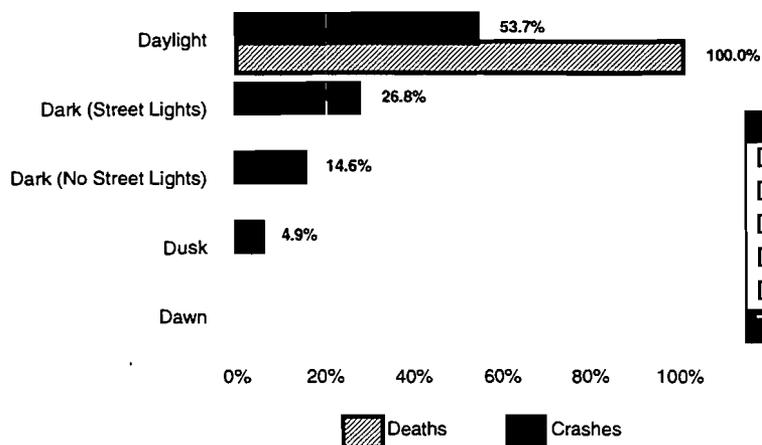
Vehicle Type	Crashes	Deaths
Passenger Car	25	1
Light Truck	9	0
Heavy Truck	7	0
School Bus	0	0
Commercial Bus	0	0
Motorcycle	0	0
Bicycle	0	0
TOTAL	41	1

Train/Vehicle Crashes by Road Type

Road Type	Crashes	Deaths
State Highway (Non-Interstate)	11	1
Local Road	30	0
TOTAL	41	1

All Crashes

Train/Vehicle Crashes by Light Level



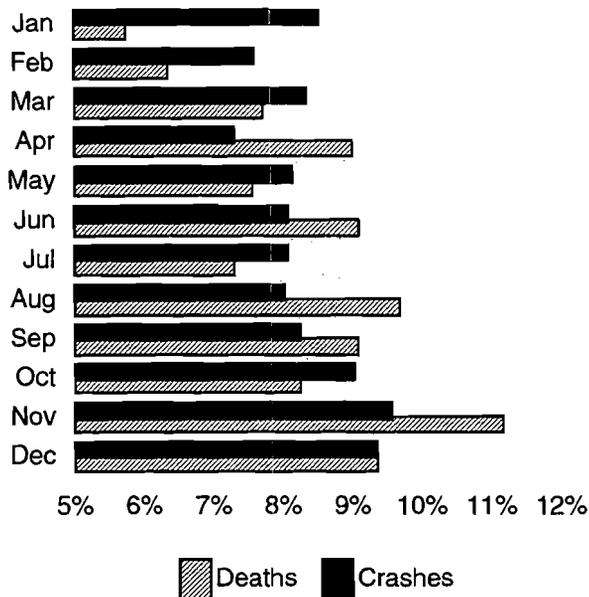
Light Level	Crashes	Deaths
Daylight	22	1
Dark (Street Lights)	11	0
Dark (No Street Lights)	6	0
Dusk	2	0
Dawn	0	0
TOTAL	41	1

Train/Vehicle Crashes by County

County	Crashes	Deaths	County	Crashes	Deaths
Allegheny	1	0	Jefferson	1	0
Berks	2	0	Lackawanna	1	0
Blair	1	0	Lawrence	1	0
Bradford	1	0	Lebanon	3	0
Bucks	1	0	Lehigh	4	0
Centre	1	0	Luzerne	1	0
Chester	1	0	Mercer	1	0
Cumberland	1	1	Northumberland	2	0
Delaware	2	0	Philadelphia	2	0
Elk	1	0	Schuylkill	1	0
Erie	2	0	Venango	1	0
Franklin	1	0	Washington	4	0
Greene	1	0	Westmoreland	1	0
Huntingdon	1	0	TOTAL	41	1
Indiana	1	0			

—WHEN THEY HAPPENED—

Crashes by Month

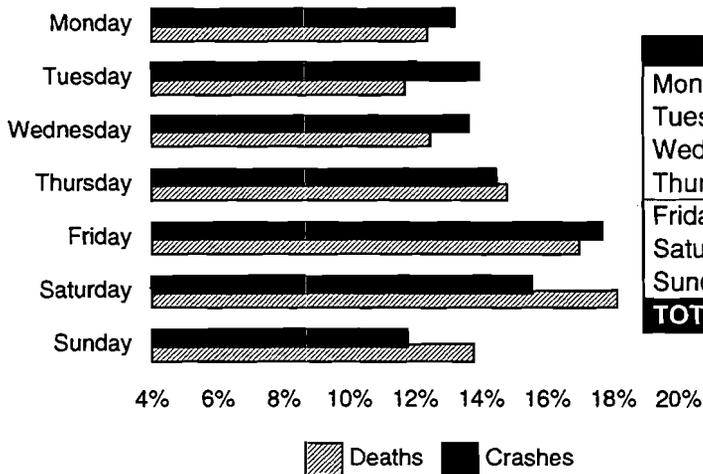


Month	Crashes	Deaths
January	12,138 (8.5%)	84 (5.7%)
February	10,833 (7.6%)	93 (6.3%)
March	11,892 (8.3%)	113 (7.7%)
April	10,409 (7.3%)	132 (9.0%)
May	11,594 (8.1%)	111 (7.6%)
June	11,502 (8.1%)	133 (9.0%)
July	11,483 (8.0%)	107 (7.3%)
August	11,410 (8.0%)	142 (9.7%)
September	11,755 (8.2%)	133 (9.0%)
October	12,876 (9.0%)	121 (8.2%)
November	13,639 (9.5%)	164 (11.2%)
December	13,336 (9.3%)	137 (9.3%)
TOTAL	142,867 (100.0%)	1,470 (100.0%)

All Crashes

Crashes by Day of Week

More crashes and deaths tend to occur on Friday and Saturdays. The number of deaths on Saturday and Sunday is proportionally greater than the number of crashes, which could be attributed to alcohol use. (See *Victims of Fatal Crashes by Day of Week*, page 29.)

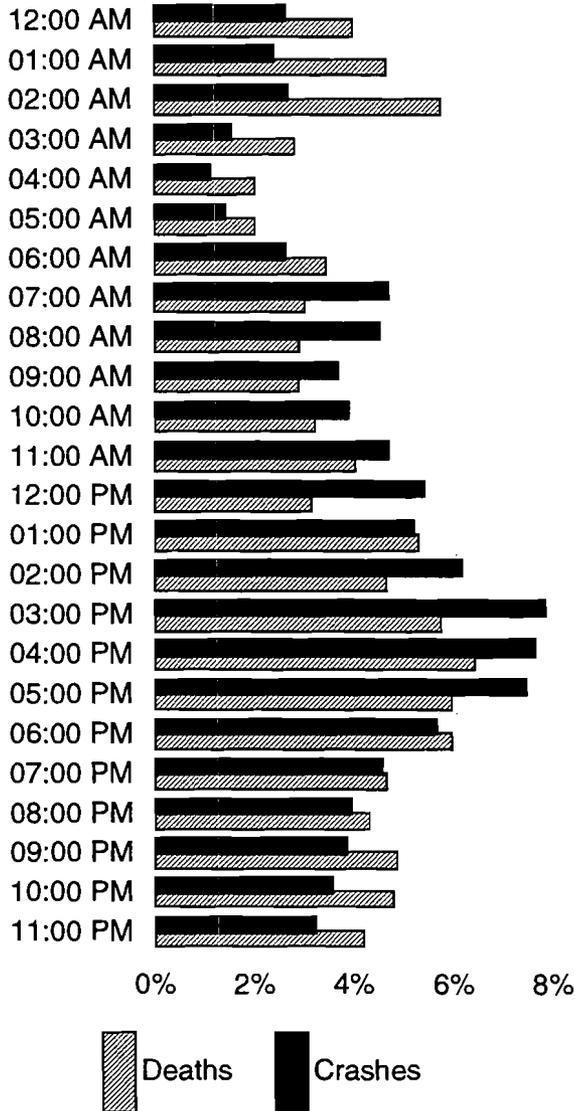


Day	Crashes	Deaths
Monday	18,802 (13.2%)	182 (12.4%)
Tuesday	19,911 (13.9%)	171 (11.6%)
Wednesday	19,476 (13.6%)	183 (12.4%)
Thursday	20,584 (14.4%)	217 (14.8%)
Friday	25,163 (17.6%)	249 (16.9%)
Saturday	22,180 (15.5%)	266 (18.1%)
Sunday	16,751 (11.7%)	202 (13.7%)
TOTAL	142,867 (100.0%)	1,470 (100.0%)

Crashes by Hour of Day

Some hours of the day are more dangerous than others with regard to crashes and deaths. Not surprisingly, crashes and deaths 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 2.7% of all crashes in 1996 occurred in the 2:00 AM hour, but 5.7% of all deaths—the third highest percentage—occurred then. The higher volume of traffic itself is a factor during peak traffic hours, particularly the rush-hours.

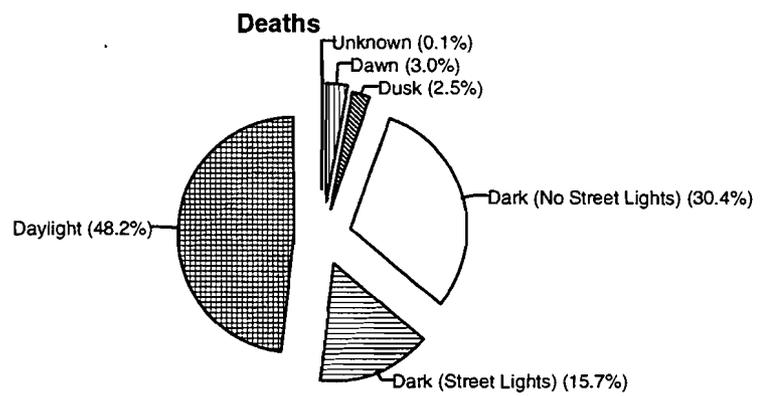
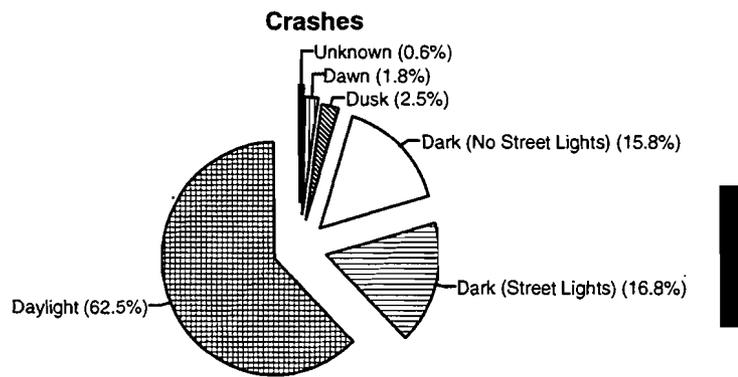
All Crashes



Hour	Crashes	Deaths
12:00 AM	3,699	58
01:00 AM	3,371	68
02:00 AM	3,802	84
03:00 AM	2,176	41
04:00 AM	1,588	29
05:00 AM	1,964	29
06:00 AM	3,695	50
07:00 AM	6,621	44
08:00 AM	6,422	42
09:00 AM	5,221	42
10:00 AM	5,507	47
11:00 AM	6,629	59
12:00 PM	7,677	46
01:00 PM	7,376	77
02:00 PM	8,737	68
03:00 PM	11,083	84
04:00 PM	10,812	94
05:00 PM	10,569	87
06:00 PM	8,025	87
07:00 PM	6,435	68
08:00 PM	5,586	63
09:00 PM	5,467	71
10:00 PM	5,045	70
11:00 PM	4,564	61

Crashes by Light Level

In 1996, 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, deaths in 1996 occurred slightly more often during non-daylight hours (dark and dusk/dawn conditions). If 1996 deaths per 1000 crashes are compared (Daylight—7.9 deaths per 1000 crashes versus Non-Daylight—14.2 deaths per 1000 crashes), it is apparent that non-daylight crashes resulted in deaths 80% more often than daylight crashes.



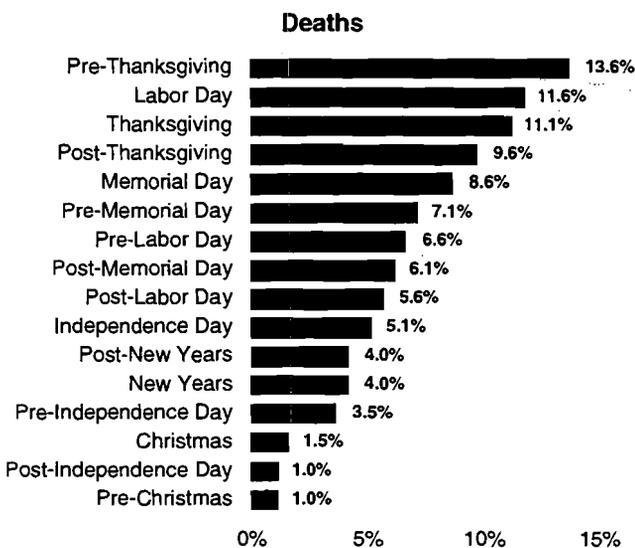
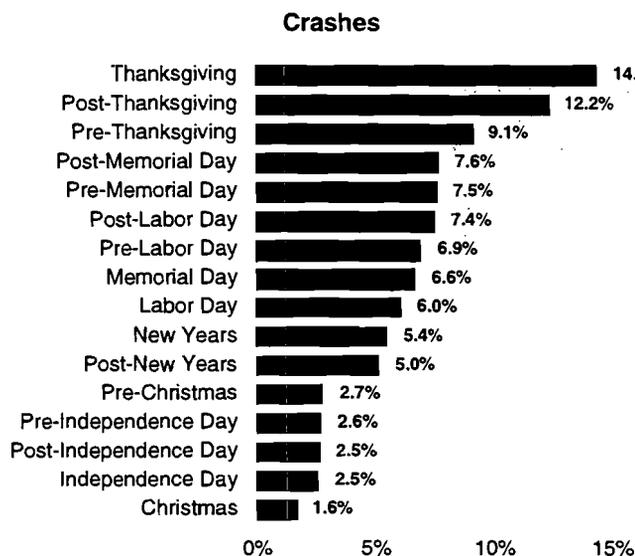
Light Level	Crashes	Deaths
Daylight	89,226	709
Dark (Street Lights)	24,009	231
Dark (No Street Lights)	22,640	447
Dusk	3,545	37
Dawn	2,629	44
Unknown	818	2
TOTAL	142,867	1,470

All Crashes

Crashes by Holiday

With few exceptions, most crashes occurred in the weekends directly before or after a holiday. Most deaths, however, occurred during the actual holiday weekend—again, with few exceptions. The graphs below illustrate the ranking, in descending order, of total crashes and deaths, respectively, for each holiday period. The table below shows a breakdown of crashes and deaths for each holiday period in 1996.

All Crashes



Period*	Crashes	Deaths
New Years**	908	8
Post-New Years**	851	8
Pre-Memorial Day	1,270	14
Memorial Day	1,112	17
Post-Memorial Day	1,284	12
Pre-Independence Day**	442	7
Independence Day**	423	10
Post-Independence Day*	429	2
Pre-Labor Day	1,159	13
Labor Day	1,009	23
Post-Labor Day	1,251	11
Pre-Thanksgiving	1,533	27
Thanksgiving	2,416	22
Post-Thanksgiving	2,068	19
Pre-Christmas**	456	2
Christmas**	276	3
TOTAL	16,887	198

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

** Not part of a holiday weekend in 1996.

Drivers

Drivers Overview

Every traffic crash involves 3 elements: the driver, highway, 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.). As a result young drivers are over-represented in single vehicle crashes, whereas mature drivers are over-represented in multiple vehicle crashes and intersection crashes.



Crashes Involving Driver Error

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

Note that a crash may involve more than one contributing factor, such as speeding and alcohol combined.

Contributing Factor	Crashes	Fatal Crashes
Speed-Related	24,769	435
Drinking Driver	11,084	392
Improper Turning-Related	12,893	79
Careless/illegal Passing	2,608	49
Proceeded Without Clearance	10,463	46
Distracted Driver	6,425	27
Drowsy Drivers	2,941	26
Tailgating	12,706	16

Single and Multiple Vehicle Crashes of Young and Mature Drivers

Young drivers are over-represented in single vehicle crashes, perhaps due to increased risk taking often associated with youth. Mature drivers are over-represented in multiple vehicle crashes, due in part to the loss of physical and cognitive abilities.

Number of Vehicles	All Drivers	Young Drivers (16-21)	Mature Drivers (65-74)	Mature Drivers (75+)
Single Vehicle Crash	40.0% 57,121 crashes	35.1% 14,429 crashes	15.7% 1,821 crashes	15.6% 1,217 crashes
Multiple Vehicle Crash	60.0% 85,746 crashes	64.9% 26,697 crashes	84.3% 9,763 crashes	84.4% 6,604 crashes

Drivers

Drivers in Crashes by Age Group

Looking at the 1996 Pennsylvania driver data, as driver age groups increase in age, the percentage of Pennsylvania licensed drivers involved in crashes within each age group decreases considerably. Also note the large population of mature Pennsylvania drivers age 70 and over.

Age Group	PA Drivers Involved in Crashes	PA Total Licensed Drivers	% Involved in Crashes
16	6,357	48,868	13.0%
17	7,985	88,347	9.0%
18	7,731	107,434	7.2%
19	6,874	117,712	5.8%
20	5,986	113,149	5.3%
21	5,751	116,608	4.9%
22-24	15,955	380,185	4.2%
25-29	25,024	744,877	3.4%
30-39	45,673	1,754,588	2.6%
40-54	45,680	2,356,276	1.9%
55-59	8,147	515,162	1.6%
60-64	6,567	456,198	1.4%
65-69	5,959	464,042	1.3%
70-74	5,145	417,078	1.2%
75 and over	7,562	540,629	1.4%
Unknown	1,173	N/A	N/A

Comparison of Young and Mature Drivers by Crash Type

Young drivers are over-represented in hit fixed object crashes (single vehicle run-off-the-road type crashes), while mature drivers are 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	3.4% 4,792 crashes	2.4% 987 crashes	1.1% 133 crashes	0.6% 50 crashes
Rear-End	20.2% 28,862 crashes	21.4% 8,812 crashes	26.4% 3,057 crashes	22.9% 1,790 crashes
Head-On	3.6% 5,104 crashes	4.0% 1,661 crashes	3.5% 404 crashes	3.2% 247 crashes
Backing Up	0.4% 572 crashes	0.4% 145 crashes	0.5% 55 crashes	0.5% 37 crashes
Angle	29.8% 42,538 crashes	33.5% 13,761 crashes	47.8% 5,536 crashes	53.1% 4,154 crashes
Sideswipe	4.6% 6,633 crashes	4.4% 1,828 crashes	4.7% 544 crashes	3.8% 295 crashes
Hit Fixed Object	32.7% 46,652 crashes	31.6% 13,007 crashes	12.7% 1,467 crashes	13.2% 1,033 crashes
Hit Pedestrian	3.9% 5,558 crashes	1.6% 643 crashes	2.6% 301 crashes	2.4% 191 crashes
Other	1.5% 2,156 crashes	0.7% 282 crashes	0.8% 87 crashes	0.3% 24 crashes

Drivers

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	41.6% 59,495 crashes	43.2% 17,769 crashes	55.0% 6,368 crashes	58.2% 4,555 crashes
Non-Intersection	58.4% 83,372 crashes	56.8% 23,357 crashes	45.0% 5,216 crashes	41.8% 3,266 crashes

Alcohol-Related Crashes

Alcohol Overview

- ▶ In Pennsylvania, drinking and driving remains a top safety issue even though significant reductions in alcohol-related incidents have occurred steadily since 1988 (856 deaths in 1988, compared to 503 in 1996; 18,637 crashes in 1988, compared to 13,343 in 1996).
- ▶ Of particular concern is the involvement of drinking drivers under the age of 21. Although there has been a 51% drop in crashes among this age group since 1988, 1995 and 1996 data reveal a 5% and 6% increase (respectively) since 1994.
- ▶ Of equal focus is the 21 to 35 age group, in which over 50% of the driver deaths involved a drinking driver.
- ▶ In 1996, alcohol-related deaths were 34.2% of the total traffic deaths, continuing the downward trend from 1995, when the death toll due to alcohol-related crashes fell to 35% for the first time ever in Pennsylvania.
- ▶ Pennsylvania's aggressive posture to prevent and deter drinking and driving (particularly through the widespread use of sobriety checkpoints and saturation patrols) has had a significant impact on the DUI problem.

Alcohol-
Related

1996 Briefs

- ▶ 503 people died in alcohol-related crashes.
- ▶ 90% of the alcohol-related occupant deaths (drivers and passengers) were in the vehicle driven by the drinking driver; 68% were the drinking drivers themselves.
- ▶ 83% of the drinking drivers in traffic crashes were male.
- ▶ 79% of the alcohol-related crashes were during the hours of darkness, usually on weekends.
- ▶ On average each day, 36 alcohol-related traffic crashes occurred.
- ▶ On average each day, 1.4 persons were killed in alcohol-related traffic crashes.
- ▶ On average each day, 35 persons were injured in alcohol-related traffic crashes.

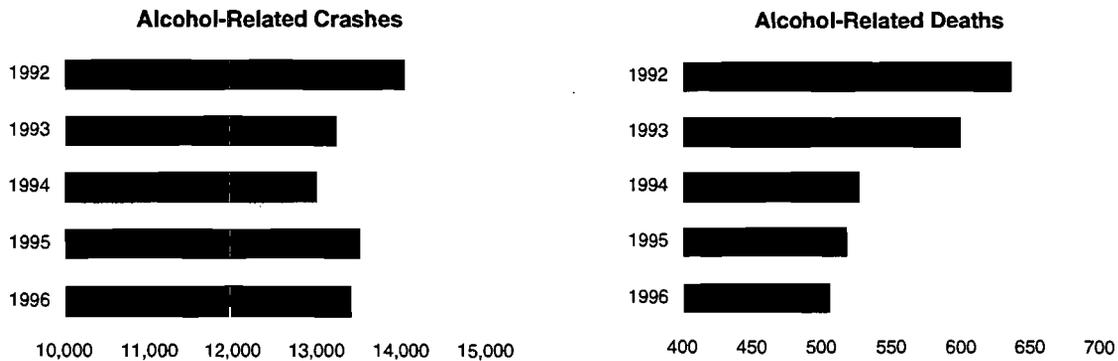
Alcohol Involvement in Crashes

Although alcohol-related crashes accounted for less than 10% of the total crashes in 1996, they resulted in 34% of all persons killed in crashes. Alcohol-related crashes were five times more likely to result in death than those not related to alcohol (3.8% of the alcohol-related crashes resulted in death, compared to 0.75% of crashes which were not alcohol-related). “PDO Crashes” in the table below refers to property damage only crashes.

	Fatal Crashes	Deaths	Injury Crashes	Injuries	PDO Crashes
Alcohol-Related	462 (34.1%)	503 (34.2%)	8,572 (9.6%)	12,760 (9.3%)	4,309 (8.3%)
Non-Alcohol-Related	892 (65.9%)	967 (65.8%)	81,139 (90.4%)	124,189 (90.7%)	47,493 (91.7%)
TOTAL	1,354 (100.0%)	1,470 (100.0%)	89,711 (100.0%)	136,949 (100.0%)	51,802 (100.0%)

Alcohol-Related Crashes—Five-Year Trends

Alcohol-related crashes and deaths dropped in 1996 (by 0.7% and 2%, respectively). Alcohol-related injuries dropped by 4%. “PDO Crashes” in the table below refers to property damage only crashes.



	1992	1993	1994	1995	1996
Crashes	13,988	13,183	12,944	13,440	13,343
Fatal Crashes	574	542	484	464	462
Injury Crashes	9,216	8,669	8,425	8,740	8,572
PDO Crashes	4,198	3,972	4,035	4,236	4,309
Deaths	634	596	523	514	503
Injuries	14,239	13,344	12,764	13,353	12,760
Fatal Crashes per 100,000 Licensed Drivers	7.1	6.7	6.0	5.7	5.7
Deaths per 100,000 Licensed Drivers	7.8	7.4	6.4	6.3	6.2

Alcohol-Related

Victims of Alcohol-Related Fatal Crashes

Of the 447 driver and passenger deaths in alcohol-related crashes, 402 (90%) were drinking drivers or their passengers. A drinking pedestrian was three times more likely to be killed than a non-drinking pedestrian in these types of crashes.

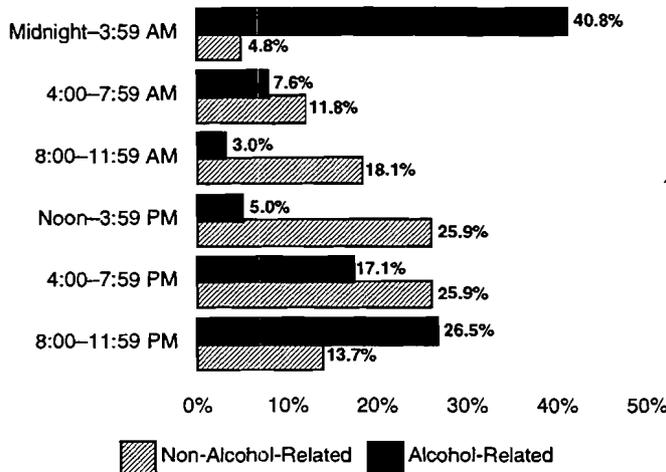
Persons Involved	Deaths
Drivers	334
<i>Drinking Drivers</i>	306 (91.6%)
<i>Non-Drinking Drivers</i>	28 (8.4%)
Passengers	113
<i>Passengers with Drinking Driver</i>	96 (85.0%)
<i>Passengers with Non-Drinking Drivers</i>	17 (15.0%)
Pedestrians	55
<i>Drinking Pedestrians</i>	42 (76.4%)
<i>Non-Drinking Pedestrians</i>	13 (23.6%)
TOTAL DEATHS*	503

*Includes 1 victim, status unknown

Alcohol-Related

Victims of Fatal Crashes by Time of Day

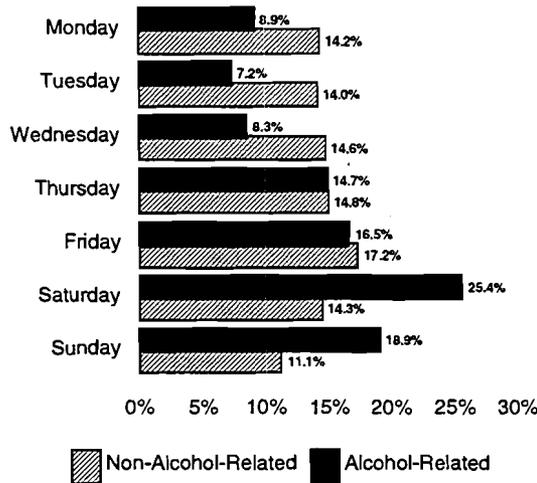
Alcohol-related crashes occurring between 8:00 PM and 4:00 AM produced the vast majority of deaths (67% of alcohol-related deaths). In contrast, half the deaths from non-alcohol-related crashes resulted from crashes occurring between noon and 8:00 PM.



Time of Occurrence	Non-Alcohol-Related	Alcohol-Related
Midnight–3:59 AM	46	205
4:00–7:59 AM	114	38
8:00–11:59 AM	175	15
Noon–3:59 PM	250	25
4:00–7:59 PM	250	86
8:00–11:59 PM	132	133
Time Unknown	0	1
TOTAL DEATHS	967	503

Victims of Fatal Crashes by Day of Week

The majority (61%) of alcohol-related fatal crash victims were the result of crashes occurring on Friday, Saturday, and Sunday, while fatal crash victims of non-alcohol-related crashes tended to be distributed fairly evenly throughout the week.

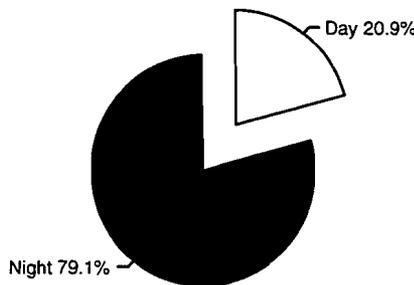


Day of Occurrence	Non-Alcohol-Related	Alcohol-Related
Monday	137	45
Tuesday	135	36
Wednesday	141	42
Thursday	143	74
Friday	166	83
Saturday	138	128
Sunday	107	95
TOTAL DEATHS	967	503

Alcohol-Related

Alcohol-Related Crashes—Day vs. Night

More than three-quarters of alcohol-related crashes occur at night. The graph below shows the breakdown of alcohol-related crashes by day and night.



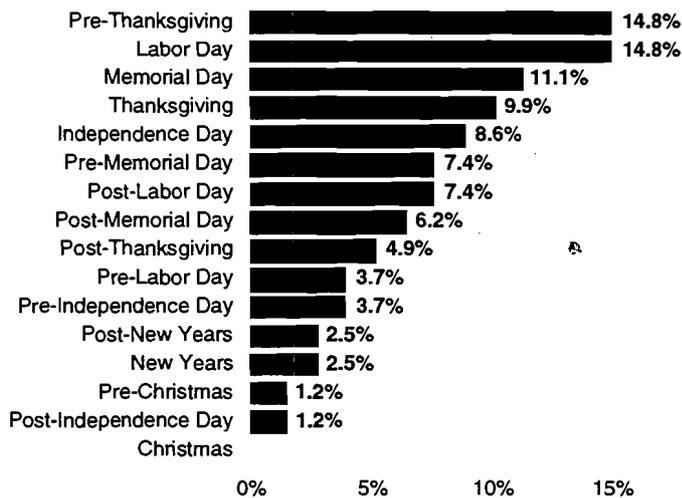
Alcohol-Related Holiday Crashes

In 1996, 13% of all holiday crashes involved alcohol use; however, 41% of deaths which occurred during holiday weekends were related to alcohol use. (See *Crashes by Holiday*, page 22.)

Total Crashes



Deaths



Period*	Crashes	Deaths
New Years**	158	2
Post-New Years**	85	2
Pre-Memorial Day	150	6
Memorial Day	181	9
Post-Memorial Day	169	5
Pre-Independence Day**	34	3
Independence Day**	78	7
Post-Independence Day**	37	1
Pre-Labor Day	151	3
Labor Day	147	12
Post-Labor Day	182	6
Pre-Thanksgiving	230	12
Thanksgiving	244	8
Post-Thanksgiving	201	4
Pre-Christmas**	52	1
Christmas**	49	0
TOTAL	2,148	81

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

** Not part of a holiday weekend in 1996.

Driver Involvement in Alcohol-Related Crashes by Vehicle Type

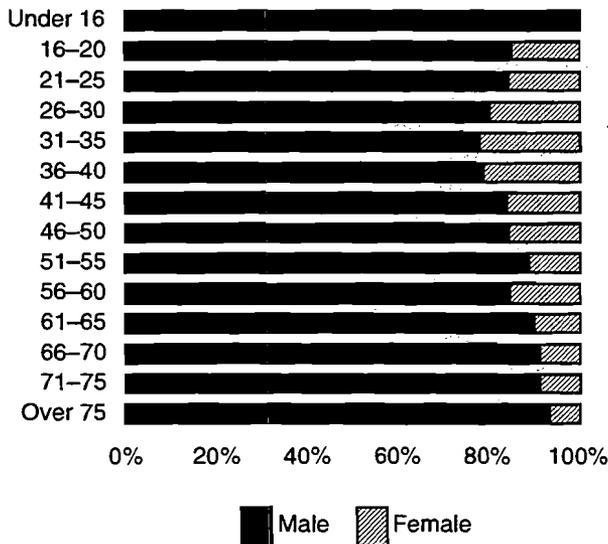
Motorcycle crashes involved an inordinate number of drinking drivers—more than twice the average for all vehicles. Drinking drivers of light trucks (which include pickups, vans, sport utility vehicles, etc.) were also above the average for drivers of all vehicle types.

Total Drivers in Crashes 240,906	Passenger Car	164,269
	Light Trucks	59,430
	Heavy Trucks	8,253
	Motorcycle	2,372
	Bus	1,233
	Other	5,349
	<hr/>	
Drinking Drivers in Crashes 13,330 (5.5% of total)	Passenger Car	8,904 (5.4% of total)
	Light Trucks	4,031 (6.8% of total)
	Heavy Trucks	37 (0.4% of total)
	Motorcycle	290 (12.2% of total)
	Bus	1 (0.1% of total)
	Other	67 (1.3% of total)



Drinking Drivers In Crashes by Age and Sex

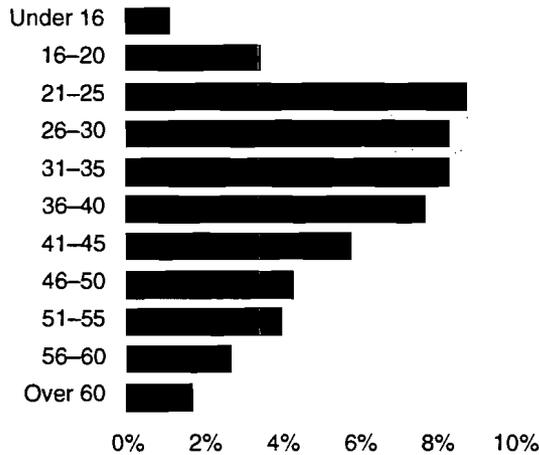
In 1996, four out of five drinking drivers in crashes were male (across all age groups), with only slight variations among the age groups. The table below does not include an additional 147 drivers for whom age and/or sex were not known.



Age Group	Male	Female	Total
Under 16	18	0	18
16-20	1,076	181	1,257
21-25	2,313	411	2,724
26-30	1,829	436	2,265
31-35	1,707	467	2,174
36-40	1,462	381	1,843
41-45	960	176	1,136
46-50	586	104	690
51-55	404	48	452
56-60	189	33	222
61-65	134	14	148
66-70	110	10	120
71-75	78	7	85
Over 75	46	3	49
Total	10,912	2,271	13,183

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

In 1996, as the table and graph below show, the four age groups from 21 to 40 had the highest percentage of drinking drivers within their respective age groups. After age 35, the percentage of drinking drivers within the succeeding age groups steadily declined. The 16 to 20 age group had smaller percentages, but still involved 1,257 underage drinking drivers.

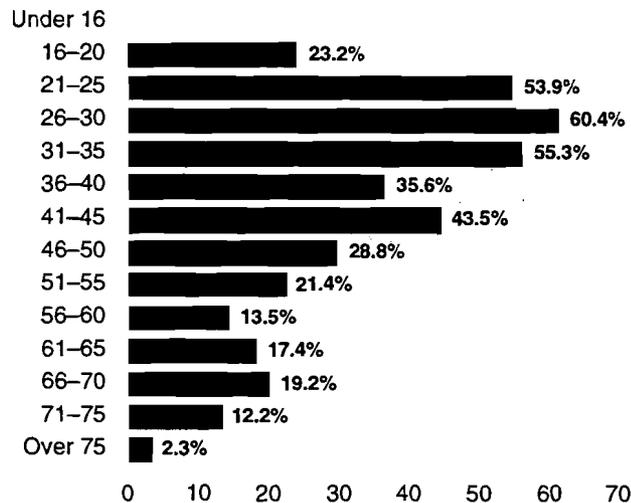


Age Group	Drinking Driver	Non-Drinking Driver
Under 16	18 (1.0%)	1,717 (99.0%)
16-20	1,257 (3.3%)	36,735 (96.7%)
21-25	2,724 (8.7%)	28,706 (91.3%)
26-30	2,265 (8.2%)	25,283 (91.8%)
31-35	2,174 (8.2%)	24,309 (91.8%)
36-40	1,843 (7.6%)	22,471 (92.4%)
41-45	1,136 (5.6%)	19,090 (94.4%)
46-50	690 (4.2%)	15,804 (95.8%)
51-55	452 (3.9%)	11,232 (96.1%)
56-60	222 (2.6%)	8,398 (97.4%)
Over 60	402 (1.6%)	25,136 (98.4%)

Drinking Driver Deaths as a Percentage of Total Driver Deaths, by Age Group

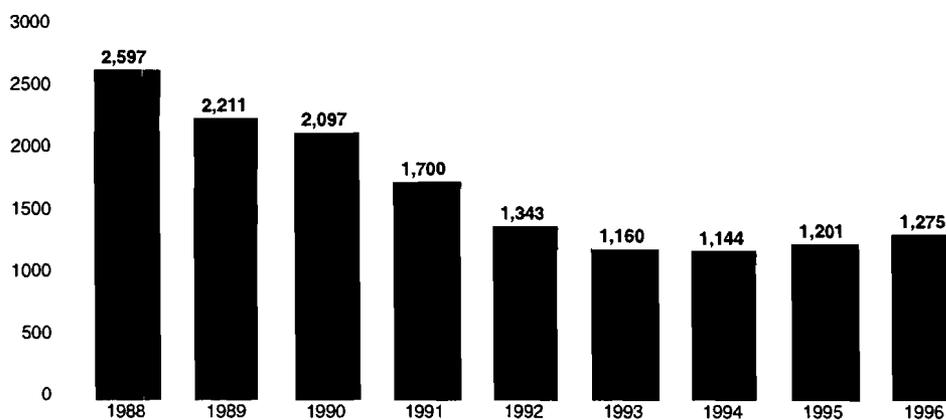
The graph below shows drinking driver deaths as a percentage of total driver deaths within each respective age group for 1996 crashes. The three age groups from 21 to 35 had the highest percentages, with over half of the driver deaths in these age groups involving a drinking driver.

Note: The "Under 16" category is zero percent.



Underage Drinking Drivers in Pennsylvania Crashes—Historical Data

Since Act 31, commonly known as the “Underage Drinking Law,” went into effect on May 24, 1988, the number of underage drinking drivers involved in Pennsylvania crashes has declined through 1994. In 1995 and 1996 the numbers rose 5% and 6% (respectively) when compared to the previous year.



Alcohol-
Related

Seat Belts, Child Safety Seats, and Air Bags

Restraints Overview

Safety Belts

- ▶ Pennsylvania's seat belt law requires drivers and front seat passengers to be properly buckled up when riding in a passenger car, Class 1 and Class 2 truck, or motor home.
- ▶ The combination of lap/shoulder seat belts, when used, reduces the risk of fatal injury to front seat passenger car occupants by 45%, and the risk of moderate-to-critical injury by 50%. For light truck occupants, safety belts reduce the risk of fatal injury by 60%, and moderate-to-critical injury 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 would wear seat belts when riding in a motor vehicle, hundreds of lives in Pennsylvania alone would be saved (see page 36). Everyone should buckle up, every time!

Child Safety Seats

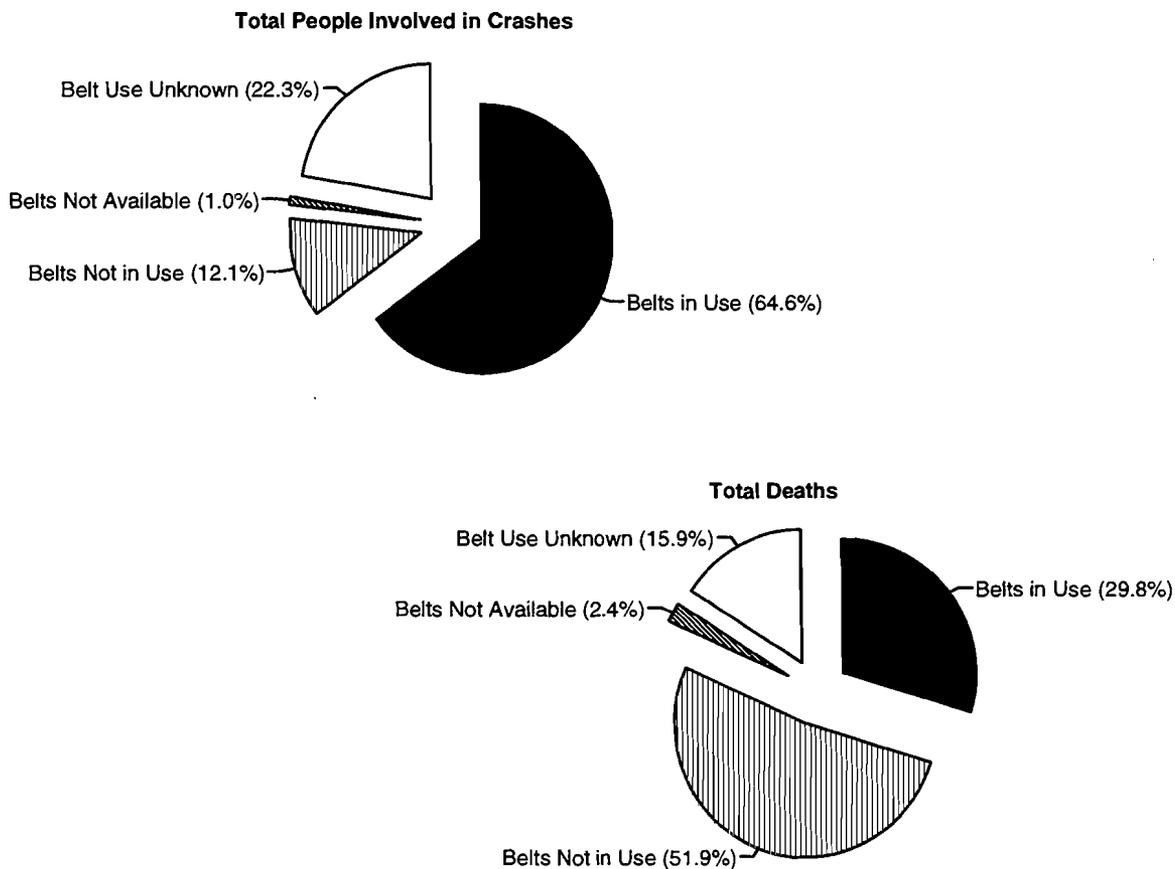
- ▶ Pennsylvania law requires children under the age of four to be properly restrained in a child passenger restraint system whenever riding anywhere in the vehicle.
- ▶ Research shows that child safety seats, when used correctly, are 71% effective in preventing fatalities, and 67% effective in preventing serious injury.
- ▶ 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 under 1 year of age and 20 pounds should ride in a rear-facing position. Small children should ride in a child safety seat approved for their age and size.
- ▶ Children should ride in the rear seat whenever possible, and should always be properly buckled.

Air Bag Safety

- ▶ 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 collar bone away from the neck and cross over the breast bone.
 - 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 1996, as shown in the two pie graphs below, 64.6% of all people involved in crashes were wearing seat belts. Almost twice as many people not wearing seat belts died in crashes as those who did. The table at the bottom shows the total number of people involved in crashes in 1996 by severity of injury by belt use.



Seat Belts,
Etc.

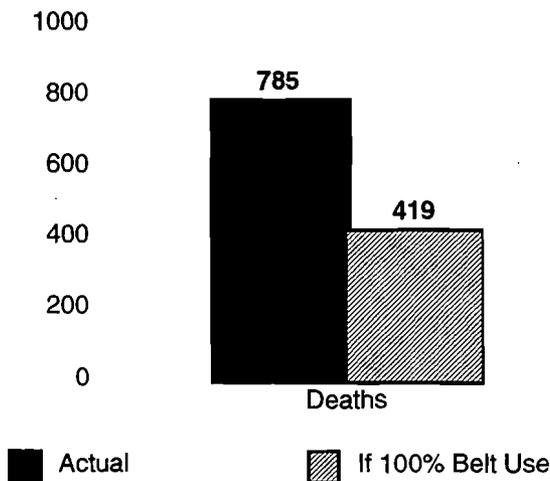
	Belts in Use	Belts Not in Use	Belts Not Available	Belt Use Unknown
Killed	332	579	27	177
Major Injury	1,470	1,664	89	1,002
Moderate Injury	6,588	4,734	223	3,315
Minor Injury	55,728	14,772	892	16,353
No Injury	149,232	17,741	2,034	48,168
Unknown Injury	7,472	1,930	159	7,326
TOTAL	220,822	41,420	3,424	76,341

Note: Vehicles involved include passenger cars, light trucks, and heavy trucks.

Seat Belt Use In Crashes—Impact on Deaths & Injuries

The table and graph below give estimates of the impact that 100% seat belt use would have on traffic deaths and injuries. The numbers in parentheses, in the last row of the table below, are the estimated decreases in 1996 deaths and injuries if 100% belt use was achieved. (Note: The data below is for passenger cars only.) The estimated economic savings of 100% belt use in 1996 would have been \$2,286,698,622 or approximately \$190 for every man, woman, and child in Pennsylvania. More importantly, 366 people could have survived if they had worn their belts.

	Deaths	Injuries			
		Major	Moderate	Minor	None
No Belts	12	31	100	451	990
Belts Used	274	1,092	4,855	40,987	94,273
Belts Not Used	407	1,150	3,321	10,230	11,003
Use Unknown	92	508	1,436	7,110	16,166
TOTAL	785	2,781	9,712	58,778	122,432
If 100% Belt Use	419	1,658	7,108	56,573	128,730
Net Increase/(Decrease)	(366)	(1,123)	(2,604)	(2,205)	6,298



Note: PennDOT's cost estimating procedures were revised in 1996 dollars.

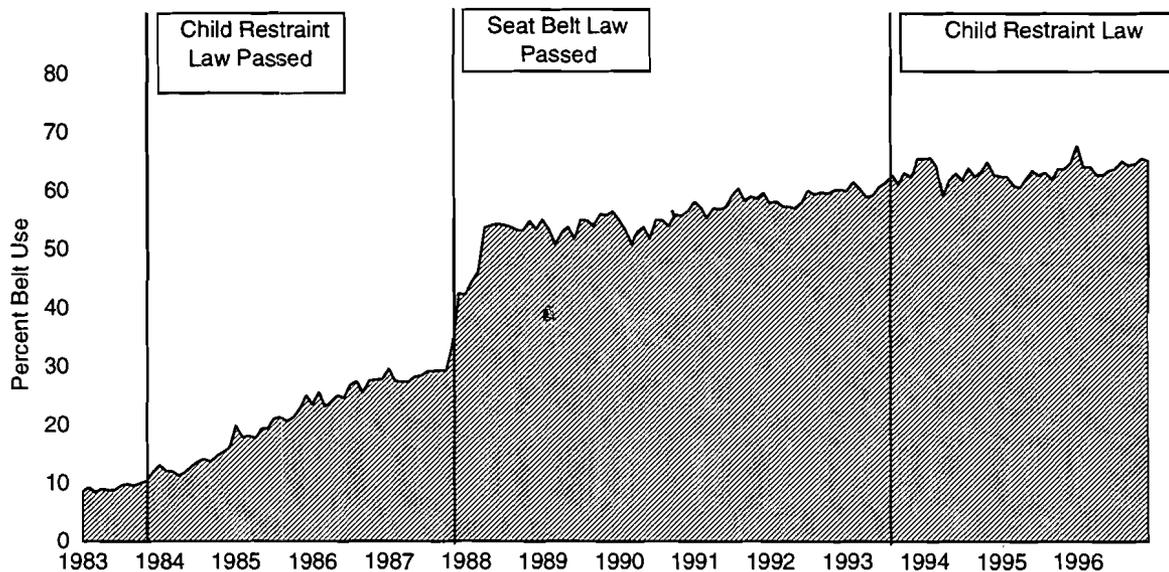
Seat Belt Use in Crashes—Historical Data

On November 1, 1983, Pennsylvania passed a primary law requiring drivers to secure children under age four 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 one to four could be in the back seat in a seat safety belt in lieu of a child passenger restraint system. Fines took effect January 1, 1985.

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

Effective August 21, 1993, the child passenger restraint law was upgraded to require all drivers (not just those with vehicles registered in Pennsylvania) to secure a child up to age four in a child passenger restraint system when sitting anywhere in the 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 trend slowly increased over the next several years, although it has flattened out over the past three years.

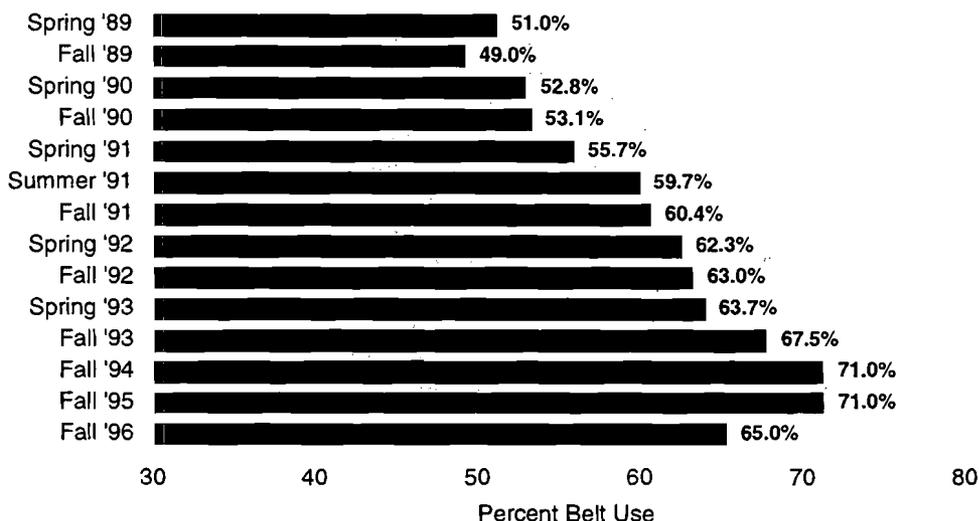


Note: Data shown for passenger cars only.



Seat Belt Use 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 improved annually until 1996, when a 6% drop occurred.



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 four in a child passenger restraint system while sitting anywhere in the vehicle. As shown in the table below (for 1992–1996 crashes involving children up to age four), the percentages of deaths and injuries (within restraint type by row) were lower when restraints were used. In 1992–1996, 83.2% of the children who were involved in crashes and restrained in a child seat sustained no injury.

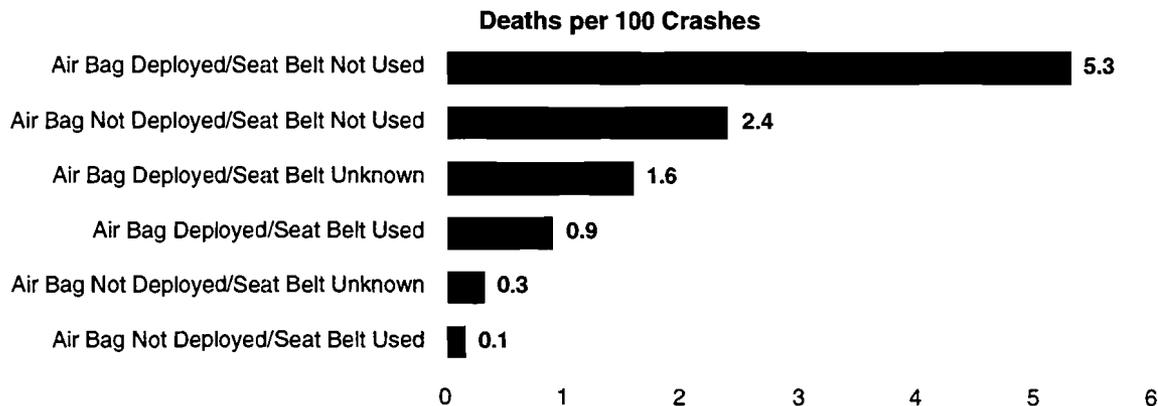
Child Restraint	Deaths	Injuries					No Injury	Total Persons
		Major	Moderate	Minor	Unknown			
Child Seat In Use	31 (0.1%)	83 (0.3%)	350 (1.2%)	2,953 (10.3%)	1,420 (4.9%)	23,909 (83.2%)	28,746	
Child Seat Not In Use	5 (0.4%)	16 (1.3%)	35 (2.7%)	210 (16.5%)	152 (11.9%)	857 (67.2%)	1,275	
Other Restraint In Use	14 (0.1%)	69 (0.5%)	296 (2.0%)	2,480 (16.4%)	602 (4.0%)	11,649 (77.1%)	15,110	
Other Restraint Not In Use	33 (0.4%)	109 (1.4%)	352 (4.6%)	1,884 (24.4%)	868 (11.2%)	4,486 (58.0%)	7,732	

Seat Belts, Etc.

Air Bag Deployment in Crashes—Injuries and Deaths

Passive restraints, most notably air bags, are becoming more and more prevalent, but the majority of vehicles on the road still do not have air bags. 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.)

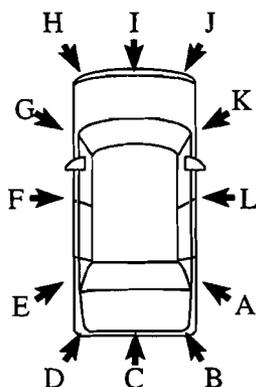
Passive Restraint Status	Seat Belt Status	Deaths	Injuries					Total Persons
			Major	Moderate	Minor	Unknown	No Injury	
None	n/a	1,064 (0.5%)	3,591 (1.6%)	11,441 (5.1%)	60,853 (27.3%)	8,215 (3.7%)	138,142 (61.9%)	223,306
Air Bag Deployed	Used	72 (0.5%)	232 (1.7%)	1,025 (7.4%)	5,828 (42.3%)	589 (4.3%)	6,017 (43.7%)	13,763
Air Bag Deployed	Not Used	68 (3.4%)	138 (6.9%)	330 (16.4%)	835 (41.6%)	110 (5.5%)	526 (26.2%)	2,007
Air Bag Deployed	Unknown	19 (1.0%)	75 (4.1%)	225 (12.2%)	632 (34.3%)	191 (10.4%)	703 (38.1%)	1,845
Air Bag Not Deployed	Used	15 (0.1%)	90 (0.4%)	434 (1.9%)	5,526 (23.9%)	715 (3.1%)	16,360 (70.7%)	23,140
Air Bag Not Deployed	Not Used	23 (1.3%)	40 (2.3%)	99 (5.7%)	610 (35.0%)	64 (3.7%)	907 (52.0%)	1,743
Air Bag Not Deployed	Unknown	3 (0.2%)	23 (1.2%)	91 (4.7%)	427 (22.2%)	117 (6.1%)	1,261 (65.6%)	1,922
Other	n/a	34 (0.1%)	278 (0.8%)	1,288 (3.5%)	9,092 (24.9%)	2,422 (6.6%)	23,464 (64.1%)	36,578



Seat Belts, Etc.

Air Bag Deployment by Initial Vehicle Impact Point

Air bags are designed to deploy in frontal impacts. The table below shows the initial vehicle impact points for all 1996 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 404 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)	3,114	1,903	75 (16%)	401 (84%)	735
Right Rear (B)	6,371	4,015	125 (13%)	802 (87%)	1,429
Center Rear (C)	32,448	19,640	404 (8%)	4,609 (92%)	7,795
Left Rear (D)	6,426	4,170	139 (15%)	767 (85%)	1,350
Left Side Rear (E)	3,294	2,148	81 (18%)	380 (82%)	685
Left Side Center (F)	9,503	6,100	236 (20%)	972 (80%)	2,195
Left Side Forward (G)	8,076	4,976	366 (29%)	914 (71%)	1,820
Left Front (H)	36,742	22,705	3,033 (47%)	3,411 (53%)	7,593
Center Front (I)	73,801	43,347	8,125 (60%)	5,404 (40%)	16,925
Right Front (J)	35,249	21,195	2,690 (46%)	3,134 (54%)	8,230
Right Side Forward (K)	7,203	4,350	341 (31%)	773 (69%)	1,739
Right Side Center (L)	8,598	5,443	264 (23%)	908 (77%)	1,983
Other	8,639	4,631	305 (31%)	672 (69%)	3,031
None	1,442	1,202	4 (7%)	50 (93%)	186
TOTAL	240,906	145,825	16,188 (41%)	23,197 (59%)	55,696

Seat Belts, Etc.

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 moderate and major injuries, and even death, during crashes involving air bag deployment. (Percentages listed in the table are by age group.)

	Age Group	Injuries						Total Persons
		Deaths	Major	Moderate	Minor	Unknown	No Injury	
Seat Belts Used	0-4	0 (0.0%)	0 (0.0%)	3 (10.0%)	17 (56.7%)	2 (6.7%)	8 (26.7%)	30
	5-8	1 (1.3%)	3 (3.9%)	11 (14.3%)	39 (50.6%)	1 (1.3%)	22 (28.6%)	77
	9-12	0 (0.0%)	2 (2.0%)	6 (6.0%)	50 (50.0%)	6 (6.0%)	36 (36.0%)	100
	13-64	51 (0.4%)	179 (1.5%)	872 (7.2%)	5,078 (41.9%)	499 (4.1%)	5,447 (44.9%)	12,126
	65-74	9 (1.0%)	32 (3.6%)	75 (8.4%)	403 (45.1%)	44 (4.9%)	331 (37.0%)	894
	75+	11 (2.1%)	16 (3.0%)	58 (10.8%)	241 (45.0%)	37 (6.9%)	173 (32.3%)	536
	Total	72 (0.5%)	232 (1.7%)	1,025 (7.4%)	5,828 (42.3%)	589 (4.3%)	6,017 (43.7%)	13,763
Seat Belts Not Used	0-4	0 (0.0%)	0 (0.0%)	1 (16.7%)	5 (83.3%)	0 (0.0%)	0 (0.0%)	6
	5-8	0 (0.0%)	0 (0.0%)	4 (33.3%)	6 (50.0%)	1 (8.3%)	1 (8.3%)	12
	9-12	0 (0.0%)	0 (0.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	2
	13-64	54 (2.9%)	127 (6.9%)	294 (16.1%)	764 (41.7%)	101 (5.5%)	491 (26.8%)	1,831
	65-74	8 (9.4%)	3 (3.5%)	15 (17.6%)	34 (40.0%)	6 (7.1%)	19 (22.4%)	85
	75+	6 (8.5%)	8 (11.3%)	14 (19.7%)	26 (36.6%)	2 (2.8%)	15 (21.1%)	71
	Total	68 (3.4%)	138 (6.9%)	330 (16.4%)	835 (41.6%)	110 (5.5%)	526 (26.2%)	2,007

Pedestrian and Bicycle Crashes

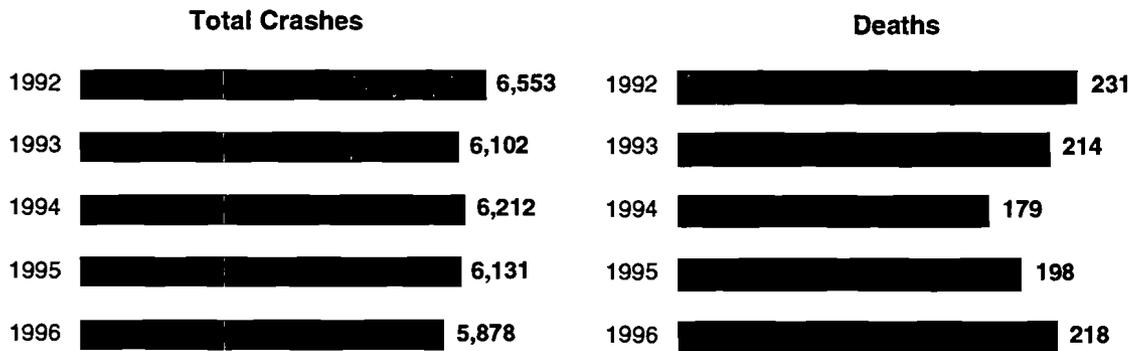
Pedestrian and Bicycles Overview

- ▶ Pedestrian-related crashes represent 4.1% of the total reported traffic crashes; however, they account for nearly 15% of all traffic crash deaths. (See also *Pennsylvania County Crashes*, pages 62, 63, and 68.)

- ▶ Bicycle crashes represent 1.7% of the total reported crashes and 1.8% of all traffic deaths. Although these percentages are small, they still represent 26 bicyclist deaths and 2,403 injuries in 1996.

Pedestrian Crashes—Five-Year Trends

The percent of reported crashes involving pedestrians decreased from 4.9% in 1992 to 4.1% in 1996. Pedestrian deaths have risen in the last two years, and in 1996 represented 14.8% of the total traffic deaths.



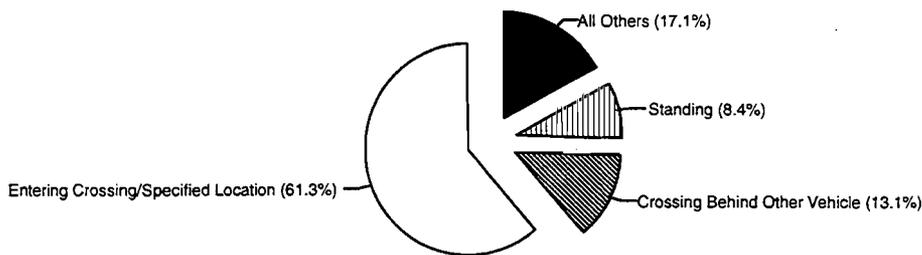
Year	Total Crashes	Deaths
1992	6,553	231
1993	6,102	214
1994	6,212	179
1995	6,131	198
1996	5,878	218

Pedis & Bikes

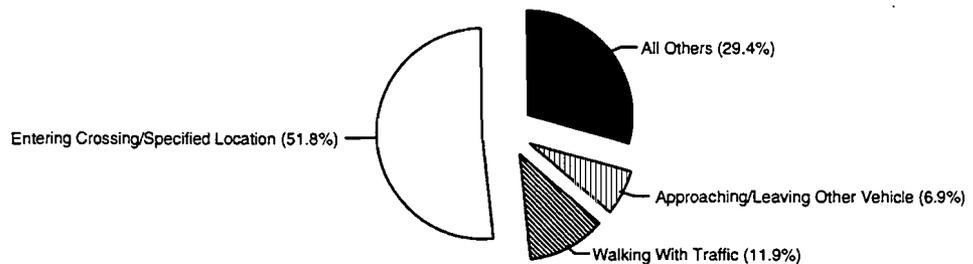
Pedestrian-Related Crashes

Referring to the table and pie charts below, most pedestrian crashes and deaths occur while pedestrians are “entering crossing/specified location.” This means that a pedestrian was most likely crossing the street at either an intersection, mid-block crossing, or driveway entrance. “Other Vehicle,” as used below under Pedestrian Actions, refers to vehicles other than school buses.

Top Crash-Related Pedestrian Actions



Top Fatal Pedestrian Actions

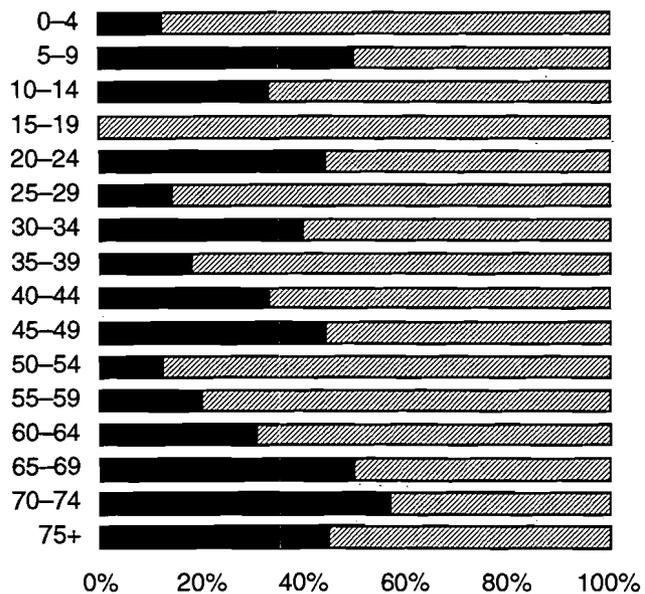


Peds & Bikes

Pedestrian Action	Deaths	Total Pedestrians Involved
Entering Crossing/Specified Location	113	3,752
Crossing Behind School Bus	0	7
Crossing Behind Other Vehicle	10	801
Walking With Traffic	26	232
Leaving/Returning to Disabled Vehicle	3	9
Walking Against Traffic	6	99
Approaching/Leaving School Bus	3	20
Approaching/Leaving Other Vehicle	15	161
Playing/Working on Vehicle	4	61
Other Working	2	89
Standing	13	515
Playing	5	87
Lying at Specific Location	9	35
Other/Unknown	9	248
TOTAL	218	6,116

Pedestrian Deaths by Age and Sex

There is a sharp increase in deaths with pedestrians aged 80 and over. Overall, male pedestrian deaths were almost double female pedestrian deaths. *Note:* Pedestrians of unknown sex are not included in the numbers below.



Age Group	Female	Male	Total
0-4	1	7	8
5-9	8	8	16
10-14	4	8	12
15-19	0	6	6
20-24	4	5	9
25-29	1	6	7
30-34	4	6	10
35-39	2	9	11
40-44	6	12	18
45-49	8	10	18
50-54	2	14	16
55-59	2	8	10
60-64	4	9	13
65-69	5	5	10
70-74	8	6	14
75 and over	18	22	40
TOTAL	77	141	218

Female Male

Pedestrian Injury Severity by Municipality Type

The majority of pedestrians are injured in cities; however, there is a much higher percentage of pedestrian deaths in Townships, perhaps due to higher vehicle speeds on rural roads.

Municipality Type	Deaths	Injuries	Non-Injury	Total
City	79 (36.2%)	3,929 (67.0%)	11 (31.4%)	4,019 (65.7%)
Borough/Town	33 (15.1%)	886 (15.1%)	10 (28.6%)	929 (15.2%)
Township	106 (48.6%)	1,046 (17.8%)	14 (40.0%)	1,166 (19.1%)
Other	0 (0.0%)	2 (0.0%)	0 (0.0%)	2 (0.0%)
TOTAL	218 (100.0%)	5,863 (100.0%)	35 (100.0%)	6,116 (100.0%)

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



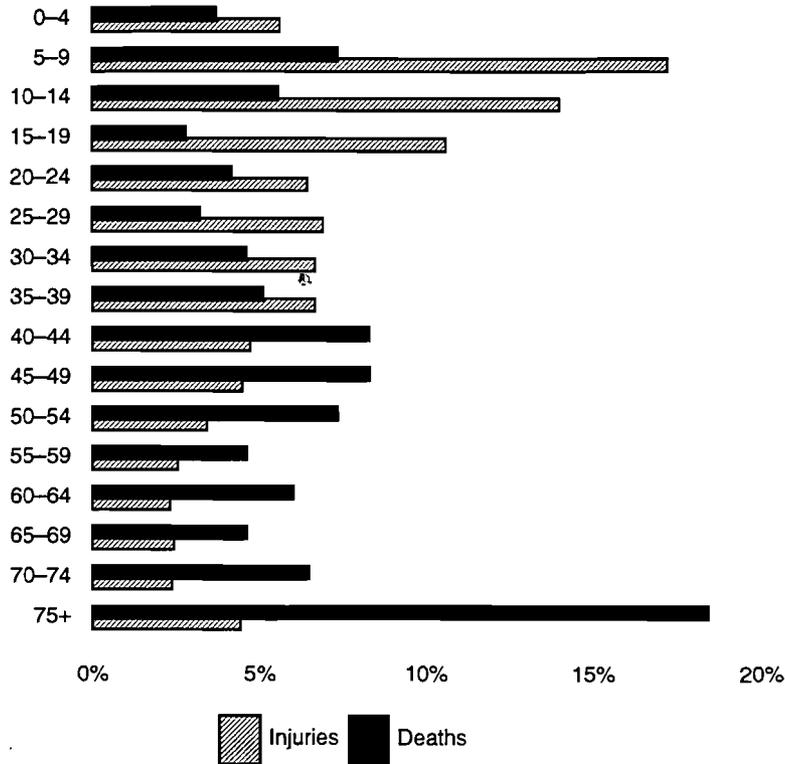
Pedestrian Deaths and Injuries by Age

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

Pedestrian Age	Deaths	Injuries
0-4	8 (3.7%)	316 (5.4%)
5-9	16 (7.3%)	977 (16.7%)
10-14	12 (5.5%)	794 (13.5%)
15-19	6 (2.8%)	599 (10.2%)
20-24	9 (4.1%)	362 (6.2%)
25-29	7 (3.2%)	389 (6.6%)
30-34	10 (4.6%)	376 (6.4%)
35-39	11 (5.0%)	377 (6.4%)
40-44	18 (8.3%)	268 (4.6%)
45-49	18 (8.3%)	251 (4.3%)
50-54	16 (7.3%)	192 (3.3%)
55-59	10 (4.6%)	141 (2.4%)
60-64	13 (6.0%)	128 (2.2%)
65-69	10 (4.6%)	135 (2.3%)
70-74	14 (6.4%)	132 (2.3%)
75 and over	40 (18.3%)	248 (4.2%)
Unknown	0 (0.0%)	178 (3.0%)
TOTAL	218 (100.0%)	5,863 (100.0%)

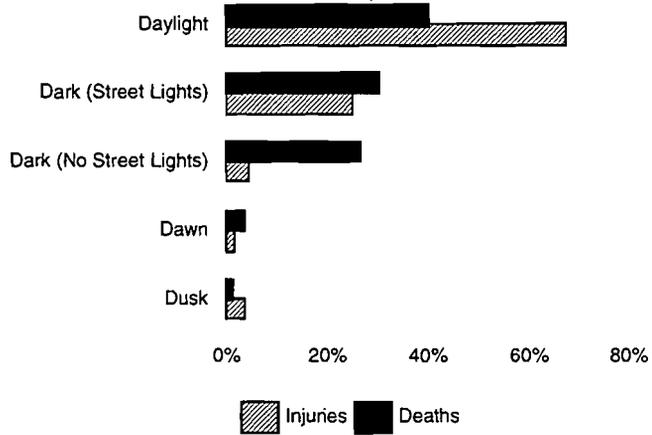
Note: The totals in the table do not include an additional 35 pedestrians who were not killed or injured.

Peds & Bikes



Pedestrian Deaths and Injuries by Light Level

The majority of pedestrians are injured in the daytime, but most pedestrian deaths occur after dark. As shown in the bar chart, pedestrians are more likely to be killed if struck in a night crash as compared to a day crash.

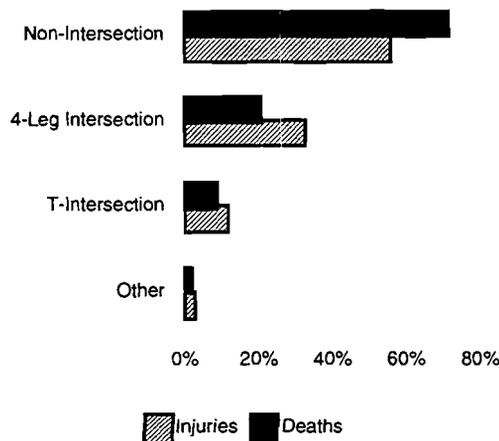


Light Level	Deaths	Injuries
Dawn	6 (2.8%)	73 (1.2%)
Daylight	87 (39.9%)	3,891 (66.4%)
Dark (Street Lights)	66 (30.3%)	1,408 (24.0%)
Dark (No Street Lights)	57 (26.1%)	240 (4.1%)
Dusk	2 (0.9%)	209 (3.6%)
Unknown	0 (0.0%)	42 (0.7%)
TOTAL	218 (100.0%)	5,863 (100.0%)

Note: The totals in the table do not include an additional 35 pedestrians who were not killed or injured.

Pedestrian Deaths and Injuries by Intersection Type

More than two-thirds of pedestrian deaths and over half of pedestrian injuries occurred in areas other than intersections. “Non-Intersection” as used below includes mid-block crossings, driveway crossings, etc.



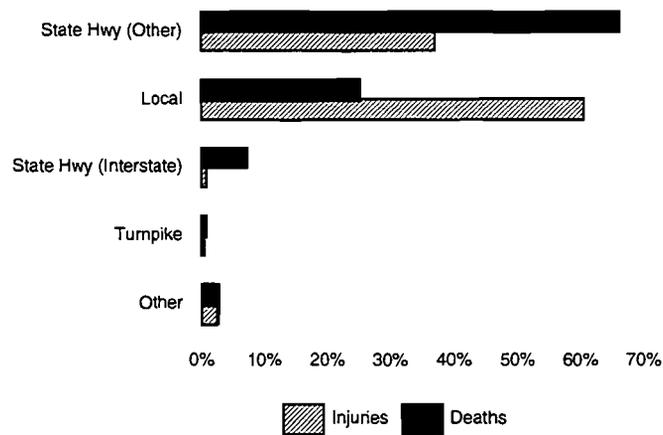
Intersection	Deaths	Injuries
Non-Intersection	154 (70.6%)	3,251 (55.4%)
4-Leg Intersection	43 (19.7%)	1,873 (31.9%)
T-Intersection	18 (8.3%)	643 (11.0%)
Other	3 (1.4%)	96 (1.6%)
TOTAL	218 (100.0%)	5,863 (100.0%)

Note: The totals in the table do not include an additional 35 pedestrians who were not killed or injured.



Pedestrian Deaths and Injuries by Road Type

As the graph shows, the majority of pedestrians are injured on local roads, whereas the majority of pedestrian deaths occur on state highways.

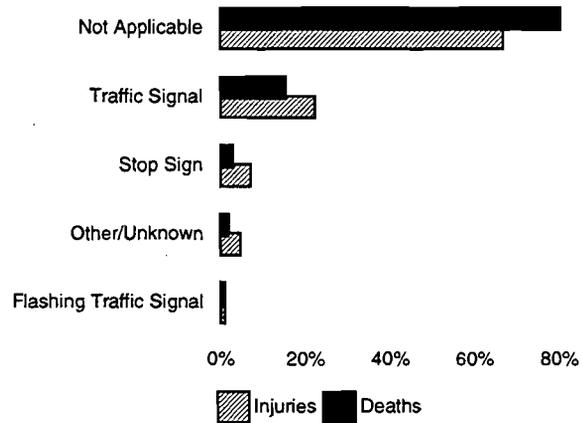


Note: "Road Type" relates to the road on which the motor vehicle was traveling immediately prior to striking the pedestrian. The totals in the table do not include an additional 35 pedestrians who were not killed or injured.

Road Type	Deaths	Injuries
State Hwy (Other)	143 (65.6%)	2,152 (36.7%)
Local	54 (24.8%)	3,529 (60.2%)
State Hwy (Interstate)	15 (6.9%)	33 (0.6%)
Turnpike	1 (0.5%)	17 (0.3%)
Other	5 (2.3%)	132 (2.3%)
TOTAL	218 (100.0%)	5,863 (100.0%)

Pedestrian Deaths and Injuries by Traffic Control Device

As the graph shows, most pedestrian deaths and injuries occurred in areas without traffic control devices (TCDs). However, notice the large number of pedestrians injured at traffic signal intersections.



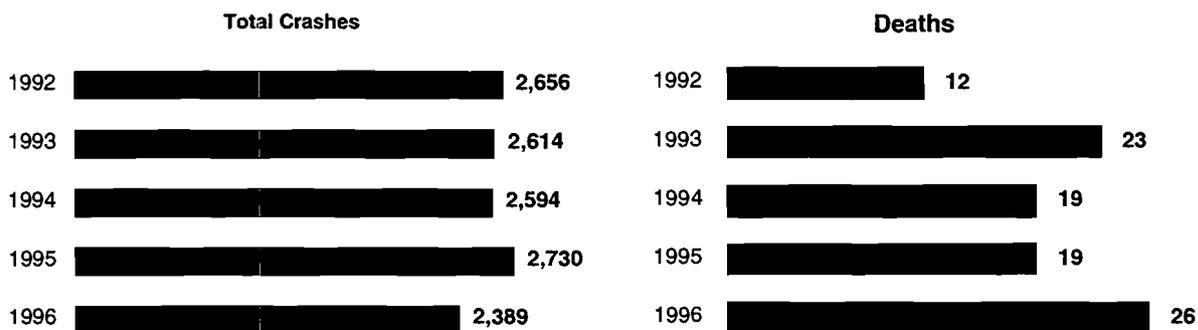
Note: "Traffic Control Device" relates to the TCD which was present for the motor vehicle immediately prior to striking the pedestrian. The totals in the table do not include an additional 35 pedestrians who were not killed or injured.

Traffic Control Device	Deaths	Injuries
Not Applicable	172 (78.9%)	3,898 (66.5%)
Flashing Traffic Signal	1 (0.5%)	25 (0.4%)
Traffic Signal	32 (14.7%)	1,292 (22.0%)
Stop Sign	5 (2.3%)	402 (6.9%)
Other/Unknown	8 (3.7%)	246 (4.2%)
TOTAL	218 (100.0%)	5,863 (100.0%)

Bicycle Crashes—Five-Year Trends

The total number of bicycle crashes dropped 10% between 1992 and 1996.

Year	Total Crashes	Deaths
1992	2,656	12
1993	2,614	23
1994	2,594	19
1995	2,730	19
1996	2,389	26



Bicycle Deaths and Injuries by Age

Children age 5 to 14 are the most vulnerable to death and injury while riding a bicycle. Almost half of the deaths and injuries involving bicycles were suffered by this age group. Another vulnerable group was persons age 20 to 44, who suffered 35% of the total deaths and 27% of the total injuries.

Victim's Age	Deaths	Injuries
0-4	0 (0.0%)	14 (0.6%)
5-9	4 (15.4%)	409 (17.0%)
10-14	8 (30.8%)	795 (33.1%)
15-19	2 (7.7%)	379 (15.8%)
20-34	3 (11.5%)	460 (19.1%)
35-44	6 (23.1%)	194 (8.1%)
45-54	2 (7.7%)	76 (3.2%)
55-64	0 (0.0%)	26 (1.1%)
65-74	0 (0.0%)	13 (0.5%)
75+	1 (3.8%)	5 (0.2%)
Unknown	0 (0.0%)	32 (1.3%)
TOTAL	26 (100.0%)	2,403 (100.0%)

The totals in the table do not include an additional 29 bicyclists who were not killed or injured.



Bicycle Deaths and Injuries by Light Level

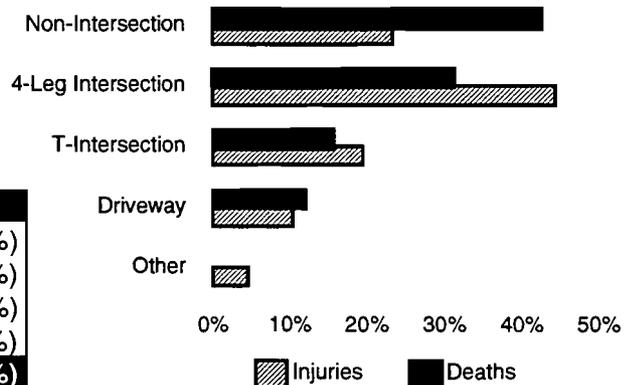
The majority of bicyclists are killed or injured during the day. However, bicycle crashes occurring after dark are more likely to result in death compared to daylight crashes.

Light Level	Deaths	Injuries
Dawn	0 (0.0%)	9 (0.4%)
Daylight	16 (61.5%)	1,889 (78.6%)
Dark with Street Lights	7 (26.9%)	341 (14.2%)
Dark, No Street Lights	3 (11.5%)	47 (2.0%)
Dusk	0 (0.0%)	97 (4.0%)
Unknown	0 (0.0%)	20 (0.8%)
TOTAL	26 (100.0%)	2,403 (100.0%)

Note: The totals in the table do not include an additional 29 bicyclists who were not killed or injured.

Bicycle Deaths and Injuries by Intersection

The majority of bicyclists are injured at intersections, while deaths are more evenly split between intersection and non-intersection crashes.



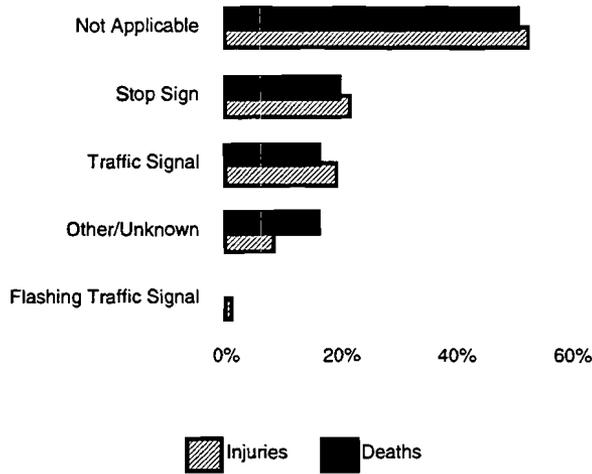
Intersection	Deaths	Injuries
Non-Intersection	14 (53.8%)	815 (33.9%)
4-Leg Intersection	8 (30.8%)	1,078 (44.9%)
T-Intersection	4 (15.4%)	471 (19.6%)
Other	0 (0.0%)	39 (1.6%)
TOTAL	26 (100.0%)	2,403 (100.0%)

Note: The totals in the table do not include an additional 29 bicyclists who were not killed or injured.

Bicycle Deaths and Injuries by Traffic Control Device

The proportion of deaths to injuries was roughly equal for all types of traffic control device (TCD).

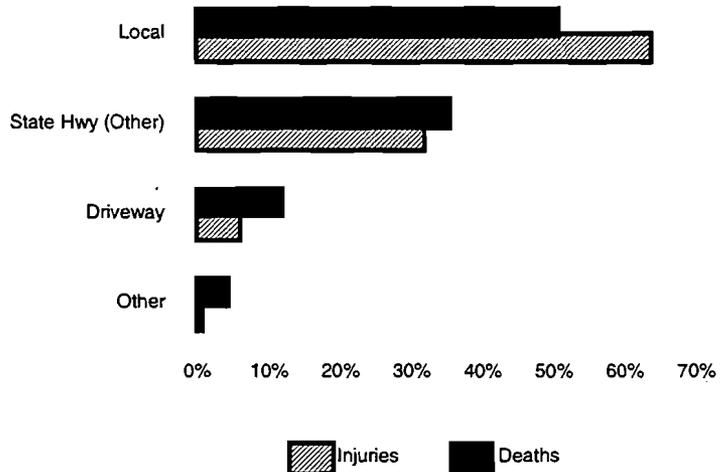
Traffic Control Device	Deaths	Injuries
Not Applicable	13 (50.0%)	1,257 (52.3%)
Stop Sign	5 (19.2%)	511 (21.3%)
Traffic Signal	4 (15.4%)	439 (18.3%)
Flashing Traffic Signal	0 (0.0%)	10 (0.4%)
Other	4 (15.4%)	133 (5.5%)
Unknown	0 (0.0%)	53 (2.2%)
TOTAL	26 (100.0%)	2,403 (100.0%)



Note: "Traffic Control Device" relates to the TCD that was present for the bike immediately prior to the crash. The totals in the table do not include an additional 29 bicyclists who were not killed or injured.

Bicycle Deaths and Injuries by Road Type

Almost half the deaths and well over half the injuries involving bicycles occurred on local roads. Note the deaths and injuries involving driveways.



Note: "Road Type" relates to the road on which the bicyclist was traveling immediately prior to the crash. The totals in the table do not include an additional 29 bicyclists who were not killed or injured.

Road Type	Deaths	Injuries
State Hwy (Other)	9 (34.6%)	755 (31.4%)
Local	13 (50.0%)	1,518 (63.2%)
Driveway	3 (11.5%)	126 (5.2%)
Other	1 (3.8%)	4 (0.2%)
TOTAL	26 (100.00%)	2,403 (100.0%)

Peds & Bikes

Crashes by Motor Vehicle Type

Vehicle Crashes by Vehicle Types

	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes
Passenger Car	70.9%	82.9%	78.5%	81.2%
	960 crashes	74,362 crashes	40,679 crashes	116,001 crashes
Light Truck	37.7%	36.1%	38.4%	36.9%
	510 crashes	32,363 crashes	19,904 crashes	52,777 crashes
Heavy Truck	12.9%	4.9%	6.1%	5.4%
	175 crashes	4,379 crashes	3,155 crashes	7,709 crashes
Bicycle	1.9%	2.6%	0.0%	1.7%
	26 crashes	2,355 crashes	8 crashes	2,389 crashes
Motorcycle	7.2%	2.3%	0.3%	1.6%
	98 crashes	2,105 crashes	142 crashes	2,345 crashes
School Bus	0.3%	0.4%	0.4%	0.4%
	4 crashes	374 crashes	190 crashes	568 crashes
Commercial Bus	0.7%	0.6%	0.2%	0.5%
	10 crashes	541 crashes	101 crashes	652 crashes
Other	1.9%	2.5%	1.3%	2.0%
	26 crashes	2,249 crashes	648 crashes	2,923 crashes

Percentages compare the number of crashes with the total number of crashes in the column category (for example, passenger cars were involved in 70.9% of all fatal crashes). Percentage totals exceed 100% due to multiple vehicle crashes.

Vehicle Crashes—Single Vehicles Hitting Fixed Objects

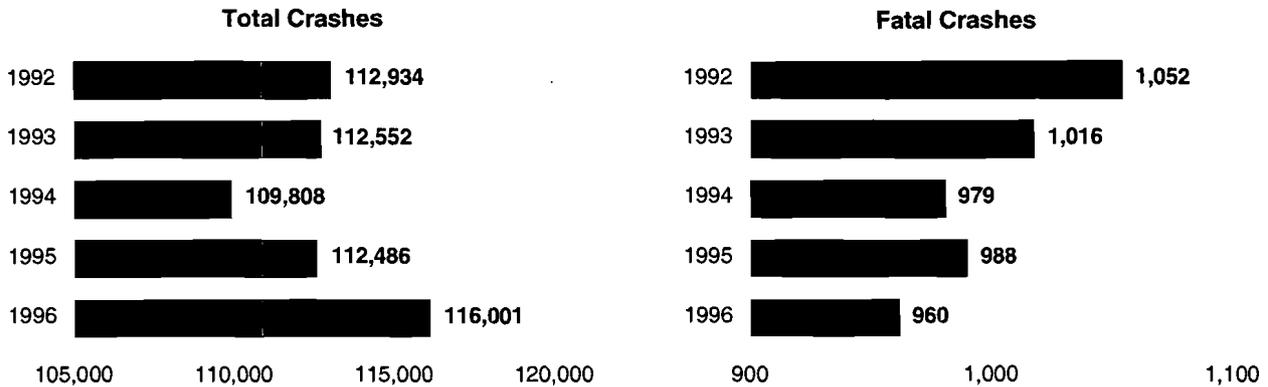
Crashes in Which a Single Vehicle Hit a Fixed Object:	45,152	Passenger Car	31,343	69.4%
		Light Truck	12,055	26.7%
		Heavy Truck	951	2.1%
		Motorcycle	469	1.0%
		School Bus	45	0.1%
		Commercial Bus	20	0.0%
		Other	269	0.6%

Vehicle Crashes—Two-Vehicle Collisions

Striking Vehicle	Vehicle Struck								Total
	Passenger Car	Light Truck	Heavy Truck	Motorcycle	Bicycle	School Bus	Commercial Bus	Other/Unknown	
Passenger Car	35,061	12,546	1,812	271	1,001	185	209	325	51,410
Light Truck	11,794	4,439	678	83	263	76	61	120	17,514
Heavy Truck	1,657	470	359	5	9	10	13	16	2,539
Motorcycle	541	168	16	22	6	1	3	15	772
Bicycle	675	226	6	4	0	2	4	23	940
School Bus	103	37	3	0	3	6	0	1	153
Commercial Bus	126	30	7	2	13	0	6	1	185
Other/Unknown	899	154	15	13	114	0	11	11	1,217

Passenger Car Crashes—Five-Year Trends

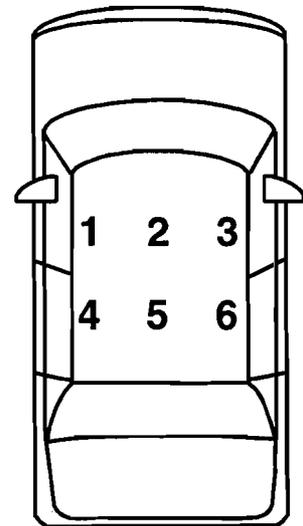
Total passenger car crashes have increased over the last two years, but fatal crashes in 1996 were the fewest in five years.



Passenger Car Deaths by Seating Position

In 1996, 57% of crash deaths involved passenger car occupants. The table below depicts the passenger car deaths in 1996 by seating position, excluding any pedestrians involved.

	Drivers	1 →
	584 (69.4%)	
	<i>Center Front</i>	2 →
	7 (0.8%)	
	<i>Right Front</i>	3 →
	185 (22.0%)	
	<i>Left Rear</i>	4 →
26 (3.1%)		
<i>Center Rear</i>	5 →	
8 (1.0%)		
<i>Right Rear</i>	6 →	
28 (3.3%)		
Total Deaths		
842		
Total Passengers		
254 (30.2%)		
Others		
4 (0.5%)		

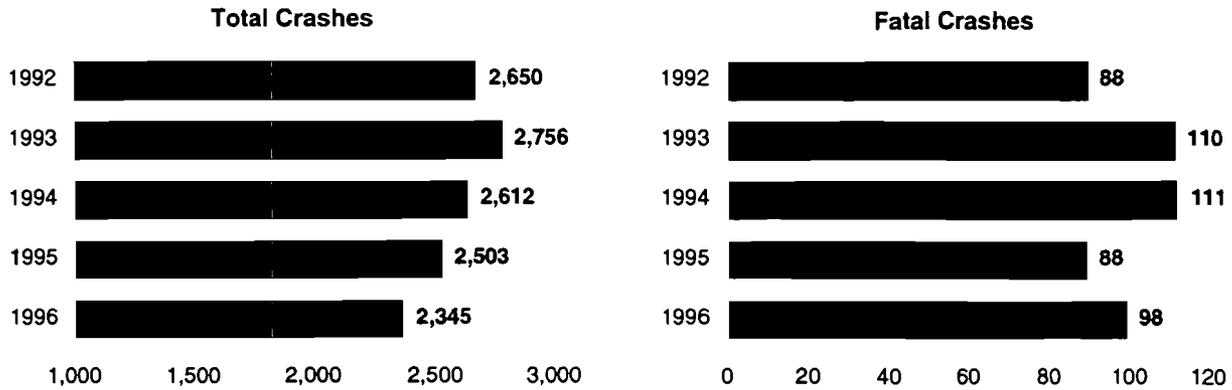


Crashes by Vehicle

“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

Total motorcycle crashes have declined steadily since 1993. Fatal crashes rose in 1996, but were fewer than in 1994.



Motorcycle Deaths—Five-Year Trend

Year	Deaths
1992	90
1993	113
1994	112
1995	85
1996	98
TOTAL	498

Of the 98 deaths in 1996 involving motorcycle drivers or passengers:

- ▶ 90 (91.8%) were drivers
- ▶ 8 (8.2%) were passengers

Motorcycle Helmet Use in Crashes

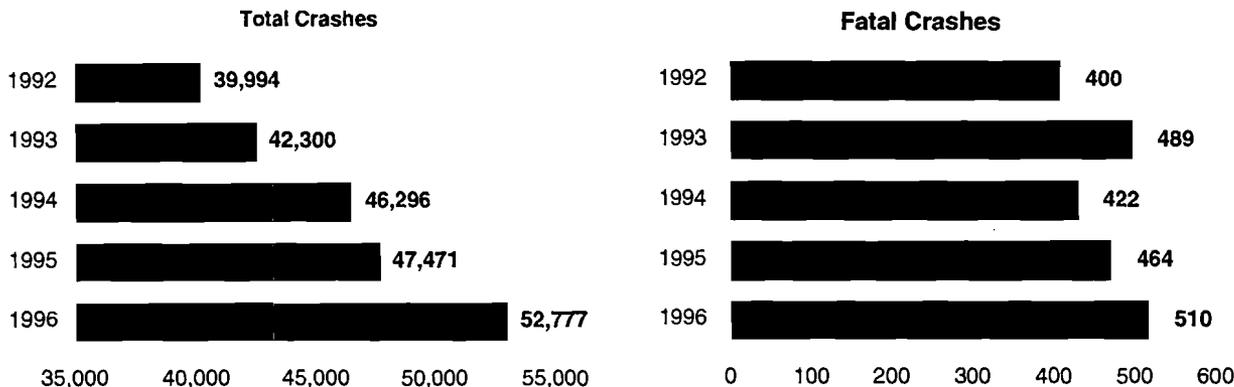
The table below shows injury severities of motorcycle riders (driver or passenger) by helmet usage.

	Deaths	Injuries	Not Injured	Total Motorcyclists
Helmets	75 (76.5%)	1,566 (67.5%)	165 (59.4%)	1,806 (67.0%)
No Helmets	15 (15.3%)	420 (18.1%)	49 (17.6%)	484 (18.0%)
Unknown	8 (8.2%)	334 (14.4%)	64 (23.0%)	406 (15.1%)
TOTAL	98 (100.0%)	2,320 (100.0%)	278 (100.0%)	2,696 (100.0%)

Crashes by Vehicle

Light Truck Crashes—Five-Year Trends

As pickups, minivans, and sport utility vehicles have become more popular over the last several years, crashes involving these types of vehicles have also risen. Total crashes in 1996 were 32% higher than in 1992; fatal crashes were 28% higher than in 1992.



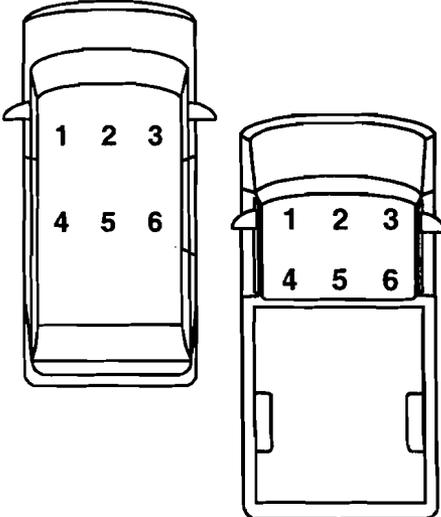
Light Truck Rollovers Compared to Passenger Cars

- ▶ The percentage of 1996 light truck crashes were almost twice as high as passenger cars in crashes involving rollovers (9.2% of all light truck crashes compared to 5.3% of all passenger car crashes).
- ▶ In 1996 rollover crashes, the percentage of light truck deaths was more than twice as high as passenger car deaths (45.4% of deaths compared to 18.4%, excluding any pedestrians).

	Rollover Crashes	Rollover Deaths
Light Trucks	4,876 (9.2%)	114 (45.4%)
Passenger Cars	6,176 (5.3%)	155 (18.4%)

Light Truck Deaths by Seating Position

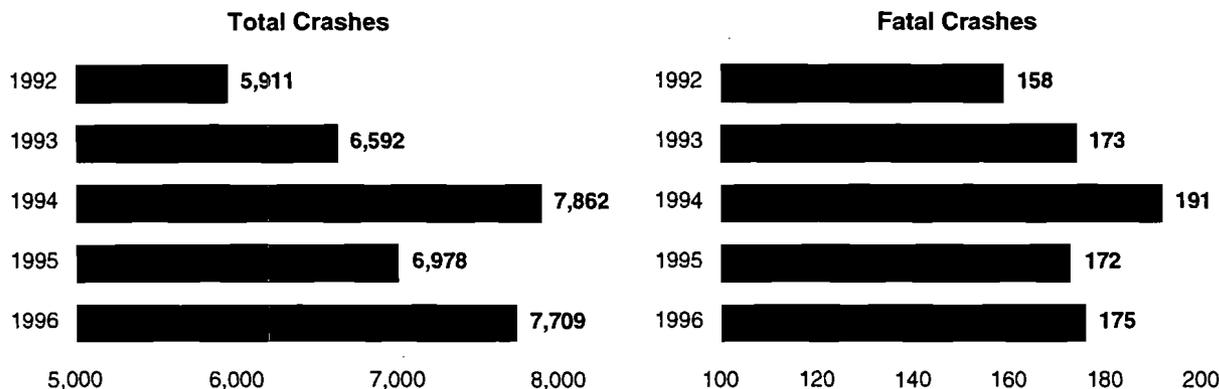
In 1996, 17% of crash deaths involved occupants in light trucks (jeeps, pickups, vans, sport utility vehicles, etc.). The table below depicts light truck deaths in 1996 by seating position, excluding any pedestrians involved, but including others who were riding on the vehicles in unusual positions.

	Drivers	1 →		
	182 (72.5%)	<i>Center Front</i>		2 →
		<i>Right Front</i>		3 →
		<i>Left Rear</i>		4 →
		<i>Center Rear</i>		5 →
		<i>Right Rear</i>		6 →
	Total Deaths 251	Total Passengers 57 (22.7%)		
	Truck Bed or Vehicle Exterior			
		7 (2.8%)		
Towed Unit/Other		5 (2.0%)		

Crashes by Vehicle

Heavy Truck Crashes—Five-Year Trends

Total crashes involving heavy trucks have been on the increase over the last five years. Fatal crashes have remained steady after peaking in 1994.



Heavy Truck Crashes Involving Vehicle Defects

The vast majority of heavy truck crashes involving vehicle defects were related to brakes, tires and wheels, and engine failures.

Vehicle Defect	Crashes
Brake-Related	136
Tire/Wheel-Related	105
Engine Failure	74
Total Steering System Failure	15
Transmission Problem	13
Suspension	9
Vehicle Lighting-Related	9
Dirty/Frosty Windshield	3
Exhaust System Failure	1
Defective Defrosting	0
Defective Wipers	0

Crashes by Vehicle

Heavy Truck Crashes by Road Type

Road Type	Crashes	Occupant Deaths
State Hwy (Interstate)	1,714 (22.2%)	8 (36.4%)
State Hwy (Other)	4,413 (57.2%)	9 (40.9%)
Turnpike	436 (5.7%)	3 (13.6%)
Local Road	946 (12.3%)	0 (0.0%)
Ramp	200 (2.6%)	2 (9.1%)
TOTAL	7,709 (100.0%)	22 (100.0%)

Note: State highway (other) includes state-maintained roads that are not designated as interstates.

Hazardous Material Crashes by Road Type

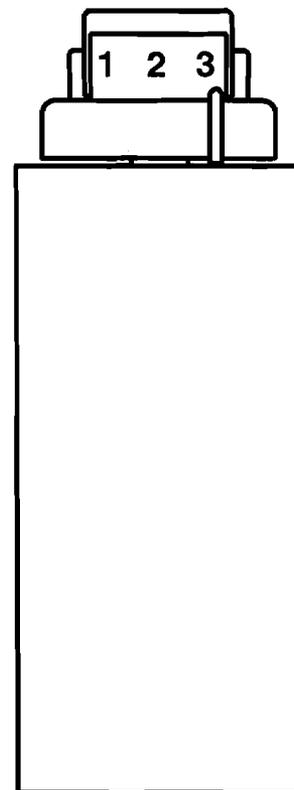
Road Type	Crashes	HazMat Released
State Hwy (Interstate)	61 (20.7%)	12 (25.0%)
State Hwy (Other)	176 (59.7%)	27 (56.3%)
Turnpike	11 (3.7%)	0 (0.0%)
Local Road	42 (14.2%)	8 (16.7%)
Ramp	5 (1.7%)	1 (2.1%)
TOTAL	295 (100.0%)	48 (100.0%)

Note: State highway (other) includes state-maintained roads that are not designated as inter-states.

Heavy Truck Deaths by Seating Position

In 1996, 1.5% of crash deaths involved heavy truck occupants. The table below depicts the heavy truck deaths in 1996 by seating position, excluding any pedestrians involved.

Total Deaths 22 	Drivers	1 →
	21 (95.5%)	
	Total Passengers	Center Front 2 →
	0 (0.0%)	Right Front 3 →
	0 (0.0%)	0 (0.0%)
	Others	1 (4.5%)



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

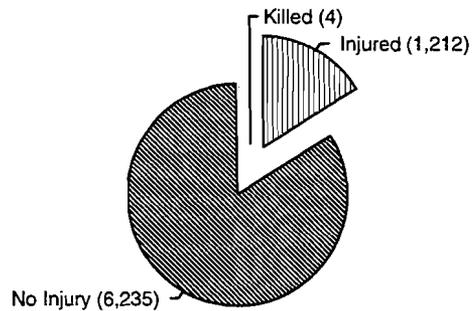
Crashes by Vehicle

School Bus Crashes

Of the more than 7,000 persons involved in school bus crashes in 1996, only 4 were killed. Almost 85% suffered no injury at all. See the tables at the bottom of page 57 for a breakdown of the persons involved. As shown, most are not the school bus passengers.

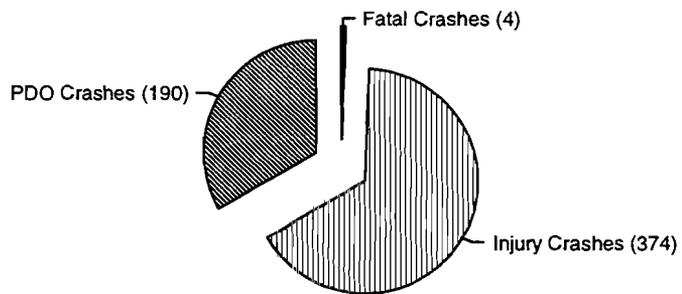
Total persons involved: **7,451**

Persons Involved



The majority (66%) of school bus crashes in 1996 were injury crashes. However, as the pie chart above shows, most persons involved in school bus crashes suffer no injuries at all.

Total Crashes



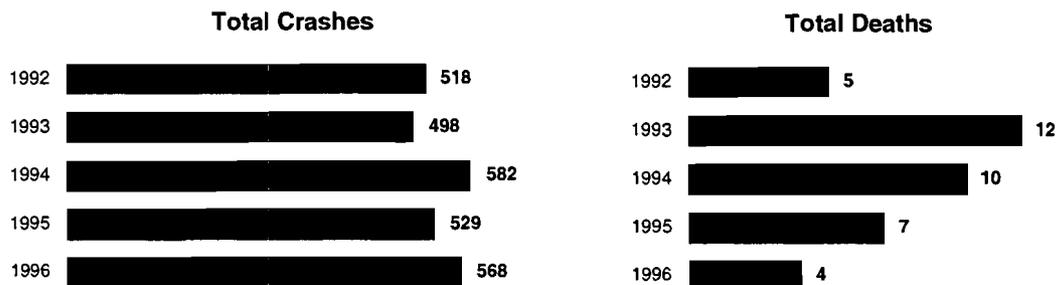
School Bus Crashes by Road Type

Road Type	Crashes	Percentage
State Hwy (Interstate)	4	0.7%
State Hwy (Other)	344	60.6%
Turnpike	1	0.2%
Local Road	211	37.1%
Ramp	8	1.4%
TOTAL	568	100.0%

Note: State highway (other) includes state-maintained roads that are not designated as interstates.

School Bus Crashes—Five-Year Trends

The total number of school bus crashes has fluctuated over the past five years, as have injury and property damage only (PDO) crashes. School bus related deaths have declined since 1993. Total injuries, however, were at a five-year high in 1996. Most of the persons killed were not school bus passengers at the time of the crash.



Year	Crash Severity				Deaths	Injuries
	Fatal	Injury	PDO	Total		
1992	5	353	160	518	5	1,197
1993	11	324	163	498	12	936
1994	7	383	192	582	10	1,113
1995	7	344	178	529	7	992
1996	4	374	190	568	4	1,212
TOTAL	34	1,778	883	2,695	38	5,450

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

The tables below show the breakdown of persons killed and injured in school bus crashes. Most of the persons who were killed or injured in these crashes were not school bus passengers.

DEATHS							
Year	School Bus Drivers	School Bus Passengers	School-Age Pedestrians	Other Pedestrians	Driver/ Passenger of Other Vehicle	Other/ Unknown	Total Deaths
1992	0	1	1	0	3	0	5
1993	0	1	1	0	9	1	12
1994	0	0	0	1	8	1	10
1995	0	0	0	2	5	0	7
1996	0	0	3	0	1	0	4
TOTAL	0	2	5	3	26	2	38

INJURIES							
Year	School Bus Drivers	School Bus Passengers	School-Age Pedestrians	Other Pedestrians	Driver/ Passenger of Other Vehicle	Other/ Unknown	Total Injuries
1992	71	168	15	8	275	660	1,197
1993	67	240	7	11	274	335	934
1994	86	142	12	4	354	518	1,116
1995	58	244	8	7	289	385	991
1996	72	281	12	7	322	518	1,212
TOTAL	354	1,075	54	37	1,514	2,416	5,450

Crashes by Vehicle

Pennsylvania County Crashes

County Overview

The Commonwealth of Pennsylvania is comprised of 67 counties. Each county is made up of 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 1996, Pennsylvania's total population was 12,056,112 people.

The ten most populated counties were:

Philadelphia (12.3%)	Allegheny (10.8%)	Montgomery (5.9%)
Bucks (4.8%)	Delaware (4.5%)	Lancaster (3.7%)
Chester (3.4%)	Westmoreland (3.1%)	York (3.1%)
Berks (2.9%)	<i>See page 59.</i>	

The ten least populated counties were:

Forest (0.04%)	Cameron (0.05%)	Sullivan (0.05%)
Fulton (0.12%)	Potter (0.14%)	Montour (0.15%)
Juniata (0.18%)	Wyoming (0.24%)	Elk (0.29%)
Clinton (0.31%)	<i>See page 59.</i>	

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

Westmoreland (2.99%)	Allegheny (2.93%)	York (2.86%)
Lancaster (2.78%)	Washington (2.72%)	Chester (2.65%)
Bucks (2.40%)	Crawford (2.27%)	Bradford (2.25%)
Berks (2.22%)		

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

Allegheny (5.98%)	Lancaster (3.51%)	Montgomery (3.43%)
York (3.30%)	Westmoreland (3.12%)	Berks (3.02%)
Bucks (2.99%)	Chester (2.90%)	Philadelphia (2.77%)
Erie (2.32%)		

The ten counties with the most reported traffic crashes were:

Philadelphia (9.9%)	Allegheny (9.7%)	Montgomery (6.9%)
Bucks (5.3%)	Lancaster (4.0%)	Delaware (3.8%)
Chester (3.6%)	Berks (3.5%)	York (3.3%)
Westmoreland (3.2%)	<i>See page 59.</i>	

The eleven counties with the most traffic-related deaths were:

Philadelphia (9.5%)	Bucks (5.2%)	Allegheny (5.0%)
Montgomery (4.9%)	Westmoreland (3.9%)	Berks (3.3%)
Lancaster (3.3%)	Luzerne (2.9%)	York (2.7%)
Chester (2.3%)	Erie (2.3%)	<i>See page 61.</i>

*Information provided by PennDOT's Bureau of Planning and Research, Performance Monitoring Division.

Pennsylvania Crashes by County

Percentages compare the number to the statewide total at the bottom of the column.

County	Population	Fatal Crashes	Injury Crashes	PDO Crashes	Total Crashes
Adams	84,921 (0.7%)	17 (1.3%)	531 (0.6%)	360 (0.7%)	908 (0.6%)
Allegheny	1,296,037 (10.8%)	66 (4.9%)	8,392 (9.4%)	5,360 (10.3%)	13,818 (9.7%)
Armstrong	73,872 (0.6%)	8 (0.6%)	467 (0.5%)	294 (0.6%)	769 (0.5%)
Beaver	187,009 (1.6%)	14 (1.0%)	1,110 (1.2%)	692 (1.3%)	1,816 (1.3%)
Bedford	49,322 (0.4%)	15 (1.1%)	419 (0.5%)	275 (0.5%)	709 (0.5%)
Berks	352,353 (2.9%)	44 (3.2%)	2,943 (3.3%)	2,064 (4.0%)	5,051 (3.5%)
Blair	131,450 (1.1%)	14 (1.0%)	1,042 (1.2%)	708 (1.4%)	1,764 (1.2%)
Bradford	62,352 (0.5%)	11 (0.8%)	406 (0.5%)	296 (0.6%)	713 (0.5%)
Bucks	578,715 (4.8%)	75 (5.5%)	4,658 (5.2%)	2,782 (5.4%)	7,515 (5.3%)
Butler	167,732 (1.4%)	28 (2.1%)	1,194 (1.3%)	701 (1.4%)	1,923 (1.3%)
Cambria	158,500 (1.3%)	14 (1.0%)	939 (1.0%)	528 (1.0%)	1,481 (1.0%)
Cameron	5,745 (0.0%)	3 (0.2%)	33 (0.0%)	39 (0.1%)	75 (0.1%)
Carbon	58,783 (0.5%)	16 (1.2%)	440 (0.5%)	316 (0.6%)	772 (0.5%)
Centre	131,489 (1.1%)	10 (0.7%)	905 (1.0%)	593 (1.1%)	1,508 (1.1%)
Chester	410,744 (3.4%)	34 (2.5%)	2,837 (3.2%)	2,238 (4.3%)	5,109 (3.6%)
Clarion	42,205 (0.4%)	13 (1.0%)	332 (0.4%)	253 (0.5%)	598 (0.4%)
Clearfield	79,640 (0.7%)	17 (1.3%)	604 (0.7%)	420 (0.8%)	1,041 (0.7%)
Clinton	37,130 (0.3%)	6 (0.4%)	276 (0.3%)	193 (0.4%)	475 (0.3%)
Columbia	64,079 (0.5%)	17 (1.3%)	446 (0.5%)	293 (0.6%)	756 (0.5%)
Crawford	89,175 (0.7%)	15 (1.1%)	654 (0.7%)	449 (0.9%)	1,118 (0.8%)
Cumberland	207,042 (1.7%)	26 (1.9%)	1,533 (1.7%)	1,046 (2.0%)	2,605 (1.8%)
Dauphin	246,807 (2.0%)	22 (1.6%)	1,858 (2.1%)	1,317 (2.5%)	3,197 (2.2%)
Delaware	547,592 (4.5%)	28 (2.1%)	3,547 (4.0%)	1,844 (3.6%)	5,419 (3.8%)
Elk	35,141 (0.3%)	11 (0.8%)	244 (0.3%)	125 (0.2%)	380 (0.3%)
Erie	280,570 (2.3%)	30 (2.2%)	2,436 (2.7%)	1,169 (2.3%)	3,635 (2.5%)
Fayette	145,628 (1.2%)	23 (1.7%)	1,045 (1.2%)	525 (1.0%)	1,593 (1.1%)
Forest	4,942 (0.0%)	0 (0.0%)	55 (0.1%)	28 (0.1%)	83 (0.1%)
Franklin	127,035 (1.1%)	18 (1.3%)	952 (1.1%)	684 (1.3%)	1,654 (1.2%)
Fulton	14,435 (0.1%)	7 (0.5%)	177 (0.2%)	119 (0.2%)	303 (0.2%)
Greene	42,054 (0.3%)	6 (0.4%)	240 (0.3%)	179 (0.3%)	425 (0.3%)
Huntingdon	44,977 (0.4%)	8 (0.6%)	270 (0.3%)	209 (0.4%)	487 (0.3%)
Indiana	90,073 (0.7%)	15 (1.1%)	664 (0.7%)	355 (0.7%)	1,034 (0.7%)
Jefferson	46,624 (0.4%)	10 (0.7%)	362 (0.4%)	228 (0.4%)	600 (0.4%)
Juniata	21,793 (0.2%)	3 (0.2%)	171 (0.2%)	93 (0.2%)	267 (0.2%)
Lackawanna	213,323 (1.8%)	13 (1.0%)	1,591 (1.8%)	1,038 (2.0%)	2,642 (1.8%)
Lancaster	450,834 (3.7%)	43 (3.2%)	3,414 (3.8%)	2,205 (4.3%)	5,662 (4.0%)
Lawrence	95,780 (0.8%)	10 (0.7%)	734 (0.8%)	369 (0.7%)	1,113 (0.8%)
Lebanon	117,179 (1.0%)	16 (1.2%)	850 (0.9%)	553 (1.1%)	1,419 (1.0%)
Lehigh	297,802 (2.5%)	27 (2.0%)	2,705 (3.0%)	1,763 (3.4%)	4,495 (3.1%)
Luzerne	321,309 (2.7%)	42 (3.1%)	2,445 (2.7%)	1,375 (2.7%)	3,862 (2.7%)
Lycoming	119,083 (1.0%)	26 (1.9%)	818 (0.9%)	554 (1.1%)	1,398 (1.0%)
McKean	48,156 (0.4%)	8 (0.6%)	241 (0.3%)	210 (0.4%)	459 (0.3%)
Mercer	122,155 (1.0%)	22 (1.6%)	1,046 (1.2%)	587 (1.1%)	1,655 (1.2%)
Mifflin	47,006 (0.4%)	7 (0.5%)	277 (0.3%)	168 (0.3%)	452 (0.3%)
Monroe	119,581 (1.0%)	14 (1.0%)	1,291 (1.4%)	856 (1.7%)	2,161 (1.5%)
Montgomery	708,782 (5.9%)	68 (5.0%)	6,180 (6.9%)	3,625 (7.0%)	9,873 (6.9%)
Montour	18,044 (0.1%)	3 (0.2%)	141 (0.2%)	70 (0.1%)	214 (0.1%)
Northampton	257,719 (2.1%)	23 (1.7%)	1,975 (2.2%)	1,222 (2.4%)	3,220 (2.3%)
Northumberland	95,897 (0.8%)	14 (1.0%)	496 (0.6%)	316 (0.6%)	826 (0.6%)
Perry	43,727 (0.4%)	9 (0.7%)	315 (0.4%)	257 (0.5%)	581 (0.4%)
Philadelphia	1,478,002 (12.3%)	132 (9.7%)	11,703 (13.0%)	2,285 (4.4%)	14,120 (9.9%)
Pike	38,139 (0.3%)	5 (0.4%)	251 (0.3%)	213 (0.4%)	469 (0.3%)
Potter	17,103 (0.1%)	2 (0.1%)	81 (0.1%)	68 (0.1%)	151 (0.1%)
Schuylkill	152,630 (1.3%)	21 (1.6%)	1,030 (1.1%)	732 (1.4%)	1,783 (1.2%)
Snyder	38,034 (0.3%)	9 (0.7%)	230 (0.3%)	159 (0.3%)	398 (0.3%)
Somerset	80,517 (0.7%)	12 (0.9%)	523 (0.6%)	405 (0.8%)	940 (0.7%)
Sullivan	6,145 (0.1%)	4 (0.3%)	49 (0.1%)	37 (0.1%)	90 (0.1%)
Susquehanna	42,002 (0.3%)	8 (0.6%)	307 (0.3%)	222 (0.4%)	537 (0.4%)
Tioga	41,510 (0.3%)	5 (0.4%)	291 (0.3%)	185 (0.4%)	481 (0.3%)
Union	40,826 (0.3%)	5 (0.4%)	250 (0.3%)	167 (0.3%)	422 (0.3%)
Venango	58,820 (0.5%)	14 (1.0%)	498 (0.6%)	303 (0.6%)	815 (0.6%)
Warren	44,624 (0.4%)	15 (1.1%)	302 (0.3%)	285 (0.6%)	602 (0.4%)
Washington	206,708 (1.7%)	25 (1.8%)	1,248 (1.4%)	895 (1.7%)	2,168 (1.5%)
Wayne	44,718 (0.4%)	12 (0.9%)	346 (0.4%)	223 (0.4%)	581 (0.4%)
Westmoreland	376,297 (3.1%)	52 (3.8%)	2,747 (3.1%)	1,706 (3.3%)	4,505 (3.2%)
Wyoming	29,362 (0.2%)	8 (0.6%)	275 (0.3%)	146 (0.3%)	429 (0.3%)
York	368,332 (3.1%)	36 (2.7%)	2,879 (3.2%)	1,828 (3.5%)	4,743 (3.3%)
TOTALS	12,056,112 (100.0%)	1,354 (100.0%)	89,711 (100.0%)	51,802 (100.0%)	142,867 (100.0%)

Counties

Crashes by County—Five-Year Trends

Percentages compare the number to the statewide total at the bottom of the column.

County	1992 Crashes	1993 Crashes	1994 Crashes	1995 Crashes	1996 Crashes
Adams	914 (0.7%)	949 (0.7%)	974 (0.7%)	997 (0.7%)	908 (0.6%)
Allegheny	13,226 (9.9%)	13,365 (10.0%)	12,803 (9.5%)	12,969 (9.5%)	13,818 (9.7%)
Armstrong	677 (0.5%)	706 (0.5%)	685 (0.5%)	731 (0.5%)	769 (0.5%)
Beaver	1,816 (1.4%)	1,780 (1.3%)	1,853 (1.4%)	1,948 (1.4%)	1,816 (1.3%)
Bedford	599 (0.4%)	637 (0.5%)	682 (0.5%)	712 (0.5%)	709 (0.5%)
Berks	4,838 (3.6%)	4,788 (3.6%)	4,782 (3.6%)	4,784 (3.5%)	5,051 (3.5%)
Blair	1,742 (1.3%)	1,735 (1.3%)	1,733 (1.3%)	1,612 (1.2%)	1,764 (1.2%)
Bradford	638 (0.5%)	637 (0.5%)	619 (0.5%)	651 (0.5%)	713 (0.5%)
Bucks	6,807 (5.1%)	6,872 (5.1%)	7,034 (5.2%)	7,041 (5.1%)	7,515 (5.3%)
Butler	1,955 (1.5%)	1,931 (1.4%)	2,009 (1.5%)	2,078 (1.5%)	1,923 (1.3%)
Cambria	1,487 (1.1%)	1,543 (1.1%)	1,464 (1.1%)	1,545 (1.1%)	1,481 (1.0%)
Cameron	76 (0.1%)	63 (0.0%)	66 (0.0%)	76 (0.1%)	75 (0.1%)
Carbon	755 (0.6%)	765 (0.6%)	720 (0.5%)	787 (0.6%)	772 (0.5%)
Centre	1,194 (0.9%)	1,237 (0.9%)	1,333 (1.0%)	1,393 (1.0%)	1,508 (1.1%)
Chester	4,680 (3.5%)	4,775 (3.6%)	5,072 (3.8%)	4,788 (3.5%)	5,109 (3.6%)
Clarion	532 (0.4%)	577 (0.4%)	536 (0.4%)	535 (0.4%)	598 (0.4%)
Clearfield	901 (0.7%)	980 (0.7%)	1,023 (0.8%)	1,041 (0.8%)	1,041 (0.7%)
Clinton	458 (0.3%)	477 (0.4%)	470 (0.4%)	437 (0.3%)	475 (0.3%)
Columbia	729 (0.5%)	708 (0.5%)	720 (0.5%)	711 (0.5%)	756 (0.5%)
Crawford	1,068 (0.8%)	1,081 (0.8%)	1,073 (0.8%)	1,180 (0.9%)	1,118 (0.8%)
Cumberland	2,271 (1.7%)	2,451 (1.8%)	2,546 (1.9%)	2,415 (1.8%)	2,605 (1.8%)
Dauphin	3,123 (2.3%)	3,118 (2.3%)	3,051 (2.3%)	3,118 (2.3%)	3,197 (2.2%)
Delaware	5,225 (3.9%)	5,411 (4.0%)	5,249 (3.9%)	5,267 (3.9%)	5,419 (3.8%)
Elk	402 (0.3%)	430 (0.3%)	405 (0.3%)	468 (0.3%)	380 (0.3%)
Erie	3,230 (2.4%)	3,348 (2.5%)	3,403 (2.5%)	3,414 (2.5%)	3,635 (2.5%)
Fayette	1,615 (1.2%)	1,595 (1.2%)	1,510 (1.1%)	1,496 (1.1%)	1,593 (1.1%)
Forest	82 (0.1%)	87 (0.1%)	86 (0.1%)	75 (0.1%)	83 (0.1%)
Franklin	1,543 (1.2%)	1,635 (1.2%)	1,685 (1.3%)	1,626 (1.2%)	1,654 (1.2%)
Fulton	262 (0.2%)	281 (0.2%)	273 (0.2%)	283 (0.2%)	303 (0.2%)
Greene	493 (0.4%)	474 (0.4%)	470 (0.4%)	444 (0.3%)	425 (0.3%)
Huntingdon	470 (0.4%)	451 (0.3%)	439 (0.3%)	463 (0.3%)	487 (0.3%)
Indiana	993 (0.7%)	938 (0.7%)	954 (0.7%)	953 (0.7%)	1,034 (0.7%)
Jefferson	530 (0.4%)	547 (0.4%)	507 (0.4%)	515 (0.4%)	600 (0.4%)
Juniata	209 (0.2%)	213 (0.2%)	222 (0.2%)	229 (0.2%)	267 (0.2%)
Lackawanna	2,262 (1.7%)	2,088 (1.6%)	1,814 (1.4%)	2,271 (1.7%)	2,642 (1.8%)
Lancaster	5,193 (3.9%)	5,136 (3.8%)	5,360 (4.0%)	5,242 (3.8%)	5,662 (4.0%)
Lawrence	1,028 (0.8%)	1,083 (0.8%)	985 (0.7%)	1,033 (0.8%)	1,113 (0.8%)
Lebanon	1,481 (1.1%)	1,398 (1.0%)	1,398 (1.0%)	1,401 (1.0%)	1,419 (1.0%)
Lehigh	4,060 (3.0%)	4,076 (3.0%)	4,217 (3.1%)	4,264 (3.1%)	4,495 (3.1%)
Luzerne	3,639 (2.7%)	3,734 (2.8%)	3,678 (2.7%)	3,832 (2.8%)	3,862 (2.7%)
Lycoming	1,354 (1.0%)	1,356 (1.0%)	1,314 (1.0%)	1,312 (1.0%)	1,398 (1.0%)
McKean	444 (0.3%)	513 (0.4%)	481 (0.4%)	531 (0.4%)	459 (0.3%)
Mercer	1,590 (1.2%)	1,508 (1.1%)	1,557 (1.2%)	1,653 (1.2%)	1,655 (1.2%)
Mifflin	494 (0.4%)	473 (0.4%)	439 (0.3%)	427 (0.3%)	452 (0.3%)
Monroe	1,926 (1.4%)	1,917 (1.4%)	1,927 (1.4%)	1,910 (1.4%)	2,161 (1.5%)
Montgomery	9,121 (6.8%)	9,215 (6.9%)	9,330 (7.0%)	9,413 (6.9%)	9,873 (6.9%)
Montour	251 (0.2%)	212 (0.2%)	209 (0.2%)	213 (0.2%)	214 (0.1%)
Northampton	2,769 (2.1%)	2,829 (2.1%)	2,975 (2.2%)	2,943 (2.2%)	3,220 (2.3%)
Northumberland	784 (0.6%)	840 (0.6%)	861 (0.6%)	839 (0.6%)	826 (0.6%)
Perry	507 (0.4%)	510 (0.4%)	521 (0.4%)	560 (0.4%)	581 (0.4%)
Philadelphia	13,305 (9.9%)	12,638 (9.4%)	12,771 (9.5%)	14,126 (10.3%)	14,120 (9.9%)
Pike	496 (0.4%)	522 (0.4%)	529 (0.4%)	445 (0.3%)	469 (0.3%)
Potter	215 (0.2%)	219 (0.2%)	148 (0.1%)	184 (0.1%)	151 (0.1%)
Schuylkill	1,670 (1.2%)	1,648 (1.2%)	1,684 (1.3%)	1,571 (1.1%)	1,783 (1.2%)
Snyder	399 (0.3%)	391 (0.3%)	392 (0.3%)	394 (0.3%)	398 (0.3%)
Somerset	878 (0.7%)	849 (0.6%)	815 (0.6%)	885 (0.6%)	940 (0.7%)
Sullivan	108 (0.1%)	106 (0.1%)	83 (0.1%)	82 (0.1%)	90 (0.1%)
Susquehanna	467 (0.3%)	469 (0.3%)	445 (0.3%)	459 (0.3%)	537 (0.4%)
Tioga	432 (0.3%)	436 (0.3%)	435 (0.3%)	438 (0.3%)	481 (0.3%)
Union	368 (0.3%)	373 (0.3%)	422 (0.3%)	384 (0.3%)	422 (0.3%)
Venango	730 (0.5%)	758 (0.6%)	763 (0.6%)	841 (0.6%)	815 (0.6%)
Warren	529 (0.4%)	552 (0.4%)	509 (0.4%)	560 (0.4%)	602 (0.4%)
Washington	2,291 (1.7%)	2,188 (1.6%)	2,079 (1.5%)	2,104 (1.5%)	2,168 (1.5%)
Wayne	549 (0.4%)	522 (0.4%)	551 (0.4%)	577 (0.4%)	581 (0.4%)
Westmoreland	4,221 (3.2%)	4,201 (3.1%)	4,135 (3.1%)	4,259 (3.1%)	4,505 (3.2%)
Wyoming	377 (0.3%)	407 (0.3%)	357 (0.3%)	345 (0.3%)	429 (0.3%)
York	4,430 (3.3%)	4,563 (3.4%)	4,536 (3.4%)	4,524 (3.3%)	4,743 (3.3%)
TOTAL	133,913 (100.0%)	134,315 (100.0%)	134,171 (100.0%)	136,804 (100.0%)	142,867 (100.0%)

Counties

Traffic Deaths by County—Five-Year Trends

Percentages compare the number to the statewide totals at the bottom of the columns.

County	1992 Deaths	1993 Deaths	1994 Deaths	1995 Deaths	1996 Deaths
Adams	27 (1.7%)	20 (1.3%)	22 (1.5%)	12 (0.8%)	20 (1.4%)
Allegheny	95 (6.1%)	86 (5.6%)	84 (5.8%)	82 (5.5%)	73 (5.0%)
Armstrong	13 (1.2%)	10 (0.7%)	15 (1.0%)	11 (0.7%)	10 (0.7%)
Beaver	19 (1.2%)	18 (1.2%)	19 (1.3%)	11 (0.7%)	14 (1.0%)
Bedford	11 (0.7%)	11 (0.7%)	11 (0.8%)	17 (1.1%)	15 (1.0%)
Berks	43 (3.1%)	56 (3.7%)	47 (3.3%)	45 (3.0%)	49 (3.3%)
Blair	24 (1.6%)	16 (1.0%)	15 (1.0%)	19 (1.3%)	15 (1.0%)
Bradford	10 (0.6%)	8 (0.5%)	15 (1.0%)	9 (0.6%)	12 (0.8%)
Bucks	73 (4.7%)	67 (4.4%)	51 (3.5%)	79 (5.3%)	77 (5.2%)
Butler	26 (1.7%)	24 (1.6%)	20 (1.4%)	37 (2.5%)	28 (1.9%)
Cambria	22 (1.4%)	14 (0.9%)	23 (1.6%)	15 (1.0%)	16 (1.1%)
Cameron	2 (0.1%)	4 (0.3%)	1 (0.1%)	0 (0.0%)	3 (0.2%)
Carbon	11 (0.7%)	14 (0.9%)	10 (0.7%)	9 (0.6%)	17 (1.2%)
Centre	20 (1.3%)	13 (0.8%)	14 (1.0%)	16 (1.1%)	12 (0.8%)
Chester	59 (3.8%)	48 (3.1%)	54 (3.8%)	54 (3.6%)	34 (2.3%)
Clarion	11 (0.7%)	12 (0.8%)	7 (0.5%)	8 (0.5%)	14 (1.0%)
Clearfield	14 (0.9%)	20 (1.3%)	8 (0.6%)	24 (1.6%)	18 (1.2%)
Clinton	3 (0.2%)	5 (0.3%)	9 (0.6%)	9 (0.6%)	9 (0.6%)
Columbia	14 (0.9%)	13 (0.8%)	8 (0.6%)	6 (0.4%)	18 (1.2%)
Crawford	21 (1.4%)	10 (0.7%)	23 (1.6%)	20 (1.4%)	17 (1.2%)
Cumberland	26 (1.7%)	29 (1.9%)	17 (1.2%)	19 (1.3%)	28 (1.9%)
Dauphin	27 (1.7%)	29 (1.9%)	26 (1.8%)	32 (2.2%)	25 (1.7%)
Delaware	47 (3.0%)	38 (2.5%)	44 (3.1%)	48 (3.2%)	32 (2.2%)
Elk	4 (0.3%)	6 (0.4%)	7 (0.5%)	5 (0.3%)	13 (0.9%)
Erie	36 (2.3%)	34 (2.2%)	53 (3.7%)	33 (2.2%)	34 (2.3%)
Fayette	32 (2.1%)	33 (2.2%)	24 (1.7%)	23 (1.6%)	25 (1.7%)
Forest	4 (0.3%)	1 (0.1%)	1 (0.1%)	3 (0.2%)	0 (0.0%)
Franklin	20 (1.3%)	19 (1.2%)	39 (2.7%)	24 (1.6%)	20 (1.4%)
Fulton	5 (0.3%)	7 (0.5%)	4 (0.3%)	10 (0.7%)	7 (0.5%)
Greene	11 (0.7%)	15 (1.0%)	5 (0.3%)	7 (0.5%)	6 (0.4%)
Huntingdon	13 (0.8%)	7 (0.5%)	14 (1.0%)	17 (1.1%)	8 (0.5%)
Indiana	16 (1.0%)	23 (1.5%)	17 (1.2%)	21 (1.4%)	16 (1.1%)
Jefferson	9 (0.6%)	8 (0.5%)	13 (0.9%)	5 (0.3%)	11 (0.7%)
Juniata	5 (0.3%)	7 (0.5%)	4 (0.3%)	3 (0.2%)	4 (0.3%)
Lackawanna	21 (1.4%)	19 (1.2%)	17 (1.2%)	24 (1.6%)	13 (0.9%)
Lancaster	48 (3.1%)	65 (4.2%)	51 (3.5%)	60 (4.1%)	49 (3.3%)
Lawrence	16 (1.0%)	7 (0.5%)	9 (0.6%)	9 (0.6%)	11 (0.7%)
Lebanon	22 (1.4%)	20 (1.3%)	22 (1.5%)	19 (1.3%)	19 (1.3%)
Lehigh	36 (2.3%)	35 (2.3%)	39 (2.7%)	41 (2.8%)	28 (1.9%)
Luzerne	38 (2.5%)	47 (3.1%)	37 (2.6%)	35 (2.4%)	42 (2.9%)
Lycoming	16 (1.0%)	14 (0.9%)	23 (1.6%)	15 (1.0%)	26 (1.8%)
McKean	9 (0.6%)	13 (0.8%)	14 (1.0%)	6 (0.4%)	9 (0.6%)
Mercer	28 (1.8%)	22 (1.4%)	18 (1.3%)	32 (2.2%)	23 (1.6%)
Mifflin	16 (1.0%)	12 (0.8%)	6 (0.4%)	4 (0.3%)	8 (0.5%)
Monroe	24 (1.6%)	24 (1.6%)	13 (0.9%)	26 (1.8%)	14 (1.0%)
Montgomery	54 (3.5%)	59 (3.9%)	48 (3.3%)	56 (3.8%)	72 (4.9%)
Montour	5 (0.3%)	2 (0.1%)	3 (0.2%)	3 (0.2%)	3 (0.2%)
Northampton	32 (2.1%)	27 (1.8%)	22 (1.5%)	20 (1.4%)	28 (1.9%)
Northumberland	15 (1.0%)	20 (1.3%)	7 (0.5%)	18 (1.2%)	15 (1.0%)
Perry	9 (0.6%)	16 (1.0%)	10 (0.7%)	9 (0.6%)	12 (0.8%)
Philadelphia	124 (8.0%)	135 (8.8%)	135 (9.4%)	147 (9.9%)	140 (9.5%)
Pike	6 (0.4%)	8 (0.5%)	8 (0.6%)	10 (0.7%)	6 (0.4%)
Potter	6 (0.4%)	6 (0.4%)	6 (0.4%)	3 (0.2%)	2 (0.1%)
Schuylkill	29 (1.9%)	29 (1.9%)	24 (1.7%)	23 (1.6%)	21 (1.4%)
Snyder	8 (0.5%)	5 (0.3%)	11 (0.8%)	5 (0.3%)	13 (0.9%)
Somerset	18 (1.2%)	19 (1.2%)	18 (1.3%)	14 (0.9%)	12 (0.8%)
Sullivan	2 (0.1%)	3 (0.2%)	4 (0.3%)	0 (0.0%)	4 (0.3%)
Susquehanna	10 (0.6%)	11 (0.7%)	11 (0.8%)	8 (0.5%)	10 (0.7%)
Tioga	12 (0.8%)	16 (1.0%)	13 (0.9%)	9 (0.6%)	5 (0.3%)
Union	5 (0.3%)	7 (0.5%)	6 (0.4%)	3 (0.2%)	5 (0.3%)
Venango	11 (0.7%)	11 (0.7%)	12 (0.8%)	12 (0.8%)	16 (1.1%)
Warren	16 (1.0%)	7 (0.5%)	10 (0.7%)	13 (0.9%)	19 (1.3%)
Washington	37 (2.4%)	37 (2.4%)	18 (1.3%)	25 (1.7%)	28 (1.9%)
Wayne	10 (0.6%)	8 (0.5%)	6 (0.4%)	15 (1.0%)	12 (0.8%)
Westmoreland	38 (2.5%)	57 (3.7%)	50 (3.5%)	48 (3.2%)	58 (3.9%)
Wyoming	6 (0.4%)	6 (0.4%)	11 (0.8%)	7 (0.5%)	8 (0.5%)
York	35 (2.3%)	38 (2.5%)	34 (2.4%)	28 (1.9%)	39 (2.7%)
TOTAL	1,545 (100.0%)	1,530 (100.0%)	1,440 (100.0%)	1,480 (100.0%)	1,470 (100.0%)

Pedestrian Deaths by County—Five-Year Trends

County	1992	1993	1994	1995	1996
Adams	1	0	0	1	0
Allegheny	21	15	15	11	15
Armstrong	1	0	2	1	0
Beaver	1	1	0	1	2
Bedford	1	0	0	2	1
Berks	0	3	7	7	4
Blair	5	2	1	3	3
Bradford	5	0	1	0	1
Bucks	19	13	6	10	13
Butler	1	1	4	5	2
Cambria	2	2	1	1	1
Cameron	1	0	0	0	0
Carbon	2	4	0	2	2
Centre	1	3	0	1	2
Chester	11	8	5	3	6
Clarion	1	0	2	1	3
Clearfield	0	3	0	3	0
Clinton	0	0	0	0	0
Columbia	1	0	0	1	1
Crawford	2	0	3	4	3
Cumberland	3	2	2	0	1
Dauphin	8	2	3	5	3
Delaware	10	8	9	12	7
Elk	1	0	0	0	0
Erie	10	6	7	8	8
Fayette	4	4	1	2	7
Forest	0	0	0	0	0
Franklin	3	1	1	2	3
Fulton	0	1	1	1	0
Greene	1	2	1	2	0
Huntingdon	1	0	2	1	0
Indiana	1	2	2	0	1
Jefferson	1	0	2	0	0
Juniata	1	0	0	0	0
Lackawanna	2	2	2	3	0
Lancaster	9	8	8	6	5
Lawrence	1	0	1	1	4
Lebanon	0	1	0	3	4
Lehigh	3	7	6	5	2
Luzerne	6	8	7	2	9
Lycoming	3	1	1	2	4
McKean	2	0	2	1	1
Mercer	3	3	2	4	0
Mifflin	0	2	0	0	0
Monroe	3	3	5	2	2
Montgomery	14	12	11	10	15
Montour	0	1	0	0	0
Northampton	4	2	3	0	4
Northumberland	1	3	1	1	1
Perry	0	1	1	0	1
Philadelphia	39	54	33	49	56
Pike	1	1	2	1	0
Potter	1	0	0	0	0
Schuylkill	1	3	1	2	4
Snyder	1	0	0	1	1
Somerset	0	1	3	0	0
Sullivan	0	0	0	0	0
Susquehanna	0	0	0	0	0
Tioga	1	0	0	0	0
Union	0	0	0	0	1
Venango	2	4	2	0	0
Warren	0	0	2	2	1
Washington	4	4	1	5	2
Wayne	1	1	0	2	1
Westmoreland	4	7	3	4	4
Wyoming	1	0	0	0	2
York	4	2	4	2	5
TOTAL	231	214	179	198	218

Counties

Pedestrian Deaths and Injuries by Age Group by County

County	Age 0-4		Age 5-9		Age 10-14		Age 15-59		Age 60+		Total	
	Death	Injury	Death	Injury	Death	Injury	Death	Injury	Death	Injury	Death	Injury
Adams	0	3	0	1	0	1	0	7	0	3	0	15
Allegheny	2	25	3	80	0	81	5	313	5	81	15	580
Armstrong	0	1	0	2	0	2	0	5	0	2	0	12
Beaver	0	1	0	4	0	2	1	15	1	2	2	24
Bedford	0	0	0	1	0	0	1	5	0	0	1	6
Berks	0	14	0	44	1	15	2	75	1	25	4	173
Blair	0	0	0	7	0	7	1	27	2	4	3	45
Bradford	0	0	0	1	0	1	1	3	0	4	1	9
Bucks	0	3	0	14	0	29	8	80	5	8	13	134
Butler	0	1	0	5	0	6	0	19	2	8	2	39
Cambria	0	0	0	5	0	3	0	19	1	3	1	30
Cameron	0	0	0	1	0	2	0	1	0	1	0	5
Carbon	0	0	0	1	0	2	1	3	1	2	2	8
Centre	0	0	0	3	0	4	2	18	0	5	2	30
Chester	1	2	0	12	1	6	2	38	2	7	6	65
Clarion	0	0	2	0	0	1	1	2	0	1	3	4
Clearfield	0	1	0	2	0	3	0	11	0	3	0	20
Clinton	0	1	0	1	0	2	0	6	0	1	0	11
Columbia	0	1	0	2	0	1	1	4	0	1	1	9
Crawford	0	0	0	4	0	2	3	18	0	2	3	26
Cumberland	0	1	0	3	0	3	1	22	0	8	1	37
Dauphin	0	5	0	21	1	14	2	61	0	8	3	109
Delaware	0	16	0	42	0	34	5	116	2	27	7	235
Elk	0	0	0	2	0	3	0	6	0	2	0	13
Erie	0	4	1	24	2	20	4	66	1	12	8	126
Fayette	0	1	1	5	0	2	5	30	1	5	7	43
Forest	0	0	0	0	0	0	0	1	0	0	0	1
Franklin	0	2	1	6	0	1	0	14	2	2	3	25
Fulton	0	0	0	2	0	0	0	1	0	1	0	4
Greene	0	1	0	0	0	0	0	4	0	0	0	5
Huntingdon	0	0	0	1	0	2	0	3	0	1	0	7
Indiana	0	0	0	0	0	1	0	17	1	2	1	20
Jefferson	0	1	0	0	0	2	0	4	0	1	0	8
Juniata	0	0	0	0	0	0	0	2	0	0	0	2
Lackawanna	0	1	0	5	0	7	0	37	0	14	0	64
Lancaster	0	9	0	26	0	23	3	64	2	17	5	139
Lawrence	0	2	0	3	1	5	1	17	2	2	4	29
Lebanon	1	0	0	11	1	7	1	8	1	2	4	28
Lehigh	0	8	0	32	0	23	0	53	2	19	2	135
Luzerne	0	4	1	18	0	20	6	52	2	29	9	123
Lycoming	0	1	1	15	1	8	1	20	1	4	4	48
McKean	0	0	0	3	0	1	1	6	0	3	1	13
Mercer	0	0	0	3	0	6	0	12	0	5	0	26
Mifflin	0	0	0	7	0	0	0	4	0	2	0	13
Monroe	0	0	1	1	0	5	1	16	0	7	2	29
Montgomery	0	8	1	32	0	36	11	154	3	29	15	259
Montour	0	0	0	1	0	1	0	1	0	0	0	3
Northampton	0	4	1	5	0	15	0	35	3	6	4	65
Northumberland	0	2	0	4	0	4	0	10	1	8	1	28
Perry	0	0	0	2	1	4	0	4	0	1	1	11
Philadelphia	3	174	3	452	3	314	22	1,275	25	220	56	2,435
Pike	0	0	0	0	0	0	0	3	0	0	0	3
Potter	0	0	0	0	0	0	0	0	0	0	0	0
Schuylkill	1	4	0	9	0	8	3	19	0	12	4	52
Snyder	0	1	0	2	0	3	0	3	1	1	1	10
Somerset	0	0	0	1	0	2	0	4	0	2	0	9
Sullivan	0	0	0	0	0	0	0	0	0	0	0	0
Susquehanna	0	1	0	1	0	2	0	1	0	0	0	5
Tioga	0	0	0	2	0	0	0	5	0	1	0	8
Union	0	0	0	1	0	0	1	5	0	2	1	8
Venango	0	0	0	2	0	6	0	9	0	2	0	19
Warren	0	0	0	2	0	8	1	5	0	1	1	16
Washington	0	2	0	4	0	5	2	16	0	7	2	34
Wayne	0	0	0	1	0	2	1	5	0	0	1	8
Westmoreland	0	3	0	9	0	12	2	46	2	6	4	76
Wyoming	0	0	0	0	0	0	1	3	1	1	2	4
York	0	8	0	27	0	15	1	47	4	8	5	105
TOTAL	8	316	16	977	12	794	105	2,955	77	643	218	5,685

Counties

Note: The above totals do not include an additional 178 pedestrians of unknown age.

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

County	1992 Belt Use	1993 Belt Use	1994 Belt Use	1995 Belt Use	1996 Belt Use
Adams	64	66	71	73	70
Allegheny	54	55	58	59	60
Armstrong	65	70	72	73	71
Beaver	47	48	49	49	52
Bedford	76	78	75	79	78
Berks	60	61	63	65	64
Blair	69	72	75	76	74
Bradford	66	67	72	71	72
Bucks	60	61	65	66	69
Butler	67	67	70	69	71
Cambria	57	59	63	67	66
Cameron	55	68	67	71	60
Carbon	58	65	64	65	68
Centre	73	74	73	73	74
Chester	67	71	73	72	74
Clanton	66	74	77	73	76
Clearfield	63	69	73	73	73
Clinton	69	71	74	74	74
Columbia	66	64	69	72	67
Crawford	65	69	72	75	71
Cumberland	70	72	75	76	77
Dauphin	65	69	72	70	70
Delaware	49	50	54	54	57
Elk	60	65	70	66	69
Erie	65	68	71	70	69
Fayette	60	67	68	71	72
Forest	74	69	67	69	68
Franklin	69	69	72	70	73
Fulton	68	75	75	76	73
Greene	75	76	80	82	79
Huntingdon	67	71	73	73	74
Indiana	68	71	78	78	79
Jefferson	68	73	71	73	71
Juniata	66	68	70	69	69
Lackawanna	52	53	58	56	59
Lancaster	71	74	75	75	74
Lawrence	58	60	57	60	60
Lebanon	67	67	71	71	67
Lehigh	74	77	78	77	78
Luzerne	61	62	66	65	66
Lycoming	64	65	69	72	69
McKean	51	62	63	65	62
Mercer	64	63	63	63	65
Mifflin	60	70	70	71	69
Monroe	70	76	75	75	78
Montgomery	67	69	71	70	73
Montour	72	80	74	81	82
Northampton	68	70	69	71	68
Northumberland	61	61	65	66	62
Perry	69	76	71	73	75
Philadelphia	21	22	20	22	21
Pike	74	74	71	74	80
Potter	69	71	66	71	74
Schuylkill	65	68	71	69	70
Snyder	70	74	76	77	72
Somerset	64	68	71	70	72
Sullivan	71	66	68	71	67
Susquehanna	67	69	73	74	74
Tioga	64	74	79	77	74
Union	69	75	80	76	75
Venango	63	66	73	75	72
Warren	72	74	73	75	75
Washington	66	69	69	68	69
Wayne	65	72	75	78	76
Westmoreland	66	69	72	71	73
Wyoming	69	75	71	71	70
York	69	71	72	72	73
STATEWIDE	59	62	64	64	65

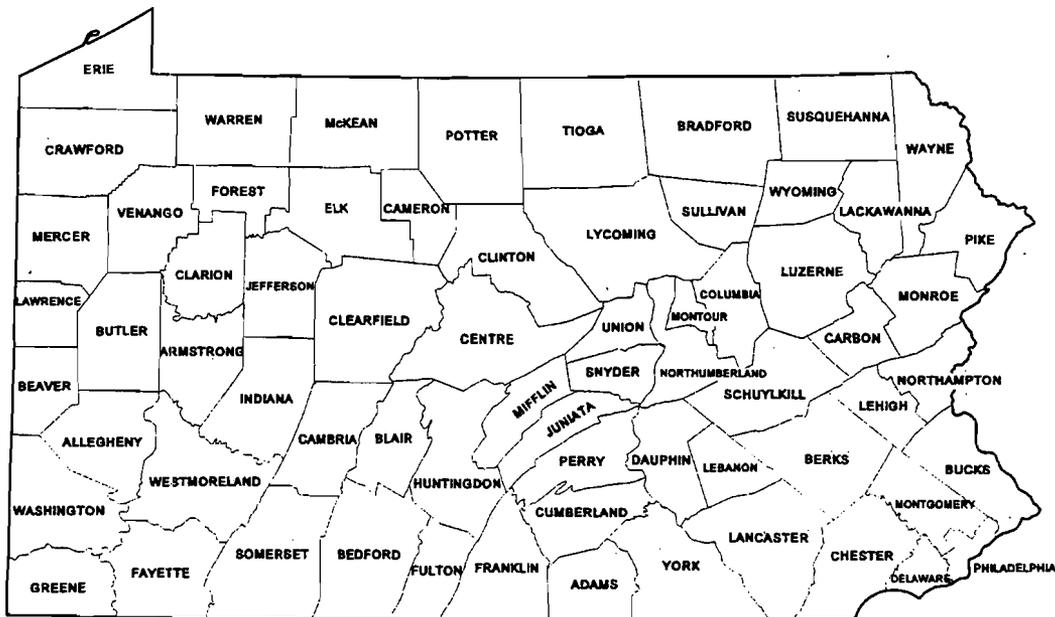
Counties

Alcohol-Related Deaths by County—Five-Year Trends

County	1992 Deaths	1993 Deaths	1994 Deaths	1995 Deaths	1996 Deaths
Adams	10	10	11	2	12
Allegheny	50	38	37	29	34
Armstrong	10	6	6	4	4
Beaver	10	7	8	3	7
Bedford	3	6	3	5	7
Berks	22	24	17	14	11
Blair	12	5	5	4	6
Bradford	3	2	6	2	3
Bucks	22	25	20	24	27
Butler	15	7	9	15	10
Cambria	14	7	11	3	4
Cameron	2	1	0	0	1
Carbon	3	9	6	3	8
Centre	10	1	6	1	2
Chester	26	14	20	19	14
Clarion	5	5	2	3	6
Clearfield	6	6	2	8	9
Clinton	1	2	1	3	3
Columbia	7	4	1	2	8
Crawford	11	4	11	9	7
Cumberland	4	13	8	5	8
Dauphin	13	9	11	11	12
Delaware	22	19	7	22	8
Elk	0	5	2	1	5
Erie	13	11	15	15	13
Fayette	19	17	17	8	8
Forest	4	0	0	0	0
Franklin	9	5	14	10	3
Fulton	2	3	2	3	2
Greene	5	7	4	5	4
Huntingdon	7	3	7	4	2
Indiana	9	11	5	9	12
Jefferson	3	3	3	1	3
Juniata	1	2	1	1	0
Lackawanna	9	13	6	11	3
Lancaster	18	23	11	19	18
Lawrence	4	1	4	3	1
Lebanon	2	12	3	5	4
Lehigh	11	10	11	13	5
Luzerne	17	25	18	13	16
Lycoming	8	6	5	8	8
McKean	7	9	3	2	5
Mercer	15	8	8	11	6
Mifflin	7	2	2	2	4
Monroe	8	7	7	21	5
Montgomery	13	18	15	22	27
Montour	1	0	2	0	1
Northampton	9	13	8	7	10
Northumberland	6	6	3	5	3
Perry	2	3	3	4	3
Philadelphia	30	29	47	37	20
Pike	1	4	2	3	5
Potter	3	4	1	2	2
Schuylkill	11	12	7	9	7
Snyder	1	0	3	1	2
Somerset	10	9	6	6	2
Sullivan	0	3	0	0	2
Susquehanna	7	4	5	3	8
Tioga	3	6	6	4	3
Union	0	2	2	0	1
Venago	6	3	2	2	3
Warren	11	4	4	9	8
Washington	15	17	7	11	9
Wayne	4	3	3	4	5
Westmoreland	24	24	21	13	26
Wyoming	3	3	3	1	3
York	15	20	17	15	15
TOTAL	634	594	523	514	503

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, 61% of the total traffic crashes occurred in only 13 of Pennsylvania's 67 counties. These 13 counties appear in black on the map.

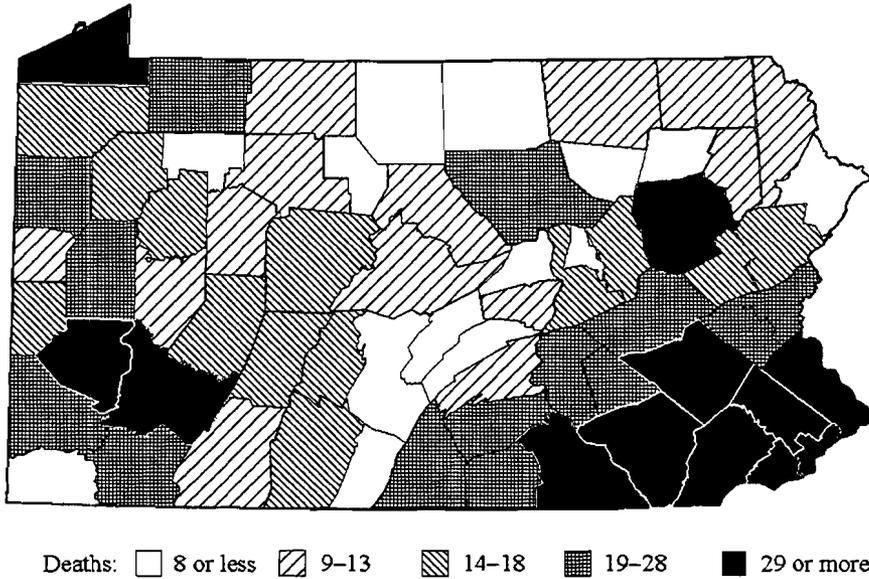


Total Crashes:
 □ 450 or less ▨ 451-750 ▩ 751-1,500
 ▧ 1,501-3,600 ■ 3,601 or more

Counties

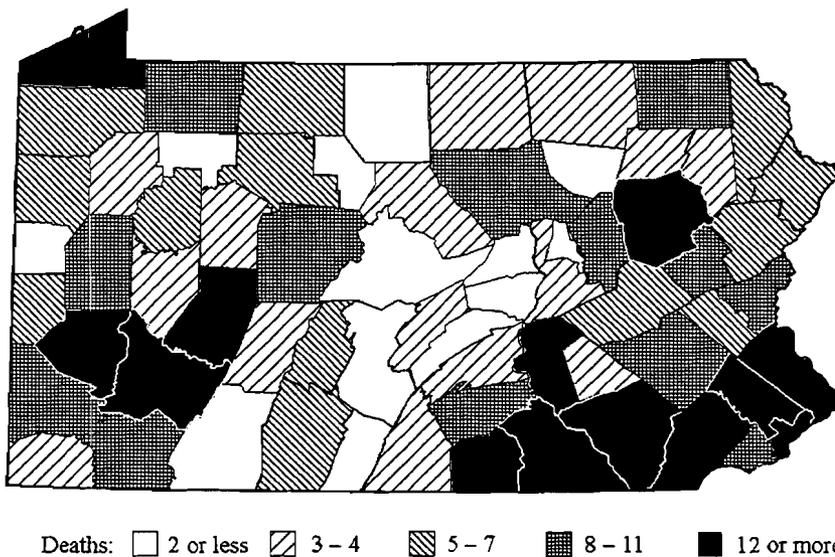
Traffic Deaths by County

Referring to the map below, 48% of the total traffic deaths occurred in only 12 of Pennsylvania's 67 counties. These 12 counties appear in black on the map.



Alcohol-Related Deaths by County

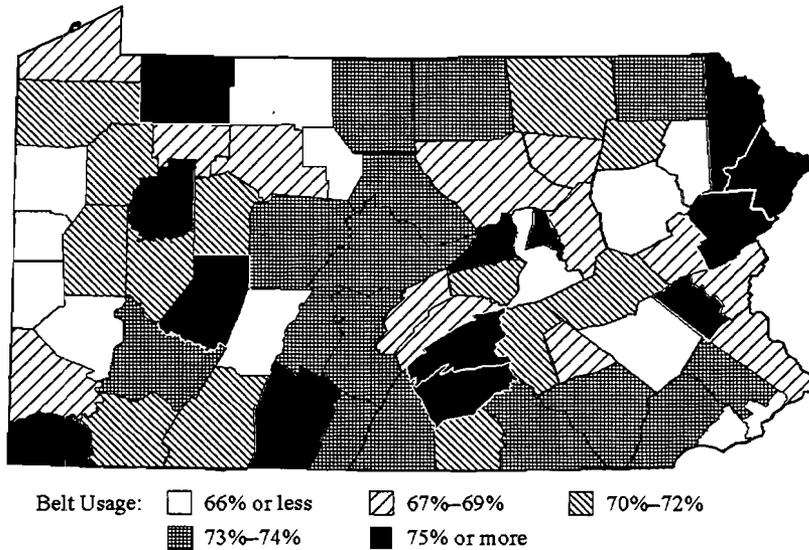
Referring to the map below, 49% of the total alcohol-related deaths occurred in only 13 of Pennsylvania's 67 counties. These 13 counties appear in black on the map.



Counties

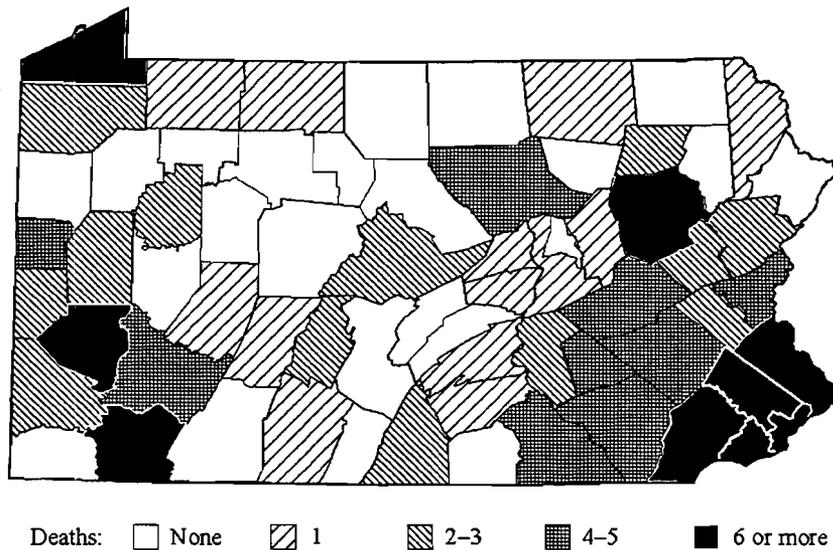
Percent Seat Belt Use in Crashes by County

The percent seat belt use in crashes tended to be lower in counties with major urban areas.



Pedestrian Deaths by County

Referring to the map below, 62% of the total pedestrian deaths occurred in only 9 of Pennsylvania's 67 counties. These 9 counties appear in black on the map.

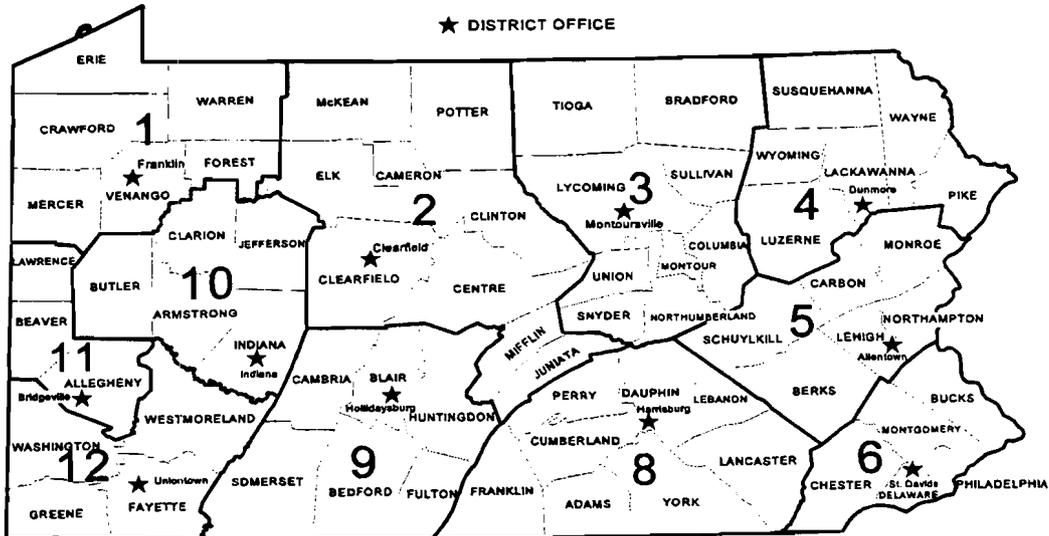


Counties

Crashes by Engineering District

The map below illustrates the eleven PennDOT engineering districts in Pennsylvania. The table below lists a breakdown of the number of crashes, deaths, and injuries in 1996 by engineering district.

District	Crashes	Deaths	Injuries
01	7,908	109	7,763
02	4,808	78	4,214
03	5,298	101	4,778
04	8,520	91	7,947
05	17,482	157	15,645
06	42,036	355	45,176
08	20,769	212	18,458
09	5,684	73	5,056
10	4,924	79	4,630
11	16,747	98	15,205
12	8,691	117	8,077
Total	142,867	1,470	136,949



Counties

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Age	10, 24, 25, 31, 32, 40, 43, 44, 47, 63
Air Bags	34, 39, 40
Alcohol	4, 8, 26-33, 65, 67
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Buses	5, 9, 13, 17, 31, 56, 57
School Buses	9, 17, 56, 57
Child Restraints	38
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by Crash Type	9, 25
by Day of Week	19
by Hour of Day	20
by Light Level	18, 21, 45, 48
by Month	19
by Road Surface Conditions	12
by Road Type	14, 16, 18, 46, 54-56
by Sex	10, 31, 43
by Vehicle Type	9, 13, 17, 31, 50
by Weather	12
Economic loss due to	8
Work Zones	13
Deaths	
Air Bags	39, 40
Alcohol-Related	8, 27-30, 32
Bicyclists	8, 47-49
by Age	40, 43-45, 47
by Crash Type	9
by Day of Week	19, 29
by Hour of Day	20, 28
by Light Level	18, 21, 45
by Month	19
by Road Type	14, 16, 18, 46, 49
by Sex	43
by Vehicle Type	9, 17
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Motorcyclists	8
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Light Levels	18, 21, 45, 48
Mature Drivers	24, 25
Motorcycles	5, 9, 13, 17, 31, 50, 52
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1996 Pennsylvania Crash Facts & Statistics Feedback Survey

The 1996 edition of the *Pennsylvania Crash Facts and Statistics* booklet has a new format and new information. In our continuing effort to make this booklet as useful for as many people as possible, we would appreciate your taking the time to fill out this survey and return it to us. Your opinions will shape future editions.

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

If not, what information would you like to see included? _____

Is the format easy to follow? (check one) Yes No If not, what changes would 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
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All Crashes and Deaths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Alcohol-Related Crashes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seat Belt, Child Safety Seats, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestrians and Bicycle Crashes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crashes by Motor Vehicle Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pennsylvania County Crashes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Pennsylvania Department of Transportation
Bureau of Highway Safety and Traffic Engineering
P.O. Box 2047
Harrisburg, PA 17105-2047

1996 Pennsylvania Crash Facts & Statistics Survey Form

Dedication

The Commonwealth of Pennsylvania would like to extend its deepest sympathy to the families and friends of the victims of fatal 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.