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16. Abstract

The purpose of this technical report is to analyze the latest trends in pedestrian fatalities and police-reported motor vehicle crashes involving a pedestrian in the United States since 1997. Key findings in the report are:

- Pedestrian fatalities declined between 1997 and 2006. However, the probability of a pedestrian fatality in a crash increased while the probability of a pedestrian crash declined.
- About two-thirds of pedestrian fatalities were in urban areas. Of the nearly 42,500 cities or towns listed according the U.S. Geographic Location Codes by the General Services Administration, only 13 percent of them accounted for those pedestrian fatalities in urban areas.
- Nationwide, nearly two pedestrians died in vehicle crashes per 100,000 population, and a pedestrian crash death occurred every 70 million miles walked.
- January 1 and October 31 were the two most deadly days of the year, having the highest number of pedestrian fatalities.
- Pedestrians are more likely to be killed in a crash between 3 a.m. and 6 a.m. or during the weekend on Saturday or Sunday.
- Males have a much higher probability than females to be killed in a crash.
- The older age group (over 64) has a much greater possibility than other age groups to be killed in a crash.
- As a pedestrian's blood alcohol concentration (BAC) increases, the probability of a pedestrian getting killed in a crash increases.
- Pedestrians have a higher possibility to be killed in non-speeding conditions than in speeding conditions based on fatality per crash.
- Pedestrians are more likely to be killed in a crash under a sleet condition than under any other weather condition based on fatality per crash.
- Pedestrians have a higher probability to be killed in a crash under a dark condition than under other light conditions.
- With regard to posted speed limits, the higher the posted speed limit, the higher the probability of a pedestrian fatality.

17. Key Words	18. Distribution Statement
Pedestrian fatalities, pedestrian crashes, pedestrian fatality probability, pedestrian crash probability, crash trend, crash location, crash time, pedestrian factors, vehicle driver factors, and other factors.	This report is free of charge from the NHTSA Web site at www.nhtsa.dot.gov

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EXECUTIVE SUMMARY

Purpose

The purpose of this technical report is to analyze the latest trends in pedestrian fatalities and police-reported motor vehicle crashes involving a pedestrian in the United States since 1997. This report also attempts to provide some insight into the following pedestrian crash characteristics:

- Location
- Time
- Pedestrian factors
- Vehicle driver
- Other crash factors, such as weather, light condition, or posted speed limit

Findings

Major findings are summarized in two groups as shown below.

KEY FINDINGS

- Pedestrian fatalities declined between 1997 and 2006. However, the probability of a pedestrian fatality in a crash increased while the probability of a pedestrian crash declined.
- About two-thirds of pedestrian fatalities were in urban areas. Of the nearly 42,500 cities or towns listed according the U.S. Geographic Location Codes by the General Services Administration, only 13 percent of them accounted for those pedestrian fatalities in urban areas.
- Nationwide, nearly two pedestrians died in vehicle crashes per 100,000 population, and a pedestrian crash death occurred every 70 million miles walked.
- January 1 and October 31 were the two most deadly days of the year, having the highest number of pedestrian fatalities.
- Pedestrians are more likely to be killed in a crash between 3 a.m. and 6 a.m. or during the weekend on Saturday or Sunday.
- Males have a much higher probability than females to be killed in a crash.
- The older age group (over 64) has a much greater possibility than other age groups to be killed in a crash.
- As a pedestrian's blood alcohol concentration (BAC) increases, the probability of a pedestrian getting killed in a crash increases.
- Pedestrians have a higher possibility to be killed in non-speeding conditions than in speeding conditions based on fatality per crash.
- Pedestrians are more likely to be killed in a crash under a sleet condition than under any other weather condition based on fatality per crash.
- Pedestrians have a higher probability to be killed in a crash under a dark condition than under other light conditions.
- With regards to posted speed limits, the higher the posted speed limit, the higher the probability of a pedestrian fatality.

GENERAL FINDINGS

- Pedestrian crash deaths constituted 11 percent of total crash fatalities in 2006, down from 13 percent in 1997.

- Pedestrian crash fatalities are decreasing slowly.
- The pedestrian fatality rate per vehicle mile traveled has declined as a longer term trend.
- Single-vehicle crashes on roadways make up an overwhelming majority of pedestrian deaths.
- The significance of non-intersections, urban roadways, and city streets as closely related to pedestrian fatalities mentioned in an early research report[1] are confirmed by this report.
- The number of pedestrians killed in NHTSA operation regions 4 and 9 is greater than any other NHTSA operation regions.
- California, Florida, and Texas have more pedestrian deaths than any other States. Based on the pedestrian death percentages as a proportion of total pedestrian fatalities, the cities of New York, Los Angeles, Chicago, Phoenix, and Houston are the top five.
- New Mexico has the highest pedestrian death rate per capita, and New Hampshire has the lowest.
- The most deadly season for pedestrian fatalities is autumn.
- The number of pedestrians killed between 6 p.m. and 9 p.m. is greater than during any other 3-hour time frame.
- Friday and Saturday have higher fatality rates than any other day of the week. October, November, and December have higher fatality rates than any other month. These results are the same as in the previous report.[2]
- On average, 13 pedestrians die in vehicle crashes each day, or one pedestrian every 107 minutes.
- The majority of killed pedestrians were male, elderly, White, Non-Hispanic, and had no alcohol involvement, yet they carried out one or more unsafe actions during the crash.
- The majority of drivers in fatal pedestrian crashes were male, between the ages of 21 and 25, were not drinking, and were not speeding.
- This report also confirmed an earlier published report that almost all drivers survived the fatal pedestrian crashes, and most drivers committed at least one erroneous action.
- Bad weather does not necessarily contribute to a pedestrian death, but a bad light condition does.
- Nearly 46 percent of pedestrian fatalities are alcohol-involved.
- One in five pedestrians killed were killed in hit-and-run motor vehicle crashes.

[1] See reference No. 1 in Appendix D.
[2] See reference No. 7 in Appendix D.

INTRODUCTION

To protect pedestrians from crashes with motor vehicles and reduce their risk on roadways is one of the main goals of transportation safety. Learning about and studying pedestrian crashes, especially those related to the deaths of pedestrians, is a part of the effort to reach that goal.

This document describes pedestrian crash fatalities and injuries in the United States by providing statistics and crash characteristics. The statistics cover pedestrian crash deaths and injuries nationwide from 1997 to 2006. Results of the data analysis are reported. Procedures used to discover the findings are explained.

The goals, methods, findings, and limitations of this technical report are introduced in the following subsections.

Goals

Although the title of this document indicates the focus of the report, many details such as pedestrian characteristics, roadway location, and crash date still need to be addressed.

This statistical report follows up the previous report "Pedestrian Roadway Fatalities" published in April 2003. The current report attempts to answer the following questions with details from the most recent available data:

- What is the latest trend in pedestrian crash deaths?
- Where are the fatal crashes?
- When do fatal crashes occur?
- Who are the vehicle drivers and pedestrians?
- What are other crash factors?

Analyzing these factors and conditions will help in developing safety programs and countermeasures for pedestrian safety.

Methods

In order to reach the goals, five major steps were taken.

First, the territory and time span were determined. This study covers Washington, DC; Hawaii; Alaska; and the 48 continental United States. Not included are Puerto Rico, the Virgin Islands, and other U.S. Territories. The analysis covers 10 years, from 1997 to 2006.

Second, primary data was determined by analyzing the variables and examining the observations in Fatality Analysis Reporting System (FARS) and General Estimates System (GES) separately and combined. Twenty-six FARS variables have been used to create 29 distributions for pedestrian crash deaths. These joint distributions, also called cross tabs, were all determined by two single variables. They are presented in Appendix A. In addition, 12 GES variables have been used to create 11 distributions for pedestrian crashes. These distributions and their standard deviations are attached in Appendix B.

Pedestrian crashes in this report are based on all police-reported crashes in which a pedestrian was killed or injured. The fatal pedestrian crashes are from the FARS, and other pedestrian crashes where injury occurred are from the GES in National Automotive Sampling System.

Third, a literature survey was conducted to search secondary data sources and select the exposure data. Forty four documents published after 1990 were reviewed. All references are listed in Appendix D. The secondary data, shown in Tables B-12, B-13, and B-14 or in the article, came from the publications of the following six organizations:

- U.S. Census Bureau
- Transportation Research Board of the National Academies

- Federal Highway Administration
- Bureau of Transportation Statistics
- Insurance Institute for Highway Safety
- National Highway Traffic Safety Administration

Table 1: Matrix of Figures and Tables by Data Sources and Variables

Source	Variable Name	Factor Group	Figure No.	Table No.
FARS	Year	Trend	1-1 to 1-7	
	V_Forms		1-7	
	City	Where	2-1	5
	State		2-2 to 2-5	4
	Location			2
	Road_Fnc			3
	Weekday	When	3-1	
	Month		3-3, 3-4	
	Hour		3-5	
	Day			6
	Sex	Who	4-1, 5-1	
	P_CF1, to P_CF3		4-10	
	Race		4-3	
	Age		4-4, 4-5, 5-2	
	Hispanic		4-7	
	BAC		4-8, 5-4	7
	Drinking		4-9	
	Harm_Ev		5-3	
	Speeding		5-5	
	Dr_CF1 to Dr_CF4		5-7	
	Weather	Other Factors	6-1	
	Lgt_Cond		6-3	
	Sp_Limit		6-5	
	Hit_Run		6-7	
NASS GES	Year	Trend	1-2, 1-6	
	Weekday	When	3-2	
	Hour_I		3-6	
	Sex	Who	4-2	
	Age		4-6	
	Alcohol		4-9	
	Speedrel		5-6	
	Weather_I	Other Factors	6-2	
	Lght_Con		6-4	
	Spd_Lim		6-6	

Fourth, 46 figures and 6 tables were created using the gathered data in Appendix A and Appendix B. The organization of the data sources, variables, figures, and tables for this document are illustrated in Table 1. As the table shows, 7 figures were created to show trends. Seven figures and 4 tables were produced to show where crashes occurred. One table and 8 figures were produced to show when crashes occurred. Seventeen figures show who the pedestrians and drivers were. One table and 7 figures are dedicated to other crash factors. Figures 2-6 and 2-7 were not included in Table 1 because there is no connection between the figures and the listed variables.

Finally, the results from the analysis were organized and used to support the findings.

Some differences between this report and the previous pedestrian report are:

- This report includes GES data to cover non-fatal pedestrian crashes;
- This report consists of additional exposure data, such as the number of walkers and their travel distance, to make the scope of analysis wider;
- In addition to pedestrian deaths in single-vehicle crashes, pedestrian deaths in multiple-vehicle crashes are included; and
- To identify patterns, three overlapping time spans are applied in this analysis. They are the overall 10-year period 1997-2006, the 5-year period of 2002-2006, and the 2-year period of 2005-2006. After looking at all three time spans, it was determined that the differences between 10, 5, and 2 years are negligible. Therefore, only the analysis results for the 10-year period are shown in this document.

Limitations

Three major limitations of this report are:

- The national estimates produced from GES data may differ from the true values, because they are based on a probability sample of crashes and not a census of all crashes. The size of these differences may vary depending on which sample of crashes was selected and the universe from which they are selected. The standard deviations; shown in Appendix B, of an estimate is a measure of the precision or reliability with which an estimate from this particular GES sample approximates the results of a census. Care should be taken while interpreting trend in this report due to the year-to-year differences resulting from the sampling process.
- Multiple factors may affect a pedestrian crash. Generally, a pedestrian crash may have been caused by a variety of conditions meeting at the same time. Using many joint distributions of two single variables, this report explores the possible factors by combining two conditions at a time. Analyzing pedestrian crashes by simultaneously mixing a set of five or more crash conditions may create a better understanding of the actual factors of pedestrian fatalities.
- This report does not analyze all variables within the FARS files. Also, the analysis and its results for this report are limited by what the FARS and GES contain through calendar year 2006. Periodically undertaking studies and reporting further findings will assist in understanding any changes in crash factors.

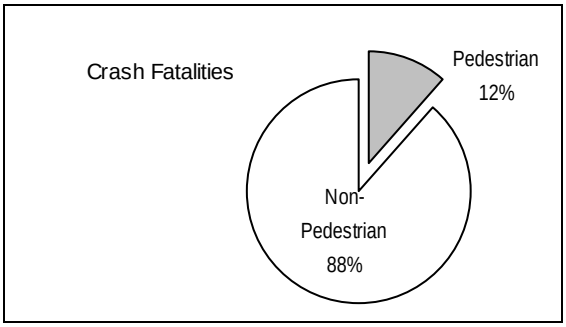
LONG-TERM TREND

Trends in pedestrian crash fatalities since 1997 are presented in the following two subsections.

Proportion of Total Crash Deaths

Pedestrian crash deaths comprise one part of the total deaths from motor vehicle crashes. From 1997 to 2006, there were 49,128 pedestrian fatalities, representing 12 percent all fatalities (424,840) in motor vehicle crashes. The rest of those killed in motor vehicle crashes were vehicle occupants (drivers and passengers), motorcycle riders, bicyclists, and others.

Figure 1-1: Distribution of Total Motor Vehicle Crash Fatalities by Person Type



Source: FARS 1997-2005 (Final), 2006 (ARF)

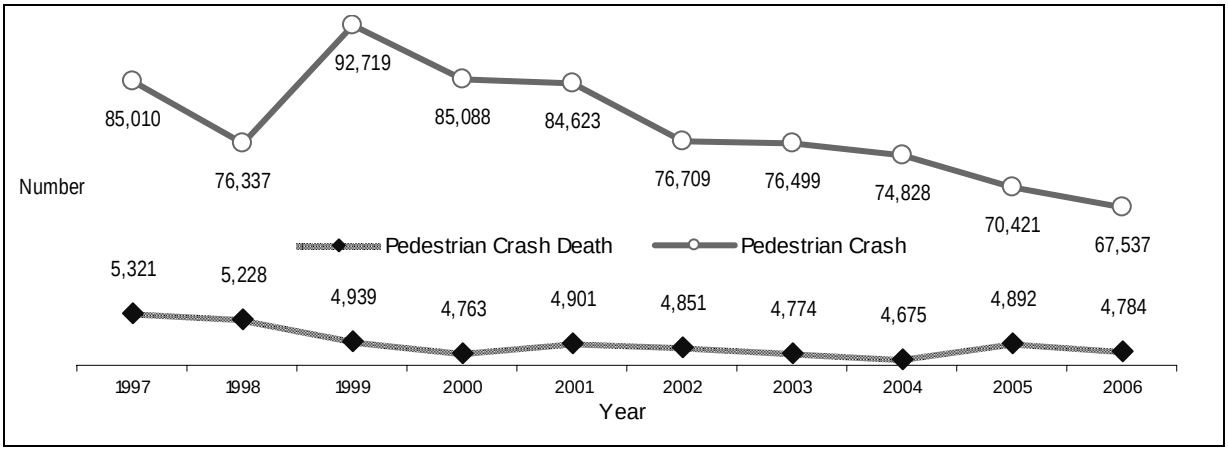
Comparing the pedestrian fatalities by gender, female pedestrian fatalities account for 11 percent of the total females killed in motor vehicle crashes. Male pedestrian fatalities make up approximately 12 percent of the total males killed in crashes.

Five Ways to See the Future

FEWER PEDESTRIAN CRASHES, FEWER PEDESTRIAN CRASH DEATHS

The number of deaths in motor vehicle crashes maintained at around 43,000 per year between 1997 and 2006. In some groups, notably among motorcycle riders, deaths have been increasing. Meanwhile, the pedestrian crash fatality rate continues a long-term decline. Since 1997, pedestrian fatalities have declined by 10 percent. This is the largest decrease in motor vehicle deaths among any person category.

Figure 1-2: Pedestrian Fatalities and Police-Reported Pedestrian Crashes by Year



Source: FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

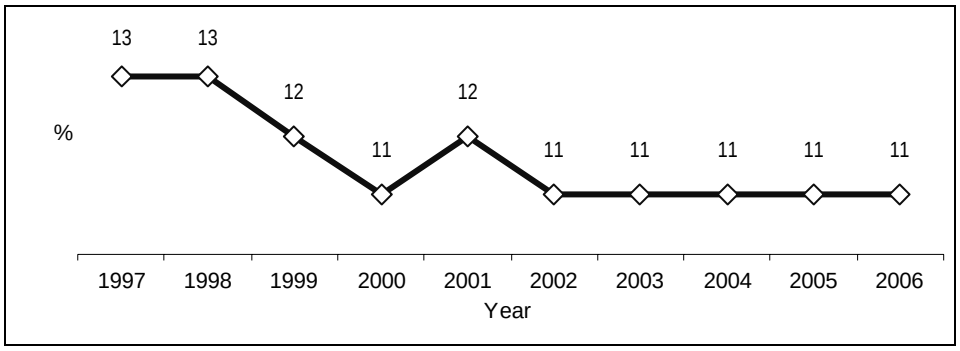
A review of FARS data shows that pedestrian crash deaths declined between 1997 and 2006. In 1997, there were an estimated 85,010 police-reported pedestrian crashes, and 5,321 of those incidents resulted in pedestrian deaths. In 2006, these figures declined to 67,573 for total pedestrian crashes and 4,784 for pedestrian crash deaths, a 20-percent decrease for pedestrian crashes (subject to sampling errors) and 10-percent reduction for pedestrian crash deaths. This trend points out that pedestrian crashes are dropping faster than pedestrian crash deaths. Figure 1-2 shows pedestrian crashes on a downward trend since 1999.

PERCENTAGE OF PEDESTRIAN DEATHS IS SHRINKING

Pedestrians represented the second largest group of motor vehicle crash deaths before 2006, following only vehicle occupant deaths and exceeding motorcycle rider deaths. As seen in the trends, the pedestrian death problem has not worsened. In 2006, motorcycle rider fatalities surpassed pedestrian crash fatalities for the first time since 1975. This change made pedestrian crash deaths drop to the third largest proportion of crash fatalities by person type.

The fraction of crash deaths made up by pedestrians decreased each year from 1997 to 2000, yet no significant changes have been seen between 2000 and 2006. Figure 1-3 shows the change of percentages from 1997 to 2006.

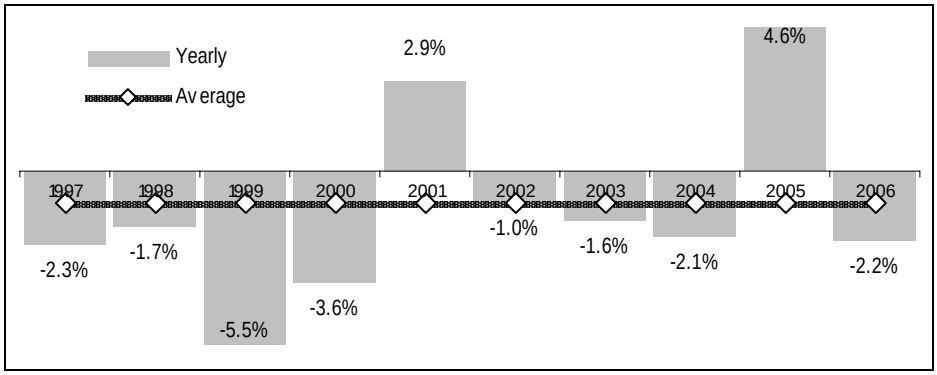
Figure 1-3: Percentage of Pedestrian Fatalities by Year



Source: FARS 1997-2005 (Final), 2006 (ARF)

Pedestrian fatalities have decreased 8 of the 10 years between 1997 and 2006. The maximum increase was 4.6 percent in 2005, and the maximum reduction was 5.5 percent in 1999. As the figure below illustrates, the average change of pedestrian deaths from 1997 through 2006 is minus one percent per year.

Figure 1-4: Annual Percent Change in Pedestrian Fatalities



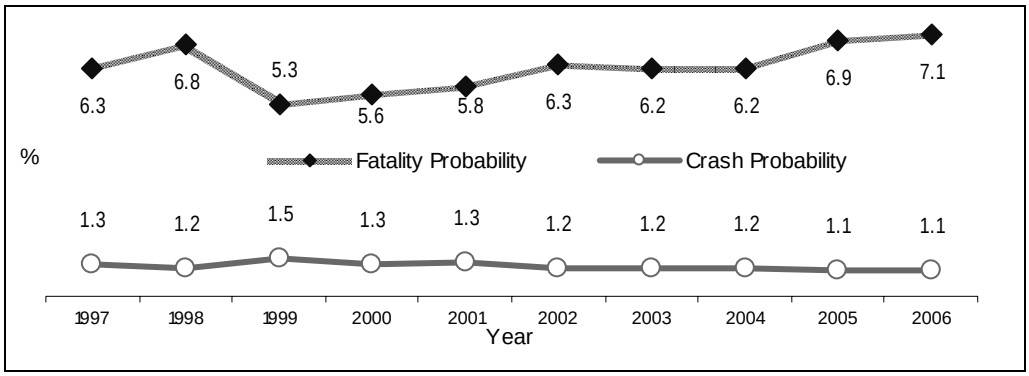
Source: FARS 1997-2005 (Final), 2006 (ARF)

HIGHER PROBABILITY OF A PEDESTRIAN KILLED IN A PEDESTRIAN CRASH

In this subsection, the pedestrian crash probability is calculated by the number of police-reported pedestrian crashes divided by the total number of police-reported motor vehicle crashes. The number of pedestrian crashes is the number of pedestrians, fatal or not fatal, that collide with motor vehicles on roadway. The pedestrian fatality probability is obtained by the number of pedestrian crash fatalities divided by the total number of pedestrian crashes. In other words, the fatality probability is the average number of deaths per crash.

Figure 1-5 shows that the pedestrian crash probability has not significantly changed over the past decade, yet the pedestrian fatality probability increased more than one third – from 5.3 percent in 1999 to 7.1 percent in 2006. It has steadily increased since 1999.

Figure 1-5: Pedestrian Fatality Probability and Crash Probability by Year



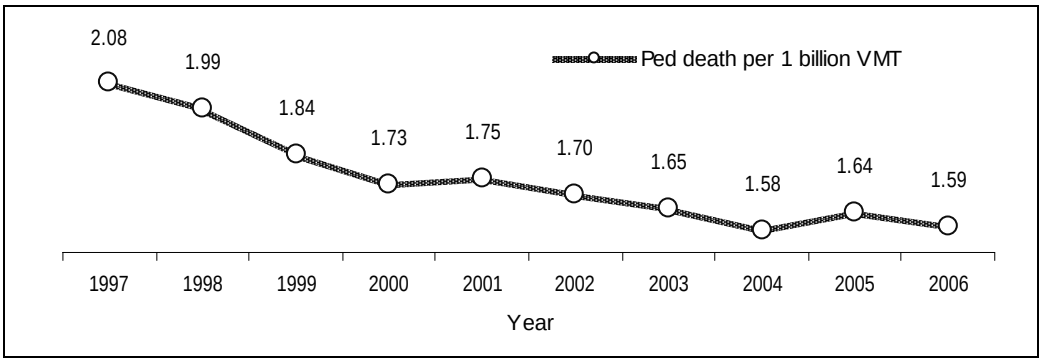
Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

The results of a 10-year ratio analysis indicated that the crash probability of a pedestrian is 1 out of 100 motor vehicle crashes, but the fatality probability of a pedestrian is 6 out of 100 pedestrian crashes.

PEDESTRIAN FATALITIES PER VEHICLE MILES TRAVELED ARE DECREASING

In this subsection, annual pedestrian deaths divided by annual vehicle miles traveled (VMT) as an indicator will be used to present the trends. In other words, the annual pedestrian death per VMT has been calculated for every year from 1997 to 2006.

Figure 1-6: Pedestrian Fatality Rate per One Billion VMT by Year



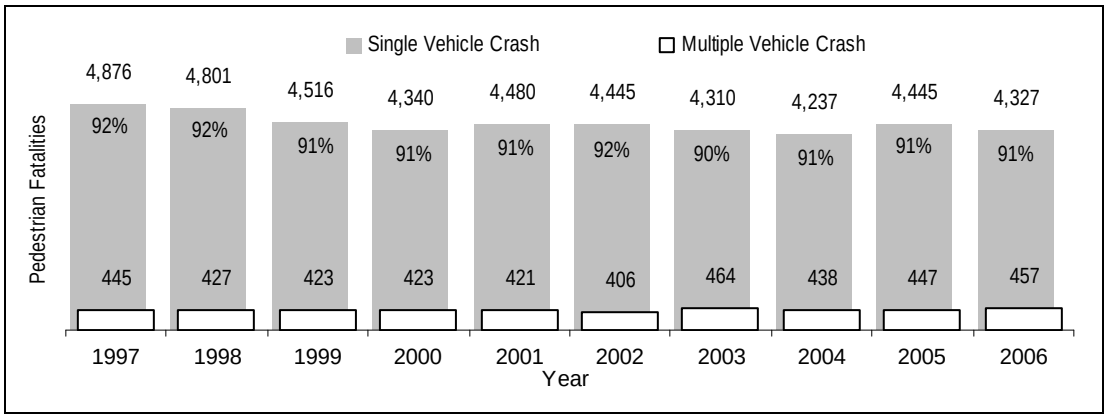
Source: FARS 1997-2005 (Final, 2006 (ARF) and FHWA Highway Statistics

As shown in Figure 1-6, the pedestrian crash fatality rate per one billion VMT has been in a downward trend during the past 10 years. Pedestrian crash deaths per one billion VMT declined from close to 2.1 in 1997 to near 1.6 in 2004. This rate stayed at roughly 1.6 with no significant change from 2004 to 2006.

SINGLE-VEHICLE CRASHES DOMINANT CAUSE OF PEDESTRIAN DEATHS

Figure 1-7 below shows the distribution of pedestrian fatalities by crash type and calendar year from 1997 to 2006. The proportion of pedestrian deaths in single-vehicle (SV) crashes did not show any significant change between 1997 and 2006. Pedestrians are often killed in SV crashes. An overwhelming majority of pedestrian deaths – more than 90 percent – are in SV crashes.

Figure 1-7: Pedestrians Killed by Crash Type and Year



Source: FARS 1997-2005 (Final), 2006 (ARF)

CRASH LOCATION

In this section, the statistics relating to pedestrian crashes or fatalities on various roadway sections and location are presented. The pedestrian death density is also introduced as another measure of rate.

Crash Place

PEDESTRIAN LOCATION

Over three-fourths (78%) of the pedestrians were killed at non-intersections and less than one-fourth (21.2%) were killed at intersections over the past decade.

Table 2 shows that roadways without crosswalks accounted for 42 percent of all pedestrian fatalities. The table also shows that the percentage of pedestrian deaths in crosswalks (near 9%) is less than deaths in roadways (80%). This indicates that using a crosswalk is the safest way to cross a street.

Table 2: Distribution of Pedestrian Fatalities by Roadway Section and Crosswalk Availability

Pedestrian Location	Section			Total
Crosswalk Availability	Roadway	Crosswalk	Other	
Available	21.1%	8.8%	0.0%	29.9%
Not Available	41.8%	0.0%	6.1%	47.9%
Unknown	16.8%	0.0%	5.4%	22.2%
Total	79.7%	8.8%	11.5%	100.0%

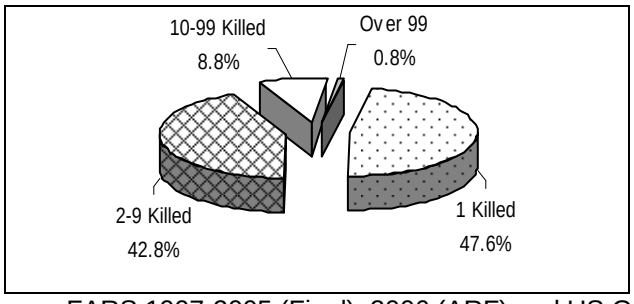
Source: FARS 1997-2005 (Final), 2006 (ARF)

URBAN AREA

City streets (urban areas) accounted for almost 67 percent of all pedestrian crash deaths. According to U.S. Geographic Locator Codes (GLC) provided by the U.S. General Services Administration (GSA), the United States had about 42,488 cities or towns at the end of 2006. Between 1997 and 2006, 36,830 of the cities had no pedestrian deaths and 5,658 of the cities had pedestrian deaths – meaning 87 percent of the cities did not have pedestrian fatalities in motor vehicle crashes and only 13 percent of cities accounted for all pedestrian deaths in urban areas.

Most of the cities that had pedestrian fatalities (90.4%) had 9 or fewer pedestrian deaths. Nearly 9 percent of the cities had 10 to 99 pedestrian deaths. Only 0.8 percent of the cities have 100 or more pedestrian crash deaths. The city percentage distribution by the number of pedestrian fatalities is shown in Figure 2-1.

Figure 2-1: Distribution of Cities by Number of Pedestrians Killed



Source: FARS 1997-2005 (Final), 2006 (ARF) and US GLC

ROADWAY FUNCTION CLASS

Urban roads accounted for more than two-thirds (70.9%) of pedestrian crash deaths with nearly one-third of those on other principal arterial roads. Urban principal arterial roads (other than interstates and

expressways) accounted for over 25 percent of the pedestrians killed in motor vehicle crashes. Table 3 shows the percentage of pedestrian deaths by roadway function class and land use from 1997 to 2006.

Table 3: Distribution of Pedestrian Fatalities by Roadway Function Class and Land Use

Roadway	Land Use			Total
Function Class	Rural	Urban	Unknown	
Principal Arterial Interstate	3.7%	6.9%	0.0%	10.6%
Principal Arterial Other Expressways or Freeways	-	4.4%	0.0%	4.4%
Principal Arterial Other	5.9%	25.7%	0.0%	31.6%
Minor Arterial	4.8%	15.2%	0.0%	20.0%
Collector	7.4%	4.2%	0.0%	11.6%
Local Road or Street	6.2%	14.1%	0.0%	20.3%
Unknown	0.5%	0.4%	0.6%	1.5%
Total	28.5%	70.9%	0.6%	100.0%

Source: FARS 1997-2005 (Final), 2006 (ARF)

Administration Region

CITY

Table 4 shows the top five ranked cities based on the past 10 years of pedestrian fatalities. The city ranking is based on the proportion of the number of pedestrian fatalities in the city to the number of pedestrian fatalities nationally. Not surprisingly, the top three most populated cities in the United States had the highest number of pedestrian fatalities. However, it is a surprise that the city of Phoenix is fourth for pedestrian fatalities even though average population is 32 percent less than the city of Houston, in fifth place, and almost the same as the city of Philadelphia, in seventh place, over the past 10 years.

Table 4: Top Five Cities With the Highest Pedestrian Fatalities

City Name	Rank*	%	Number of Fatalities
New York, NY	1	3.5	1,743
Los Angeles, CA	2	2.0	986
Chicago, IL	3	1.4	687
Phoenix, AZ	4	1.1	540
Houston, TX	5	1.0	514

Source: FARS 1997-2005 (Final), 2006 (ARF) *Rank based on fatality percentage

Table A-7 in Appendix A shows all cities that have 10 pedestrian deaths or more by the city name and calendar year.

STATE

Table 5: Top Three States With the Highest or Lowest Pedestrian Fatalities

State Name	Rank*	%	Number of Fatalities
The highest			
California	1	14.4	7,056
Florida	2	10.4	5,125
Texas	3	8.7	4,269
The lowest			
North Dakota	51	0.1	48
Vermont	50	0.1	60
Wyoming	49	0.1	71

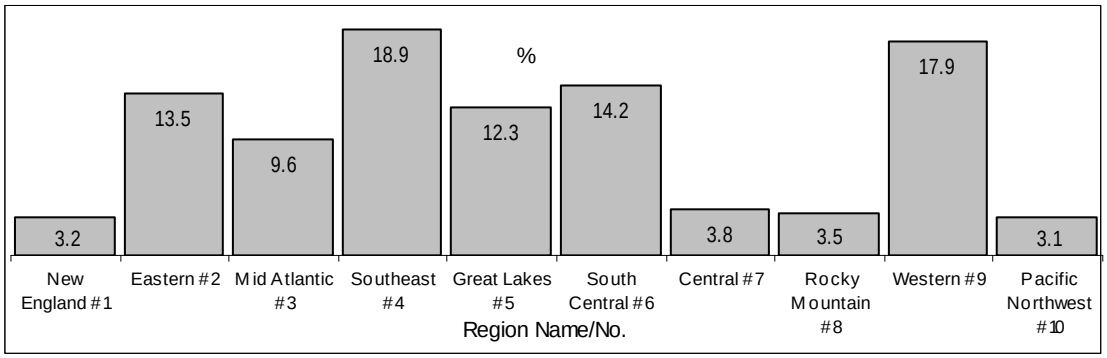
Source: FARS 1997-2005 (Final), 2006 (ARF) * Rank based on fatality percentage

Table 5 shows the pedestrian crash deaths for the top three States and the bottom three States based on the number of pedestrian crash deaths. The State ranking is based on the proportion of the number of pedestrian fatalities in the State to the number of pedestrian fatalities nationally. The top three States are California, Florida, and Texas in pedestrian death ranking. The bottom three states are composed of North Dakota, Vermont, and Wyoming. The pedestrian fatalities for the other States are shown in Table A-6 in Appendix A.

NHTSA Operation Region

Analyzing the number of pedestrian crash deaths among the 10 NHTSA operation regions, the southeast region (region 4) has the highest number of pedestrian crash deaths. It accounts for about 19 percent of pedestrian crash deaths followed by the western region (region 9). Figure 2-2 shows the percentages of pedestrian fatalities among the 10 NHTSA operation regions. A U.S. map (Figure C-1) and a table (Table C-1) to illustrate the assembly of these 10 regions by State can be found in Appendix C.

Figure 2-2: Distribution of Pedestrian Fatalities by NHTSA Operation Regions



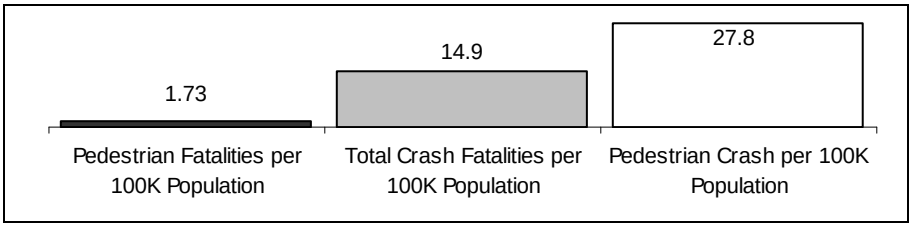
Source: FARS 1997-2005 (Final), 2006 (ARF) and NHTSA

Death Density

AVERAGE DEATHS PER CAPITA

In the same 10-year period, the pedestrian crash fatality rate was 1.73 per 100,000 population nationwide. The total crash fatalities per 100,000 population were 14.9 and the pedestrian crash rate per 100,000 population was 27.8. These differences are illustrated in Figure 2-3. As a comparison, there were 2,215 motor vehicle crashes per 100,000 population.

Figure 2-3: Average Pedestrian Fatality, Total Fatality, and Pedestrian Crash per Capita



Source: Census Bureau, FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

Figure 2-4 shows the U.S. map and pedestrian fatality rates for each State over the past decade. The highest pedestrian fatality rate among the 50 States and the District of Columbia was for New Mexico (3.23) followed by Florida (3.14), Arizona (2.77), and the District of Columbia (2.71). The lowest pedestrian death rate was for New Hampshire (0.75) and North Dakota (0.75). The State population by year between 1997 and 2006 can be found in Table B-13 in Appendix B.

Figure 2-4: Average Pedestrian Fatality Rate per 100,000 Population by State

Source: Census Bureau and FARS, 1997-2005 (Final), 2006 (ARF)

AVERAGE WALKING MILES PER DEATH

According to the 2001 National Household Travel Survey (NHTS) conducted by the U.S. Department of Transportation, people in the United States traveled approximate 4,012 billion miles[3] on a daily basis. NHTS defined a daily trip as a person going from one address to another in any day regardless of mode or distance traveled. The survey results show walking trips accounted for 8.6 percent of the total travel. That fraction makes the miles traveled by walking nearly 345 billion in 2001. The data are results from telephone interviews conducted with 60,000 individuals in 26,000 sampled households nationwide. Since NHTS is a sample-based survey, the results from the survey have sampling errors and hence care should be taken while interpreting the data.

During 2001 there were 84,623 pedestrian crashes and 4,901 pedestrians killed in those crashes. Therefore, a pedestrian crash occurred every 4 million walking miles and a pedestrian crash death happened every 70 million walking miles.

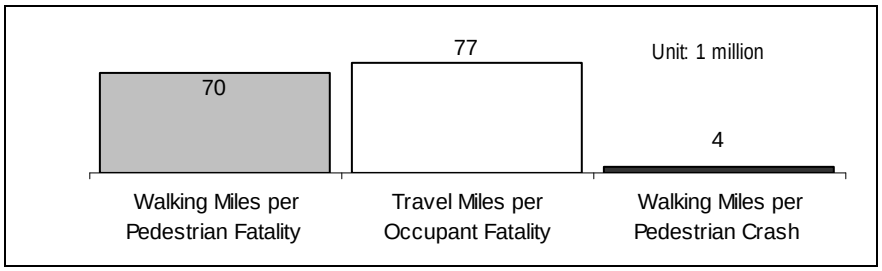
In 2001, motor vehicles in this country traveled 2,797 billion miles.[4] There were 36,440 crash fatalities among vehicle occupants, including motor vehicle drivers, motorcycle riders, and passengers in 2001. This means that one occupant crash fatality occurs on the roadway every 77 million vehicle miles traveled (VMT).

The comparison is shown in Figure 2-5. The average number of walking miles per pedestrian death is 8 percent lower than the average number of miles traveled per traffic crash death of a vehicle occupant.

[3] See reference No. 3 in Appendix D.

[4] See reference No. 9 in Appendix D.

Figure 2-5: Miles per Pedestrian Fatality, Vehicle Occupant Fatality, and Pedestrian Crash



Source: NHTS 2001, FARS 2001 (Final), and GES, 2001

AVERAGE PER MILE TRAVELED

In this subsection, the average deaths or crashes per miles traveled in 2001 are used as an indicator.

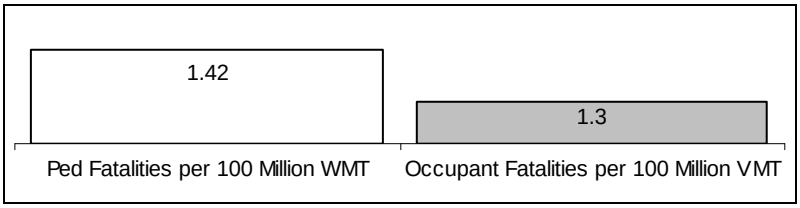
The pedestrian death rate per walking miles traveled (WMT) per year is estimated by the number of annual pedestrian deaths divided by total annual WMT. The pedestrian crashes per WMT per year equal the number of annual police-reported pedestrian crashes divided by annual WMT.

Moreover, the motor vehicle occupant fatality rate per vehicle miles traveled (VMT) per year equals the annual vehicle occupant deaths divided by annual VMT. The motor vehicle crash rate per VMT per year equals to annual police-reported motor vehicle crashes, excluding pedestrian crashes, divided by annual VMT.

During 2001, the pedestrian death rate was 1.42 per 100 million WMT, with 1.30 motor vehicle occupant fatalities per 100 million VMT, 24.5 police-reported pedestrian crashes per 100 million WMT, and 223 motor vehicle crashes per 100 million VMT. In other words, the pedestrian death rate per WMT is slightly higher compared to motor vehicle occupant deaths per VMT. The motor vehicle crash per VMT is nine times higher than pedestrian crash per WMT.

The fatality comparison is shown in Figure 2-6.

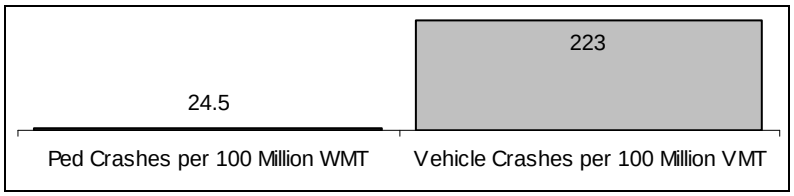
Figure 2-6: Pedestrian Fatality Rate and Vehicle Occupant Fatality Rate per Mile Traveled



Source: NHTS 2001, FARS 2001 (Final), and GES, 2001

The comparison of crashes per mile traveled is shown in the figure below.

Figure 2-7: Pedestrian Crashes and Motor Vehicle Crashes per Mile Traveled



Source: NHTS 2001, FARS 2001 (Final), and GES, 2001

CRASH TIME

The time of the crash is grouped in various ways to help explain pedestrian crash deaths.

Calendar Unit

DAYS OF YEAR

Analyzing pedestrian deaths over the past 10 years across the country, January 1 is the day with the most pedestrian fatalities, followed by October 31. The peak pedestrian deaths on October 31 could be linked to Halloween.

This finding is consistent with a report[5] published by NHTSA in 2005. In that report, the three deadliest days for pedestrians were January 1, October 31, and December 23.

Although FARS data between 1986 and 2002 are used, the statistics on a status report published by the Insurance Institute for Highway Safety[6] also shows January 1 and October 31 as the two days with most pedestrian crash deaths. The 10-year pedestrian crash deaths for each day of the year can be found in Table A-8 in Appendix A.

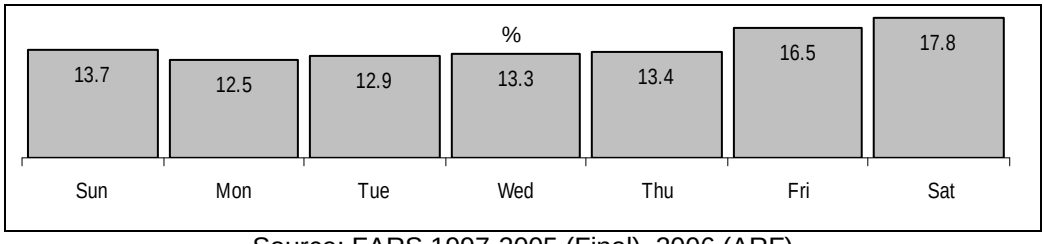
Table 6: Deadliest Days for Pedestrians, Ranked by Specific Time Spans

Year Period	Rank*	Day of Year	Period Total	Average per Day	Note
1986-2002	1	1-Jan	410	24	Rank by Insurance Institute for Highway Safety
	2	31-Oct	401	24	
	3	23-Dec	373	22	
1978-2002	1	1-Jan	539	22	Rank by previous NHTSA analysis in 2005
	2	23-Dec	498	20	
	3	31-Oct	489	20	
1997-2006	1	1-Jan	236	24	Rank based on this analysis
	2	31-Oct	212	21	
	3	1-Dec	205	21	
Source: FARS 1997-2005 (Final) 2006 (ARF) & Status Report Vol. 39 No. 6, 2004					*Rank based on total deaths

DAY OF WEEK

Figure 3-1 shows that more than one-third of pedestrian crash deaths occurred on Fridays and Saturdays, with most pedestrian fatalities occurring on Saturdays (18%) compared to any other day of the week.

Figure 3-1: Distribution of Pedestrian Fatalities by Day of the Week



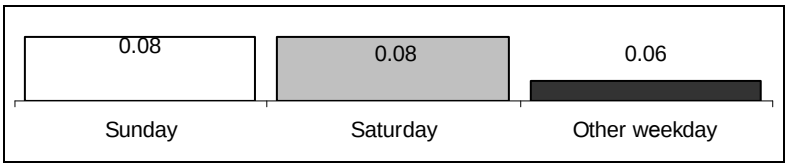
Source: FARS 1997-2005 (Final), 2006 (ARF)

Saturday and Sunday also have a higher probability of pedestrian crash fatality than any other weekday. The pedestrian death probabilities, based on all police-reported crashes and their comparisons, are illustrated on Figure 3-2, below.

[5] See reference No. 41 in Appendix D

[6] See reference No. 33 in Appendix D.

Figure 3-2: Pedestrian Fatality Probability per Crash by Day of the Week

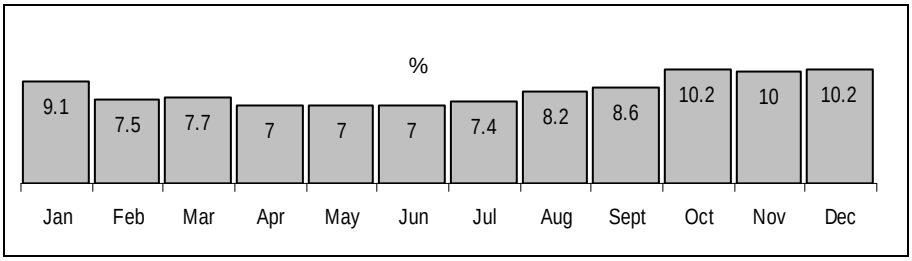


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

MONTH

A review of FARS data shows that pedestrian crash deaths are more likely to occur in October, November, and December. These three months combined accounted for one-third (32%) of the pedestrian crash deaths in any year period.

Figure 3-3: Distribution of Pedestrian Fatalities by Month

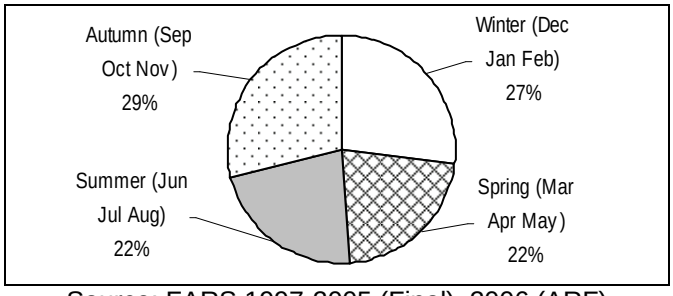


Source: FARS 1997-2005 (Final), 2006 (ARF)

SEASON

For this report, December, January, and February are considered the months of winter; March, April, and May are the months of spring; June, July, and August are the months of summer; and September, October, and November are the months of autumn. Nearly one in three pedestrian deaths occurred during autumn. Figure 3-4 shows the distribution pattern of pedestrian deaths by season.

Figure 3-4: Distribution of Pedestrian Fatalities by Season



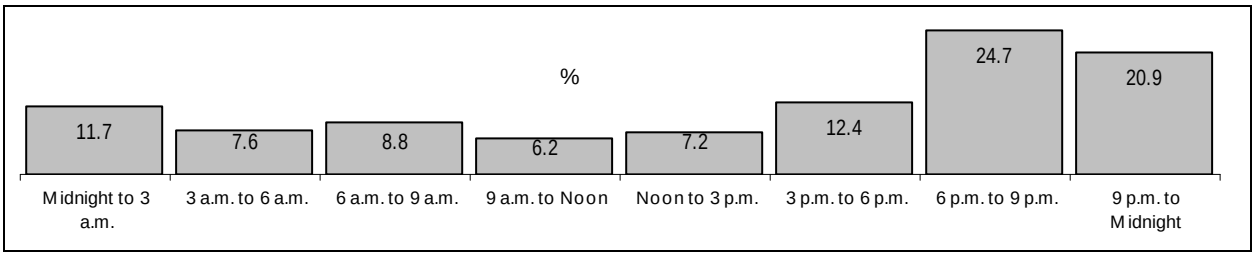
Source: FARS 1997-2005 (Final), 2006 (ARF)

Clock Time

TIME OF DAY

Analysis of the data shows that 25 percent of pedestrian deaths occurred between 6 p.m. and 9 p.m., which is the time frame with the highest number of pedestrian deaths among any time group. The next highest number of fatalities occurred between 9 p.m. and midnight (21%). In total nearly half (46%) of pedestrian fatalities occurred between 6 p.m. and midnight. The lowest number of pedestrian fatalities (6%) occurred between 9 a.m. and noon.

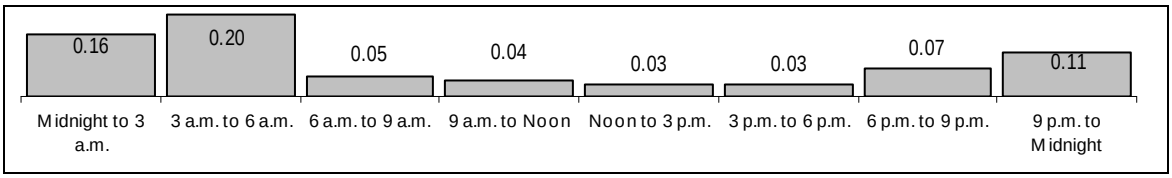
Figure 3-5: Distribution of Pedestrian Fatalities by Time of Day



Source: FARS 1997-2005 (Final), 2006 (ARF)

The time period from 3 a.m. to 6 a.m. has lower pedestrian deaths (7.6%), yet that time period has the highest pedestrian probability of getting killed in a police-reported crash (0.2 per crash). Approximately 2 pedestrians die in every 10 pedestrian crashes.

Figure 3-6: Pedestrian Fatality Probability per Crash by Time of Day



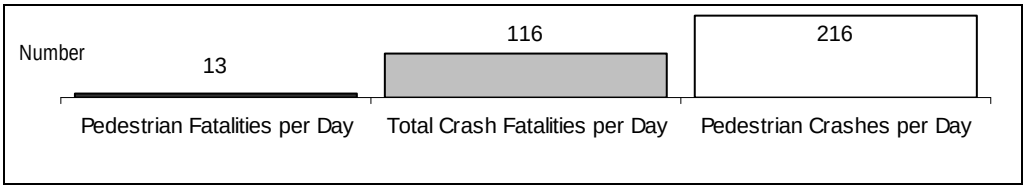
Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

Death Time Interval

AVERAGE DEATHS PER DAY

From 1997 to 2006, the average number of people killed in motor vehicle crashes was 116 per day, as shown on Figure 3-7. The rate increases to 118 per day over the 5 years from 2002 to 2006. In the last 2 years, the average total crash fatalities per day stayed at 118. However, average pedestrian fatalities per day have remained the same at 13 for the same 10-year period.

Figure 3-7: Average Pedestrian Fatalities, Total Crash Fatalities, and Pedestrian Crashes per Day



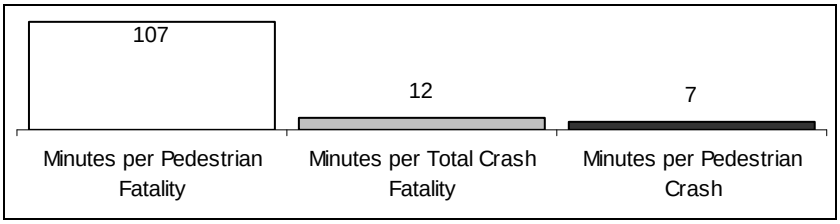
Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

On average 216 police-reported pedestrian crashes occurred per day compared to 17,225 average motor vehicle crashes per day between 1997 and 2006 in the United States.

AVERAGE MINUTES PER DEATH

On average, a pedestrian was killed every 107 minutes in a motor vehicle traffic crash from 1997 to 2006. However, there is one police-reported pedestrian crash every 7 minutes. The average time between any two fatalities in a motor vehicle crash is 12 minutes and between two motor vehicle crashes is 5 seconds. These two numbers have not changed since 1997. This comparison is displayed in Figure 3-8.

Figure 3-8: Average Minutes per Pedestrian Fatality, Total Fatality, and Pedestrian Crash



Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

PEDESTRIAN INFORMATION

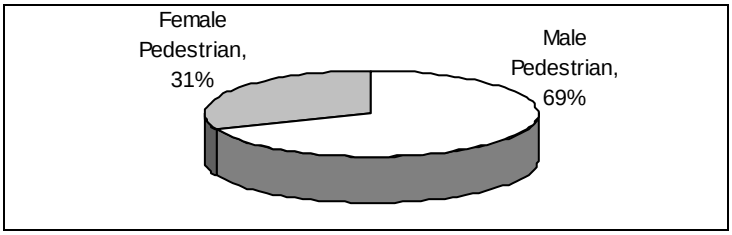
Statistics to describe characteristics and actions of deceased pedestrians at the time of the crash are reported in this section.

Pedestrian Characteristics

SEX

From 1997 to 2006, a total of 49,128 pedestrians died in motor vehicle crashes. Among them 33,907 (more than two-thirds) were males, 15,181 were females, and 40 were of unknown sex. Male pedestrian fatalities account for more than double the number of female pedestrian fatalities. Although males account for 49 percent of the population, males make up 69 percent of pedestrian crash deaths over the past decade.

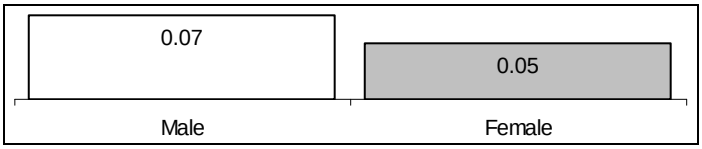
Figure 4-1: Distribution of Pedestrian Fatalities by Sex



Source: FARS 1997-2005 (Final) 2006 (ARF)

The probability of a male pedestrian being killed in a police-reported pedestrian crash is 0.07 and a female is 0.05 as shown on Figure 4-2. Male pedestrians have a 40 percent higher probability than female pedestrians to be killed in a police-reported crash.

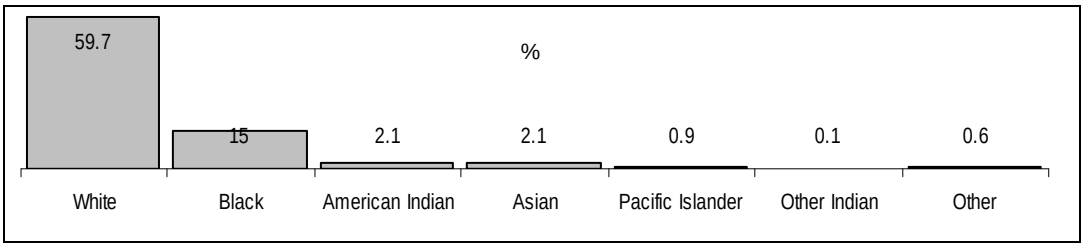
Figure 4-2: Probability of a Pedestrian Killed per Crash by Sex



Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

RACE

Figure 4-3: Distribution of Pedestrian Fatalities by Race



Source: FARS 1999-2005 (Final)

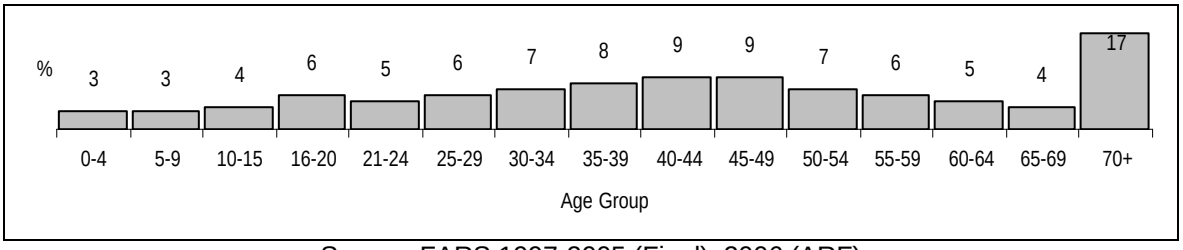
Among the pedestrians killed between 1999 and 2005, 60 percent were White, 15 percent were Black, 2 percent were Asian, 2 percent were American Indian, nearly 2 percent were members of other races, and 19 percent were of unknown race. As a comparison based on Census Bureau data, the population breakdown in the United States is 80 percent White, nearly 13 percent Black, about 4 percent Asian, and only one percent American Indian. The 2006 data for race are not used in the analysis since a large

proportion of the race data are unknown in the annual report file. This unknown proportion is reduced to a large extent in the final file with the availability of race data from death certificates.

AGE GROUP

Pedestrians over age 64 accounted for more than 21 percent of the pedestrians killed, and children under the age of 16 accounted for about 10 percent of the fatalities. The 70+ age group had the highest pedestrian fatalities among all individual age groups (17 percent), and the 40-to-44 and 45-to-49 age groups had the second highest pedestrian fatalities (9 percent). The percentages by age group of pedestrians killed are shown in Figure 4-4.

Figure 4-4: Distribution of Pedestrian Fatalities by Age Group



Source: FARS 1997-2005 (Final), 2006 (ARF)

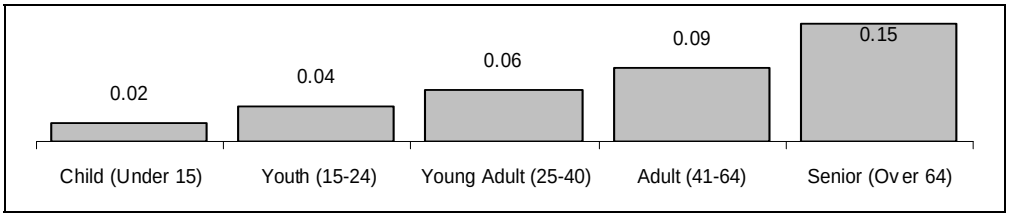
Comparing the resident population to pedestrian fatalities, people 65 and older account for 13 percent of the U.S. population, yet their pedestrian deaths make up 21 percent of all pedestrian deaths from 1997 through 2006. This contrast between resident population and pedestrian fatalities for some combined age groups is shown in Figure 4-5.

Figure 4-5: Distribution of Pedestrian Fatality and Population by Age Group

Source: FARS 1997-2005 (Final), 2006 (ARF) and Census Bureau

Figure 4-6 hints that pedestrian fatality probability and age have a positive relationship. The pedestrian fatality probability increases with the increase in age group of pedestrians. The older the age group, the more likely a fatality in a police-reported crash. Among all age groups people 65 and older have the highest probability of being in a police-reported crash.

Figure 4-6: Pedestrian Fatality Probability per Crash by Age Group

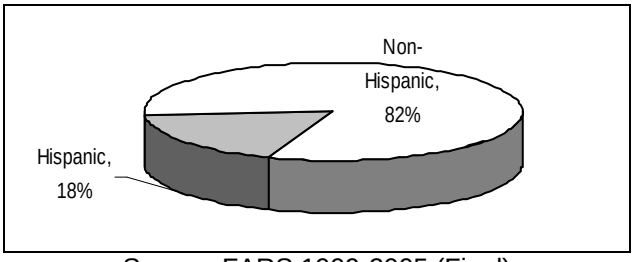


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

HISPANIC ORIGIN

Among total pedestrians killed between 1999 and 2005, Hispanics (for any race) accounted for 18 percent of the fatalities when Hispanic origin was known. Non-Hispanics accounted for 82 percent. By comparison, 14 percent of the U.S. population in the same time period was Hispanic, according to U.S. Census Bureau data. The 2006 data for ethnicity are not used in the analysis since a large proportion of the ethnicity data are unknown in the annual report file. This unknown proportion is reduced to a large extent in the final file with the availability of ethnicity data from the death certificates. The data of Hispanic or Latino population can be found in Table B-12 in Appendix B.

Figure 4-7: Distribution of Pedestrian Fatalities by Hispanic Origin



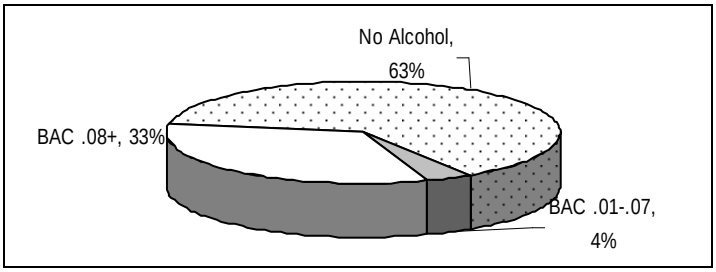
Source: FARS 1999-2005 (Final)

Pedestrian Actions

ALCOHOL INVOLVEMENT

Figure 4-8 shows the proportion of pedestrian fatality distribution by pedestrian blood alcohol concentration. BAC is used to represent the level of alcohol involvement. More than one-third of the pedestrians killed in crashes had a BAC of .08 grams per deciliter or more with a smaller proportion (4%) with BAC of .01 to 07 g/dL. This data indicates that nearly 4 out of 10 pedestrians killed had some level of alcohol involvement at the time of the crash.

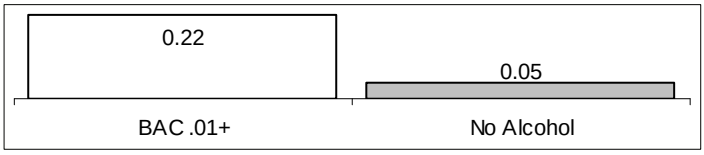
Figure 4-8: Distribution of Pedestrian Fatalities by BAC Level



Source: FARS 1997-2005 (Final), 2006 (ARF)

The probability of a pedestrian being killed in a police-reported crash has a positive association with pedestrian alcohol involvement. As Figure 4-9 shows, when alcohol is involved the probability of the pedestrian being killed in a police-reported motor vehicle crash involving a pedestrian is four times higher than when no alcohol is involved.

Figure 4-9: Pedestrian Fatality Probability per Crash by Alcohol Involvement

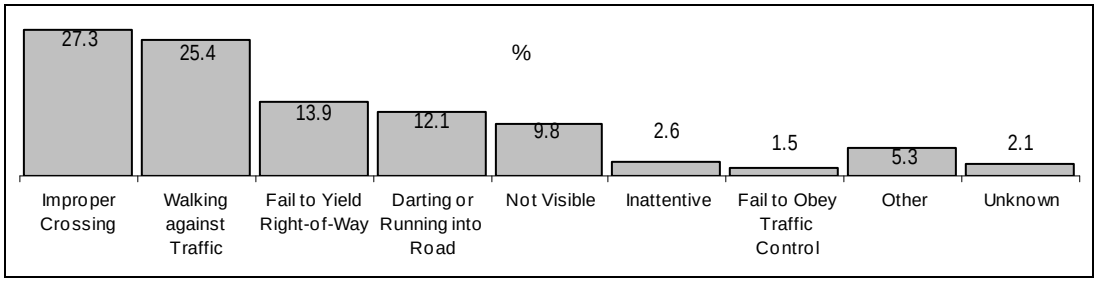


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

BEHAVIOR

Figure 4-10 shows the percentage distribution by the types of pedestrian behavior or actions in the crash. About 27 percent of the pedestrian deaths were related to improper crossing of the roadway or intersection. Over one-fourth of the deaths were related to walking, playing, working, etc. About 14 percent of the pedestrian deaths were related to failure to yield right-of-way as a condition in the crash. Also, about 12 percent of the deaths were related to darting out or running into the road.

Figure 4-10: Distribution of Pedestrian Action in Fatal Crashes



Source: FARS 1997-2005 (Final), 2006 (ARF)

DRIVER INFORMATION

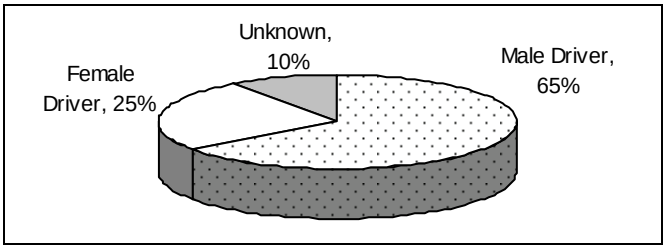
In order to understand the circumstances at the time of the crash, the characteristics and actions of vehicle drivers are equally relevant in pedestrian crashes. Numerous statistics are used to analyze drivers' characteristics and actions at the time of the crash.

Driver Characteristics

SEX

Almost two-thirds of the time, a male driver was involved when a pedestrian was killed in a motor vehicle crash. Male drivers were more than twice as likely to be involved as female drivers. The number of drivers with unknown sex is 10 percent, most of which are associated with hit-and-run crashes in which the driver left the scene of the crash.

Figure 5-1: Distribution of Vehicle Drivers by Sex in Fatal Pedestrian Crashes

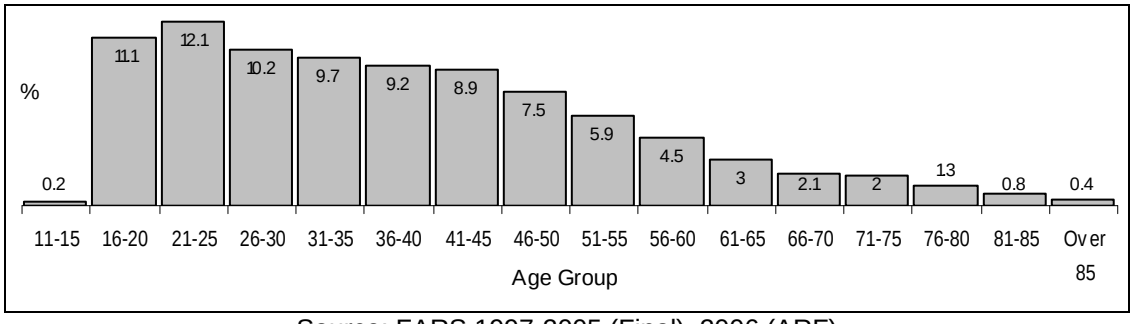


Source: FARS 1997-2005 (Final), 2006 (ARF)

AGE GROUP

Among all age groups, 16- to 25-year-old drivers were the most involved. The 21-to-25 age group has the greatest involvement at 12 percent, while the 16-to-20 age group has the second highest involvement at 11 percent.

Figure 5-2: Distribution of Vehicle Drivers by Age Group in Fatal Pedestrian Crashes

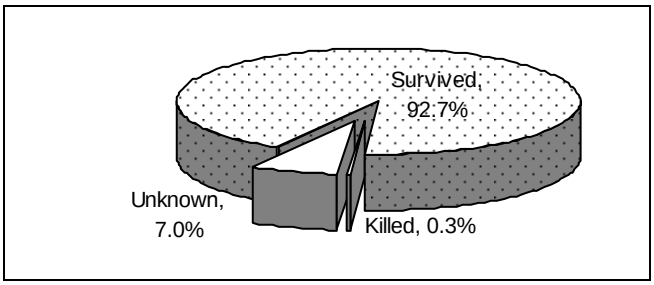


Source: FARS 1997-2005 (Final), 2006 (ARF)

DRIVER SURVIVAL

Figure 5-3 shows the percentage distribution of driver survival in crashes in which pedestrians were killed. As seen from the data, only 0.3 percent of the drivers were reported had been killed when involved in a crash in which there was a pedestrian fatality during the last 10 years. In other words, the most serious injuries happen to the pedestrians, not the vehicle drivers. Seven percent of drivers' survival status is unknown perhaps because of the hit-and-run crashes where the driver might have left the scene of the crash.

Figure 5-3: Distribution of Vehicle Drivers by Driver Survival Status



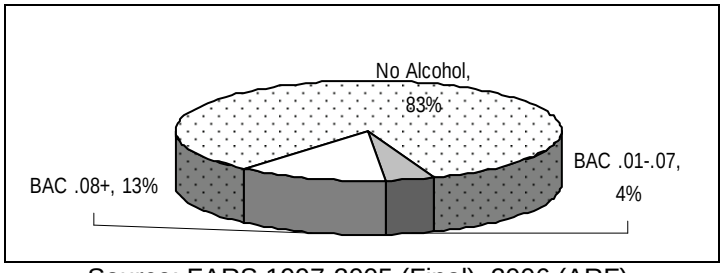
Source: FARS 1997-2005 (Final), 2006 (ARF)

Driver Actions

ALCOHOL INVOLVEMENT

Figure 5-4 shows the percentage distribution of drivers involved by their BAC level in fatal pedestrian crashes. Overall, more than 80 percent of the drivers did not have alcohol when involved in a crash. Less than 20 percent of vehicle drivers had alcohol involvement when a pedestrian was killed. The proportion of alcohol involvement for drivers in fatal pedestrian crashes is less half when compared to the alcohol involvement of pedestrians in the crashes.

Figure 5-4: Distribution of Vehicle Drivers Involved by BAC Level

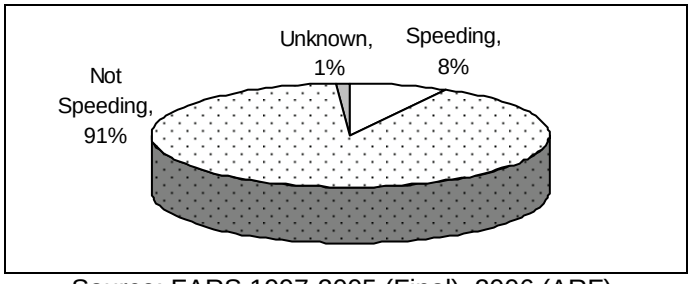


Source: FARS 1997-2005 (Final), 2006 (ARF)

SPEEDING

Less than 10 percent of the vehicle drivers involved when pedestrians were killed had speeding as a contributing factor documented in the crash. Figure 5-5 shows the percentage distribution by driver speeding status when pedestrians were killed in crashes over the past 10 years.

Figure 5-5: Distribution of Vehicle Drivers by Speeding Status

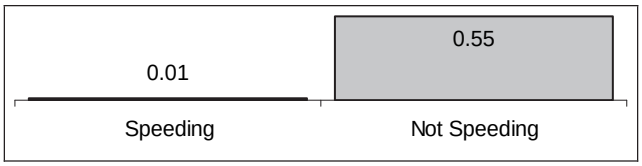


Source: FARS 1997-2005 (Final), 2006 (ARF)

Figure 5-6 shows that 1 pedestrian died per 100 police-reported crashes when the driver was recorded to be speeding compared to 55 per 100 police-reported crashes when the driver was not speeding. The probability of a pedestrian killed when drivers were not speeding is much higher than when the

driver was speeding, which is attributable to a large number of fatalities divided by small number of crashes under no speeding condition.

Figure 5-6: Pedestrian Fatality Probability per Crash by Driver Speeding Status

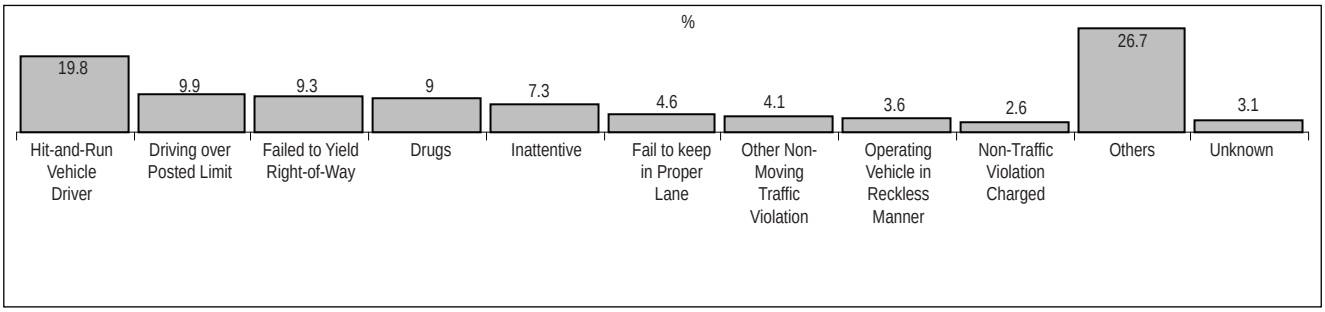


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES, 1997-2006

DRIVER ACTIONS AT THE TIME OF THE CRASH

Figure 5-7 shows the number of drivers involved categorized by police-reported driver-related factors. The data shows that drivers in the crashes did have some form of driver-related factors mentioned in the police accident report. Factors relating to the drivers were: being inattentive (7%), failure to keep in proper lane (5%), failure to yield right-of-way (9%), driving too fast for conditions (10%), operating vehicle in reckless manner (4%), and hit-and-run (20%). This data indicate the risks pedestrians encounter on roadways due to driver behavior.

Figure 5-7: Driver Distribution by Behavior in Fatal Pedestrian Crashes



Source: FARS 1997-2005 (Final), 2006 (ARF)

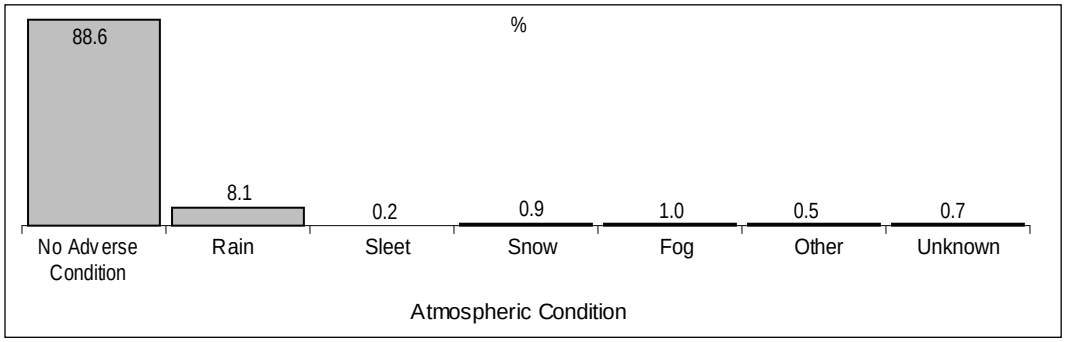
OTHER CRASH FACTORS

Five additional crash factors are included for more pedestrian crash death information. The statistics are discussed as below.

ATMOSPHERIC CONDITION

Weather is an important environmental factor in motor vehicle crashes; however 89 percent of pedestrian deaths occurred when there were no adverse weather conditions. Eight percent of pedestrians died in crashes that occurred in the rain.

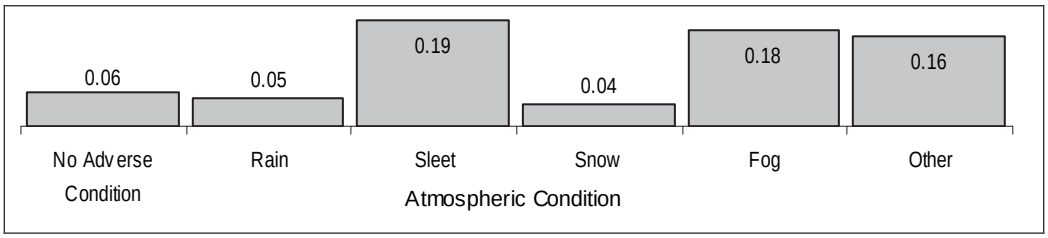
Figure 6-1: Distribution of Pedestrian Fatalities by Atmospheric Condition



Source: FARS 1997-2005 (Final), 2006 (ARF)

When the data were further analyzed based on the probability of a pedestrian fatality per police-reported crash, more pedestrian deaths per pedestrian crashes occurred when the atmospheric condition was noted as sleet or fog – 19 pedestrian fatalities per 100 police-reported pedestrian crashes. Snow was the condition with the lowest pedestrian death rate per pedestrian crash.

Figure 6-2: Pedestrian Fatality Probability per Pedestrian Crash by Atmospheric Condition



Data Source: FARS and GES, 1997-2006

ALCOHOL INVOLVEMENT (Pedestrian or Driver)

Alcohol involvement – either for the driver or for the pedestrian – was reported in 46 percent of the traffic crashes that resulted in pedestrian fatalities. Of the pedestrians involved, 33 percent were alcohol-impaired with a BAC of .08 g/dL or greater. The alcohol-impaired rate for the drivers involved was about 13 percent, less than one-half of the rate for the pedestrians. In almost 6 percent of the crashes, both the driver and the pedestrian were alcohol-impaired.

These numbers indicate higher alcohol involvement among pedestrians than among drivers during fatal pedestrian crashes. Table 7 shows joint distribution by pedestrian BAC and driver BAC from 1997 to 2006.

Table 7: Distribution of Pedestrian BAC and Driver BAC in Fatal Pedestrian Crashes

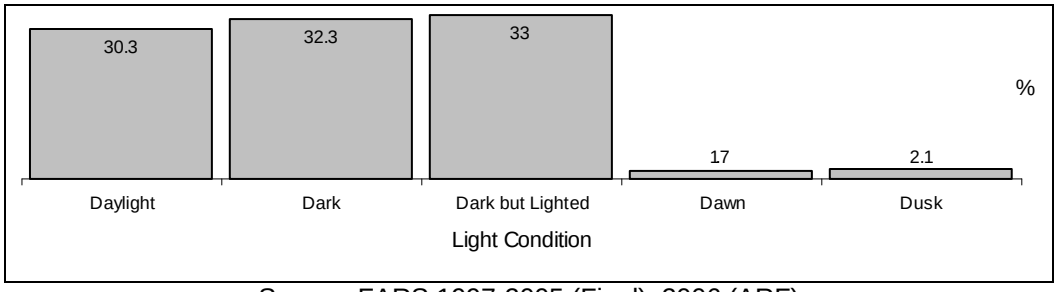
Alcohol Involvement		Driver BAC			
		No Alcohol	.01-.07	.08+	Total
Pedestrian BAC	No Alcohol	54.2%	1.9%	6.5%	62.6%
	.01-.07	3.5%	0.0%	0.9%	4.4%
	.08+	26.0%	1.5%	5.5%	33.0%
	Total	83.7%	3.4%	12.9%	100.0%

Source: FARS 1997-2005 (Final) 2006 (ARF)

LIGHT CONDITION

Roadway lighting is another important environmental factor. More than two-thirds of pedestrian fatalities occurred when the light condition was either dark or dark but lighted. Similarities between the time of day and the light condition can be found when compared with Figure 3-5. About one-third of pedestrian crash deaths occurred during daylight.

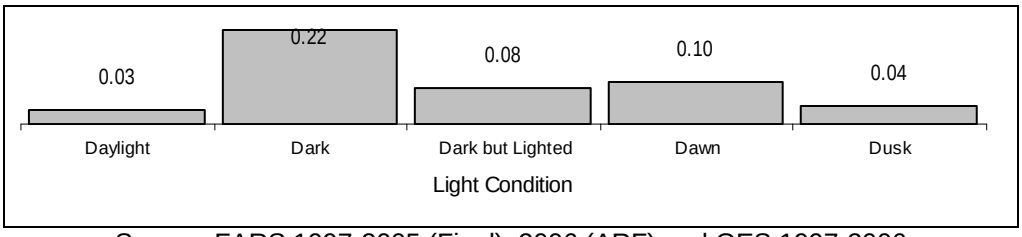
Figure 6-3: Distribution of Pedestrian Fatalities by Light Condition



Source: FARS 1997-2005 (Final), 2006 (ARF)

Further data analysis indicates that the worst light condition, dark, has the highest pedestrian fatality rate per police-reported pedestrian crash; and the best light condition, daylight, has the lowest pedestrian fatality rate per police-reported pedestrian crash.

Figure 6-4: Pedestrian Fatality Probability per Crash by Light Condition

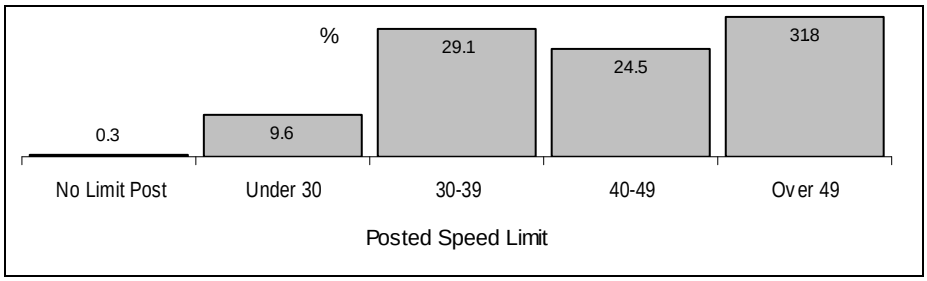


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

POSTED SPEED LIMIT

The posted speed limit is also an important factor in pedestrian crashes. Figure 6-5 shows the distribution of pedestrian crashes by posted speed limit. The largest proportion (32%) of pedestrian fatalities occurred on roads with posted speed limits of 50 miles per hour or higher compared to all other posted speed limits, followed by roads with posted speed limits of 30 to 39 miles per hour (29%).

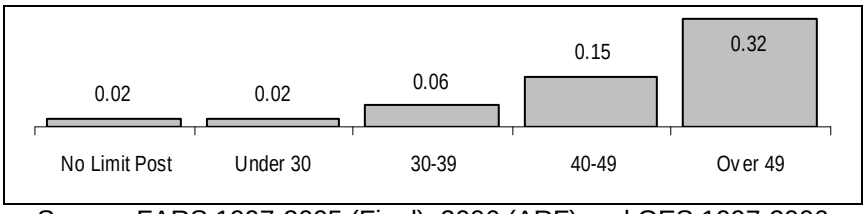
Figure 6-5: Distribution of Pedestrian Fatalities by Posted Speed Limit



Source: FARS 1997-2005 (Final), 2006 (ARF)

As indicated in Figure 6-6, further analysis reveals that roadways with posted speed limits of 50 miles per hour or higher have the highest rate of pedestrian fatalities per police-reported pedestrian crash, with a probability of 32 pedestrian fatalities per 100 crashes.

Figure 6-6: Pedestrian Fatality Probability per Crash by Posted Speed Limit

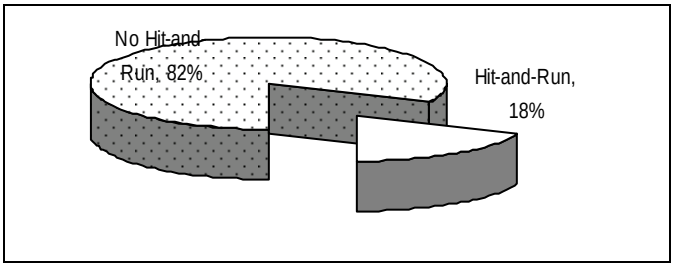


Source: FARS 1997-2005 (Final), 2006 (ARF) and GES 1997-2006

HIT-AND-RUN

Figure 6-7 shows the proportion of pedestrian deaths by hit-and-run in the 10-year survey period. A hit-and-run crash is defined as a crash where the driver of a contact vehicle in the crash does not stop to render aid (this includes drivers who flee the scene on foot). While the majority of pedestrian crash deaths occurred in crashes where no hit-and-run was involved, about one in five (18%) of all pedestrian deaths were the result of hit-and-run crashes.

Figure 6-7: Distribution of Pedestrian Fatalities by Hit-and-Run



Source: FARS 1997-2005 (Final), 2006 (ARF)

FINDINGS

Walking, running, or jogging is a primary means of human locomotion. In many circumstances, people need to move their bodies from one place to another on foot. Despite advances in modern transportation, travel by foot is still a common and necessary mode of transport. Pedestrian safety is an essential concern in the planning and control of the transportation system.

Analyses, calculations, and comparisons for pedestrian crash fatalities, which were done in previous sections, generated many important findings. These findings could be used in the design of safety systems and countermeasure programs to decrease pedestrian crash fatalities. The findings are provided in this section.

Trend

- Pedestrian crash fatalities make up a small component of total crash fatalities. Its proportion has declined from 13 percent to 11 percent over 10 years.
- Both the number of pedestrian crash fatalities and the total number of pedestrian crashes are dropping, yet the decrease in pedestrian crash fatalities is slower than the decrease in pedestrian crashes.
- Although pedestrian fatalities are declining in the long term, the rate of decline is slow; only 1 percent per year on average.
- The probability of fatality in pedestrian crashes (number of pedestrian deaths per pedestrian crash) is going up, while the overall pedestrian crash probability (number of pedestrian crashes per motor vehicle crash) is going down. This is one of the more significant findings in this report. Improving vehicle design and other factors in pedestrian crashes may help alleviate this problem.
- The number of pedestrian crash fatalities per vehicle miles traveled is decreasing. In other words, the increase in VMT has outpaced the increase in pedestrian fatalities.
- Pedestrians are most often killed by a single vehicle. More than 90 percent of pedestrians are killed in single-vehicle crashes, and less than 10 percent of pedestrians are killed in multiple-vehicle crashes. This ratio has not changed over the past decade.

Location

- Most pedestrians were killed at nonintersections or on urban roadways. A research report published in 1981[7] had the same finding. The result from the analysis reconfirmed that urban roadways and nonintersection areas are important to pedestrian safety.
- More than two-thirds of pedestrian crash fatalities took place in cities. Only 13 percent of the cities in this country accounted for more than two-thirds of total pedestrian deaths between 1997 and 2006. U.S. pedestrian deaths were distributed evenly among cities. In a 10-year period, cities with less than 10 pedestrian deaths made up 91 percent of total cities with pedestrian deaths. Less than 1 percent of U.S. cities had more than 99 pedestrian deaths.
- Consolidating the number of pedestrian fatalities into NHTSA operation regions may reveal a pattern of pedestrian fatality distribution from a different point of view. In the United States, NHTSA Regions 4 (southeast) and 9 (western) had more pedestrian deaths than other regions.
- In terms of number of pedestrians killed, the three most deadly States were California, Florida, and Texas; the five deadliest cities in the Nation were New York, Los Angeles, Chicago, Phoenix, and Houston. These rankings are based on pedestrian death percentages. States and cities with the highest number of pedestrian deaths may need to focus messages and outreach efforts on pedestrian safety.

[7] See reference No. 1 in Appendix D.

- Measuring death density further illustrates the pedestrian safety problem. On average over the past decade, 1.73 pedestrians died in vehicle crashes per 100,000 population nationwide. By comparison, 14.9 people died in all crashes per 100,000 population.
- Among the 50 States and the District of Columbia, New Mexico had the highest pedestrian death rate per capita followed by Florida. New Hampshire had the lowest pedestrian death rate per capita.
- The average number of miles walked per pedestrian death is a valid indicator in gauging pedestrian safety. In the United States, 1 pedestrian crash fatality occurred for every 70 million miles walked. This number is much greater than 4 million which was the number of miles walked per pedestrian crash, but less than 77 million which was the number of vehicle miles traveled per motor vehicle occupant fatality. Based solely on miles of travel in a crash, pedestrian fatalities occurred more frequently than occupants crash fatalities.
- For every 100 million walking miles traveled (WMT), the pedestrian fatality rate was 1.42 and the pedestrian crash rate was 24.5. By comparison, for every 100 million vehicle miles traveled (VMT), the motor vehicle occupant fatality rate was 1.3 and the motor vehicle crash rate was 223.
- The pedestrian fatality rate per capita was significantly lower than total crash fatalities per capita, yet the pedestrian fatality rate per WMT was slightly higher than motor vehicle occupant fatality rate per VMT.

Time

- For pedestrians, the deadliest day of the year is January 1st followed by October 31st. The most deadly day of the week is Saturday followed by Friday. The months with the highest number of pedestrian fatalities are October, November, and December. These findings are consistent with previous reports.[8]
- Saturday and Sunday also have a higher probability of fatality in a crash than any other day of the week.
- Autumn is the deadliest season for pedestrians, with two of the highest fatality months being October and November.
- The highest percentage of pedestrian fatalities occurs from 6 p.m. to 9 p.m., followed by 9 p.m. to midnight. The percentage of pedestrian fatalities between 3 a.m. and 6 a.m. is low, but the crash fatality probability is the highest during that time period.
- The number of deaths during a time period is a base for assessing risk control. Between 1997 and 2006, an average of 13 pedestrians died per day in vehicle crashes. By comparison, there were approximately 216 total pedestrian crashes per day and 116 deaths per day in all motor vehicle crashes.
- In the United States, a pedestrian was killed in a vehicle crash every 107 minutes. However, pedestrian crashes and vehicle crash fatalities occurred every 7 minutes and 12 minutes, respectively.

Pedestrian Factors

- More than two-thirds of pedestrians killed are male, yet males make up less than half of the total population.
- Sixty percent of pedestrians killed are White, while 80 percent of the total U.S. population is White.
- People 65 and older are over-represented in pedestrian fatalities. They were 21 percent of all pedestrian fatalities yet are only 13 percent of population.

[8] See reference No. 7, 33, and 41 in Appendix D.

- Almost one-fifth of pedestrian fatalities are of Hispanic origin.
- More than a third of pedestrians killed had alcohol involvement.
- The majority of pedestrians killed performed at least one unsafe action when crashes occurred. Pedestrian actions at the time of the crash indicate the risks pedestrians are taking while crossing roadways. More attention toward pedestrian safety education may be required.
- Regarding pedestrian fatality probability in a crash, males are much more likely than females to be killed. As pedestrians, people 65 and older have a much higher fatality probability than children (under age 15), youth (15 to 24), and young adults (25 to 40). Safety education, engineering countermeasures, and law enforcement efforts should be undertaken to reduce the pedestrian safety problem among males and senior citizens.
- As expected, the higher the pedestrian BAC, the higher the fatality probability.

Vehicle Driver

- Analysis of the types of drivers involved in fatal pedestrian crashes shows that male drivers were more likely than female drivers to be involved in pedestrian crashes. Regarding driver age, 21- to 25-year-olds were more likely than other age groups to be involved.
- Almost all drivers survived the pedestrian crashes, most vehicle drivers did not have alcohol, and the majority of drivers were not speeding.
- Most drivers committed some type of unsafe action on at least one occasion. Driver actions at the time of the crash indicate the risks pedestrians encounter on roadways. This indicates that more attention may need to be paid to law enforcement and driver training.
- More pedestrians were killed in crashes where speeding was not a factor than in crashes where it was. This finding means that a pedestrian is still likely to die in a crash even if the driver is obeying the posted speed limit.

Other Factors

- Most pedestrian crash fatalities occurred when the weather was good, the road light condition was poor, alcohol was not involved, and hit-and-run was not involved. That is, every pedestrian crash fatality was more likely to meet each one of these criteria individually, and we do not wish to give the impression that the majority of all pedestrian crash fatalities occurred under all of those conditions at once. More attention and effort on road lighting and pedestrian visibility may be required.
- Based on weather conditions at the time of a crash, the highest probability of pedestrian fatality existed under a sleet condition.
- Based on light conditions, pedestrian fatality probability was highest in the dark.
- Roadways with posted speed limits over 49 miles per hour had the highest pedestrian fatality rate per pedestrian crash.
- Forty-six percent of pedestrian fatalities were involved some alcohol, either by the driver or by the pedestrian.
- One in five pedestrians (18%) was killed in hit-and-run motor vehicle crashes.

APPENDIX A

FARS Data 1997-2005 (Final), 2006 (ARF)

Table A-1: Pedestrian crash deaths by crash type and year

Crash Type	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Single-Vehicle	4,876	4,801	4,516	4,340	4,480	4,445	4,310	4,237	4,445	4,327
Multiple-Vehicle	445	427	423	423	421	406	464	438	447	457
Total	5,321	5,228	4,939	4,763	4,901	4,851	4,774	4,675	4,892	4,784
Note: Data in this table has been used to create all figures in Pedestrian Fatality Trend.										

Table A-2: Pedestrian crash deaths by pedestrian location and year

Pedestrian Location	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Unknown Location	36	20	23	21	36	31	28	39	33	72
Intersection Crosswalk	360	369	385	386	397	396	424	392	388	404
Intersection Roadway, Crosswalk Available	211	224	176	192	207	256	219	226	296	196
Intersection Roadway, Crosswalk Not Available	160	194	153	152	131	124	116	125	138	139
Intersection Roadway, Crosswalk Unknown	332	291	249	274	234	219	178	141	122	207
Not on Roadway	42	43	38	36	30	40	39	30	26	48
Unknown-Intersection	20	24	13	17	18	27	36	43	24	14
Non-intersection Crosswalk	36	42	36	45	42	35	46	44	63	47
Non-intersection Roadway, Crosswalk Available	514	573	525	565	648	728	885	1,088	1,373	1,255
Non-intersection Roadway, Crosswalk Not Available	2,252	2,239	2,125	1,935	2,036	1,856	1,703	1,677	1,636	1,629
Non-intersection Roadway, Crosswalk Unknown	827	765	722	660	646	673	639	439	312	333
In Parking Lane	5	11	9	10	7	7	12	13	17	3
On Road Shoulder	320	221	285	216	237	233	227	219	252	246
Bike Path	0	2	1	0	0	2	0	0	0	2
Outside Traffic Way	36	44	44	51	42	40	50	41	58	58
Other	141	147	136	180	171	169	151	141	131	116
Unknown Non-intersection	29	19	19	23	19	15	21	17	23	15
Note: Data in this table has been used to create Table 2 in Crash Location.										

Table A-3: Pedestrian crash deaths by roadway function class and year

Roadway Function Class	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Rural Land	1,611	1,611	1,520	1,376	1,453	1,418	1,283	1,274	1,245	1,220
Urban Land	3,699	3,584	3,399	3,298	3,436	3,421	3,479	3,393	3,618	3,435
Unknown	11	33	20	89	12	12	12	8	29	129
Rural Principal Arterial Interstate	209	180	161	183	195	208	176	171	170	150
Principal Arterial Other	334	359	320	255	295	290	256	277	258	266
Rural Minor Arterial	279	240	242	196	240	231	238	284	201	214
Major Collector	311	329	304	279	313	280	270	238	248	247
Minor Collector	84	103	93	82	81	101	78	68	74	64
Rural Local Road or Street	355	373	362	328	306	299	258	220	279	264
Rural Unknown	39	27	38	53	23	9	7	16	15	15
Urban Principal Arterial Interstate	362	330	326	327	342	335	275	354	397	324
Principal Arterial Other Expressways or Freeways	228	185	199	199	226	190	228	218	233	238
Other Principal Arterial	1,359	1,368	1,237	1,238	1,272	1,192	1,251	1,172	1,254	1,268
Urban Minor Arterial	774	785	716	658	710	739	778	722	804	760
Collector	222	204	178	179	162	179	214	242	239	231
Urban Local Road or Street	739	697	720	658	705	778	712	639	677	606
Urban Unknown	15	15	23	39	19	8	21	46	14	8
Unknown Roadway Type	11	33	20	89	12	12	12	8	29	129
Note: Data in this table has been used to create Table 3 in Crash Location.										

Table A-4: Pedestrian crash deaths by urban area and year

Urban Area	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Not City	1,797	1,733	1,631	1,543	1,633	1,626	1,579	1,538	1,606	1,504
City	3,520	3,491	3,305	3,219	3,264	3,217	3,189	3,128	3,279	3,269
Unknown	4	4	3	1	4	8	6	9	7	11
Note: Data in this table has been used to create Figure 2-1 in Crash Location.										

Table A-5: Pedestrian crash deaths by NHTSA operation region and year

Operation Region	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New England Region #1	181	175	159	165	148	142	173	147	141	128
Eastern Region #2	702	683	715	650	676	667	641	619	634	643
Mid Atlantic Region #3	495	530	462	460	460	475	473	442	458	465
Southeast Region #4	1006	970	922	872	897	879	894	896	962	988
Great Lakes Region #5	680	681	643	597	590	606	623	551	548	536
South Central Region #6	770	737	705	672	729	690	622	700	723	646
Central Region #7	220	230	170	190	179	174	174	167	181	164
Rocky Mountain Region #8	174	177	197	186	162	160	173	172	161	157
Western Region #9	926	875	829	829	901	896	848	844	935	915
Pacific Northwest Region #10	167	170	137	142	159	162	153	137	149	142
Note: Data in this table has been used to create Figure 2-2 in Crash Location.										

Table A-6: Pedestrian crash deaths by State and year

State Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Alabama	85	79	86	62	68	61	62	81	73	78
Alaska	10	7	8	10	7	16	9	10	7	9
Arizona	148	155	143	130	160	154	121	130	158	167
Arkansas	49	47	41	38	41	33	41	32	37	31
California	757	697	665	670	711	709	704	684	742	717
Colorado	56	73	63	80	61	69	56	70	48	59
Connecticut	53	45	51	48	33	50	35	27	34	36
Delaware	14	15	12	22	17	16	19	16	11	27
Dist of Columbia	24	15	16	18	11	7	18	9	16	17
Florida	528	531	488	492	489	487	500	493	571	546
Georgia	183	167	159	137	156	161	156	153	150	148
Hawaii	21	23	21	29	30	33	23	30	35	31
Idaho	19	7	14	6	12	15	13	17	9	8
Illinois	198	187	175	187	185	191	189	156	165	138
Indiana	72	71	68	54	56	53	62	73	63	73
Iowa	27	25	17	25	19	19	18	24	24	25
Kansas	27	35	33	19	24	23	25	21	24	23
Kentucky	64	61	52	53	53	55	61	48	54	52
Louisiana	138	113	107	100	99	103	93	103	113	96
Maine	19	13	11	15	12	14	13	10	9	10
Maryland	107	105	114	91	101	105	114	97	102	94
Massachusetts	79	84	74	82	79	59	86	81	76	61
Michigan	165	171	173	170	162	175	166	137	137	136
Minnesota	56	55	51	38	43	50	53	37	44	38
Mississippi	54	59	60	64	59	55	40	44	72	56
Missouri	100	102	65	88	83	87	78	81	88	76
Montana	9	13	7	11	9	14	10	7	13	12
Nebraska	17	21	14	20	12	12	12	9	8	9
Nevada	59	46	67	43	45	52	65	60	63	52
New Hampshire	11	11	5	7	9	6	19	15	5	6
New Jersey	144	154	154	145	132	177	137	152	153	165
New Mexico	66	58	52	48	72	60	51	56	61	69
New York	389	363	378	335	356	337	334	317	322	312
North Carolina	176	197	155	159	149	176	153	161	164	173
North Dakota	5	4	4	5	3	2	7	5	9	4
Ohio	126	134	122	97	99	87	99	94	95	96
Oklahoma	69	46	60	43	49	54	37	50	50	46
Oregon	57	66	48	50	58	48	46	43	48	47
Pennsylvania	169	166	183	170	188	153	170	150	159	166
Rhode Island	7	11	14	6	10	9	13	7	14	15
South Carolina	103	111	113	82	107	98	80	86	98	125
South Dakota	6	7	11	13	15	8	10	9	14	7
Tennessee	107	82	76	99	77	72	96	83	70	91
Texas	443	461	426	417	450	418	401	447	427	379
Utah	39	43	38	33	33	25	28	25	20	29
Vermont	12	11	4	7	5	4	7	7	3	0
Virginia	89	102	84	92	101	88	86	85	88	82
Washington	72	77	60	65	73	69	75	60	72	66
West Virginia	21	35	29	25	28	28	22	26	23	20
Wisconsin	63	63	54	51	45	50	54	54	44	55
Wyoming	9	4	14	12	5	4	7	3	7	6

Note: Data in this table has been used to create Table 4 in Crash Location.

Table A-7: Pedestrian crash deaths by city and year

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New York, NY	233	177	183	178	186	163	164	148	154	157
Los Angeles, CA	125	85	96	96	116	87	103	83	96	99
Chicago, IL	86	85	63	73	67	73	72	54	66	48
Phoenix, AZ	59	49	51	54	62	59	53	42	52	59
Houston, TX	48	61	47	51	59	54	53	44	52	45
Detroit, MI	38	49	50	45	37	53	41	37	37	28
Dallas, TX	38	46	43	36	44	38	28	57	46	30
Philadelphia, PA	35	27	34	39	32	24	32	39	30	36
San Diego, CA	28	32	38	36	19	37	30	32	18	22
San Antonio, TX	31	32	25	31	23	24	24	26	37	28
San Francisco, CA	29	33	26	30	20	21	27	19	16	19
Jacksonville, FL	20	28	18	20	21	20	13	28	34	23
Miami, FL	22	21	18	27	14	26	18	17	22	27
Denver, CO	22	17	18	35	23	25	17	20	16	14
Memphis, TN	31	20	19	16	18	20	21	19	18	16
Hempstead, NY	14	20	22	18	19	14	17	19	20	10
San Jose, CA	21	17	15	19	15	22	10	16	14	22
Atlanta, GA	23	26	23	15	18	18	20	16	6	6
Albuquerque, NM	18	12	10	16	23	14	15	13	21	18
Washington, DC	24	15	16	18	11	7	18	9	16	17
Tucson, AZ	11	15	15	15	22	16	7	15	19	14
Fort Worth, TX	14	13	11	15	14	21	12	15	19	14
Tampa, FL	14	16	19	20	11	16	11	14	8	13
Austin, TX	14	13	17	12	16	11	7	13	17	15
Baltimore, MD	16	28	19	1	0	12	15	14	12	16
Las Vegas, NV	13	6	14	9	16	14	15	13	18	11
El Paso, TX	20	17	15	13	12	9	19	8	12	4
Nashville, TN	12	16	8	14	15	8	14	12	10	18
Louisville, KY	7	11	11	18	8	10	15	13	12	17
Kansas City, MO	12	14	9	9	14	19	12	12	9	9
Fresno, CA	13	14	10	6	9	19	17	6	13	10
St Louis, MO	10	11	11	17	12	9	14	12	11	8
Charlotte, NC	10	13	11	15	9	13	9	9	10	15
Oklahoma City, OK	17	11	6	10	17	11	5	16	13	8
New Orleans, LA	20	8	12	12	11	16	7	15	11	0
Sacramento, CA	15	5	13	5	12	14	14	10	14	9
Oakland, CA	10	12	10	7	13	16	10	8	10	14
Newark, NJ	12	15	15	13	9	10	9	11	6	10
Fort Lauderdale, FL	17	11	16	8	8	6	7	12	9	15
Columbus, OH	13	8	14	8	14	8	13	8	13	9
Portland, OR	9	13	15	10	10	10	15	9	8	8
Milwaukee, WI	13	11	5	10	8	11	7	16	12	14
Honolulu, HI	12	5	5	12	10	13	7	12	15	12
Boston, MA	6	12	8	17	13	11	14	7	7	7
Brookhaven, NY	11	13	6	10	6	8	10	11	12	8
Orlando, FL	8	9	11	6	9	11	10	6	9	13
Tulsa, OK	10	8	13	7	7	7	9	10	11	8
Indianapolis, IN	7	6	11	9	11	6	7	11	7	10
Seattle, WA	8	5	7	5	12	8	12	13	7	8
Long Beach, CA	8	9	6	7	10	9	7	10	7	7
Corpus Christi, TX	9	12	7	7	5	6	7	12	8	3

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Santa Ana, CA	11	5	7	7	2	8	15	5	8	7
Baton Rouge, LA	3	6	6	9	14	11	4	9	7	5
San Bernardino, CA	4	4	9	6	8	11	6	5	12	8
St Petersburg, FL	11	7	10	6	9	4	6	7	5	7
Birmingham, AL	11	8	6	5	8	7	4	10	4	6
Bakersfield, CA	9	8	2	3	5	2	7	7	8	12
Hialeah, FL	4	11	8	5	5	4	6	8	6	5
Islip, NY	5	5	11	5	3	5	9	10	6	2
Cleveland, OH	8	7	8	5	7	1	5	2	10	8
Anaheim, CA	5	2	5	6	5	7	7	6	8	9
Reno, NV	5	6	8	5	4	6	9	5	5	6
Stockton, CA	5	4	4	6	5	10	5	5	8	6
Minneapolis, MN	10	11	6	2	6	6	4	6	6	1
Oyster Bay, NY	7	5	10	3	2	11	2	4	10	4
Raleigh, NC	5	7	5	4	6	7	4	6	5	8
Salt Lake City, UT	8	7	5	9	5	2	0	4	6	10
Mobile, AL	3	4	3	5	3	7	9	8	3	10
Pittsburgh, PA	6	5	4	5	6	3	9	8	4	5
Aurora, CO	3	7	5	4	6	4	4	7	8	6
Mesa, AZ	5	5	1	3	7	2	3	5	13	9
Greensboro, NC	5	4	4	6	7	4	3	6	8	6
Cincinnati, OH	6	5	4	7	4	1	6	8	7	5
Toledo, OH	9	5	8	4	5	2	4	4	5	7
Hollywood, FL	5	10	6	1	5	6	6	4	4	3
Anchorage, AK	5	6	4	4	5	8	4	6	4	3
Clearwater, FL	8	2	7	7	1	7	3	5	5	4
Jackson, MS	2	8	3	6	4	6	4	3	13	0
Charleston, SC	4	3	6	4	1	6	2	10	8	5
Riverside, CA	5	6	8	4	3	3	3	5	5	6
Worcester, MA	6	6	2	7	5	6	4	6	2	4
Jersey City, NJ	7	3	5	6	4	6	6	3	4	2
Durham, NC	4	3	5	6	5	4	3	8	3	5
Beaumont, TX	3	7	1	5	2	5	3	2	9	9
Huntsville, AL	7	0	4	4	7	5	3	4	4	7
Montgomery, AL	4	8	3	2	5	3	2	7	7	3
Glendale, AZ	2	5	5	3	5	6	5	2	4	7
Rochester, NY	4	8	7	2	4	5	4	3	4	3
Fayetteville, NC	6	3	3	6	6	4	3	3	7	3
Ontario, CA	3	5	1	3	5	3	6	8	3	5
Lexington, KY	6	7	3	2	3	6	3	3	6	3
Omaha, NE	3	5	4	6	7	2	6	4	3	2
Daytona Beach, FL	3	6	2	6	5	3	3	5	3	5
Ft Myers, FL	4	1	7	6	2	1	7	1	5	7
Wichita, KS	7	8	3	1	6	3	1	3	3	6
Winston Salem, NC	4	3	6	6	3	7	3	3	3	3
Arlington, TX	3	5	2	6	6	2	4	2	4	7
Virginia Beach, VA	2	5	5	0	6	3	4	5	7	4
Tacoma, WA	7	3	4	6	4	2	7	0	5	3
Amarillo, TX	3	4	2	5	4	4	3	3	7	5
Huntington Beach, CA	1	3	5	3	7	5	4	2	5	4
Oceanside, CA	4	2	2	3	3	2	3	5	7	8
Columbus, GA	4	9	1	3	5	2	3	2	5	5

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
St Paul, MN	7	3	5	5	4	1	3	2	6	3
Buffalo, NY	5	4	5	5	5	3	2	3	5	2
Pomona, CA	2	3	3	8	7	2	2	5	4	2
Augusta, GA	5	3	5	1	5	5	3	2	2	6
Modesto, CA	2	2	4	3	4	3	2	4	8	4
Colorado Springs, CO	5	4	3	6	1	5	3	4	4	1
Columbia, SC	3	8	10	0	1	1	1	4	6	2
Norfolk, VA	3	4	5	4	4	2	5	2	3	4
Tempe, AZ	3	4	1	5	3	3	6	1	5	4
Springfield, MA	2	0	2	6	2	5	8	3	6	1
Elizabeth, NJ	2	1	0	2	6	7	1	10	2	4
Paterson, NJ	4	5	5	0	4	3	3	5	3	3
Garden Grove, CA	5	3	5	3	5	3	3	2	3	2
Rialto, CA	2	3	4	2	3	2	6	7	3	2
Santa Monica, CA	2	4	2	4	4	4	10	1	2	1
Savannah, GA	4	4	1	4	7	4	1	2	1	6
Shreveport, LA	4	3	5	2	2	3	6	2	5	2
Babylon, NY	4	3	3	6	5	1	2	4	2	4
Dayton, OH	1	9	4	4	1	2	5	1	4	3
Chattanooga, TN	7	2	2	6	1	3	3	3	5	2
Chula Vista, CA	1	5	6	4	3	3	2	2	4	3
Macon, GA	2	5	2	5	2	2	6	3	1	5
Laredo, TX	2	5	1	2	4	3	6	2	5	3
Richmond, VA	7	3	3	5	3	2	5	3	2	0
Little Rock, AR	2	3	4	6	3	2	3	4	3	2
Knoxville, TN	3	1	4	2	6	2	6	2	0	6
El Cajon, CA	2	3	1	3	6	6	4	1	3	2
Hartford, CT	7	1	4	5	2	5	1	3	2	1
West Palm Beach, FL	2	1	5	3	8	0	3	2	2	5
Woodbridge, NJ	3	0	6	3	2	4	2	4	1	6
Pompano Beach, FL	0	7	3	1	3	4	4	1	3	4
Marietta, GA	4	4	4	1	4	3	3	4	2	1
Lafayette, LA	5	4	0	3	3	2	3	4	2	4
Vista, CA	2	6	3	1	3	4	1	4	3	2
Pinellas Park, FL	4	3	1	4	3	2	3	1	5	3
Gary, IN	4	7	4	2	2	1	2	1	1	5
Providence, RI	3	3	1	0	4	4	3	2	5	4
Brownsville, TX	2	3	3	2	4	5	5	1	1	3
Lubbock, TX	4	3	1	0	3	3	4	4	1	6
Compton, CA	2	2	5	4	2	5	3	2	1	2
Escondido, CA	1	2	5	3	4	1	3	3	1	5
Grand Rapids, MI	3	3	3	2	5	2	4	4	1	1
Mesquite, TX	3	1	4	1	4	3	4	3	4	1
Lancaster, CA	2	1	1	4	2	2	2	0	8	5
Pueblo, CO	1	6	3	3	1	6	2	2	1	2
Sarasota, FL	3	4	1	3	4	3	3	2	3	1
Des Moines, IA	7	4	3	2	0	1	2	2	2	4
Flint, MI	9	1	5	1	1	3	3	4	0	0
Springfield, MO	3	2	5	3	1	2	2	4	2	3
Yonkers, NY	2	3	3	4	3	5	3	1	2	1
Irving, TX	3	6	2	3	5	2	1	0	1	4
Ogden, UT	4	4	1	3	4	6	1	1	2	1

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Oxnard, CA	4	3	0	3	2	6	2	2	0	4
Miami Beach, FL	2	4	3	2	2	3	3	1	3	3
North Las Vegas, NV	1	2	1	1	1	6	6	2	2	4
Spokane, WA	2	1	4	2	7	3	1	3	1	2
Glendale, CA	1	3	1	4	3	3	5	1	1	3
Palm Springs, CA	3	3	2	5	2	4	2	1	1	2
Lakewood, CO	2	6	1	0	5	2	3	5	1	0
Largo, FL	3	1	4	4	1	2	2	3	1	4
Kansas City, KS	2	4	2	2	3	1	3	4	4	0
Warren, MI	4	1	2	1	3	5	2	4	0	3
Downey, CA	1	6	0	1	3	3	0	3	2	5
Fontana, CA	1	1	1	2	5	5	0	3	2	4
Orange, CA	1	2	2	5	3	3	3	3	2	0
Santa Barbara, CA	1	4	1	2	4	1	2	2	7	0
Stanton, CA	3	0	2	1	4	4	1	1	4	4
Victorville, CA	2	2	3	1	2	4	2	2	3	3
Waterbury, CT	1	3	6	3	3	2	2	0	2	2
New Port Richey, FL	1	2	1	1	4	3	1	5	1	5
North Miami Beach, FL	3	4	1	6	1	2	1	2	2	2
Atlantic City, NJ	4	2	1	2	3	3	3	2	3	1
Huntington, NY	1	4	4	0	2	0	3	2	2	6
Baldwin Park, CA	0	3	1	4	3	1	4	2	3	2
Hayward, CA	5	1	0	7	1	2	4	2	1	0
Redding, CA	3	1	4	2	1	3	2	4	3	0
Santa Rosa, CA	3	5	2	2	3	2	2	0	3	1
Garland, TX	0	3	5	0	1	2	1	5	1	5
Salinas, CA	0	4	0	0	1	1	5	4	3	4
Santa Clara, CA	2	2	1	5	1	3	3	1	2	2
Bridgeport, CT	3	1	4	2	2	2	1	1	3	3
Lakeland, FL	1	3	4	0	3	2	1	1	6	1
Rockford, IL	3	4	6	1	3	1	0	0	3	1
East Orange, NJ	1	2	2	4	2	0	2	3	5	1
North Bergen, NJ	3	1	4	1	4	3	2	2	2	0
New Hyde Park, NY	2	0	4	0	1	2	6	3	2	2
Wilmington, NC	2	1	2	1	2	4	2	2	4	2
Eugene, OR	3	2	1	3	3	3	2	0	4	1
Abilene, TX	2	2	3	2	2	4	2	2	3	0
Newport News, VA	1	4	2	3	2	3	2	0	4	1
Apple Valley, CA	0	0	1	3	0	1	3	7	1	5
Fremont, CA	2	2	1	0	3	4	3	3	3	0
Ventura, CA	3	2	2	3	2	4	1	0	2	2
North Miami, FL	3	1	1	2	3	1	1	2	6	1
Riviera Beach, FL	3	2	0	3	2	2	3	2	1	3
Lowell, MA	4	2	1	2	2	1	2	3	3	1
Henderson, NV	2	3	2	1	1	3	3	2	1	3
Gallup, NM	3	0	4	2	1	3	2	5	1	0
Syracuse, NY	4	1	2	2	2	4	1	1	2	2
McAllen, TX	3	1	2	3	1	6	2	0	2	1
Port Arthur, TX	2	1	2	2	3	3	1	4	0	3
Scottsdale, AZ	4	5	1	0	1	1	0	3	3	2
Buena Park, CA	2	2	1	1	2	2	2	2	3	3
Lynwood, CA	2	2	3	4	3	0	2	2	0	2

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Madera, CA	1	3	2	2	1	0	2	5	1	3
Pasadena, CA	1	3	1	4	2	1	0	3	3	2
Westminster, CA	1	1	1	1	2	2	2	5	2	3
New Haven, CT	3	3	2	1	0	3	3	1	1	3
Deerfield Beach, FL	2	4	1	1	1	2	4	1	2	2
Sanford, FL	3	5	0	0	3	1	0	3	2	3
Tallahassee, FL	5	1	0	2	0	2	2	2	5	1
Pontiac, MI	3	1	3	3	2	0	2	3	2	1
Edison, NJ	2	3	1	0	2	3	3	1	1	4
Lakewood, NJ	1	2	3	1	3	1	3	1	0	5
Allentown, PA	1	0	4	1	6	2	1	3	2	0
Erie, PA	3	3	4	0	1	1	1	4	2	1
Greenville, SC	6	1	1	1	1	0	0	2	5	3
Conroe, TX	1	3	2	5	0	1	3	0	1	4
Waco, TX	2	2	1	3	1	2	1	1	5	2
Everett, WA	3	3	1	0	2	5	0	0	2	4
Carlsbad, CA	2	2	1	2	2	2	1	2	2	3
Corona, CA	2	3	2	2	2	2	2	0	1	3
El Monte, CA	3	2	4	0	1	2	1	2	0	4
Monterey Park, CA	2	2	2	4	0	3	2	1	0	3
National City, CA	4	1	1	2	3	2	1	0	3	2
Melbourne, FL	0	1	2	1	2	1	5	1	4	2
East St Louis, IL	2	5	2	1	1	0	0	3	1	4
Peoria, IL	1	1	3	3	2	1	1	4	1	2
Southfield, MI	2	0	1	2	0	4	3	1	3	3
Freeport, NY	2	2	2	1	2	4	1	1	2	2
Pasadena, TX	4	2	1	5	1	3	0	3	0	0
Chesapeake, VA	2	3	2	2	3	0	1	2	3	1
Flagstaff, AZ	0	1	1	3	3	0	2	1	5	2
Bellflower, CA	1	2	2	3	2	3	3	0	2	0
Indio, CA	3	2	0	3	3	1	2	2	1	1
Palmdale, CA	3	2	1	1	2	1	2	1	3	2
Santa Maria, CA	1	0	1	1	2	1	1	4	6	1
Sunnyvale, CA	2	2	3	0	2	1	1	0	6	1
Vallejo, CA	1	3	1	0	3	1	2	3	1	3
Visalia, CA	2	2	1	2	2	3	2	2	1	1
Davie, FL	1	4	1	0	3	0	2	1	2	4
Immokalee, FL	1	2	2	2	3	1	2	0	1	4
Ocala, FL	1	3	1	3	2	2	1	3	2	0
Albany, GA	1	3	1	3	1	3	3	1	0	2
Athens, GA	2	4	2	1	1	1	1	1	3	2
Lake Charles, LA	1	2	2	1	3	0	0	4	3	2
Billings, MT	1	0	1	2	2	5	0	3	1	3
Trenton, NJ	1	2	3	2	4	1	2	1	1	1
Burlington, NC	4	4	1	2	3	0	2	1	1	0
Hickory, NC	3	0	5	4	0	0	3	0	1	2
Salem, OR	1	4	2	2	1	3	2	3	0	0
Clarksville, TN	5	0	0	1	2	0	2	4	1	3
Longview, TX	2	3	0	2	1	0	2	4	4	0
Temple, TX	2	1	2	0	1	8	1	1	2	0
Pine Bluff, AR	2	2	3	2	1	2	4	0	1	0
Richmond, CA	3	1	0	2	3	3	2	0	2	1

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Santa Clarita, CA	2	1	1	3	3	3	1	2	1	0
Stamford, CT	2	5	1	2	0	3	0	1	3	0
Altamonte Springs, FL	1	1	3	2	1	1	3	2	3	0
Delray Beach, FL	3	2	3	0	1	2	2	2	2	0
Gainesville, FL	3	1	1	3	3	0	0	2	2	2
Kissimmee, FL	2	1	0	5	1	1	2	1	4	0
Lake Worth, FL	0	2	1	2	1	1	4	2	2	2
Oakland Park, FL	1	0	3	2	1	1	4	2	2	1
Panama City, FL	6	1	1	2	1	2	0	0	1	3
Sunrise, FL	4	1	2	1	2	2	0	3	0	2
Winter Haven, FL	0	2	1	3	3	1	2	0	1	4
Hammond, IN	3	1	2	2	1	2	3	2	0	1
Union, NJ	1	2	3	1	3	3	0	2	2	0
Smithtown, NY	0	1	0	3	4	3	4	1	1	0
Southampton, NY	3	4	1	1	3	1	2	2	0	0
Akron, OH	2	1	0	1	3	2	3	0	3	2
Reading, PA	1	0	1	3	2	2	2	2	2	2
Baytown, TX	4	1	1	2	1	1	1	1	1	4
Roanoke, VA	0	1	1	5	4	1	0	3	1	1
Lakewood Center, WA	1	2	0	2	2	4	2	1	1	2
Madison, WI	1	3	0	2	3	1	2	3	0	2
Citrus Heights, CA	1	1	1	0	1	3	2	3	1	3
Concord, CA	2	2	2	3	3	0	0	0	2	2
Fullerton, CA	3	2	1	1	3	1	1	2	1	1
Gardena, CA	1	3	2	1	1	1	0	4	2	1
Hesperia, CA	2	1	3	0	0	3	5	2	0	0
Inglewood, CA	1	3	5	0	1	0	0	2	2	2
San Leandro, CA	1	3	2	5	0	1	1	2	1	0
Ft Pierce, FL	1	2	2	1	0	4	0	1	2	3
Pensacola, FL	7	1	3	1	1	0	0	1	1	1
Boise, ID	3	0	1	1	0	3	4	1	2	1
Bossier City, LA	0	1	0	3	4	0	1	4	2	1
Forestville, MD	0	1	2	0	2	4	2	1	2	2
Langley Park, MD	1	4	1	1	2	3	2	1	0	1
Cambridge, MA	2	2	1	3	0	0	3	2	2	1
New Bedford, MA	0	4	1	0	3	1	2	4	1	0
Clinton Township, MI	0	1	0	4	1	1	2	2	2	3
Independence, MO	1	1	2	4	0	1	0	2	3	2
Camden, NJ	3	0	0	2	1	1	0	3	2	4
Old Bridge, NJ	0	3	2	2	1	3	2	1	1	1
Ramapo, NY	1	0	1	1	1	2	4	2	1	3
Salisbury, NC	1	6	2	1	2	1	0	1	2	0
Myrtle Beach, SC	1	1	3	3	1	2	2	0	2	1
North Charleston, SC	4	2	1	3	1	0	0	1	0	4
Bryan, TX	3	0	1	1	3	0	0	4	2	2
Grand Prairie, TX	2	1	0	1	4	2	1	2	2	1
Wichita Falls, TX	2	2	2	1	1	0	0	1	5	2
Federal Way, WA	2	1	2	1	2	1	2	2	3	0
Kent, WA	1	4	0	1	1	3	3	0	2	1
Tuscaloosa, AL	3	2	1	0	1	0	0	4	2	2
Chandler, AZ	5	2	0	0	1	1	0	2	1	3
Hawthorne, CA	6	1	2	0	0	1	1	1	1	2

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Irvine, CA	4	2	2	1	1	0	2	2	0	1
Merced, CA	1	1	1	2	1	3	2	1	0	3
Palm Desert, CA	2	3	0	2	2	2	1	2	1	0
San Gabriel, CA	1	4	1	1	1	0	2	2	3	0
Torrance, CA	1	2	3	4	0	1	1	1	1	1
Boynton Beach, FL	1	0	3	0	2	2	1	1	2	3
Cicero, IL	2	0	1	1	2	3	2	1	1	2
Fort Wayne, IN	1	3	3	1	1	0	0	2	1	3
Monroe, LA	1	2	1	1	1	1	2	1	3	2
Dearborn, MI	0	2	2	2	1	2	1	0	2	3
Lansing, MI	1	3	1	2	0	1	3	1	2	1
Colonie, NY	0	3	1	1	1	2	3	2	0	2
Asheville, NC	0	3	1	0	3	3	0	0	5	0
Edinburg, TX	2	0	3	4	2	0	0	3	1	0
Odessa, TX	3	4	0	1	1	2	2	0	1	1
South Salt Lake, UT	2	0	0	4	4	1	2	0	1	1
Alexandria, VA	2	0	3	2	2	2	1	0	2	1
North Little Rock, AR	1	1	1	2	4	0	2	1	0	2
Cucamonga, CA	2	6	2	1	0	0	0	0	2	1
Gilroy, CA	1	1	1	1	2	1	2	1	0	4
Hemet, CA	0	3	0	1	1	3	2	2	0	2
Rancho Cucamonga, CA	0	0	0	0	3	2	1	1	1	6
West Covina, CA	1	0	0	2	1	3	2	0	4	1
Yucca Valley, CA	1	1	2	1	0	1	4	0	1	3
Boca Raton, FL	0	1	1	1	1	0	2	2	3	3
Homestead, FL	2	0	1	1	2	0	3	0	3	2
Pembroke Pines, FL	2	1	0	1	3	3	2	0	0	2
Skokie, IL	0	0	0	2	5	1	0	3	1	2
Springfield, IL	1	1	2	1	0	4	1	1	3	0
Evansville, IN	3	1	0	0	1	1	3	0	3	2
South Bend, IN	2	2	2	1	2	0	1	1	1	2
Biloxi, MS	1	3	1	0	1	0	0	1	3	4
Gulfport, MS	2	1	1	1	2	1	0	1	4	1
Clifton, NJ	1	0	2	2	1	0	2	3	1	2
Teaneck, NJ	1	1	3	0	0	2	1	3	2	1
Santa Fe, NM	2	1	2	1	1	2	0	1	2	2
Albany, NY	2	1	1	0	0	3	2	1	2	2
Cheektowaga, NY	1	0	1	2	2	1	2	4	0	1
Niagara Falls, NY	1	4	1	1	1	2	1	0	1	2
Gastonia, NC	0	2	3	0	2	1	1	3	2	0
Springfield, OR	0	0	1	0	2	4	2	3	0	2
Scranton, PA	0	2	1	3	0	1	3	0	1	3
Suffolk, VA	1	2	1	1	1	2	1	2	2	1
Shoreline, WA	3	1	0	1	1	2	2	1	2	1
Kenosha, WI	2	1	1	0	3	2	0	1	2	2
Bullhead City, AZ	1	2	1	2	1	1	1	1	2	1
Fort Smith, AR	0	1	4	0	1	3	1	1	0	2
Burbank, CA	2	1	1	2	2	2	0	0	2	1
Coachella, CA	1	1	0	2	0	5	2	0	2	0
Encinitas, CA	1	2	2	0	1	1	2	2	1	1
South Gate, CA	4	0	2	1	0	3	0	2	1	0
South San Francisco, CA	1	1	0	1	2	1	2	0	2	3

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
West Sacramento, CA	0	3	0	1	1	2	2	1	1	2
Whittier, CA	1	1	0	2	0	1	0	7	1	0
Westminster, CO	0	0	3	1	3	1	2	0	0	3
Bradenton, FL	3	1	2	0	2	0	2	1	1	1
Cape Coral, FL	0	1	2	2	1	1	1	0	2	3
Hilo, HI	1	2	2	1	0	0	2	0	3	2
Davenport, IA	0	3	0	1	1	1	1	0	2	4
Alexandria, LA	2	3	0	1	0	3	2	1	0	1
Hyattsville, MD	4	0	2	0	2	0	1	0	3	1
Landover, MD	2	3	0	0	0	4	0	1	2	1
Fall River, MA	1	1	3	1	2	2	0	1	1	1
Hattiesburg, MS	0	0	0	0	0	2	1	3	3	4
Columbia, MO	1	1	0	2	2	1	1	2	1	2
North Brunswick, NJ	1	1	2	1	1	1	0	3	1	2
Amherst, NY	1	1	2	1	3	1	2	1	0	1
Hamburg, NY	2	2	2	2	3	0	0	1	0	1
Goldsboro, NC	2	2	1	1	0	2	2	1	1	1
Gresham, OR	0	3	0	3	1	1	3	0	1	1
Harrisburg, PA	2	2	1	0	3	2	0	1	2	0
Galveston, TX	3	4	1	0	0	2	1	1	1	0
Victoria, TX	1	1	2	2	1	1	3	0	0	2
Portsmouth, VA	4	2	1	0	1	4	0	1	0	0
Tukwila, WA	0	2	1	1	2	1	2	2	0	2
Vancouver, WA	1	3	4	2	1	1	0	1	0	0
Charleston, WV	2	2	2	4	1	1	1	0	0	0
Yuma, AZ	2	0	1	4	3	2	0	0	0	0
Fayetteville, AR	1	0	0	3	1	2	1	3	1	0
Arcadia, CA	1	2	1	0	1	2	1	2	1	1
Beverly Hills, CA	1	1	2	1	2	1	1	0	0	3
Carson, CA	2	1	1	4	1	1	1	1	0	0
Cathedral City, CA	0	2	1	1	0	1	2	4	0	1
Costa Mesa, CA	2	1	1	1	4	0	1	2	0	0
Daly City, CA	2	3	1	1	0	2	0	2	0	1
Eureka, CA	2	0	1	1	2	0	2	1	2	1
Norwalk, CA	1	0	1	1	0	1	2	1	2	3
Rosemead, CA	1	3	1	1	2	1	1	0	1	1
Temecula, CA	0	1	1	2	1	1	1	2	0	3
Turlock, CA	3	3	0	0	2	1	1	1	1	0
Norwalk, CT	2	2	0	1	1	2	0	1	3	0
Dania, FL	3	0	2	2	0	2	1	2	0	0
Hallandale, FL	2	3	0	2	0	2	0	1	2	0
Palm Bay, FL	0	0	2	1	0	1	0	1	1	6
Aiea, HI	1	2	1	1	2	2	0	2	1	0
Aurora, IL	0	4	0	1	1	2	2	0	1	1
Elgin, IL	1	1	0	2	1	2	1	0	2	2
Waukegan, IL	0	1	1	2	0	1	1	1	1	4
Kenner, LA	1	3	0	1	1	0	2	0	2	2
Oxon Hill, MD	0	2	0	0	2	0	1	2	3	2
Lynn, MA	4	0	1	0	2	1	0	1	2	1
Revere, MA	0	2	0	2	2	1	0	2	1	2
Taunton, MA	0	1	0	3	2	2	0	0	2	2
St Joseph, MO	2	2	0	1	3	0	1	0	0	3

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Hackensack, NJ	0	0	2	0	0	4	0	3	2	1
Howell, NJ	3	1	1	2	0	0	2	1	1	1
Paramus, NJ	2	0	1	2	3	1	2	0	1	0
Parsippany, NJ	0	1	3	0	1	1	2	0	1	3
Rahway, NJ	0	0	1	2	1	2	1	2	2	1
Sayreville, NJ	0	0	1	1	1	2	0	2	2	3
Farmington, NM	3	1	0	1	1	1	1	2	1	1
Las Cruces, NM	1	0	0	2	1	1	2	0	2	3
Greenville, NC	2	1	0	0	0	0	1	2	4	2
High Point, NC	2	3	2	1	0	0	2	1	1	0
Bethlehem, PA	1	3	1	0	0	1	0	2	2	2
Conway, SC	0	3	1	2	1	1	1	1	1	1
Sioux Falls, SD	2	1	0	1	1	1	2	1	2	1
Jackson, TN	0	1	1	2	0	0	2	2	2	2
Killeen, TX	0	1	1	1	0	1	1	2	3	2
Texarkana, TX	1	2	1	0	3	0	3	0	0	2
Renton, WA	2	1	0	2	0	1	4	1	0	1
Bessemer, AL	2	3	0	1	0	0	1	1	2	1
West Memphis, AR	2	1	1	1	1	1	0	2	1	1
Berkeley, CA	1	2	0	1	1	1	0	4	1	0
Colton, CA	1	1	0	1	2	1	1	0	3	1
Desert Hot Springs, CA	2	2	1	0	2	1	0	1	2	0
La Mirada, CA	0	0	0	0	2	0	2	1	3	3
Montclair, CA	1	0	1	0	3	1	1	0	2	2
Montebello, CA	0	1	4	1	2	1	0	0	1	1
Mountain View, CA	2	3	0	0	1	3	0	0	2	0
Perris, CA	0	1	0	0	0	2	0	1	4	3
Pico-Rivera, CA	0	0	3	3	2	1	1	0	1	0
Redwood City, CA	1	1	0	1	0	0	0	4	1	3
San Marcos, CA	1	0	1	0	2	1	1	1	3	1
San Mateo, CA	3	0	2	0	0	0	0	2	1	3
Englewood, CO	0	1	1	1	0	3	0	1	3	1
East Hartford, CT	2	1	1	0	2	1	2	0	1	1
Apopka, FL	0	0	1	1	2	2	0	0	3	2
Holly Hill, FL	1	2	0	1	0	2	0	1	1	3
Miramar, FL	2	0	0	0	1	0	2	0	2	4
Doraville, GA	0	3	1	0	2	1	0	1	1	2
Ocean City, MD	2	0	1	3	1	0	2	1	1	0
Brockton, MA	0	0	2	0	2	1	3	2	1	0
Quincy, MA	2	2	1	0	0	0	1	0	1	4
Farmington Hills, MI	1	1	1	2	1	4	0	0	0	1
Roseville, MI	0	1	3	2	0	1	1	0	1	2
Saginaw, MI	0	0	4	0	2	2	1	1	0	1
Taylor, MI	1	1	2	2	2	0	2	1	0	0
Rochester, MN	3	1	2	0	0	1	2	1	0	1
Lincoln, NE	2	3	0	1	1	0	1	1	1	1
Irvington, NJ	0	1	2	2	0	2	0	0	3	1
Middletown, NJ	4	0	0	1	2	0	0	1	0	3
Millville, NJ	0	1	2	1	1	0	3	1	1	1
Vineland, NJ	3	1	1	2	1	0	0	0	1	2
Mount Vernon, NY	1	3	0	0	0	2	0	3	1	1
Newburgh, NY	1	1	3	0	0	1	1	1	1	2

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Utica, NY	2	1	1	0	0	1	0	2	1	3
Rocky Mount, NC	1	3	0	1	0	2	2	0	0	2
Wilson, NC	2	2	3	2	1	0	0	0	1	0
Canton, OH	3	1	0	1	0	1	1	1	3	0
Beaverton, OR	0	1	1	2	1	1	0	2	1	2
Bensalem, PA	0	0	0	0	0	5	2	3	1	0
Warwick, RI	1	4	3	0	2	0	0	0	0	1
College Station, TX	0	0	6	1	1	0	0	2	1	0
Lewisville, TX	3	2	0	0	0	1	1	0	4	0
Tyler, TX	0	0	1	0	1	1	2	2	2	2
Hampton, VA	1	2	2	1	1	1	2	1	0	0
Green Bay, WI	1	0	2	1	0	2	3	0	1	1
West Allis, WI	0	1	2	0	2	1	2	2	0	1
Holbrook, AZ	4	0	2	1	1	2	0	0	0	0
Texarkana, AR	0	2	0	1	0	0	3	2	1	1
Calexico, CA	1	1	1	3	1	1	0	0	1	1
El Centro, CA	0	2	0	0	0	1	1	1	2	3
Huntington Park, CA	2	0	0	0	1	1	2	0	1	3
Laguna Beach, CA	2	1	1	2	1	0	1	1	1	0
Lake Los Angeles, CA	0	0	0	0	0	0	0	10	0	0
Lodi, CA	0	1	2	1	1	0	1	1	1	2
Moreno Valley, CA	0	0	0	1	4	0	0	2	1	2
Newport Beach, CA	1	2	0	2	0	1	1	2	1	0
San Rafael, CA	2	1	1	2	2	1	0	0	1	0
South Lake Tahoe, CA	3	0	0	2	1	1	2	0	1	0
Thousand Oaks, CA	1	0	2	1	2	1	0	2	1	0
Tustin, CA	0	2	1	0	0	1	2	1	0	3
Twentynine Palms, CA	1	0	1	0	2	1	2	1	2	0
Upland, CA	1	2	2	0	0	1	0	0	2	2
Watsonville, CA	0	0	1	0	1	2	4	2	0	0
New Britain, CT	0	0	0	3	0	2	1	2	0	2
Haines City, FL	1	1	0	2	0	1	1	2	1	1
Margate, FL	3	1	2	1	0	0	0	0	0	3
Ormond Beach, FL	0	1	0	1	2	2	2	1	0	1
Port Richey, FL	1	0	2	2	0	2	1	1	0	1
Winter Park, FL	3	2	0	0	2	1	0	1	1	0
Waipahu, HI	1	0	0	2	3	2	0	2	0	0
Des Plaines, IL	2	0	0	2	0	1	1	1	3	0
Evanston, IL	1	1	1	1	2	0	3	1	0	0
Mt Prospect, IL	1	2	0	1	1	1	2	1	1	0
Schaumburg, IL	1	1	1	1	1	1	3	0	0	1
Cedar Rapids, IA	1	3	0	1	0	2	0	2	0	1
Topeka, KS	0	0	4	0	2	0	1	1	0	2
Bowling Green, KY	0	2	1	0	1	1	1	2	0	2
Annapolis, MD	1	0	0	1	4	0	0	0	3	1
Medford, MA	0	2	1	2	1	1	0	1	1	1
Somerville, MA	2	2	1	0	2	0	0	1	1	1
Kalamazoo, MI	2	1	2	1	0	2	0	1	1	0
Westland, MI	1	3	0	3	1	0	0	0	0	2
Joplin, MO	2	2	1	0	0	1	2	0	1	1
Carson City, NV	3	1	2	1	0	1	2	0	0	0
Bayonne, NJ	1	2	3	0	0	0	1	0	1	2

City Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Linden, NJ	2	1	1	1	1	0	2	1	1	0
Pennsauken, NJ	1	1	2	2	0	0	2	1	1	0
Wayne, NJ	1	1	1	2	1	1	1	0	1	1
East Hampton, NY	0	0	1	0	1	0	3	3	1	1
New City, NY	0	0	4	1	1	2	1	0	1	0
New Rochelle, NY	1	1	2	0	1	1	1	2	0	1
Lumberton, NC	2	1	0	0	2	1	0	0	2	2
Medford, OR	3	0	1	0	0	1	0	2	1	2
Lancaster, PA	0	0	2	3	0	2	1	0	2	0
Harlingen, TX	0	1	3	1	1	2	0	1	1	0
Marshall, TX	2	0	2	0	2	0	1	0	1	2
Pharr, TX	2	2	0	2	1	1	0	1	1	0
Plano, TX	1	0	0	2	3	3	0	0	1	0
San Marcos, TX	0	0	2	1	2	2	1	0	0	2
South Houston, TX	0	0	2	1	0	0	3	2	1	1
Sugar Land, TX	0	1	0	1	2	2	1	1	1	1
Texas City, TX	0	0	1	0	1	3	3	1	0	1
West Valley City, UT	2	2	0	2	1	0	1	1	0	1
Huntington, WV	2	3	2	0	1	2	0	0	0	0
Casper, WY	1	1	2	3	1	1	0	0	1	0
Note: Data in this table has been used to create Table 5 in Crash Location.										

Table A-8: Pedestrian crash deaths by day of month and month

Day of Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	236	140	148	130	121	142	115	122	144	152	173	205
2	151	137	130	131	111	118	131	157	145	168	171	188
3	159	126	120	118	135	107	140	134	153	156	189	169
4	141	157	129	126	109	108	149	131	140	169	173	193
5	152	149	133	133	133	98	115	129	130	162	160	143
6	154	135	134	119	109	108	103	119	127	139	161	158
7	148	139	128	103	121	105	100	116	146	145	169	150
8	148	128	139	126	115	127	88	134	105	146	148	180
9	146	123	130	111	105	101	122	108	151	159	162	151
10	163	134	117	109	99	112	110	138	136	160	194	178
11	143	137	115	115	111	132	134	117	145	151	124	152
12	153	117	96	113	100	108	98	122	126	172	163	144
13	113	125	122	112	110	130	115	119	140	171	151	175
14	164	149	125	100	117	109	111	135	141	160	156	146
15	119	141	126	126	119	112	112	129	166	157	173	170
16	135	97	124	134	113	100	146	129	140	177	174	168
17	156	124	108	111	105	99	128	127	140	170	166	167
18	134	116	121	115	115	103	122	118	156	135	158	176
19	120	104	130	120	117	131	131	139	133	157	160	184
20	134	129	119	105	115	137	114	144	155	146	190	183
21	132	132	110	107	106	92	113	108	113	167	168	171
22	159	117	121	117	106	118	91	130	164	147	182	169
23	125	131	102	99	118	111	113	142	152	150	157	187
24	126	107	132	98	113	110	133	122	151	171	166	148
25	143	129	113	105	103	136	108	127	133	191	146	119
26	126	147	118	113	103	123	118	137	161	178	159	140
27	134	134	117	110	96	114	119	145	144	139	153	137
28	135	135	122	109	111	130	119	120	129	153	153	131
29	137	24	101	99	113	118	101	139	140	172	180	135
30	151	N/A	100	113	112	112	127	140	131	179	142	128
31	147	N/A	129	N/A	100	N/A	116	149	N/A	212	N/A	185
Note: Data in this table has been used to create Table 6 in Crash Time												

Table A-9: Pedestrian crash deaths by day of week and year

Weekday	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Sunday	715	686	663	659	624	651	622	688	661	749
Monday	644	673	648	610	635	607	569	563	603	597
Tuesday	671	720	636	629	612	627	591	587	617	631
Wednesday	715	673	637	603	639	665	693	614	645	627
Thursday	702	707	660	653	678	646	639	620	654	611
Friday	920	847	829	766	836	787	783	782	814	747
Saturday	952	920	865	842	873	867	874	820	897	822
Unknown	2	2	1	1	4	1	3	1	1	0
Note: Data in this table has been used to create Figures 3-1 and 3-2 in Crash Time.										

Table A-10: Pedestrian crash deaths by month and year

Month	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
January	480	486	449	444	397	479	453	406	443	450
February	386	426	338	353	361	357	345	367	372	358
March	401	377	394	388	383	357	374	350	366	371
April	359	366	377	338	340	341	352	294	348	314
May	440	350	361	371	341	350	280	357	307	306
June	377	378	350	335	320	369	332	336	318	337
July	396	387	401	318	355	359	369	317	377	363
August	441	417	407	389	422	386	402	363	392	408
September	421	442	379	426	405	406	414	435	471	440
October	514	536	509	479	517	523	467	470	501	497
November	539	534	472	447	527	461	497	471	501	472
December	567	529	502	475	533	463	489	509	496	468
Note: Data in this table has been used to create Figure 3-3 in Crash Time.										

Table A-11: Pedestrian crash deaths by season and year

Season	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Winter	1,433	1,441	1,289	1,272	1,291	1,299	1,287	1,282	1,311	1,276
Spring	1,200	1,093	1,132	1,097	1,064	1,048	1,006	1,001	1,021	991
Summer	1,214	1,182	1,158	1,042	1,097	1,114	1,103	1,016	1,087	1,108
Fall	1,474	1,512	1,360	1,352	1,449	1,390	1,378	1,376	1,473	1,409
Note: Data in this table has been used to create Figure 3-4 in Crash Time.										

Table A-12: Pedestrian crash deaths by time of day and year

Time of Day	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Midnight to 3 a.m.	562	578	553	544	533	579	565	574	624	618
3 a.m. to 6 a.m.	339	332	357	318	379	373	374	372	438	453
6 a.m. to 9 a.m.	499	432	441	441	430	415	391	394	434	453
9 a.m. to Noon	336	342	323	276	298	288	325	290	290	254
Noon to 3 p.m.	435	415	322	381	375	329	331	312	321	293
3 p.m. to 6 p.m.	717	687	613	578	626	625	620	567	568	478
6 p.m. to 9 p.m.	1,316	1,310	1,241	1,218	1,199	1,188	1,151	1,158	1,182	1,183
9 p.m. to Midnight	1,086	1,101	1,060	975	1,031	1,027	992	983	1,007	1,019
Unknown	31	31	29	32	30	27	25	25	28	33
Note: Data in this table has been used to create Figures 3-5 & 3-6 in Crash Time.										

Table A-13: Pedestrian crash deaths by sex and year

Pedestrian Sex	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Male	3,643	3,558	3,466	3,251	3,421	3,298	3,274	3,237	3,450	3,309
Female	1,677	1,670	1,472	1,512	1,479	1,552	1,499	1,435	1,441	1,444
Unknown	1	0	1	0	1	1	1	3	1	31
Note: Data in this table has been used to create Figures 4-1 & 4-2 in Pedestrian Information.										

Table A-14: Pedestrian crash deaths by race and year

Race	1997	1998	1999	2000	2001	2002	2003	2004	2005
White	N/A	N/A	2,870	2,720	3,137	3,124	3,220	2,906	3,073
Black	N/A	N/A	799	705	768	787	724	724	750
American Indian	N/A	N/A	106	88	100	102	107	86	110
Asian	N/A	N/A	100	106	88	100	113	118	134
Pacific Islander	N/A	N/A	32	40	58	50	42	40	58
Other Indian	N/A	N/A	0	0	6	4	3	6	7
Other	N/A	N/A	22	14	18	38	27	46	47
Unknown	N/A	N/A	1,010	1,090	726	646	538	749	713
Note: Data in this table has been used to create Figure 4-3 in Pedestrian Information.									

Table A-15: Pedestrian crash deaths by specific age group and year

Age Group	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<4	167	171	163	154	122	121	109	108	112	108
5-9	243	202	196	166	149	142	131	121	107	104
10-15	241	209	212	204	216	176	202	168	167	157
16-20	301	301	273	263	294	284	302	269	281	274
21-24	253	255	236	227	275	246	266	278	297	290
25-29	338	294	288	305	271	281	296	298	296	317
30-34	424	382	334	311	293	321	268	301	319	298
35-39	471	487	457	419	446	392	377	353	341	341
40-44	461	451	454	462	466	467	475	428	463	429
45-49	406	426	386	406	433	453	421	450	484	506
50-54	294	303	313	333	367	360	359	405	430	427
55-59	245	278	274	263	258	257	310	271	337	307
60-64	254	244	212	207	207	242	243	233	222	260
65-69	243	211	213	189	180	219	204	188	211	202
70+	931	965	885	807	878	845	777	763	777	702
Unknown	49	49	43	47	46	45	34	41	48	62
Note: Data in this table has been used to create Figure 4-4 in Pedestrian Information.										

Table A-16: Pedestrian crash deaths by age group and year

Age Group	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Children (Under 15)	599	540	521	475	446	391	389	366	336	331
Youth (15-24)	606	598	559	539	610	578	621	578	628	602
Young Adults (25-40)	1,327	1,245	1,178	1,129	1,099	1,071	1,033	1,024	1,032	1,022
Adults (41-64)	1,566	1,620	1,540	1,577	1,642	1,702	1,716	1,715	1,860	1,863
Seniors (Over 64)	1,174	1,176	1,098	996	1,058	1,064	981	951	988	904
Unknown Age	49	49	43	47	46	45	34	41	48	62
Note: Data in this table has been used to create Figures 4-5 & 4-6 in Pedestrian Information.										

Table A-17: Pedestrian crash deaths by Hispanic origin and year

Hispanic Origin	1997	1998	1999	2000	2001	2002	2003	2004	2005
Hispanic	N/A	N/A	654	564	757	722	798	767	867
Non-Hispanic	N/A	N/A	2,983	2,926	3,211	3,385	3,374	3,117	3,251
Unknown	N/A	N/A	1,302	1,273	933	744	602	791	774
Note: Data in this table has been used to create Figure 4-7 in Pedestrian Information.									

Table A-18: Pedestrian crash deaths by pedestrian BAC and year

Pedestrian BAC	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No Alcohol	3,471	3,263	3,064	2,980	3,078	3,039	2,990	2,899	3,101	2,916
.01-.07	179	251	197	217	225	201	194	211	200	219
.08+	1,671	1,715	1,679	1,567	1,599	1,611	1,590	1,565	1,591	1,649
Note: Data in this table has been used to create Figure 4-8 in Pedestrian Information.										

Table A-19: Vehicle drivers in pedestrian crash deaths by sex and year

Driver Sex	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Male	3,417	3,429	3,186	3,101	3,042	3,083	3,052	2,930	3,145	2,993
Female	1,246	1,297	1,226	1,187	1,232	1,171	1,160	1,197	1,124	1,140
Unknown	523	468	453	453	520	493	465	483	552	590
Note: Data in this table has been used to create Figure 5-1 in Driver Information.										

Table A-20: Frequency in pedestrian crash deaths by pedestrian behavior and year

Pedestrian Behavior	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Improper Crossing	1,543	1,526	1,494	1,412	1,386	1,516	1,369	1,159	1,032	1,061
Walking/Riding With or Against Traffic	1,556	1,589	1,426	1,210	1,277	1,193	1,188	1,131	1,023	923
Fail to Yield Right-of-Way	789	707	670	676	686	667	673	729	590	676
Darting or Running Into Road	709	651	648	612	553	586	575	506	551	605
Not Visible	364	417	397	460	463	567	537	522	514	582
Inattentive	170	131	106	122	146	112	119	122	119	122
Fail to Obey Traffic Control	66	67	72	86	93	85	70	78	57	72
Other	243	323	354	321	347	349	406	403	343	448
Unknown	84	83	93	81	92	108	109	130	69	182
None reported	1,304	1,279	1,243	1,324	1,423	1,274	1,299	1,429	1,970	1,615
Note: Data in this table has been used to create Figure 4-10 in Pedestrian Information.										

Table A-21: Vehicle drivers in fatal pedestrian crashes by age group and year

Driver Age Group	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
6-10	0	0	0	0	0	0	0	0	1	1
11-15	12	11	11	6	8	14	11	3	5	6
16-20	586	619	562	569	555	534	510	488	467	465
21-25	703	630	593	538	527	560	539	563	571	605
26-30	575	588	543	516	506	449	453	425	449	450
31-35	524	525	504	493	498	477	454	402	427	365
36-40	506	519	472	456	445	415	448	414	408	373
41-45	442	470	422	392	432	428	433	437	424	409
46-50	367	370	315	345	361	365	350	330	427	384
51-55	267	267	282	270	270	278	263	295	335	304
56-60	175	207	209	219	190	222	214	245	215	274
61-65	123	125	145	138	117	151	136	166	175	184
66-70	111	108	89	103	100	99	119	95	114	91
71-75	106	115	108	100	83	92	101	106	93	75
76-80	63	65	59	50	68	74	76	53	70	61
81-85	31	36	38	34	46	41	41	43	43	37
Over 85	18	15	15	15	18	12	18	24	19	16
Unknown	577	524	498	497	570	536	511	521	578	623
Note: Data in this table has been used to create Figure 5-2 in Driver Information.										

Table A-22: Vehicle drivers in fatal pedestrian crashes by survival status and year

Driver Survival Status	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survived	4,824	4,851	4,523	4,416	4,424	4,392	4,366	4,273	4,431	4,345
Killed	6	15	20	15	13	10	15	16	12	15
Unknown	356	328	322	310	357	345	296	321	378	363
Note: Data in this table has been used to create Figure 5-3 in Driver Information.										

Table A-23: Vehicle drivers in fatal pedestrian crashes by driver BAC and year

Driver BAC	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No Alcohol	4,047	7,834	7,498	7,052	7,052	3,526	3,526	3,526	3,526	3,526
.01-.07	175	390	329	339	339	169	169	169	169	169
.08+	529	1,180	973	1,106	1,106	553	553	553	553	553
.01+	704	1,570	1,302	1,444	1,444	722	722	722	722	722
Note: Data in this table has been used to create Figure 5-4 in Driver Information.										

Table A-24: Pedestrian crash deaths by driver speeding status and year

Driver Speeding Status	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Speeding	502	387	423	338	387	402	444	387	404	360
Not Speeding	4,792	4,817	4,495	4,380	4,467	4,405	4,295	4,256	4,416	4,355
Unknown	28	24	21	46	47	44	36	34	72	69
Note: Data in this table has been used to create Figures 5-5 & 5-6 in Driver Information.										

Table A-25: Frequency of driver behaviors in fatal pedestrian crashes by year

Driver Behavior	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Hit-and-Run Vehicle Driver	830	791	772	696	756	758	745	742	835	809
Driving over Posted Limit or too Fast for Conditions	497	382	409	333	376	393	435	381	396	354
Inattentive	404	341	362	336	350	296	293	255	281	329
Fail to Yield Right-of-Way	388	356	350	356	323	363	402	385	358	324
Fail to keep in Proper Lane	333	264	308	121	137	100	84	200	232	207
Non-Traffic Violation Charged	234	209	215	157	167	138	115	116	93	83
Other Non-Moving Traffic Violation	223	243	257	224	182	201	179	150	165	160
Operating Vehicle in Erratic, Reckless, or Careless Manner	187	176	150	164	176	145	181	176	136	75
Other Drugs	N/A	N/A	N/A	N/A	N/A	N/A	334	371	359	358
Unknown	101	78	95	107	106	94	91	103	146	152
Other	844	883	906	1,009	1,060	1,164	1,300	1,033	969	926
Note: Data in this table has been used to create Figure 5-7 in Driver Information.										

Table A-26: Pedestrian crash deaths by atmospheric condition and year

Atmospheric Condition	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No Adverse Condition	4,678	4,583	4,435	4,287	4,366	4,278	4,227	4,113	4,329	4,238
Rain	454	491	373	315	386	406	376	371	390	400
Sleet	24	12	9	12	6	11	10	5	14	5
Snow	52	24	43	50	46	42	46	43	52	20
Fog	54	71	48	36	45	46	53	56	35	43
Other	13	21	10	27	13	34	33	49	44	13
Unknown	46	26	21	36	39	34	29	38	28	65
Note: Data in this table has been used to create Figure 6-1 in Other Crash Information.										

Table A-27: Pedestrian crash deaths by light condition and year

Light Condition	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Daylight	1,742	1,717	1,511	1,509	1,550	1,450	1,423	1,349	1,402	1,224
Dark	1,676	1,618	1,591	1,475	1,531	1,590	1,546	1,537	1,655	1,667
Dark but Lighted	1,659	1,678	1,609	1,597	1,595	1,611	1,621	1,603	1,636	1,623
Dawn	92	83	90	74	85	76	70	76	91	99
Dusk	121	116	121	88	110	106	98	84	87	111
Unknown	31	16	17	20	30	18	16	26	21	60
Note: Data in this table has been used to create Figures 6-2 & 6-3 in Other Crash Information.										

Table A-28: Pedestrian crash deaths by posted speed limit and year

Posted Speed Limit	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No Posted Speed Limit	13	17	19	11	9	8	12	13	18	10
Under 30 mph	519	496	480	466	470	481	478	431	455	421
30-39 mph	1,643	1,563	1,483	1,466	1,445	1,350	1,388	1,338	1,345	1,261
40-49 mph	1,225	1,293	1,192	1,088	1,179	1,186	1,127	1,199	1,297	1,272
Over 49 mph	1,715	1,666	1,562	1,549	1,573	1,584	1,491	1,476	1,528	1,498
Unknown	206	193	203	183	225	242	278	218	249	322
Note: Data in this table has been used to create Figure 6-4 & 6-5 in Other Crash Information.										

Table A-29: Pedestrian crash deaths by hit-and-run status and year

Hit-and-Run	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
No Hit-and-Run	4,393	4,344	4,074	3,954	4,016	3,969	3,894	3,795	3,912	3,842
Hit Pedestrian	912	879	850	796	866	866	856	865	955	928
Hit Parked Vehicle or Object	6	2	4	5	5	4	11	2	8	2
Other & Unknown	10	3	11	8	14	12	13	13	17	12
Note: Data in this table has been used to create Figure 6-6 in Other Crash Information.										

APPENDIX B

NASS GES Data 1997-2006

Table B-1: Pedestrian crashes and crash standard deviation by year

Year:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Nonfatal Pedestrian Crashes	79,689	71,109	87,780	80,325	79,722	71,858	71,725	70,153	65,529	62,753
Nonfatal Pedestrian Crash Std. Dev	7,403	7,718	7,185	7,469	5,341	5,290	5,449	4,296	3,831	4,428
Pedestrian Crashes	85,010	76,337	92,719	85,088	84,623	76,709	76,499	74,828	70,421	67,537
Note: 1. Data in this table has been used to create Figures 1-6, 2-3, 3-7, and 3-8. 2. Pedestrian Crash = Pedestrian Crash Deaths + Nonfatal Pedestrian Crashes										

Table B-2: Pedestrian crashes by month, 1997-2006

Month	Pedestrian Crash	Crash Std. Dev
Jan	68,844	4,652
Oct	71,238	4,206
Dec	72,493	4,375
Other	567,194	37,799
Note: Data in this table has been used to create fatality probabilities in Crash Time.		

Table B-3: Pedestrian crashes by day of week, 1997-2006

Weekday	Pedestrian Crash	Crash Std. Dev
Sunday	80,038	5,596
Monday	108,431	7,474
Tuesday	114,895	7,776
Wednesday	120,105	9,003
Thursday	121,422	7,889
Friday	138,117	8,959
Saturday	106,747	5,174
Unknown	16	0
Note: Data in this table has been used to create Figure 3-2 in Crash Time.		

Table B-4: Pedestrian crashes by time of day, 1997-2006

Time of Day	Pedestrian Crash	Crash Std. Dev
Midnight to 3 a.m.	36,394	2,634
3 a.m. to 6 a.m.	18,220	1,675
6 a.m. to 9 a.m.	86,180	5,692
9 a.m. to Noon	78,674	4,586
Noon to 3 p.m.	116,216	7,994
3 p.m. to 6 p.m.	190,770	16,579
6 p.m. to 9 p.m.	169,639	11,291
9 p.m. to Midnight	93,386	5,887
Unknown	291	0
Note: Data in this table has been used to create Figure 3-6 in Crash Time.		

Table B-5: Pedestrian crashes by pedestrian sex, 1997-2006

Pedestrian Sex	Pedestrian Crash	Crash Std. Dev
Male	466,494	27,592
Female	319,108	19,889
Unknown	4,167	1,467
Note: Data in this table has been used to create Figure 4-2 in Pedestrian Information.		

Table B-6: Pedestrian crashes by pedestrian age group, 1997-2006

Pedestrian Age Group	Pedestrian Crash	Crash Std. Dev
Children (Under 15)	193,102	23,475
Youth (15-24)	139,907	7,952
Young Adults (25-40)	178,308	8,972
Adults (41-64)	179,646	9,097
Seniors (Over 64)	70,162	5,724
Unknown Age	28,646	3,827
Note: Data in this table has been used to create Figure 4-6 in Pedestrian Information.		

Table B-7: Pedestrian crashes by alcohol involvement, 1997-2006

Alcohol Involved	Pedestrian Crash	Crash Std. Dev
Alcohol Involved	84,300	5,198
No Alcohol Involved	654,166	33,695
Other & Unknown	51,307	12,491
Note: Data in this table has been used to create Figure 4-9 in Pedestrian Information.		

Table B-8: Pedestrian crashes by driver speeding status, 1997-2006

Driver Speeding Status	Pedestrian Crash	Crash Std. Dev
Speeding	581,309	34,503
Not Speeding	80,841	2,621
Unknown	127,654	12,898
Note: Data in this table has been used to create Figure 5-6 in Driver Information		

Table B-9: Pedestrian crashes by atmospheric condition, 1997-2006

Atmospheric Condition	Pedestrian Crash	Crash Std. Dev
No Adverse Condition	694,648	41,623
Rain	77,328	6,328
Sleet	556	109
Snow	10,656	1,259
Fog	2,777	532
Other	3,804	1,121
Note: Data in this table has been used to create Figure 6-2 in Other Crash Information		

Table B-10: Pedestrian crashes by light condition, 1997-2006

Light Condition	Pedestrian Crash	Crash Std. Dev
Daylight	478,199	32,954
Dark	72,696	4,710
Dark but Lighted	196,669	11,047
Dawn	8,403	929
Dusk	25,617	3,025
Unknown	8,184	1,072
Note: Data in this table has been used to create Figure 6-4 in Other Crash Information		

Table B-11: Pedestrian crashes by posted speed limit, 1997-2006

Post Speed Limit	Pedestrian Crash	Crash Std. Dev
No Posted Speed Limit	5,438	1,257
Under 30 mph	192,250	36,282
30-39 mph	225,890	18,698
40-49 mph	81,879	7,396
Over 49 mph	48,861	4,256
Unknown	235,449	18,415
Note: Data in this table has been used to create Figure 6-6 in Other Crash Information		

Exposure Data

Table B-13: Resident Population by State, 1997-2006

State Name	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Alabama	4,320,281	4,351,037	4,369,862	4,452,375	4,466,618	4,477,571	4,495,089	4,517,442	4,548,327	4,599,030
Alaska	608,846	615,205	619,500	627,533	632,241	640,544	647,747	656,834	663,253	670,053
Arizona	4,552,207	4,667,277	4,778,332	5,166,693	5,300,366	5,445,333	5,582,252	5,745,674	5,953,007	6,166,318
Arkansas	2,524,007	2,538,202	2,551,373	2,678,610	2,691,665	2,706,198	2,723,645	2,746,823	2,775,708	2,810,872
California	32,217,708	32,682,794	33,145,121	34,008,499	34,550,466	35,024,517	35,466,365	35,841,254	36,154,147	36,457,549
Colorado	3,891,293	3,968,967	4,056,133	4,327,409	4,428,562	4,500,122	4,545,957	4,598,507	4,663,295	4,753,377
Connecticut	3,268,514	3,272,563	3,282,031	3,412,539	3,433,201	3,457,927	3,482,326	3,493,893	3,500,701	3,504,809
Delaware	735,024	744,066	753,538	786,505	795,450	805,591	816,861	828,762	841,741	853,476
Dist of Columbia	528,752	521,426	519,000	571,042	577,357	578,907	577,476	579,720	582,049	581,530
Florida	14,683,350	14,908,230	15,111,244	16,050,166	16,354,728	16,682,250	16,981,800	17,366,593	17,768,191	18,089,888
Georgia	7,486,094	7,636,522	7,788,240	8,230,550	8,424,033	8,597,927	8,750,259	8,935,151	9,132,553	9,363,941
Hawaii	1,189,322	1,190,472	1,185,497	1,212,113	1,221,419	1,233,249	1,245,606	1,259,299	1,273,278	1,285,498
Idaho	1,210,638	1,230,923	1,251,700	1,299,811	1,321,446	1,344,266	1,367,428	1,394,524	1,429,367	1,466,465
Illinois	12,011,509	12,069,774	12,128,370	12,440,970	12,524,663	12,595,003	12,649,778	12,713,548	12,765,427	12,831,970
Indiana	5,872,370	5,907,617	5,942,901	6,092,375	6,126,395	6,154,697	6,191,719	6,223,329	6,266,019	6,313,520
Iowa	2,854,396	2,861,025	2,869,413	2,928,703	2,932,151	2,935,295	2,942,070	2,953,679	2,965,524	2,982,085
Kansas	2,616,339	2,638,667	2,654,052	2,692,947	2,702,446	2,714,792	2,727,042	2,738,356	2,748,172	2,764,075
Kentucky	3,907,816	3,934,310	3,960,825	4,049,260	4,067,643	4,088,977	4,114,489	4,140,427	4,172,608	4,206,074
Louisiana	4,351,390	4,362,758	4,372,035	4,469,529	4,463,421	4,470,543	4,480,925	4,495,706	4,507,331	4,287,768
Maine	1,245,215	1,247,554	1,253,040	1,277,483	1,286,419	1,296,817	1,307,151	1,313,921	1,318,220	1,321,574
Maryland	5,092,914	5,130,072	5,171,634	5,311,695	5,379,795	5,441,349	5,506,684	5,553,249	5,589,599	5,615,727
Massachusetts	6,115,476	6,144,407	6,175,169	6,362,604	6,406,727	6,431,247	6,439,592	6,435,995	6,433,367	6,437,193
Michigan	9,785,450	9,820,231	9,863,775	9,956,689	10,003,243	10,038,165	10,068,311	10,093,398	10,100,833	10,095,643
Minnesota	4,687,726	4,726,411	4,775,508	4,934,275	4,985,851	5,024,570	5,059,023	5,094,304	5,126,739	5,167,101
Mississippi	2,731,826	2,751,335	2,768,619	2,848,634	2,856,108	2,863,091	2,874,171	2,892,668	2,908,496	2,910,540
Missouri	5,407,113	5,437,562	5,468,338	5,606,532	5,643,232	5,680,259	5,712,355	5,752,861	5,797,703	5,842,713
Montana	878,706	879,533	882,779	903,531	906,148	910,357	917,193	926,345	934,737	944,632
Nebraska	1,656,042	1,660,772	1,666,028	1,713,426	1,719,315	1,727,040	1,737,017	1,746,980	1,758,163	1,768,331
Nevada	1,675,581	1,743,772	1,809,253	2,018,456	2,095,820	2,169,202	2,241,127	2,332,484	2,412,301	2,495,529
New Hampshire	1,173,239	1,185,823	1,201,134	1,240,664	1,258,408	1,273,970	1,285,918	1,297,961	1,306,819	1,314,895
New Jersey	8,054,178	8,095,542	8,143,412	8,434,216	8,506,516	8,577,514	8,632,553	8,675,879	8,703,150	8,724,560
New Mexico	1,722,939	1,733,535	1,739,844	1,821,656	1,832,783	1,855,353	1,877,598	1,900,620	1,925,985	1,954,599
New York	18,143,184	18,159,175	18,196,601	19,000,135	19,095,604	19,167,600	19,238,252	19,291,526	19,315,721	19,306,183
North Carolina	7,428,672	7,545,828	7,650,789	8,078,909	8,199,541	8,313,494	8,415,710	8,531,040	8,672,459	8,856,505
North Dakota	640,945	637,808	633,666	641,193	636,349	633,649	632,620	635,848	634,605	635,867
Ohio	11,212,498	11,237,752	11,256,654	11,364,401	11,392,043	11,414,537	11,437,908	11,461,347	11,470,685	11,478,006
Oklahoma	3,314,259	3,339,478	3,358,044	3,454,508	3,466,687	3,488,447	3,504,347	3,522,827	3,543,442	3,579,212
Oregon	3,243,254	3,282,055	3,316,154	3,431,530	3,474,183	3,523,529	3,561,155	3,589,168	3,638,871	3,700,758
Pennsylvania	12,015,888	12,002,329	11,994,016	12,286,905	12,295,929	12,321,644	12,351,381	12,377,381	12,405,348	12,440,621
Rhode Island	986,966	987,704	990,819	1,050,836	1,058,510	1,068,568	1,074,783	1,078,930	1,073,579	1,067,610
South Carolina	3,790,066	3,839,578	3,885,736	4,023,565	4,060,728	4,101,122	4,142,356	4,194,694	4,246,933	4,321,249
South Dakota	730,855	730,789	733,133	755,793	758,106	760,291	763,913	770,188	774,883	781,919
Tennessee	5,378,433	5,432,679	5,483,535	5,703,299	5,746,477	5,788,333	5,834,358	5,885,597	5,955,745	6,038,803
Texas	19,355,427	19,712,389	20,044,141	20,951,848	21,357,926	21,762,430	22,134,047	22,517,901	22,928,508	23,507,783
Utah	2,065,397	2,100,562	2,129,836	2,243,490	2,288,374	2,325,921	2,355,785	2,421,500	2,490,334	2,550,063
Vermont	588,665	590,579	593,740	609,986	612,882	616,236	618,616	620,795	622,387	623,908
Virginia	6,732,878	6,789,225	6,872,912	7,104,587	7,192,701	7,285,707	7,375,863	7,472,448	7,564,327	7,642,884
Washington	5,604,105	5,687,832	5,756,361	5,912,036	5,995,397	6,070,176	6,130,323	6,205,535	6,291,899	6,395,798
West Virginia	1,815,588	1,811,688	1,806,928	1,807,528	1,801,411	1,804,146	1,808,660	1,810,906	1,814,083	1,818,470
Wisconsin	5,200,235	5,222,124	5,250,446	5,374,747	5,404,733	5,438,527	5,466,929	5,498,807	5,527,644	5,556,506
Wyoming	480,031	480,045	479,602	494,166	494,067	498,973	501,490	505,534	508,798	515,004

Source: Census Bureau released yearly on July 1. Note: Data in this table and Table A-6 have been used to create Figure 2-3.

Table B-12: Hispanic or Latino population and total U.S. population by year

Year:	2000	2001	2002	2003	2004	2005
Total Population at Survey Time	273,643,273	277,017,622	280,540,330	282,909,885	285,691,501	288,378,137
Hispanic or Latino	34,474,440	36,200,781	37,872,475	39,194,837	40,459,196	41,870,703
Data Source: U.S. Census Bureau Note: Data in this table has been used to create Figure 4-7 in Pedestrian Information						

Table B-14: Total crash fatalities, total crashes, and vehicle miles traveled by year

Year:	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total Crash Fatalities	42,013	41,501	41,717	41,945	42,196	43,005	42,884	42,836	43,510	42,642
Total Motor Vehicle Crashes	6,624,324	6,335,107	6,279,140	6,393,526	6,322,862	6,315,491	6,328,477	6,181,444	6,159,252	5,973,588
Vehicle Miles Traveled (Unit: Billions)	2,562	2,632	2,691	2,747	2,797	2,856	2,890	2,965	2,989	3,014
Sources: Traffic Safety Facts 2006, DOT HS 810 818, NHTSA, US DOT, Note: Data in this table has been used to create Figures 1-1, 1-3, 1-4, 1-6, 2-3, 2-4, 2-6, and 2-7.										

APPENDIX C

NHTSA Operation Regions

Figure C-1: NHTSA Operation Regions Map

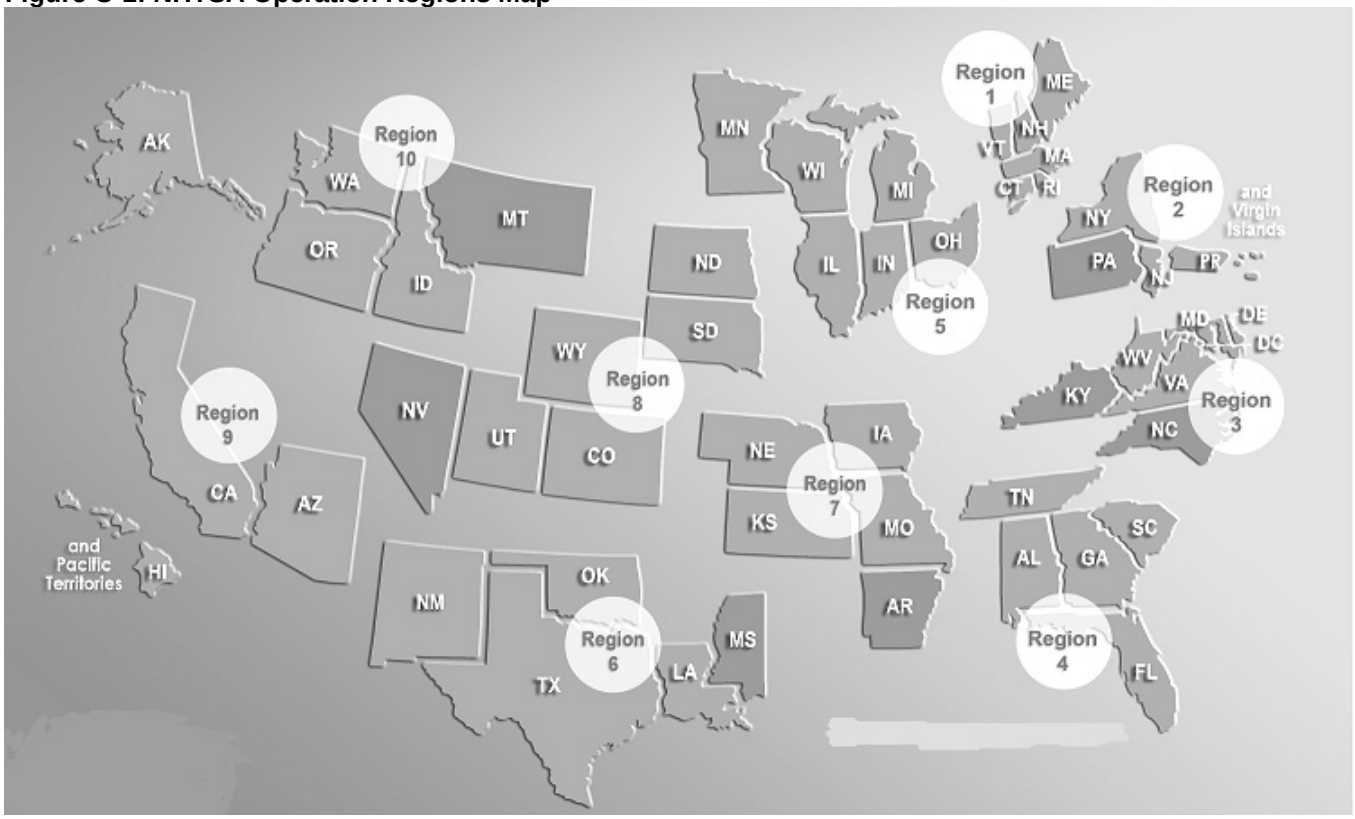


Table C-1: States included in NHTSA operation regions

Region #	Region Name	States in the Region
1	New England Region	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont
2	Eastern Region	New Jersey, New York, Pennsylvania, Puerto Rico, and Virgin Islands
3	Mid Atlantic Region	Delaware, District of Columbia, Kentucky, Maryland, North Carolina, Virginia, and West Virginia
4	Southeast Region	Alabama, Florida, Georgia, South Carolina, and Tennessee
5	Great Lakes Region	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin
6	South Central Region	Louisiana, Mississippi, New Mexico, Oklahoma, Texas, and Bureau of Indian Affairs
7	Central Region	Arkansas, Iowa, Kansas, Missouri, and Nebraska
8	Rocky Mountain Region	Colorado, Nevada, North Dakota, South Dakota, Utah, and Wyoming
9	Western Region	Arizona, California, Hawaii, and Pacific Territories
10	Pacific Northwest Region	Alaska, Idaho, Montana, Oregon, and Washington
Source: National Highway Traffic Safety Administration		

APPENDIX D

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