

2006 Pedestrian Collision Report



SEATTLE DEPARTMENT OF TRANSPORTATION

INTRODUCTION

Safety is the top priority at the Seattle Department of Transportation (SDOT) and pedestrian safety is of particular importance. In an effort to provide comprehensive and informative data on pedestrian collisions, SDOT has produced this report summarizing pedestrian collisions in the city of Seattle in 2006.

This report is intended to provide only data about collisions and does not attempt to identify solutions. The information will be provided to SDOT engineers, policy makers, and citizens to help increase awareness of recent trends and to inform decision-making related to pedestrian safety.

The data for this report come primarily from Washington State Police Traffic Collision Reports produced by the Seattle Police Department (SPD). Data from Vehicle Collision Reports submitted by citizens are also included in cases where SPD did not produce a report.

These reports reflect motor vehicle collisions on city-owned right-of-way (ROW) involving pedestrians. The information is processed by the Washington State Department of Transportation and transmitted to the city of Seattle's Collision Records System, which is owned and maintained by SDOT.

This report was produced by the Traffic Data and Records unit in SDOT's Traffic Management Division. For additional information, contact the Traffic Data and Records unit at 206-684-4005.



EXECUTIVE SUMMARY

- In 2006, the number of motor vehicle/pedestrian (mv/ped) collisions and the number of pedestrian fatalities were slightly above the five-year average.
- Pedestrian collisions occurred most frequently in the downtown area and along arterial roadways.
- Pedestrians involved in collisions were approximately twice as likely to be struck in intersections as at mid-block locations.
- Pedestrians between the ages of 15 and 34 were most frequently involved in mv/ped collisions. Pedestrian fatalities, however, were more frequent among older pedestrians. Eighty percent occurred among pedestrians ages 45 or older, an age group that comprises only 34 percent of the Seattle population.
- Males represent a higher percentage of both pedestrians and drivers involved in pedestrian collisions and fatalities.
- More pedestrians were involved in collisions in the winter months. January and November of 2006 saw the highest totals over the last five years.
- Pedestrians were more frequently involved in collisions during the work week than on weekends. Friday saw the highest daily total.
- Pedestrians were most frequently involved in collisions during the evening rush hours. The hour between 5 and 6 p.m. saw the highest total. Fatalities most often occurred later in the evening.
- Pedestrians were most frequently involved in collisions with vehicles traveling forward in a straight line.
- Pedestrians involved in collisions while attempting to cross at intersections were most frequently crossing with the traffic signal.
- Pedestrians were most frequently involved in collisions under clear or partly cloudy weather conditions. Rainy conditions were second most frequent.
- Where the pedestrian was reported to have contributed to the collision, the most common contributing factor was a failure to use a crosswalk. The most common contributing factor for drivers was a failure to grant the pedestrian right-of-way.
- The “pedestrian” designation includes not just people on foot, but also roller skaters, skate boarders, people working in the right of way, and people using wheelchairs. Two pedestrian fatalities involved people in these categories (one person on a scooter and one person using a wheelchair).



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SECTION I: HISTORICAL COMPARISON

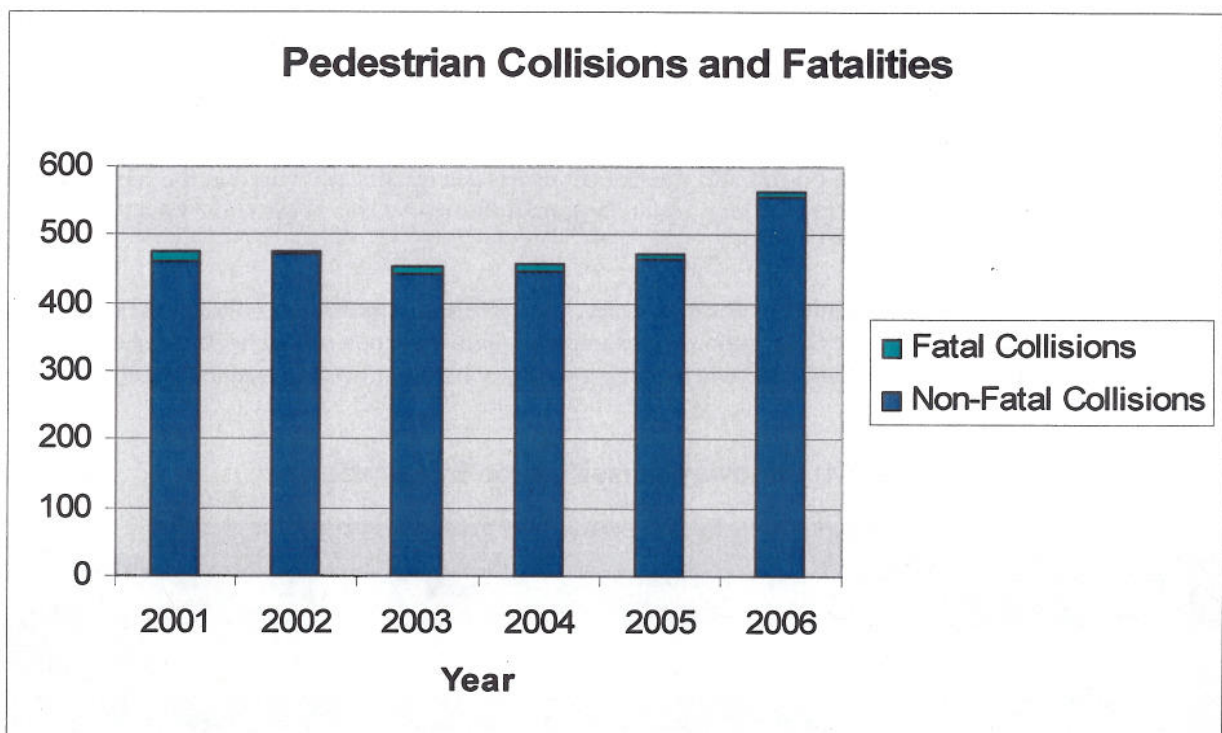
Table 1 indicates the number of motor vehicle/pedestrian (mv/ped) collisions and pedestrian fatalities from 2001 to 2006. This includes the 2001-2005 five-year average for comparison.

Table 1: Annual Totals

Year	Collisions	Fatalities
2001	474	12
2002	476	5
2003	454	11
2004	457	10
2005	473	8
5-Yr Avg	467	9
2006	565	10

Between 2001 and 2005, there was an average of 467 mv/ped collisions resulting in nine pedestrian fatalities per year in the city of Seattle. In 2006, there were 565 mv/ped collisions resulting in 10 fatalities. These statistics are above the five-year average.

Table 2: Historical Comparison



SECTION II: LOCATION AND ROAD TYPE

Section II examines the location and road type for pedestrians involved in mv/ped collisions. The total number of pedestrians involved in mv/ped collisions (598) is greater than the total number of collisions (565) primarily because a single collision sometimes involves multiple pedestrians.

Table 3 indicates the injury type by roadway classification. Injury types and roadway classifications are defined in the appendix.

Table 3: Roadway Classification by Injury

Injury	Roadway Class					Total
	Residential	Collector	Minor	Principal	Unknown	
No Injury	2	0	10	14	0	26
Possible Injury	29	13	62	128	2	234
Evident Injury	19	8	61	124	2	214
Disabling Injury	8	2	28	54	0	92
Fatality	0	1	3	5	0	9
Non-Traffic Fatality	0	0	0	1	0	1
Unknown	0	1	7	14	0	22
Total	58	25	171	340	4	598

Pedestrians were most frequently involved in collisions along arterial roadways. There were 340 pedestrians (57 percent) struck on principal arterial roadways and another 171 (28 percent) struck on minor arterial roadways.

All 10 pedestrian fatalities occurred on arterials and six of the 10 occurred on principal arterials.

The “non-traffic fatality” category seen on this and subsequent charts is a classification used in the reports for situations that do not meet the state definition of a fatal collision; in this case it was because the fatality occurred more than 30 days after the collision.

Table 4 examines the roadway classification by location type. For reporting purposes, all collision locations occur either at an intersection, or at a mid-block location. An example of an intersection would be 4th Avenue and Pike Street, while a mid-block location would be anywhere along a roadway between two intersecting streets, such as 4th Avenue between Pike and Pine Streets.

Table 4: Roadway Classification by Location

Location	Roadway Class					Total
	Residential	Collector	Minor	Principal	Unknown	
Intersection	12	13	110	262	0	397
Mid-block	46	12	61	78	4	201
Total	58	25	171	340	4	598

Even though mid-block locations make up a higher proportion of the total roadway space than do intersections, pedestrians are more likely to be struck in intersections. In 2006, 397 (66 percent) of pedestrians involved in mv/ped collisions were in intersections. This is attributable, at least in part, because pedestrians tend to cross at intersections.



As Table 4 indicates, collisions occurred more frequently at intersections than at mid-block locations for each of the arterial roadway types. On residential (non-arterial) streets, however, approximately 80 percent of pedestrians struck were at mid-block locations.

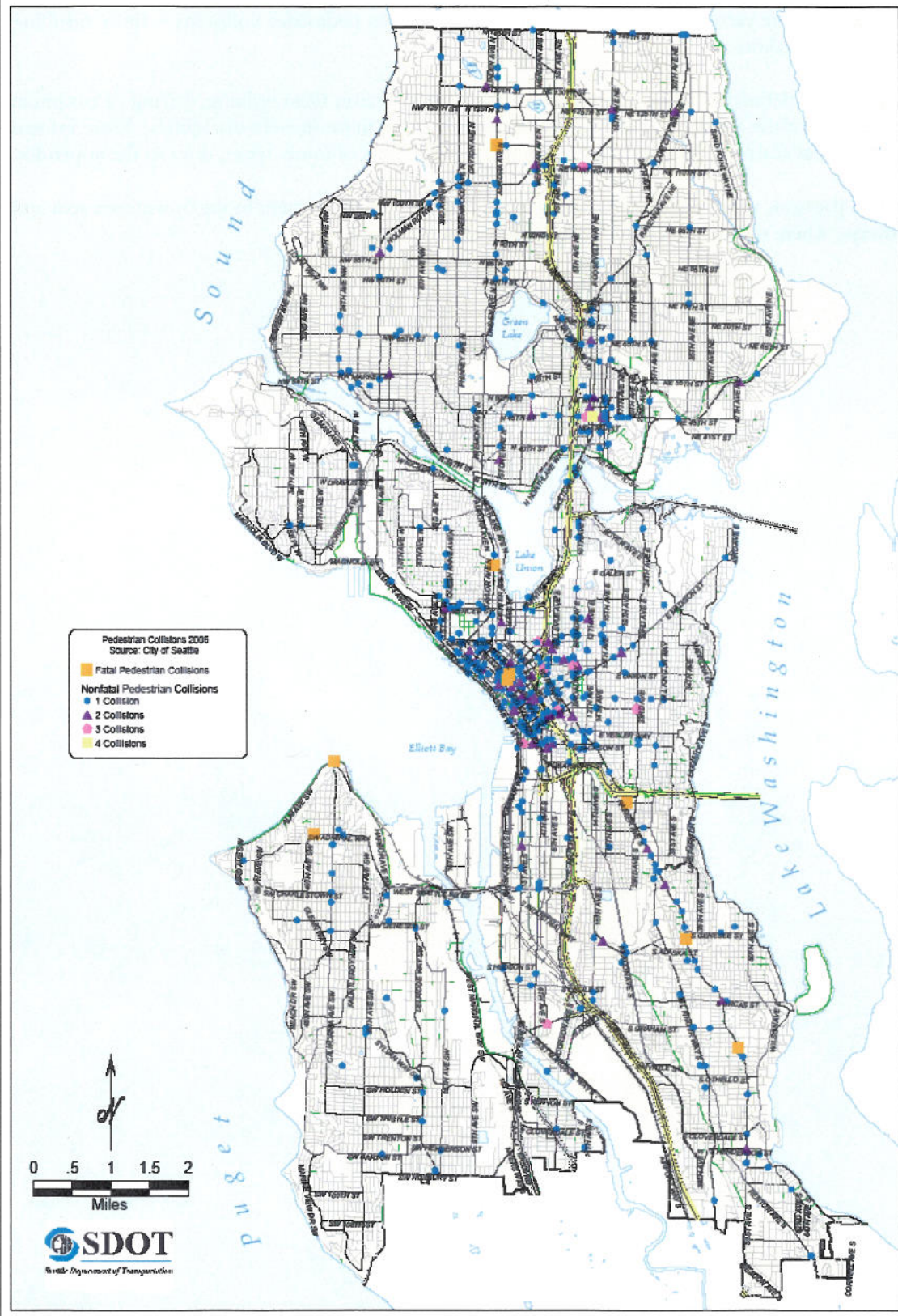
The maps on the following pages illustrate mv/ped collision locations. The first map reflects all pedestrian collisions in 2006 and the second map focuses on the most injurious pedestrian collisions -- those resulting in disabling injuries or fatalities.

Disabling injuries are defined as those which prevent the injured person from walking, driving or continuing normal activities at the time of the accident. They do not necessarily result in permanent disabilities. More information about injury type is available in Section III. For complete definitions of injury types, refer to the appendix.

Consistent with previous years, pedestrian collisions in Seattle are most frequent in the downtown area and along arterial roadways, where motor vehicle and pedestrian volumes are highest.



Pedestrian Collisions January through December, 2006



Disabling & Fatal Pedestrian Collisions January through December, 2006



SECTION III: PEDESTRIAN AND DRIVER CHARACTERISTICS

Section III examines the available demographic characteristics of pedestrians and drivers in mv/ped collisions.

Table 5 indicates the age group by injury for pedestrians involved in collisions. The final two columns compare the percentage of pedestrians involved in mv/ped collisions to their share of the population in Seattle. The age group ranges vary slightly in the number of years they include, but are consistent with U.S. Census statistics.

Table 5: Pedestrian Age Group by Injury

Age Group	Injury							Total	% of Total	% of Seattle Pop
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown			
0 to 4	2	3	5	0	0	0	0	10	2%	5%
5 to 14	1	12	24	5	0	0	1	43	7%	8%
15 to 24	4	40	41	17	1	0	2	105	18%	14%
25 to 34	4	39	42	13	1	0	3	102	17%	22%
35 to 44	5	39	31	11	0	0	2	88	15%	17%
45 to 54	3	40	25	11	2	0	2	83	14%	15%
55 to 64	1	19	12	11	3	0	2	48	8%	7%
65 & Up	1	12	12	13	2	1	0	41	7%	12%
Unknown	5	30	22	11	0	0	10	78	13%	N/A
Total	26	234	214	92	9	1	22	598	100%	100%

A comparison of the last two columns suggests that the percentage of pedestrians in each age group is roughly proportional to its share of the population.

One hundred and five pedestrians between the ages of 15 and 24 were involved in mv/ped collisions, the highest total for any age group, followed by 102 pedestrians between the ages of 25 and 34.

Pedestrians in the older age groups, however, were involved in more fatalities. The highest number of mv/ped traffic fatalities occurred in the 55 to 64 and 65 and up age groups, with three each. Eight of 10 pedestrian fatalities occurred among pedestrians ages 45 or older, while this age group comprises only 34 percent of the population. By contrast, no children suffered mv/ped fatalities in 2006.

Tables 6 and 7 look at gender compared to age group and injury type. According to U.S. Census data, the ratio of males to females in Seattle is approximately equivalent. Gender information is not reported in 18 percent of the Police Traffic Collision Reports. It is difficult to determine what, if any, impact this has on the comparisons between male and female cohorts.



Table 6: Pedestrian Age Group by Gender

Age Group	Gender			Total
	Male	Female	Unreported	
0 to 4	3	4	3	10
5 to 14	20	20	3	43
15 to 24	36	45	24	105
25 to 34	45	46	11	102
35 to 44	43	34	11	88
45 to 54	39	31	13	83
55 to 64	23	17	8	48
65 & Up	24	8	9	41
Unknown	34	15	29	78
Total	267	220	111	598

Pedestrians were involved in 487 collisions where gender was reported. Males represent 55 percent of this group, while females represent 45 percent. Males appear most over-represented in the 65 and older age group (24 males to 8 females). Females are most over-represented in the 15-24 age group (45 females to 36 males).

Table 7: Pedestrian Injury by Gender

Injury	Gender			Total
	Male	Female	Unreported	
No Injury	12	12	2	26
Possible Injury	103	90	41	234
Evident Injury	99	76	39	214
Disabling Injury	37	34	21	92
Fatality	8	1	0	9
Non-Traffic Fatality	1	0	0	1
Unknown	7	7	8	22
Total	267	220	111	598

The number of males and females involved in mv/ped collisions for the various injury types are similar with two notable exceptions: evident injuries and fatalities. Males were reported to suffer 23 more evident injuries than females. The fatality numbers, while lower, were even more disproportional. Males suffered nine of 10 total fatalities.

Tables 8 and 9 look at the age groups and genders of the drivers in mv/ped collisions. The numbers cited in these two tables are collisions, not pedestrians. Thus, the totals equal 565, not 598. This is because for each mv/ped collision there is only one driver, but potentially multiple pedestrians.



Table 8: Driver Age Group by Gender

Driver Age Group	Gender			Total
	Male	Female	Unreported	
0 to 15	0	0	0	0
16 to 24	44	20	0	64
25 to 34	55	35	0	90
35 to 44	49	29	1	79
45 to 54	59	36	1	96
55 to 64	48	14	0	62
65 & Up	25	14	0	39
Unknown	12	6	117	135
Total	292	154	119	565

The driver age groups with the highest totals are ages 45-54 (96 collisions) and ages 25-34 (90 collisions). Drivers in the 65 and up age group were involved in the fewest pedestrian collisions (39).

Data on age and/or gender is unreported in a significant number of collision reports. Where gender is reported, however, almost two out of three drivers were reported as male. Males were involved in more pedestrian collisions in each age group. The largest disparity was in the 55 to 64 age group; male drivers were involved in 48 pedestrian collisions compared to 14 for female drivers.

Though not shown here, males were also identified as the driver in seven of ten traffic fatalities.

Table 9 examines the driver's age group by pedestrian fatalities.

Table 9: Driver's Age Group by Pedestrian Fatality

Age Group	Total Collisions	Fatality
0 to 15	0	0
16 to 24	64	1
25 to 34	90	3
35 to 44	79	3
45 to 54	96	1
55 to 64	62	1
65 & Up	39	1
Unknown	135	0
Total	565	10

Each age group of drivers above the legal driving age was involved in at least one fatality. Three drivers between ages 25 and 34 were involved in fatal pedestrian collisions, as were three drivers between ages 35 and 44.

Table 10 provides more detail about the types of pedestrians involved in collisions. For traffic collision reporting purposes, the term "pedestrian" includes not just people walking on foot, but also roller skaters, skateboarders, people working in the right of way, and people in wheelchairs.



Table 10: Pedestrian Classifications by Injury

Pedestrian Class	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Person on Foot	24	226	204	87	7	1	22	571
Roller Skater / Skateboarder	1	1	2	1	1	0	0	6
Motorized Wheelchair	1	2	2	0	1	0	0	6
Non-Motorized Wheelchair	0	1	2	1	0	0	0	4
Emergency Responder	0	2	1	1	0	0	0	4
Flagger	0	1	0	1	0	0	0	2
Roadway Worker	0	1	1	0	0	0	0	2
Other	0	0	2	1	0	0	0	3
Total	26	234	214	92	9	1	22	598

While 95 percent of pedestrians involved in collisions fall into the “persons on foot” class, it is important to note the additional classifications of pedestrians. Eight people were struck while performing their job, including four emergency responders and four roadway workers/flaggers. Also, two of the nine pedestrian traffic fatalities fall into these additional categories: one person on a scooter and one person using a wheelchair.



SECTION IV: MONTH, DAY, AND HOUR

Section IV examines the time-related characteristics of mv/ped collisions, month of the year, day of the week and hour of the day.

Table 11 indicates the number of pedestrians involved in collisions by month and by injury type.

Table 11: Month by Injury

Month	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
January	4	34	31	11	0	0	7	87
February	3	21	20	6	1	0	1	52
March	2	19	10	8	0	0	0	39
April	3	16	16	7	2	0	1	45
May	1	14	10	6	0	0	2	33
June	1	16	15	5	0	0	0	37
July	1	14	17	3	1	0	0	36
August	1	8	15	8	2	0	3	37
September	3	21	13	8	1	0	2	48
October	3	18	21	7	0	0	3	52
November	2	32	28	15	2	1	3	83
December	2	21	18	8	0	0	0	49
Total	26	234	214	92	9	1	22	598

There were on average 50 pedestrians involved in collisions per month. Consistent with historical averages, the winter months saw the highest number of pedestrians involved in collisions and the summer months saw the lowest.

Pedestrian totals were particularly high in January (87) and November (83). Not only were these two months significantly higher than the third highest monthly total (52 in October), but they had the highest monthly totals in the last 5 years.

There is no discernable correlation between pedestrian fatalities and month, although as noted above, the winter months tend to see more collisions than the summer months. In general, the relatively low number of fatalities makes it difficult to come to any conclusions of statistical significance.



Table 12 examines pedestrians involved in collisions by day of the week and injury type.

Table 12: Day of Week by Injury

Day of Week	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Monday	1	36	32	13	1	1	2	86
Tuesday	4	46	25	16	2	0	5	98
Wednesday	1	28	30	15	2	0	5	81
Thursday	3	43	34	15	2	0	2	99
Friday	9	35	48	14	2	0	3	111
Saturday	5	25	18	8	0	0	3	59
Sunday	3	21	27	11	0	0	2	64
Total	26	234	214	92	9	1	22	598

Friday saw the highest number of pedestrians involved in collisions, with 111. Totals throughout the work week were fairly uniform, ranging from 86 to 111 pedestrians. Totals for the weekend days (59 on Saturday and 64 on Sunday) were significantly lower.

Two pedestrian fatalities occurred on each workday, Monday through Friday, while no pedestrian fatalities occurred on Saturday or Sunday.



Table 13 examines time of day by injury class.

Table 13: Time of Day by Injury

Hour	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
12-1 am	1	3	5	1	0	0	0	10
1-2 am	0	2	5	6	0	0	2	15
2-3 am	2	9	6	3	0	0	0	20
3-4 am	0	2	1	0	0	0	0	3
4-5 am	0	1	1	0	0	0	0	2
5-6 am	0	0	1	0	0	0	0	1
6-7 am	1	7	4	4	0	0	0	16
7-8 am	3	13	12	3	1	0	1	33
8-9 am	0	6	11	4	1	0	0	22
9-10 am	2	13	5	5	0	0	0	25
10-11 am	1	9	13	1	0	0	0	24
11-12 am	1	4	4	4	0	0	0	13
12-1 pm	1	9	9	5	0	0	1	25
1-2 pm	1	10	7	2	1	0	1	22
2-3 pm	2	15	11	6	1	0	3	38
3-4 pm	1	22	19	2	0	0	3	47
4-5 pm	4	26	24	6	0	0	1	61
5-6 pm	3	27	26	9	0	0	5	70
6-7 pm	3	20	14	10	1	0	3	51
7-8 pm	0	15	13	6	1	0	0	35
8-9 pm	0	6	5	7	1	1	0	20
9-10 pm	0	3	8	2	1	0	1	15
10-11 pm	0	8	6	1	1	0	0	16
11-12 pm	0	4	4	5	0	0	1	14
Total	26	234	214	92	9	1	22	598

The six hours with the highest numbers of pedestrians involved in collisions were all between 2 and 8 p.m. The rush hour between 5 and 6 p.m. saw the highest number of pedestrians involved in collisions, with 70.

The morning travel peak saw significantly lower totals. The morning hour with the highest number of pedestrians involved in collisions was 7 to 8 a.m., with 33.

Pedestrian fatalities tended to occur later in the evening. Six of 10 pedestrian fatalities occurred between 6 and 11 p.m.



SECTION V: COLLISION TYPE, ACTIONS AND CONDITIONS

Section V examines the collision types, pedestrian actions and reported conditions when pedestrians were involved in mv/ped collisions.

Table 14 indicates the collision type by injury for pedestrians involved in collisions.

Table 14: Collision Type by Injury

Collision Type	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Vehicle Going Straight	9	96	108	43	8	1	6	271
Vehicle Turning Left	13	68	61	24	1	0	7	174
Vehicle Turning Right	4	49	33	14	0	0	6	106
Vehicle Backing	0	6	2	2	0	0	1	11
Vehicle Hits Ped – Other	0	4	5	2	0	0	1	12
Parking Movement	0	6	1	1	0	0	0	8
Entering @ Angle	0	1	2	2	0	0	0	5
Bicycle Hits Ped	0	1	0	2	0	0	1	4
Left Turn Opp Directions	0	1	1	0	0	0	0	2
Struck Fixed Object	0	0	1	1	0	0	0	2
Sideswipe Both Moving	0	0	0	1	0	0	0	1
Sideswipe One Stopped	0	1	0	0	0	0	0	1
Rear End Stopped	0	1	0	0	0	0	0	1
Total	26	234	214	92	9	1	22	598

Pedestrians were most frequently involved in collisions with vehicles traveling straight, representing 45 percent of pedestrians. When combined with left and right-turning vehicles, these three collision types represent 92 percent of pedestrians involved in collisions.

Ninety percent pedestrians who suffered fatalities were struck by vehicles going straight.



Table 15 examines vehicle type by pedestrian collisions. As in Tables 8 and 9, this table totals 565 collisions rather than 598 pedestrians.

Table 15: Vehicle Type by Pedestrian Collisions and Fatalities

Vehicle Type	Total Collisions	Fatality
Passenger Car	294	7
Pickup – Panel Truck	186	1
Bus or Motor Stage	13	1
Taxi	10	0
Motorcycle	4	1
Flatbed Truck	7	0
Truck & Trailer	1	0
Semi Truck	3	0
Other	1	0
Unknown	46	0
Total	565	10

Passenger cars were most frequently involved in pedestrian collisions (52 percent) and fatalities (70 percent). Pickup/panel trucks, including sport utility vehicles, also were involved in a significant number of pedestrian collisions (33 percent).

Tables 16 and 17 look at the traffic signalization at pedestrian collision locations. Traffic signals are generally located at intersections, thus mid-block locations are not included in these table with the exception of a small number of mid-block traffic signals. As a result, the totals for these tables equal 397 pedestrians rather than 598. Table 16 examines pedestrian injuries by signalization. Traffic signal types are defined in the appendix.

Table 16: Injury by Signalization

Injury	Signal				Total
	No Signal	Mid-Block Signal	Half Signal	Full Signal	
No Injury	7	0	2	14	23
Possible Injury	42	0	2	107	151
Evident Injury	46	0	2	91	139
Disabling Injury	22	1	1	36	60
Fatality	3	0	0	3	6
Non-Traffic Fatality	0	0	0	1	1
Unknown	4	0	1	12	17
Total	124	1	8	264	397

The majority of intersections in Seattle have either full signals or no signals; there are relatively few mid-block and half signals. It is not surprising, therefore, that the majority of pedestrians involved in collision at intersections occurred at locations with either a full traffic signal or no signal. Sixty-five percent occurred in locations with a full traffic signal and 31 percent occurred at intersections with no signals.

Of the six fatalities that occurred at intersections, three occurred at full signals and three occurred at intersections with no signals.



Table 17 looks at pedestrian actions by signalization.

Table 17: Pedestrian Actions by Signalization

Action	Signal					Total
	No Signal	State Signal	Mid-Block Signal	Half Signal	Full Signal	
Cross @ Intrsc With Signal	10	4	0	3	196	213
Cross @ Intrsc Against Signal	1	3	0	3	34	41
Cross @ Intrsc – No Signal	96	1	0	2	4	103
Cross @ Intrsc – Diagonally	1	0	0	0	2	3
Cross @ Intersection But Did Not Use X-walk	3	0	0	0	4	7
Standing in Roadway	2	0	0	0	2	4
Not in Roadway	1	0	0	0	3	4
From Behind Parked Vehicle	2	0	0	0	0	2
Cross Mid-Block No X-walk	2	0	0	0	0	2
Cross Mid-Block In X-walk	1	0	1	0	1	3
Walk in Road with Traffic	1	0	0	0	0	1
Walk in Road against Traffic	1	0	0	0	0	1
Other Actions	3	0	0	0	10	13
Total	124	8	1	8	256	397

In 54 percent of instances where pedestrians were involved in collisions, the pedestrian was crossing at an intersection with the signal. Pedestrians were crossing at an intersection with no signal 26 percent of the time. Pedestrians crossing against a traffic signal were the third most common pedestrian action, though they accounted for only 10 percent of pedestrians involved in collisions at intersections.

Table 18 examines weather and injury type.

Table 18: Weather by Injury

Weather	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Clear or Partly Cloudy	17	135	121	46	7	0	12	338
Raining	5	64	61	30	0	1	5	166
Overcast	2	29	23	11	2	0	3	70
Snowing	0	2	0	0	0	0	0	2
Unknown	2	3	7	3	0	0	2	17
Other	0	1	2	2	0	0	0	5
Total	26	234	214	92	9	1	22	598

Fifty-seven percent of pedestrians involved in collisions were struck under conditions reported as clear or partly cloudy. Twenty-eight percent of pedestrians were struck under rainy conditions.

Seven of 10 pedestrian fatalities occurred under clear or partly cloudy conditions, while two occurred under overcast skies and one occurred under rainy conditions.



Table 19 examines clothing visibility by injury.

Table 19: Clothing Visibility by Injury

Clothing Visibility	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Mixed	15	121	117	50	5	0	13	321
Dark	8	75	80	33	2	1	5	204
Light	3	26	14	7	2	0	3	55
Retro – Reflective	0	7	0	1	0	0	1	9
Other Reflective Apparel	0	4	2	1	0	0	0	7
Unknown	0	1	1	0	0	0	0	2
Total	26	234	214	92	9	1	22	598

Fifty-four percent of pedestrians involved in collisions wore a mix of dark and light clothing. Thirty-four percent wore dark clothing and nine percent wore light clothing. Five pedestrians suffering fatalities wore mixed clothing, while three wore dark clothing and two wore light clothing.



SECTION VI: CONTRIBUTING CIRCUMSTANCES

This section looks at the contributing circumstances attributed to pedestrians and drivers in mv/ped collisions. Exactly one contributing circumstance is attributed to each driver and pedestrian; “none” is one of the options, which indicates that the individual’s actions did not contribute to the collision.

Table 20 examines pedestrian contributing circumstances by injury.

Table 20: Pedestrian Contributing Circumstances by Injury

Pedestrian Contributing Circumstance	Injury							Total
	No Injury	Possible Injury	Evident Injury	Disabling Injury	Fatality	Non-Traffic Fatality	Unknown	
Failure to Use Crosswalk	2	26	31	11	2	0	2	74
Failure to Grant R-O-W to Vehicle	0	16	15	6	1	0	1	39
Under Influence of Alcohol	2	3	13	5	0	1	0	24
Disregard Traffic Signal	2	3	5	4	1	0	1	16
Inattention	0	5	4	1	0	0	0	10
Exceeding Safe Speed	0	1	0	0	0	0	0	1
Other	1	29	11	6	0	0	6	53
None	18	143	126	57	5	0	11	360
Unknown	1	8	9	2	0	0	1	21
Total	26	234	214	92	9	1	22	598

In 60 percent of pedestrian reports, the pedestrian contributing circumstance was identified as “none.” The most commonly specified contributing circumstances were failure to use a crosswalk, failure to grant right-of-way to a vehicle and the pedestrian being under the influence of alcohol.

In pedestrian fatalities, the pedestrian contributing circumstance was identified as “none” in five instances. Two fatalities identified the pedestrian’s failure to use a crosswalk, one identified a failure to grant right-of-way, one identified the influence of alcohol and one identified disregard for a traffic signal.



Table 21 examines pedestrian contributing circumstances by gender.

Table 21: Pedestrian Contributing Circumstances by Gender

Pedestrian Contributing Circumstances	Gender			Total
	Male	Female	Unreported	
Under Influence of Alcohol	17	3	4	24
Failure to Use Xwalk	39	24	11	74
Not Grant ROW to Vehicle	19	12	8	39
Disregard Traffic Signal	7	7	2	16
Inattention	7	3	0	10
Exceeding Safe Speed	0	1	0	1
Other	23	17	13	53
None	143	148	69	360
Unknown	12	5	4	21
Total	267	220	111	598

As mentioned in the discussion of gender in Section III, more males were identified as being involved in pedestrian collisions than females. The biggest discrepancy is in the number of pedestrians under the influence of alcohol. Eighty-five percent of pedestrians identified as under the influence were male.



Table 22 examines Driver Contributing Circumstances by Collisions and Fatalities. The total is out of 565 since that is the total number of collisions involving pedestrians. Some collisions involved more than one pedestrian, but each involved only one driver.

Table 22: Driver Contributing Circumstances by Collisions and Fatalities

Driver Contributing Circumstances	Total Collisions	Fatalities
Did Not Grant R-O-W to Ped	256	2
Inattention	19	1
Under Influence of Alcohol	14	0
Disregard Traffic Signal	12	0
Exceed Safe Speed	4	1
Improper Turn	3	0
Improper Backing	3	0
Disregard Officer	3	0
Distracted Outside Vehicle	2	0
Disregard Stop Sign	2	0
Adjusting Entertnmt Equip	1	0
Exceed Stated Speed	1	0
Failure to Use Xwalk	1	0
Follow Too Closely	1	0
Improper Parking	1	0
Interacting with Occupants	1	0
Operating Defective Equip	1	0
Operating Telcom Device	1	0
Over Centerline	1	0
Reading or Writing	1	0
Under Influence of Drugs	1	1
Other	72	0
None	145	5
Unknown	19	0
Total	565	10

The most frequent driver contributing factor was a failure to grant the pedestrian right-of-way, cited in 45 percent of mv/ped collisions. It also was cited as a contributing factor in two fatalities.

The driver contributing factor was cited as “none” in 25 percent of mv/ped collisions and five of the fatalities.



Table 23 examines driver contributing circumstances by gender.

Table 23: Driver Contributing Circumstances by Gender

Driver Contributing Circumstances	Gender			Total
	Male	Female	Unreported	
Not Grant R-O-W to Ped	126	77	53	256
Inattention	12	7	0	19
Under Influence of Alcohol	11	3	0	14
Disregard Traffic Signal	5	3	4	12
Exceed Safe Speed	2	0	2	4
Improper Turn	2	0	1	3
Improper Backing	2	1	0	3
Disregard Officer	3	0	0	3
Disregard Stop Sign	0	1	1	2
Distraction outside Vehicle	2	0	0	2
Adjusting Entertnmt Equip	1	0	0	1
Exceed Stated Speed	0	0	1	1
Failure to Use Xwalk	0	1	0	1
Following Too Closely	0	1	0	1
Improper Parking	1	0	0	1
Interacting with Occupants	0	1	0	1
Operating Defective Equip	1	0	0	1
Operating Telcom Device	1	0	0	1
Over Centerline	0	0	1	1
Reading or Writing	1	0	0	1
Under Influence of Drugs	1	0	0	1
Other	25	5	42	72
None	91	50	4	145
Unknown	5	4	10	19
Total	292	154	119	565

As discussed in Section III, reports indicate that males are much more likely to be the driver in a mv/ped collision. The break-down of these collisions in Table 23 reveals a consistency in this trend across driver contributing circumstances.



APPENDIX: DEFINITIONS

Injury Types

Source - State of Washington Police Traffic Collision Report Instruction Manual and SDOT

No injury: applies when the officer at the scene has no reason to believe that, at the time of the collision, the person received any bodily harm due to the collision.

Possible Injury: any injury reported to the officer or claimed by the individual such as momentary unconsciousness, claim of injuries not evident, limping, complaint of pain, nausea, hysteria, etc.

Evident (Non-Disabling) Injury: any injury other than fatal or disabling at the scene. Includes: broken fingers or toes, abrasions, etc.

Disabling Injury: any injury which prevents the injured person from walking, driving, or continuing normal activities at the time of the collision.

Non-Traffic Fatality: a pedestrian fatality that does not meet the State of Washington's definition of a traffic fatality resulting from a motor vehicle/pedestrian collision. The one non-traffic fatality in 2006 was the result of a motor vehicle/pedestrian collision where the pedestrian died more than 30 days after the collision.

Roadway Classification Types

Source - City of Seattle Comprehensive Plan, Section 3.4 and SDOT

Residential (Non-arterial) Streets: roadways that provide localized traffic circulation, including access to neighborhood land uses, commercial and industrial land uses, and access to higher level traffic streets.

Collector Arterials: roadways that collect and distribute traffic from principal and minor arterials to local access streets or provide direct access to destinations.

Minor Arterials: roadways that distribute traffic from principal arterials to collector arterials and access streets.

Principal Arterials: roadways that are intended to serve as the primary routes for moving traffic through the city, connecting urban centers and urban villages to one another, or to the regional transportation network.

Traffic Signal Types

Source - SDOT

Mid-Block Signal: a traffic signal located between intersections. It is pedestrian activated and provides a controlled pedestrian crossing across the street. It typically remains green for the vehicular traffic until a pedestrian activates it.

Half Signal: also known as a "Pedestrian Signal". At an intersection, this signal provides control only for the vehicular traffic on the main street, while the side street will be controlled with a stop sign. It is pedestrian activated, and provides a controlled pedestrian crossing across the main street. It typically remains green for the vehicular traffic until a pedestrian activates it.

Full Signal: a traditional traffic signal located at an intersection, controlling all vehicular approaches into the intersection and pedestrian crossings with signal control. This count includes collisions at State Signals, which are traffic signals owned and operated by the Washington State Department of Transportation. These are primarily located adjacent to the freeway system, at on- and off-ramps where the City and State street systems intersect.



