

FY2016

Preliminary Crash Data 2014

district of columbia

FY2016

Highway Safety Plan

Towards Zero Deaths

JULY 1, 2015

DC HSO
District of Columbia
Highway Safety Office

NHTSA
www.nhtsa.gov

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HIGHWAY SAFETY OFFICE COORDINATOR
TRAFFIC SAFETY OFFICE CHIEF

Carole A. Lewis



This document is to be used by anyone applying for a grant with the District Highway Safety Office. The objective of this document is to provide the District's traffic crash statistics between 2010 and 2014. As a NHTSA requirement all fatality data shown are based on FARS; for 2014 preliminary FARS data were used. Serious Injuries data are from the MPD/DDOT crash database includes injuries that were coded as "Disabling Injuries" and "Non-Disabling Injuries".

As we beginning to plan for FY2016, we need to assess our current programs and practices and make the necessary improvements so we can achieve the District goal of reducing fatalities and serious injuries.

The Highway Safety Office emphasis areas are:

- Alcohol-Impaired Driving
- Occupant Protection
- Aggressive Driving
- Pedestrians and Bicycle Safety
- Motorcycle Safety
- Traffic Records

To achieve the District's goals to reduce the number of fatalities, injuries and related economic losses resulting from traffic crashes on the District's roadways. Local governments, law enforcement agencies, academic institutions, and private non-profits can apply for projects related to the HSO emphasis areas. Eligible project areas are included:

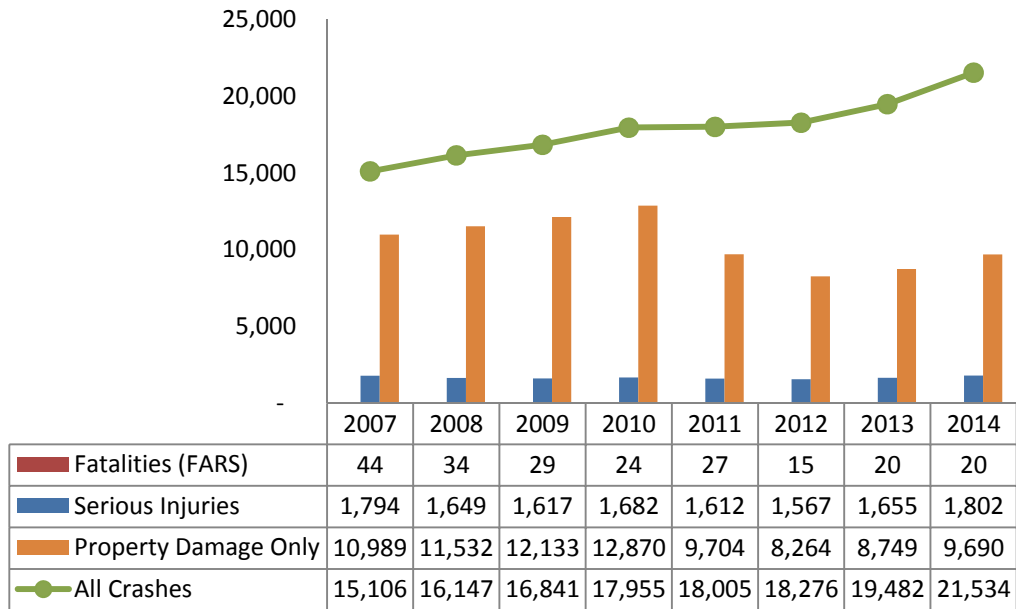
Agencies can apply for funding in the following areas:

- Alcohol Education
- Alcohol Enforcement
- DUI Prosecution
- Driver Education
- DUI / Drug Courts
- High Visibility Enforcement (HVE)
- Impaired Driving Education
- Impaired Driving Enforcement

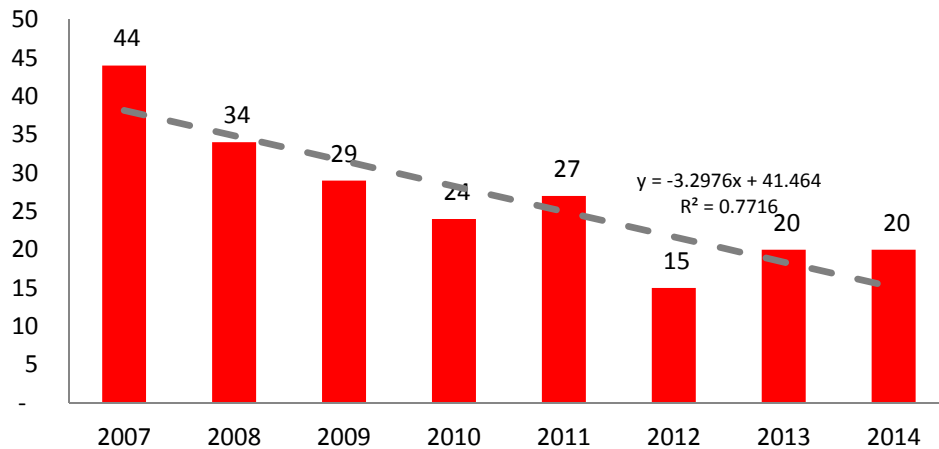
- Motorcycle Safety
- Occupant Protection
- Safe Communities
- Teen Driver Safety
- Traffic Records

Fatalities and Serious Injuries

In 2010, MPD and DDOT significantly improved recorded keeping, training MPD officers, and the crash and FEMS record management system; this resulted in an increase in the number of reported crashes. As shown below, there has been a 9.5 percent increase from 19,482 in 2013 to 21,534 in 2014.



Source: Metropolitan Police Department Crash data and FARS
 Note: 2014 FARS data are preliminary.

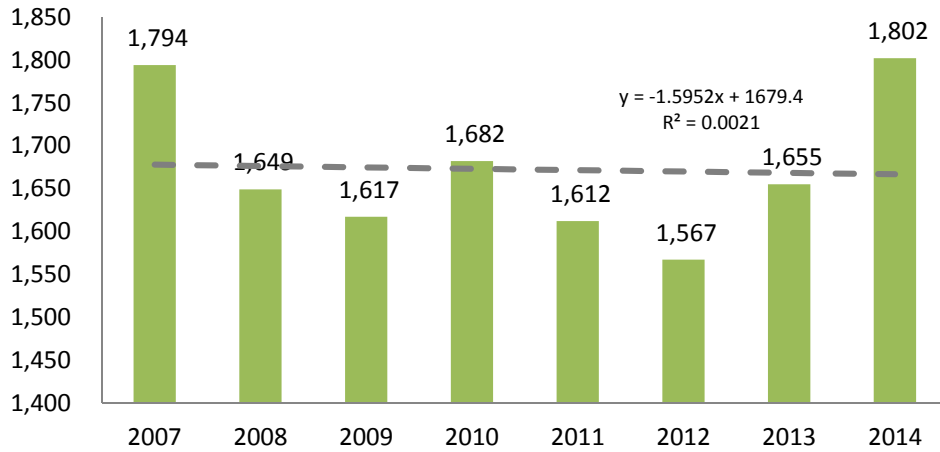


Source: Metropolitan Police Department Crash data and FARS
 Note: 2014 FARS data are preliminary.

The data also reveals that the District has seen a steady decrease in fatalities from 2007, as shown in figure above.

Based on the District’s data serious injuries are defined as Disable and Non-disabling. The data indicated an 8.9 percent increase from 2013 of 1,655 to 1,802 in 2014. However, the percentage of serious injuries compared to total crashes has remained at relatively the same – 8.5 percent in 2013 and 8.4 percent in 2014, as compared to 9.6 percent in 2009.

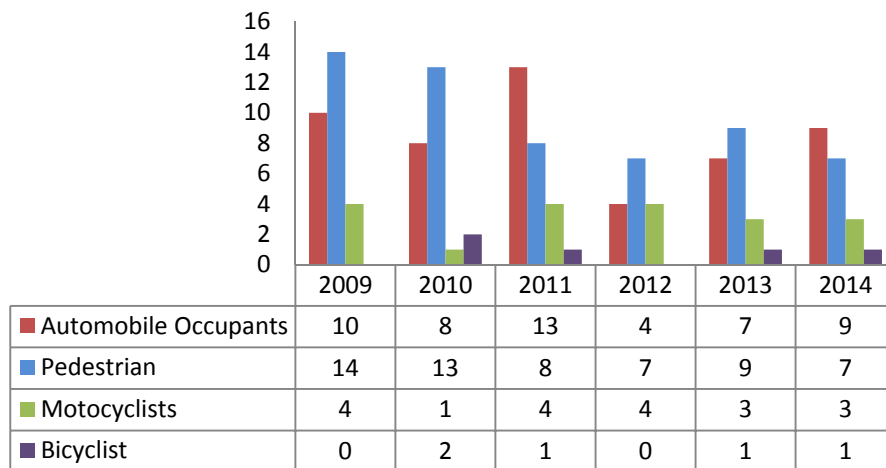
Serious Injury Trends



Source: Metropolitan Police Department Crash data

Between 2009 and 2014, automobile occupants and pedestrian accounted for the largest number of roadway users being killed, approximately 80 percent. Motorcyclist and bicyclist accounted for an average of four and one deaths per year, respectively.

Fatalities by Roadway User Group

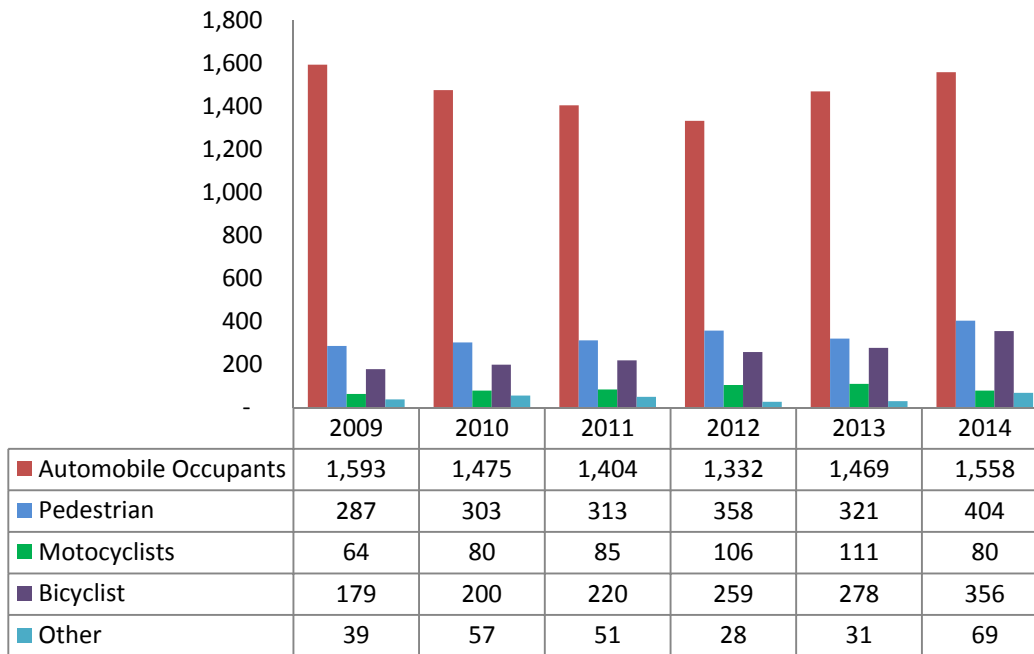


Source: FARS and Metropolitan Police Department Crash data

Note: 2014 FARS data are preliminary.

On examination of data for serious injuries, automobile occupants accounted for the largest number of people who suffered a serious injury, an average of 1,472 per year, between 2009 and 2014. Pedestrians accounted for an average of 331 per year, however it should be noted that in 2014 there was 20.5 percent increase in serious injuries from 321 in 2013 to 404 in 2014. Serious injuries involving bicyclist are also on an increase, 28 percent from 278 in 2013 and 356 in 2014. The “Other” Roadway Users consist of serious injuries occurred by moped, segway and scooter users.

Serious Injuries by Roadway User Group



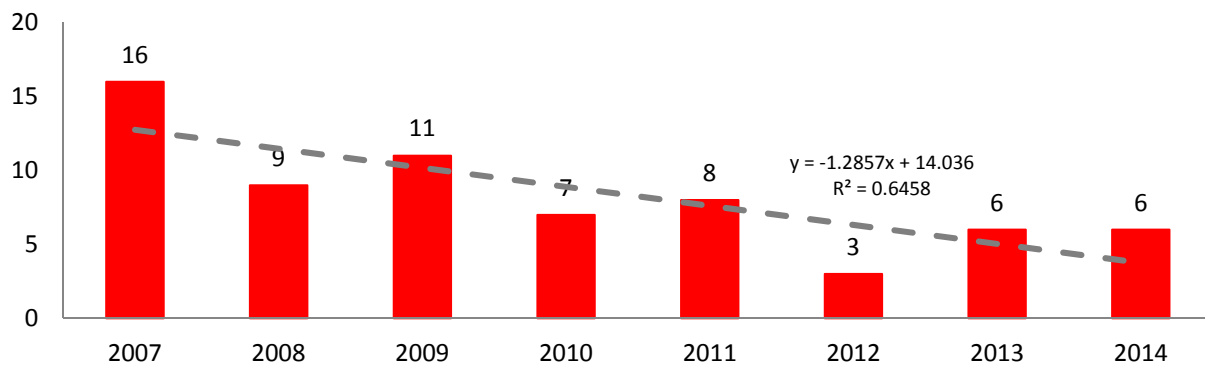
Source: Metropolitan Police Department Crash data

Alcohol-related Serious Injuries

The consumptions of alcohol and drug continue to be prominent factor in serious injuries in the District.

Below illustrates the District's Fatality trends for Alcohol-Impaired (only) fatalities, Impairment by type (Alcohol and Drug) and total Impaired-related fatalities. Based on the Districts fatality data a person can be impaired with both alcohol and drugs.

Fatalities Involving Driver, Motorcycle Operator, Pedestrian or Bicyclist with BAC=0.08+



Source: FARS and Metropolitan Police Department Crash data
 Note: 2014 FARS data are preliminary.

Drugged-impaired driving seems to be an increasing issue in the District.

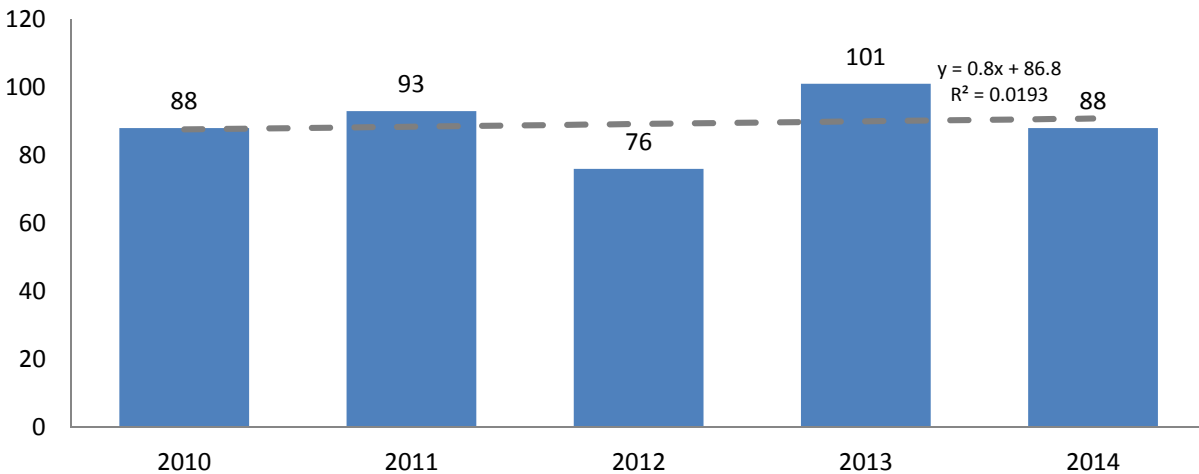
Impairment Fatalities



Source: FARS and Metropolitan Police Department Crash data
 Note: 2014 FARS data are preliminary.

The data reveals that impaired-related serious injuries are on an upward trend and in 2014 accounted for approximately 4.8 percent of all serious injuries (1,802) occurring in the District.

Impaired-Related Injuries

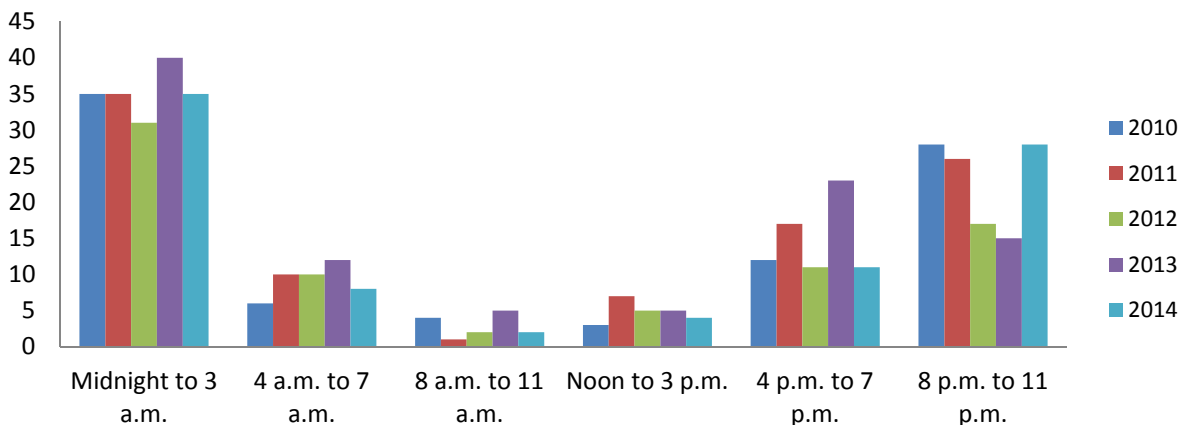


Source: Metropolitan Police Department Crash data

When are they happening

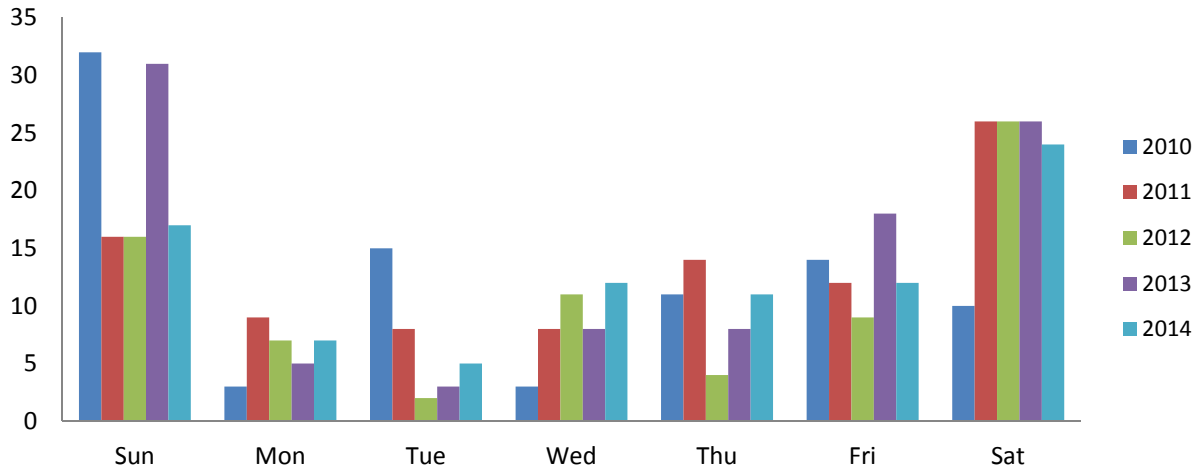
The most dangerous hours for impaired-related driving are generally between 8:00 p.m. and 3:00 a.m., Saturday and Sunday being the most dangerous day of the week, in the most of January, June, July, August and November, as illustrated in charts below. Checkforce Strikepoint campaigns runs the months of August, October, November, December, January, February –Super Bowl, March–St Patricks Day, May–Cinco de Mayo.

Serious Injuries involving an Impaired Driver By Hour



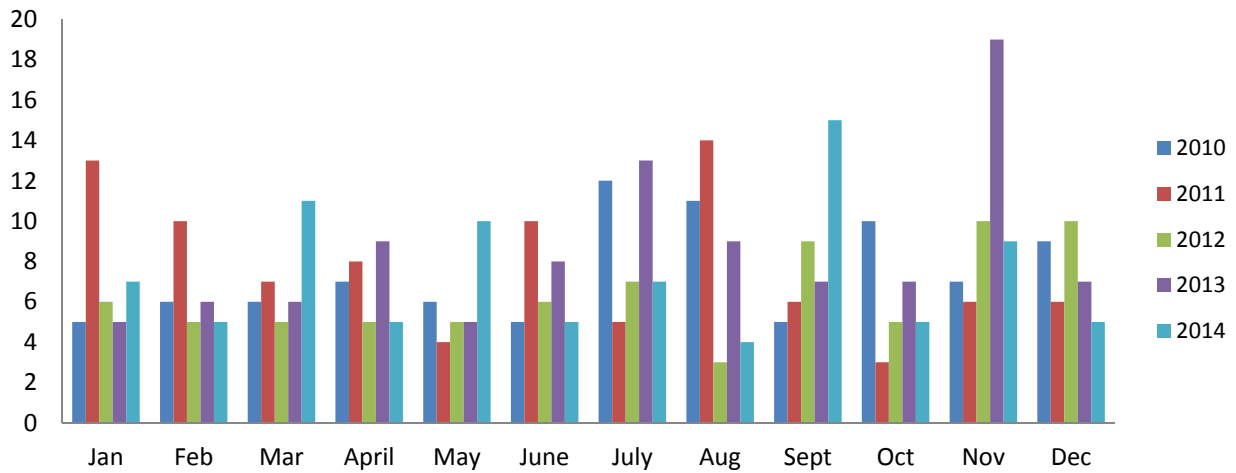
Source: Metropolitan Police Department Crash data

Serious Injuries involving an Impaired Driver by Day



Source: Metropolitan Police Department Crash data

Serious Injuries involving an Impaired Driver by Month

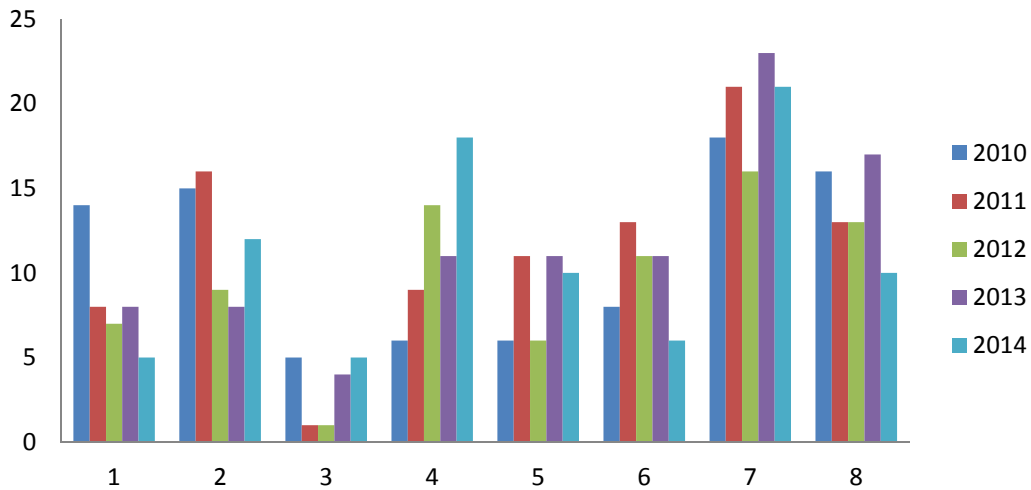


Source: Metropolitan Police Department Crash data

Where are impaired-related Serious Injuries occurring?

The data below indicates that Wards 2, 7 and 8 most of the serious injuries involving a person being impaired occurs in the District. However, in 2014 the number of serious injuries involving someone being impaired spiked in Ward 4.

Impaired-related Serious Injuries by Ward

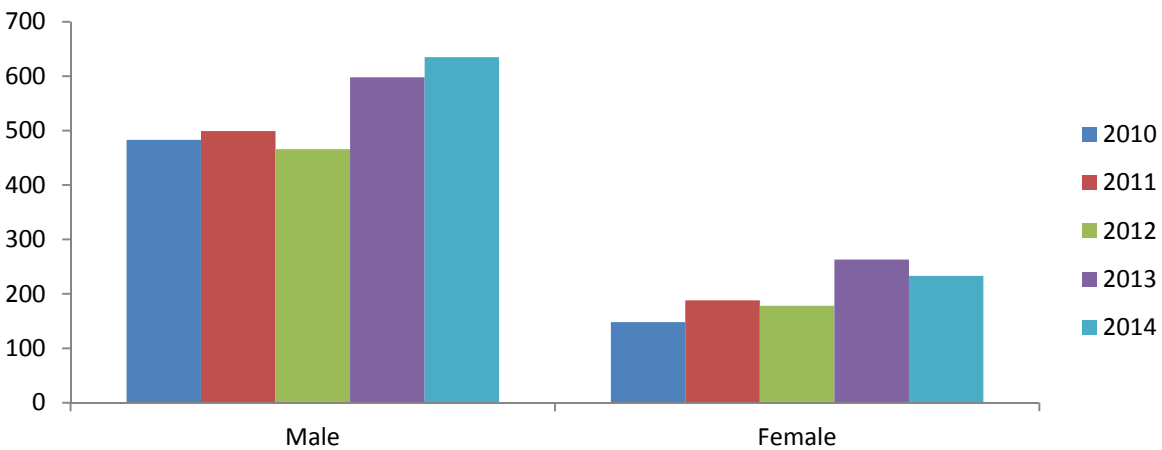


Source: Metropolitan Police Department Crash data

Who are driving impaired?

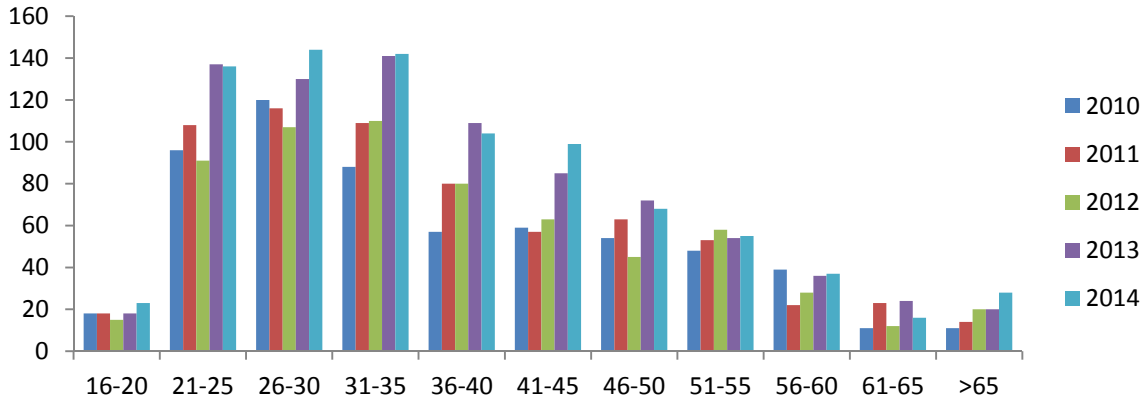
Based on the District's data of all crashes; male drivers between the ages of 21 and 35 are more likely to be impaired and drive. The figures below illustrate all impaired drivers involved in any crash; property damaged only, no injury, serious Injury and fatalities.

Impaired Driver involved in a Crash by Gender



Source: Metropolitan Police Department Crash data

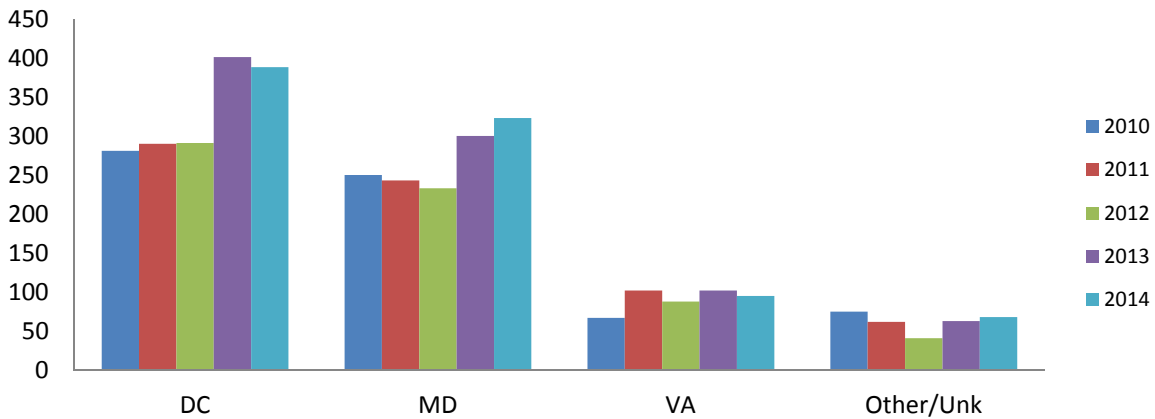
Impaired Driver involved in a Crash



Source: Metropolitan Police Department Crash data

The data also revealed that over 44 percent (388 in 2014) of all impaired drivers lived in the District and 37 percent (323 in 2014) were from Maryland. Also note that in 2014, there was a slight decrease in an impaired District residence involved in a crash and a slight increase in an impaired Maryland residence involved in a crash compared to 2013.

Impaired Driver involved in a Crash by Driver Residence

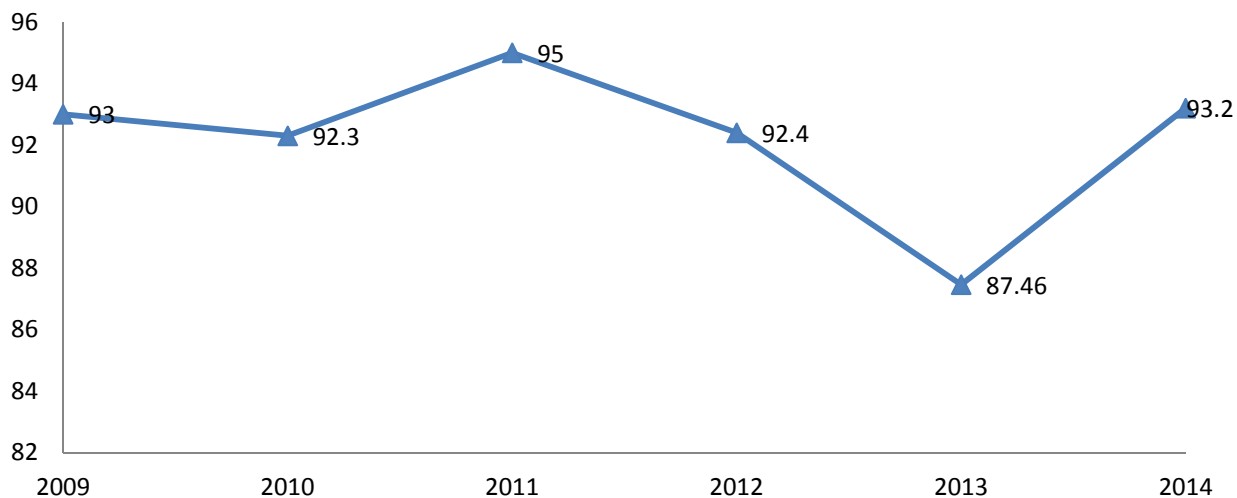


Source: Metropolitan Police Department Crash data

Occupant Protection

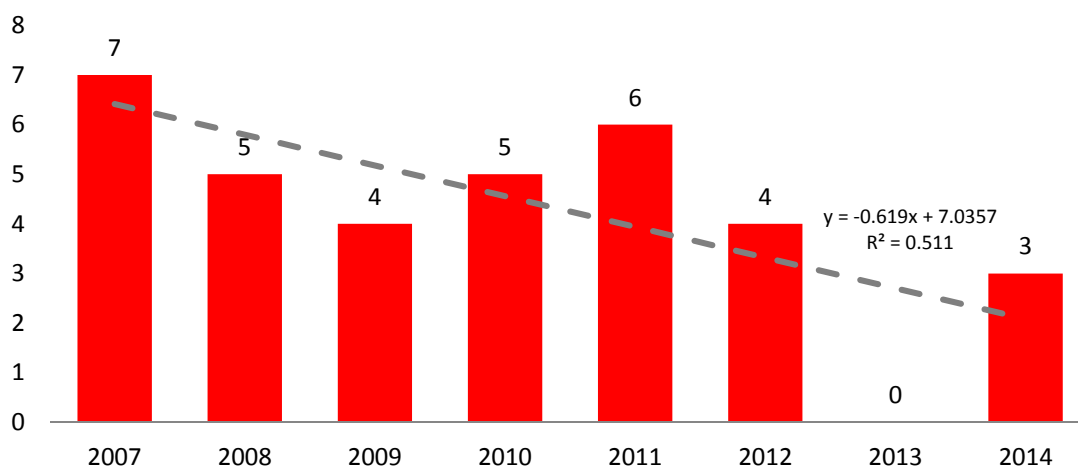
Proper and consistent use of seatbelts is the most effective protection in reducing the severity of a crash. In accordance with MAP-21 the District is rated as a high use seatbelt state for 405 funds, since in 2014 our seatbelt use rate is above 90 percent.

% Observed Belt Use for Passenger Vehicles



Unrestrained fatalities in the District is on a downward trend.

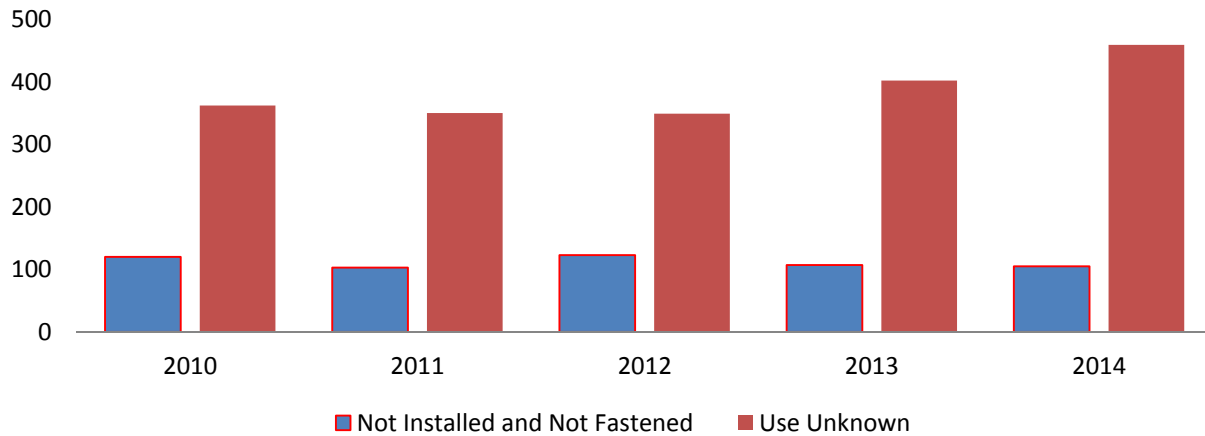
Unrestrained Fatalities



Source: FARS and Metropolitan Police Department Crash data
Note: 2014 FARS data are preliminary.

However, unrestraint serious injuries have been increasing. Unrestrained is defined as “Not Fastened” and “Not Installed”.

Unrestrained Serious Injuries

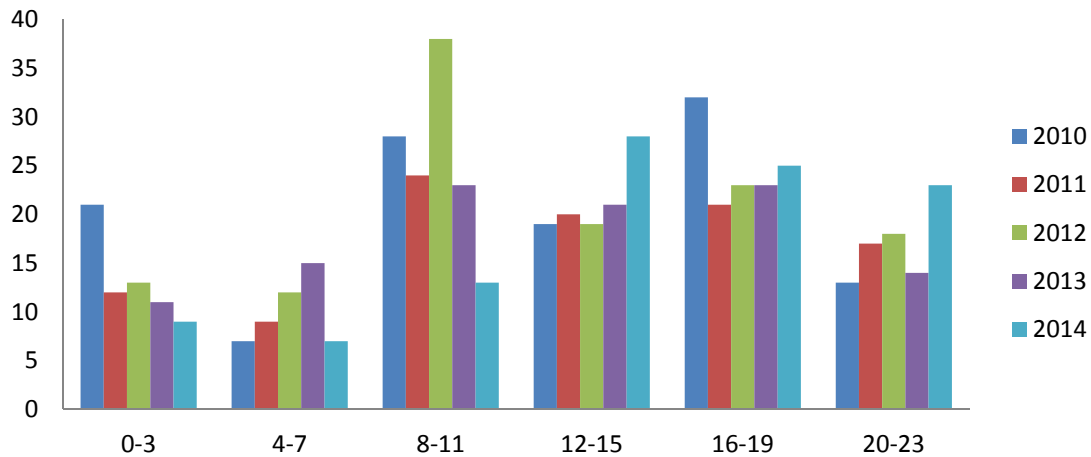


Source: Metropolitan Police Department Crash data

When are they occurring?

In 2014, the number of serious injuries occurred between 12 noon and midnight were the occupant was unrestrained.

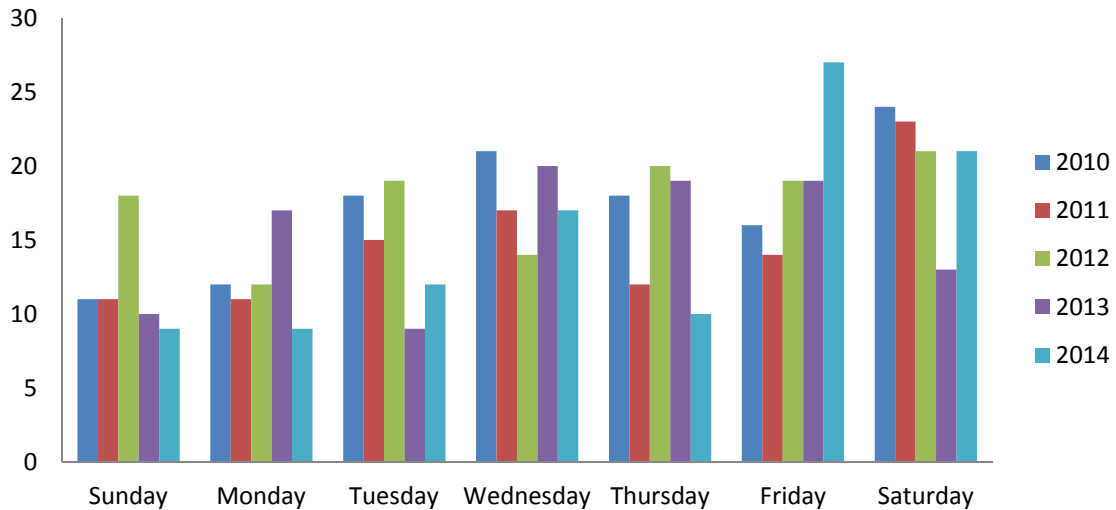
Unrestrained Occupant Serious Injuries by Hour



Source: Metropolitan Police Department Crash data

With Friday and Saturdays being the days of the week when occupants tend not to wear their seatbelts.

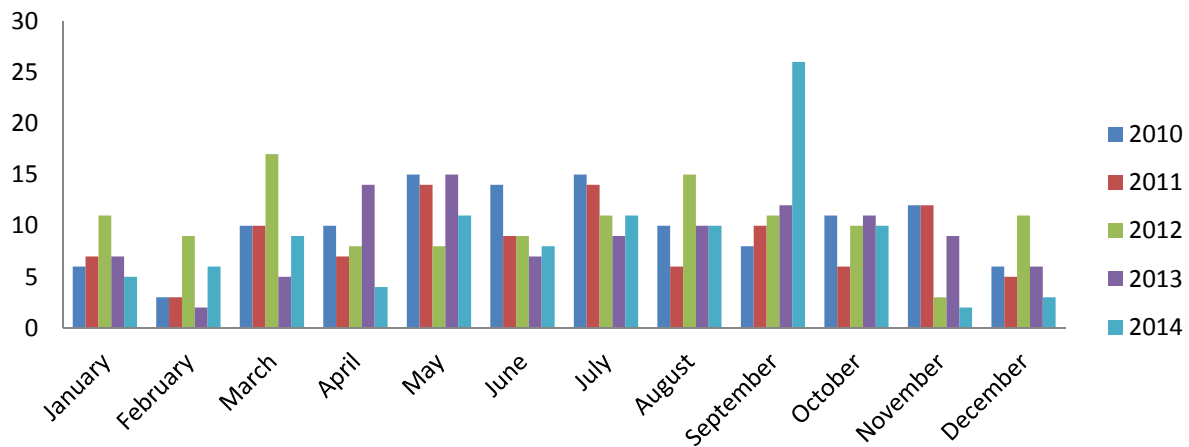
Unrestrained Occupant Serious Injuries by Day



Source: Metropolitan Police Department Crash data

Based on a 3-year average March, May, July, and September are the highest months were occupants were involved in a serious injury crash and were not wearing their seatbelts. The Districts Click It or Ticket campaigns runs in May and June, with a mini campaign in March and Child Passenger Safety enforcement conducted in September.

Unrestrained Occupant Serious Injuries by Month

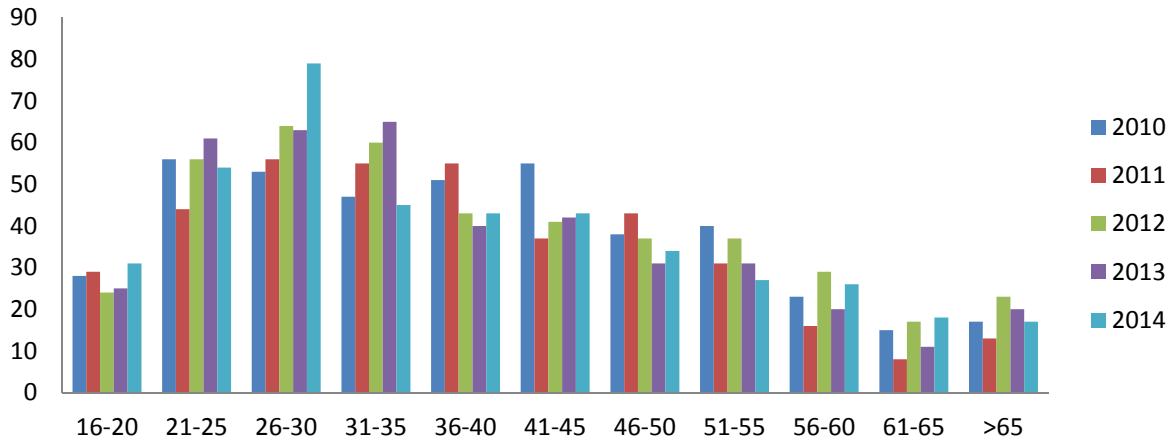


Source: Metropolitan Police Department Crash data

Occupants that are unrestrained

Based on the crash data, driver between the 21 and 35 year old are not wearing their seatbelts.

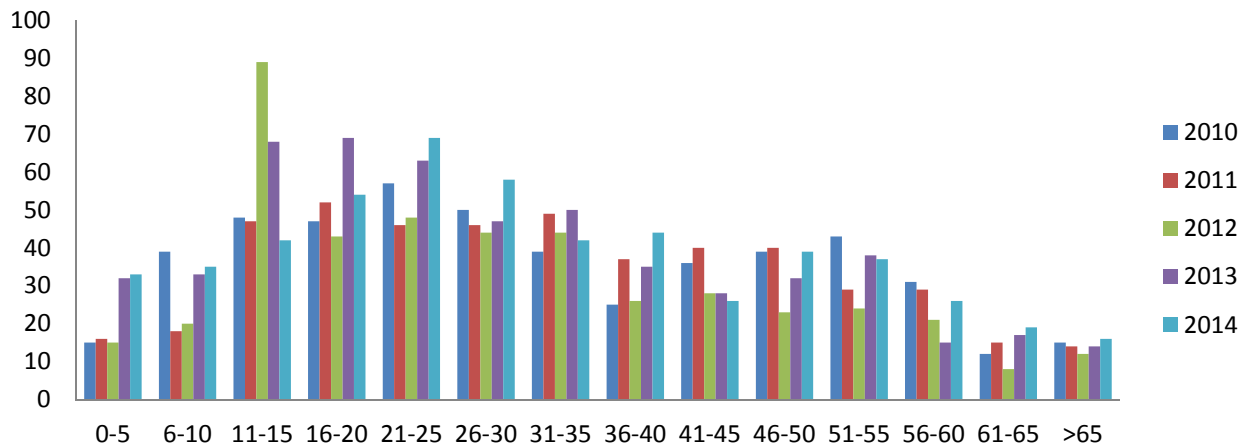
All Unrestrained Drivers involved in a Crash



Source: Metropolitan Police Department Crash data

And passengers between the ages 11 and 25 year old are not wearing their seatbelts. In 2014, there seem to be an increase between the ages of 21 and 30 years old that were involved in a crash were not restrained.

All Unrestrained Passengers involved in a Crash



Source: Metropolitan Police Department Crash data

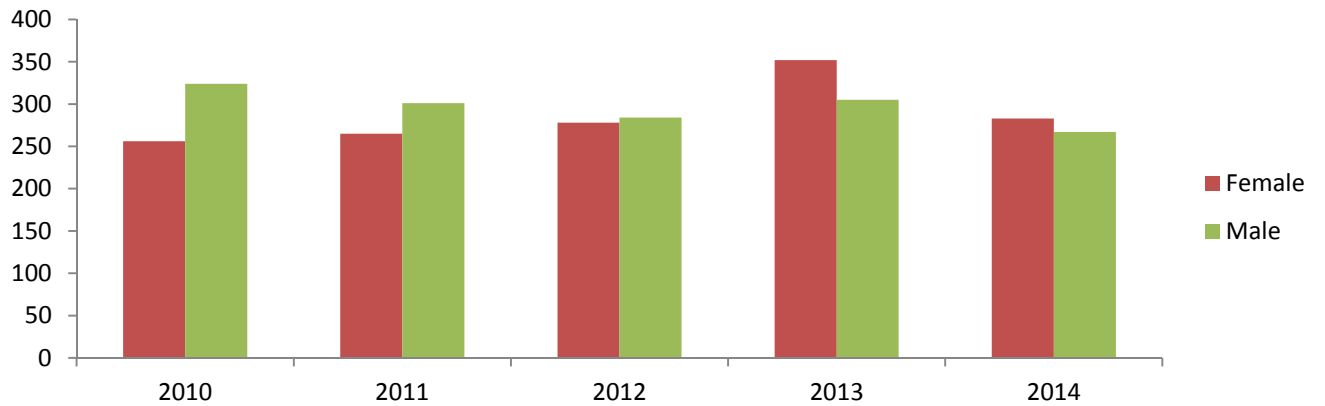
Based on the figures below; male drivers tend to drive unrestrained compared to female drivers, however there is no significant difference between male and female passengers being unrestrained.

Unrestrained Driver involved in a Crash by Gender



Source: Metropolitan Police Department Crash data

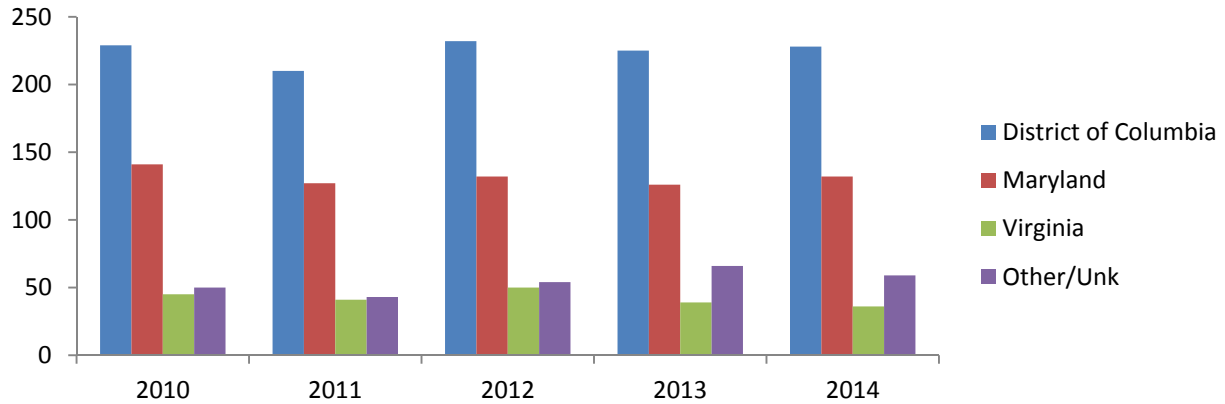
Unrestrained Passenger involved in a Crash by Gender



Source: Metropolitan Police Department Crash data

The figure below illustrates, in 2014, 50 percent of all drivers involved in a crash and was unrestrained lived in the District and 29 percent of all drivers lived in Maryland.

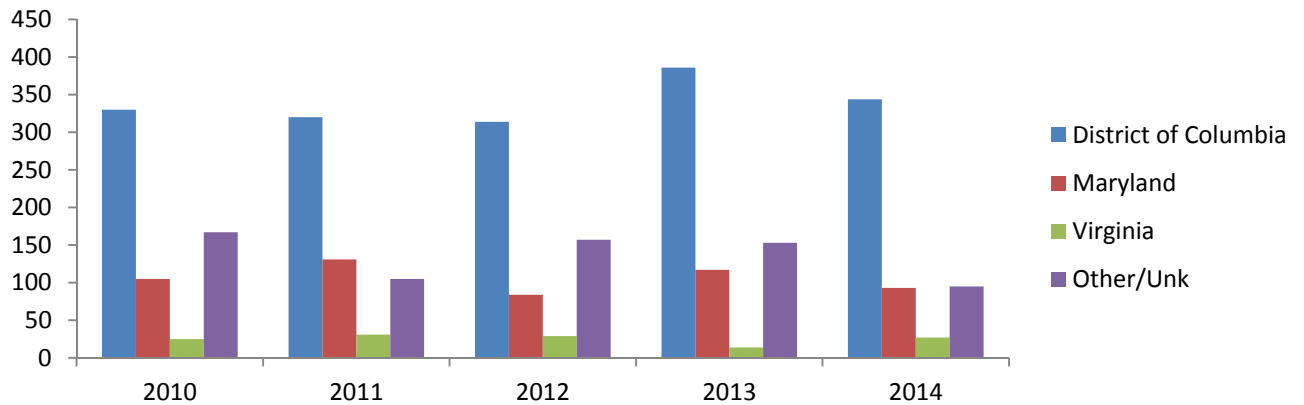
Unrestrained Drivers involved in a Crash by Residence



Source: Metropolitan Police Department Crash data

It also revealed that 57 percent of all passengers that were unrestrained lived in the District and 17 percent were from Maryland.

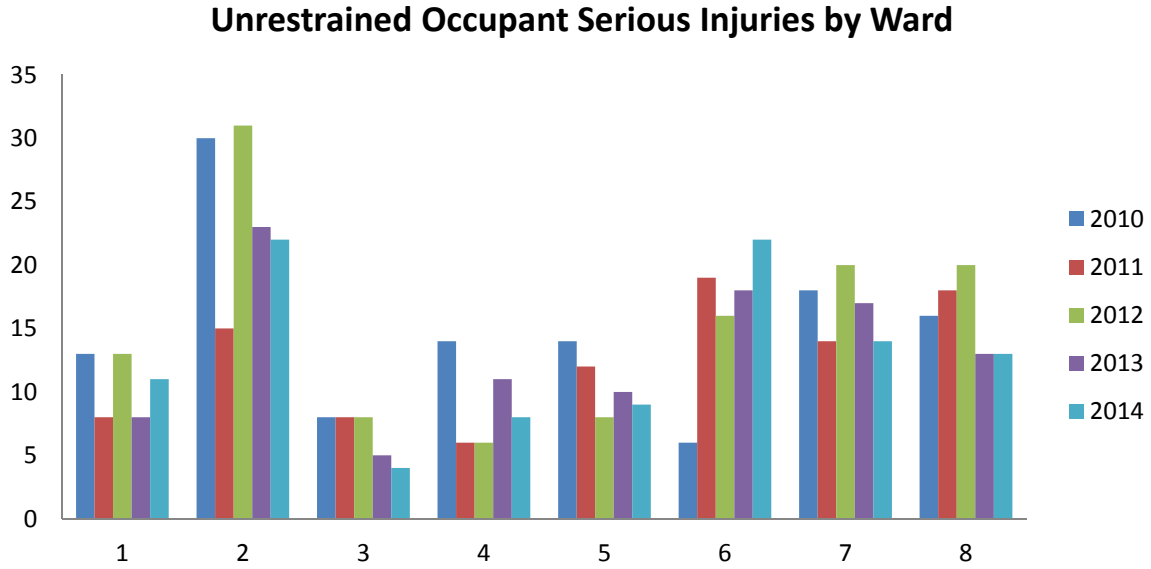
Unrestrained Passengers involved in a Crash by Residence



Source: Metropolitan Police Department Crash data

Where are they occurring?

Wards 2, 6, 7 and 8 appear to have the highest occurrences of serious injuries where drivers and passengers were travelling unrestrained and involved in a crash.

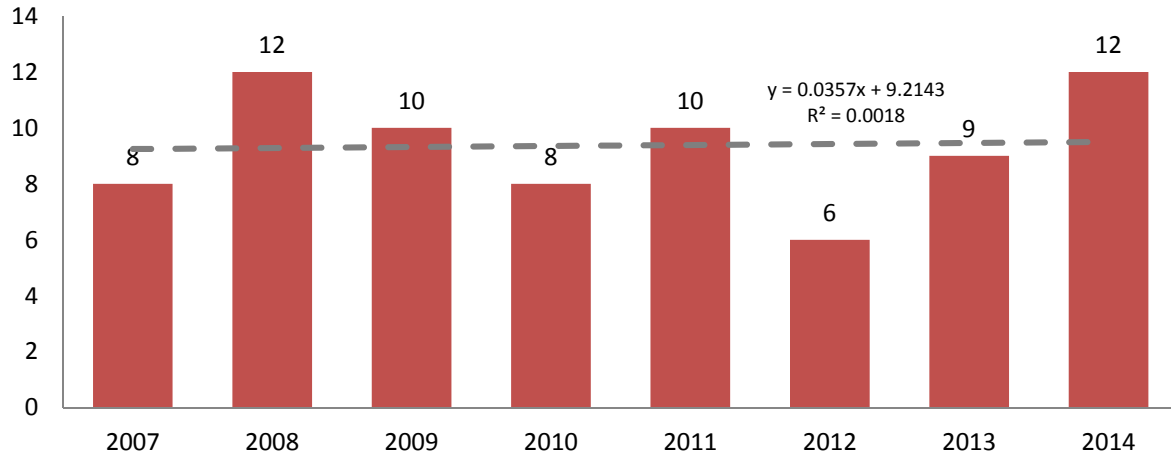


Source: Metropolitan Police Department Crash data

Aggressive Driving Related Crashes

In 2014, speeding-related fatalities accounted for 60 percent of all traffic-related fatalities (20).

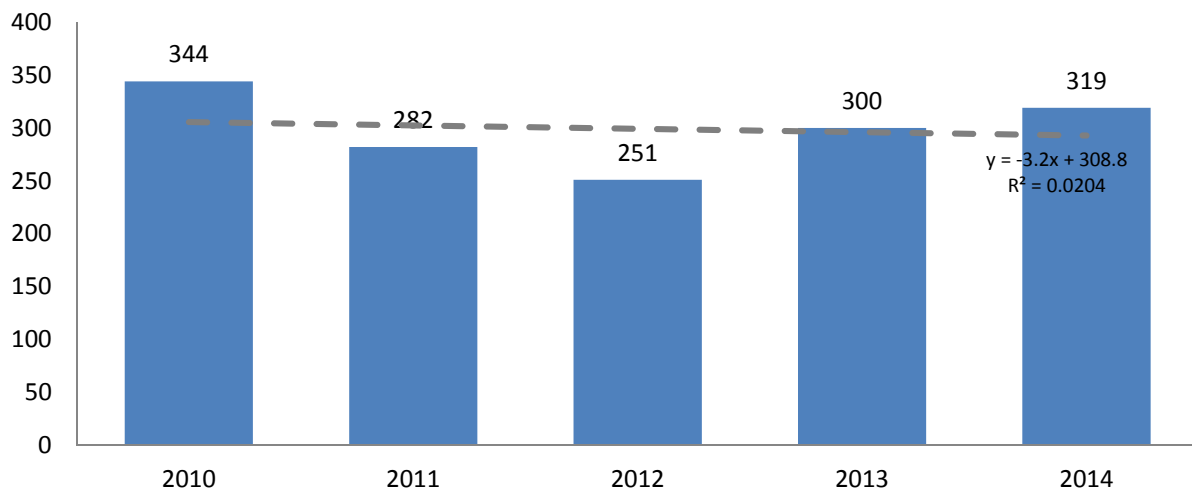
Aggressive Driving Fatalities



Source: FARS and Metropolitan Police Department Crash data
Note: 2014 FARS data are preliminary.

The FARS data reports only on speeding, however aggressive driving involves speeding, as well as factors such as, following too close, improper lane change and red-light violation behaviors. The serious injury charts includes these additional factors. In 2014, 17.6 percent of all serious injuries (1,805) were a result of an aggressive driver.

Aggressive Driving resulting in a Serious Injuries

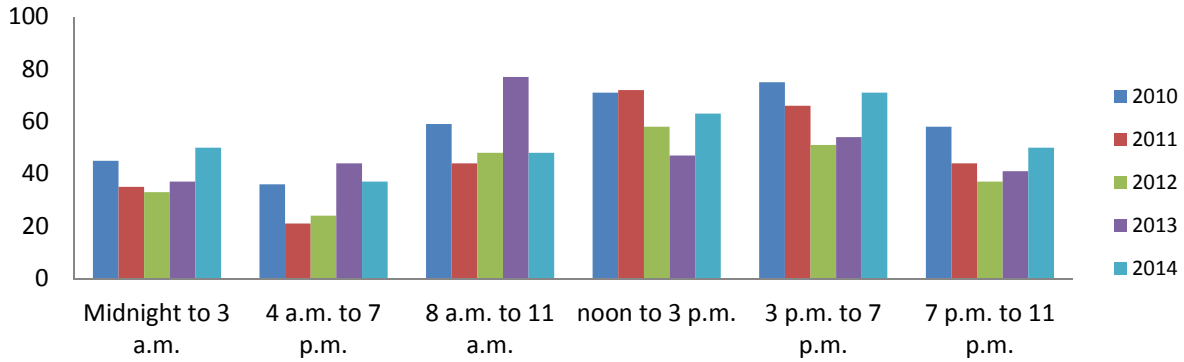


Source: Metropolitan Police Department Crash data

When are they occurring?

In 2014, the hours between noon and 3 am were the most dangerous hours for aggressive-related driving.

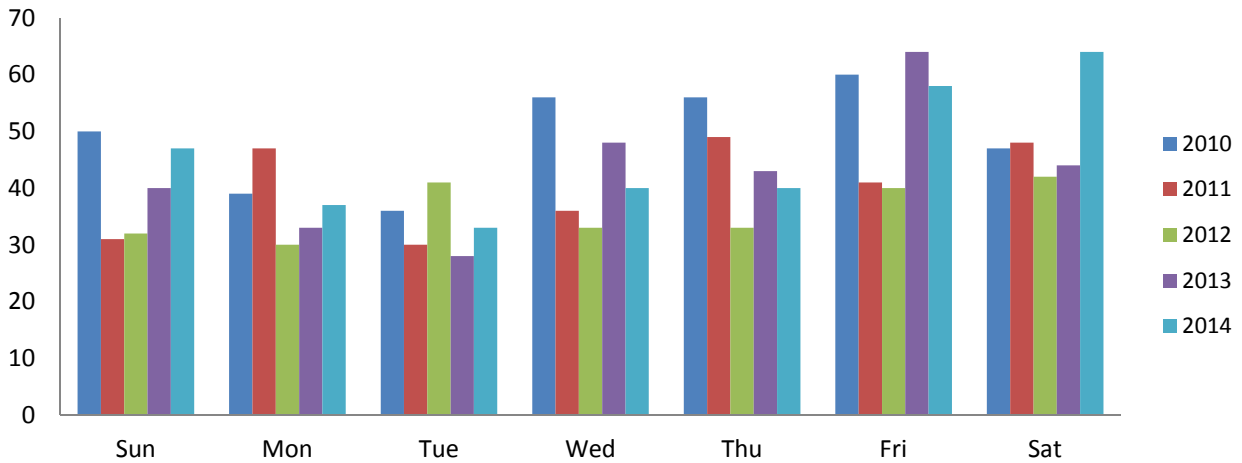
Aggressive Driving-related Serious Injuries By Time of Day



Source: Metropolitan Police Department Crash data

And occurred Fridays, Saturdays and Sundays.

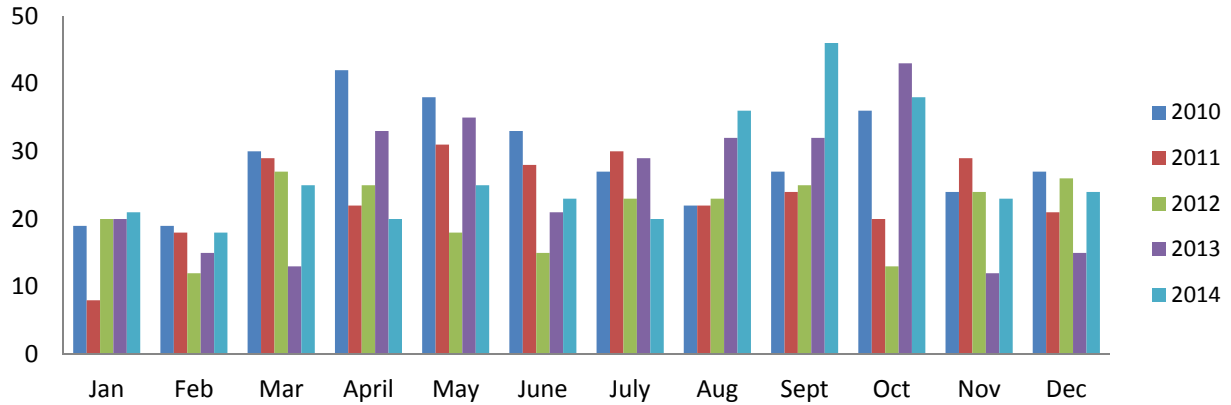
Aggressive Driving-related Serious Injuries By Day



Source: Metropolitan Police Department Crash data

Aggressive driving behavior in 2014, increased during the months of March, August, September, November and December compared to 2013. The Smooth Operator program runs in the District in June, July, August and September.

Aggressive Driving-related Serious Injuries By Month

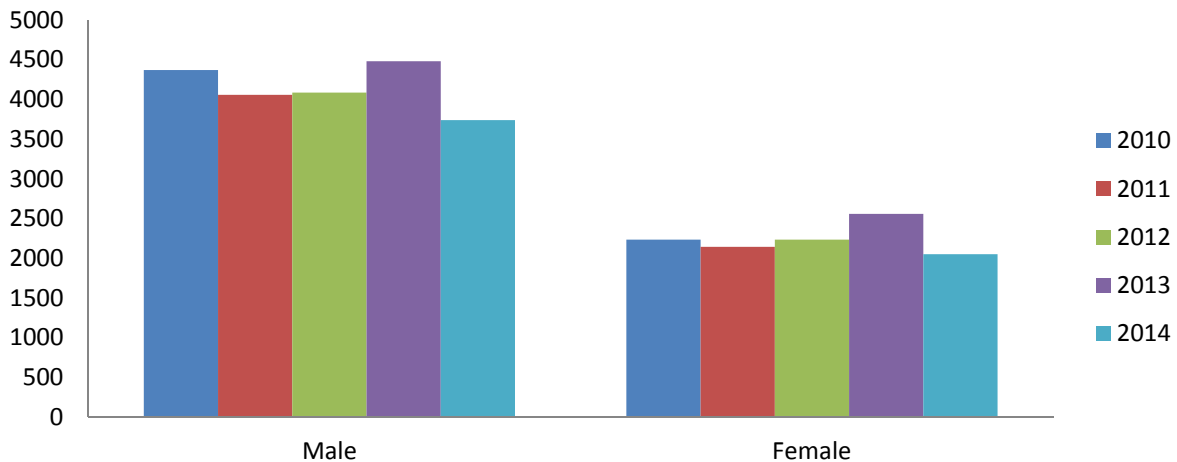


Source: Metropolitan Police Department Crash data

Who is Driving Aggressive?

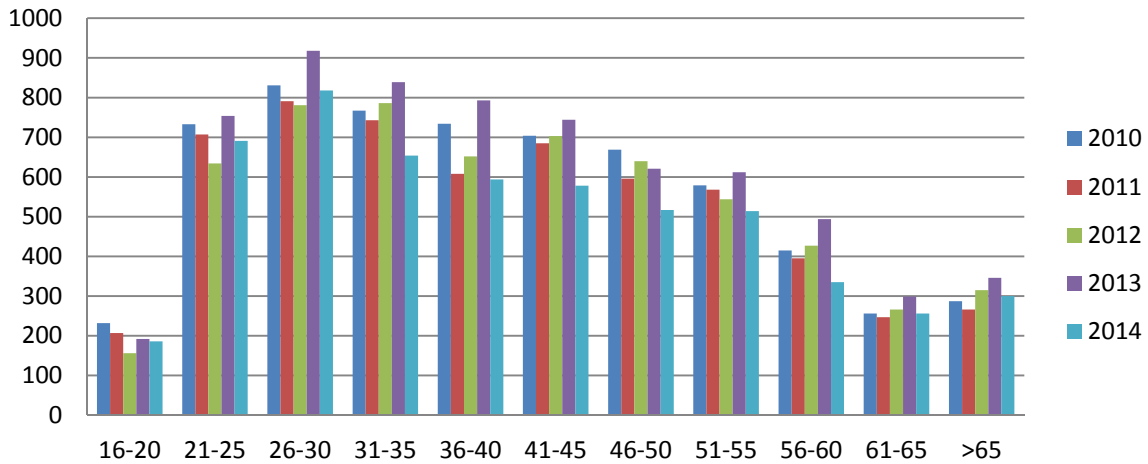
As illustrated in figures below, male drivers between the ages of 26 and 35 years old, have the highest occurrence, followed by drivers between 41 and 45 years old.

Gender of an Aggressive Driver



Source: Metropolitan Police Department Crash data

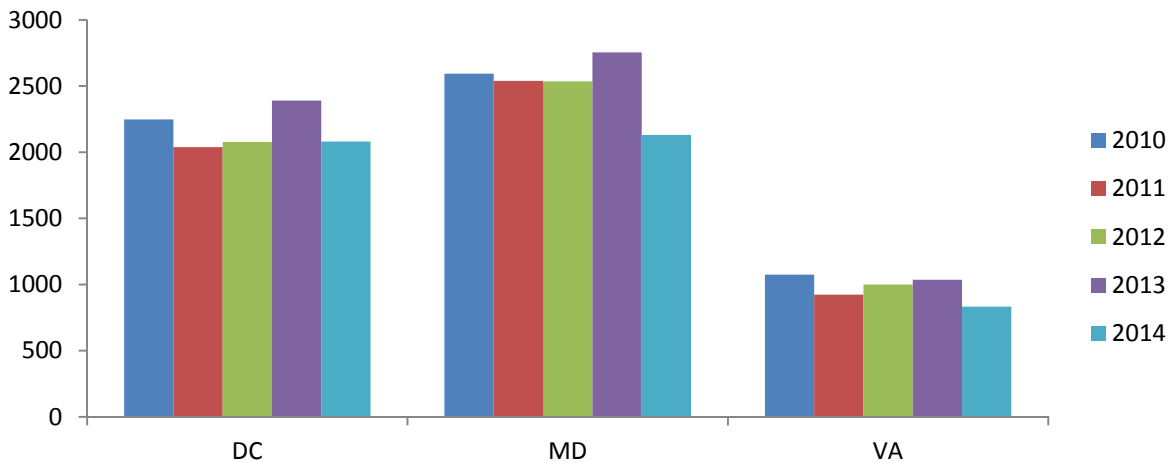
Age of an Aggressive Driver



Source: Metropolitan Police Department Crash data

The data further revealed that the Maryland residence accounts for 35 percent of all the Districts aggressive drivers; one percent greater than the District's drivers of approximately 34 percent.

Residence of an Aggressive Driver

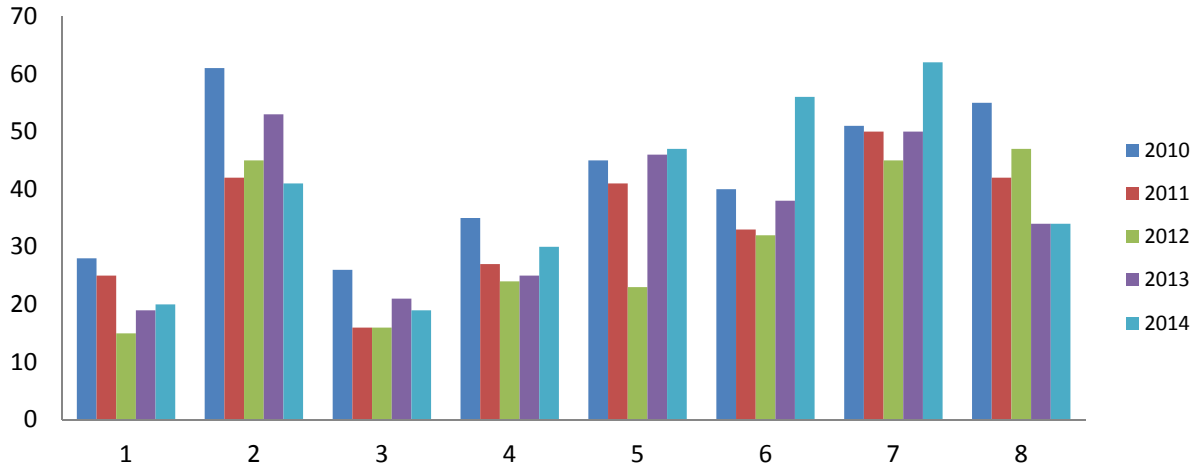


Source: Metropolitan Police Department Crash data

Where are they occurring?

In 2014, there has been an increase in aggressive driving in Wards 4, 6, and 7 that resulted in a serious injury.

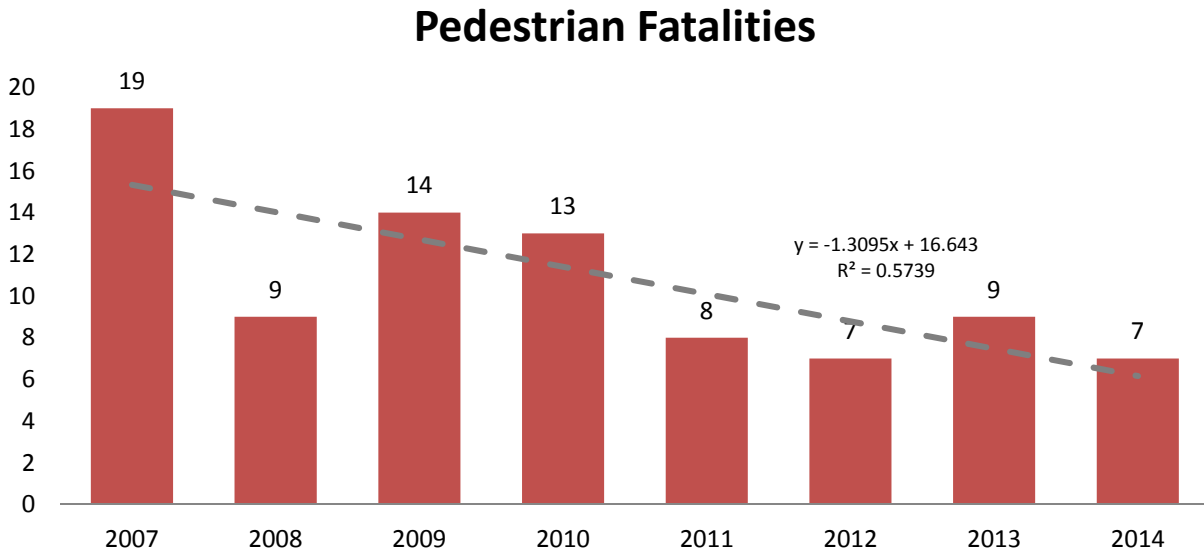
Serious Injuries involving Aggressive Driving by Ward



Source: Metropolitan Police Department Crash data

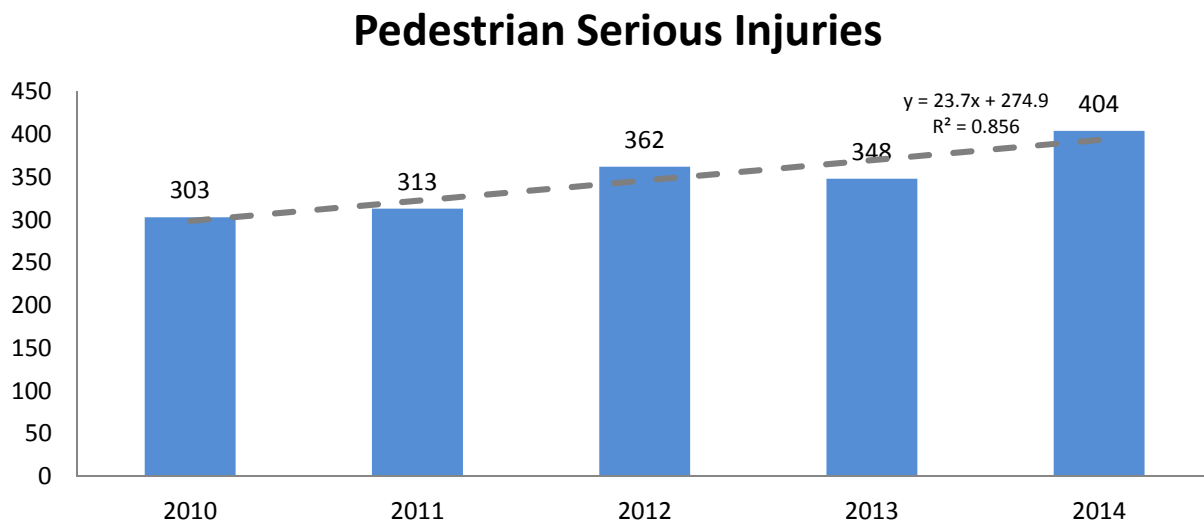
Pedestrian Crashes

In 2014, pedestrian fatalities accounted for 35 percent of all traffic-related fatalities (20), however, data from 2007 to 2014, shows a decreasing trend.



Source: FARS and Metropolitan Police Department Crash data
Note: 2014 FARS data are preliminary.

However, serious injuries are on an upward trend. In 2014, there was a 16.1 percent increase from 348 in 2013 to 404 in 2014.

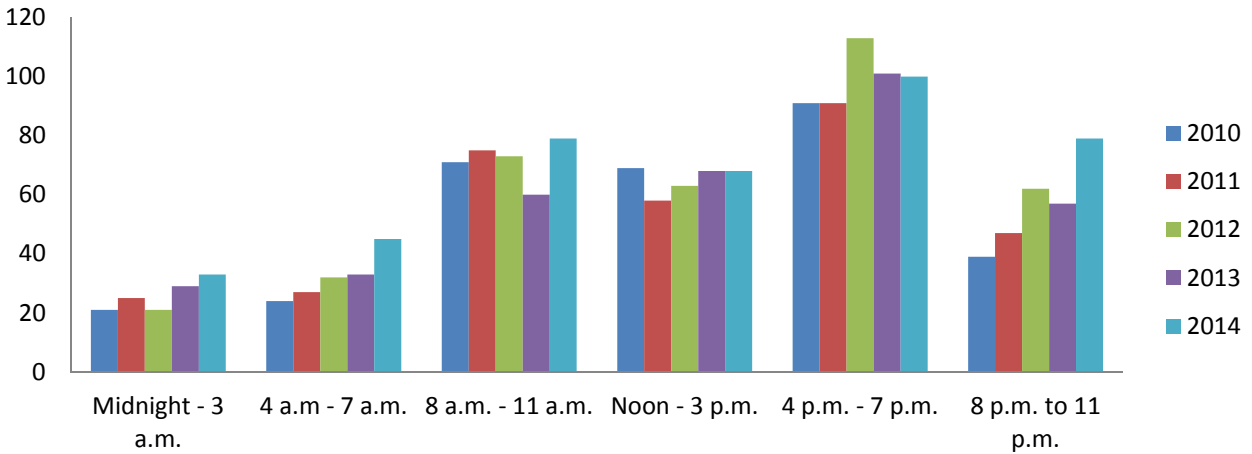


Source: Metropolitan Police Department Crash data

When are they happening?

The most dangerous hours where serious injuries occur where a pedestrian was involved was between 8 am and 7 pm. However, in 2014 there was a significant increase between 8 pm and 11 pm, compared to 2013.

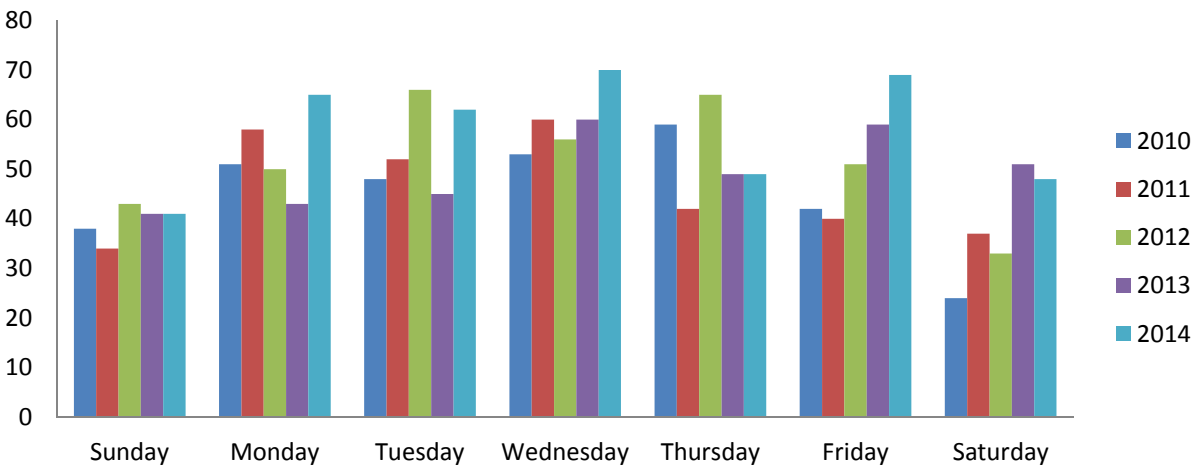
Pedestrian-related Serious Injuries by Time of Day



Source: Metropolitan Police Department Crash data

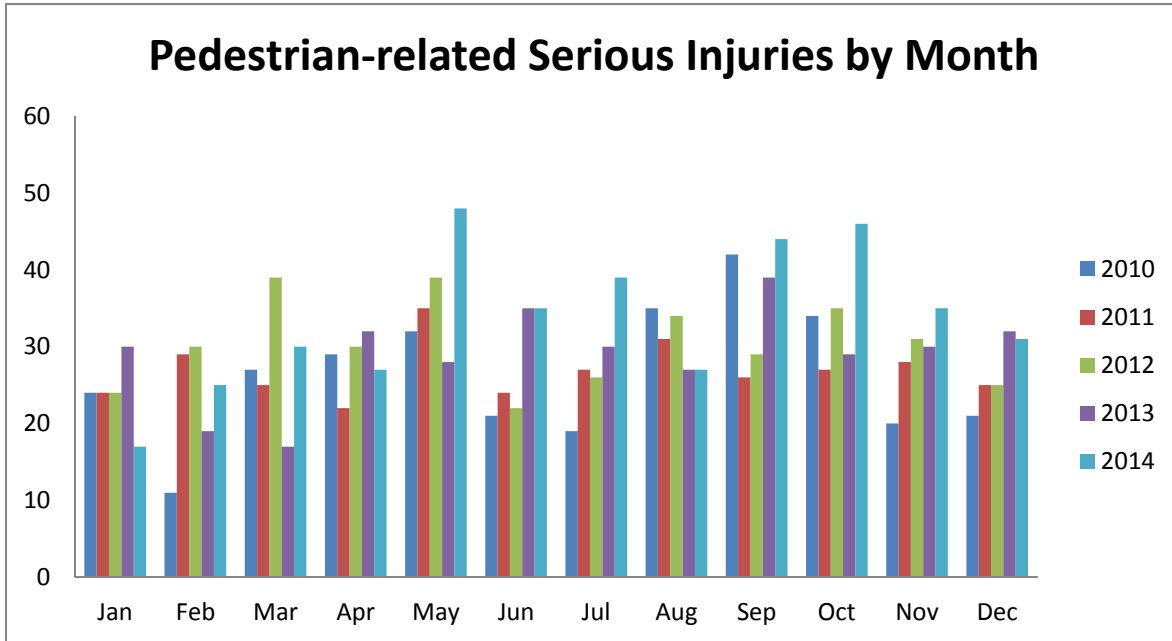
Serious injuries crashes involving pedestrians occurred during the work week; Monday thru Friday.

Pedestrian-related Serious Injuries by Day



Source: Metropolitan Police Department Crash data

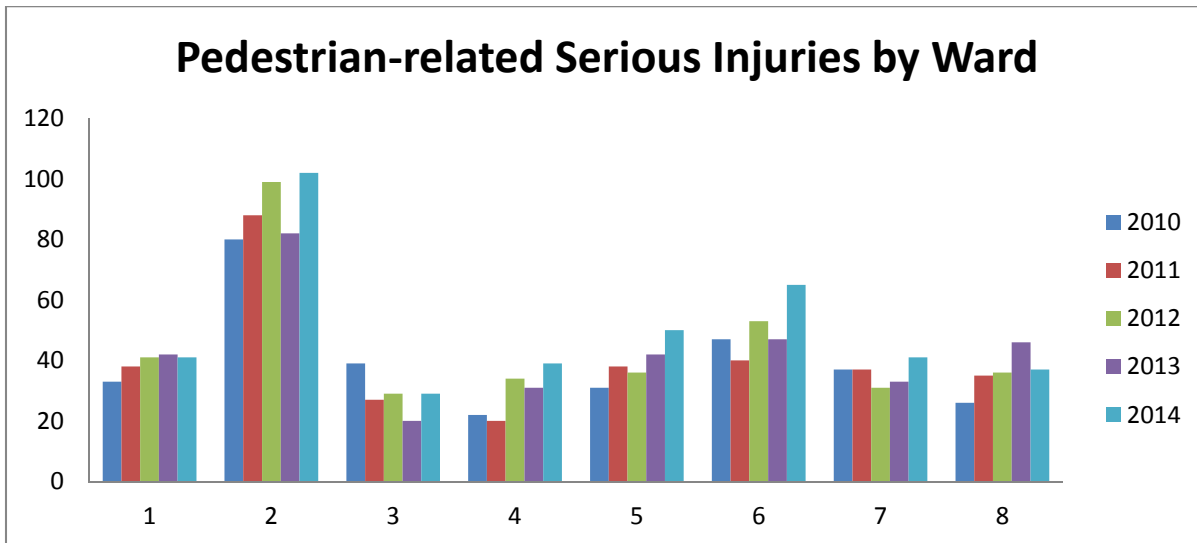
The most dangerous months where pedestrian serious injuries occurred during the months of May, September, October and November.



Source: Metropolitan Police Department Crash data

Where They Happened

Pedestrian-related serious injury crash occurred in wards 2 and 6.

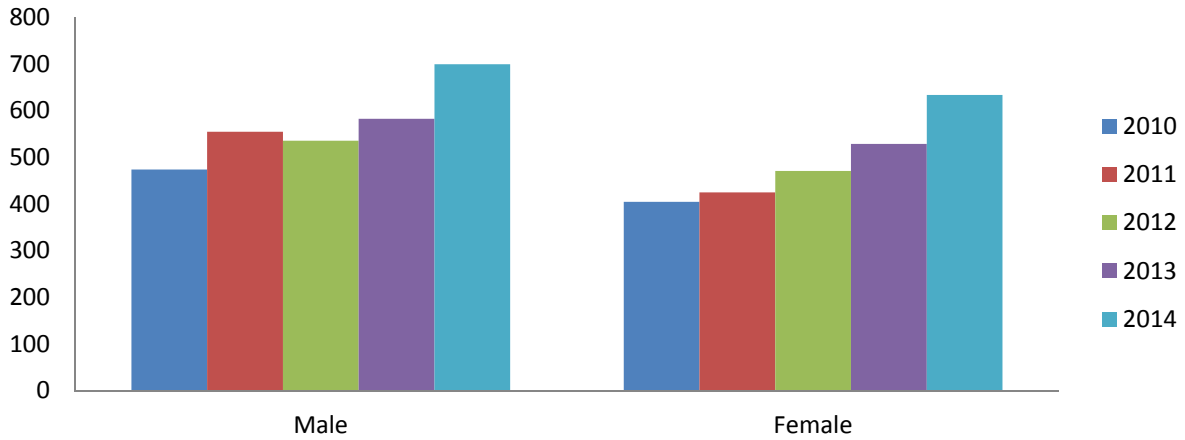


Source: Metropolitan Police Department Crash data

Who are involved?

The data revealed that both male and female pedestrians were equally involved in a crash.

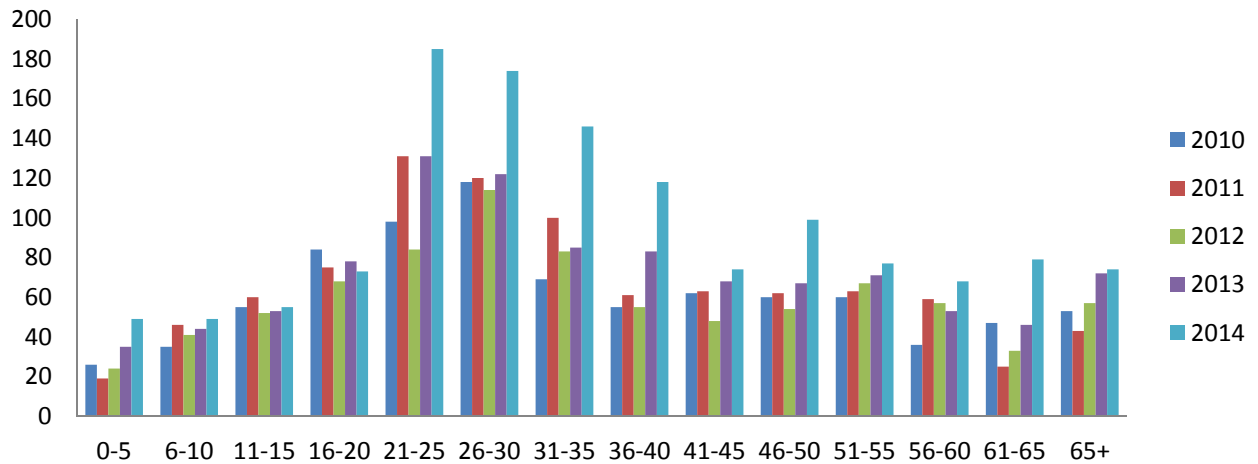
Gender of Pedestrians involved in a Crash



Source: Metropolitan Police Department Crash data

As shown in the figures below, pedestrian between 21 and 35 years old are the most likely to be involved in a crash.

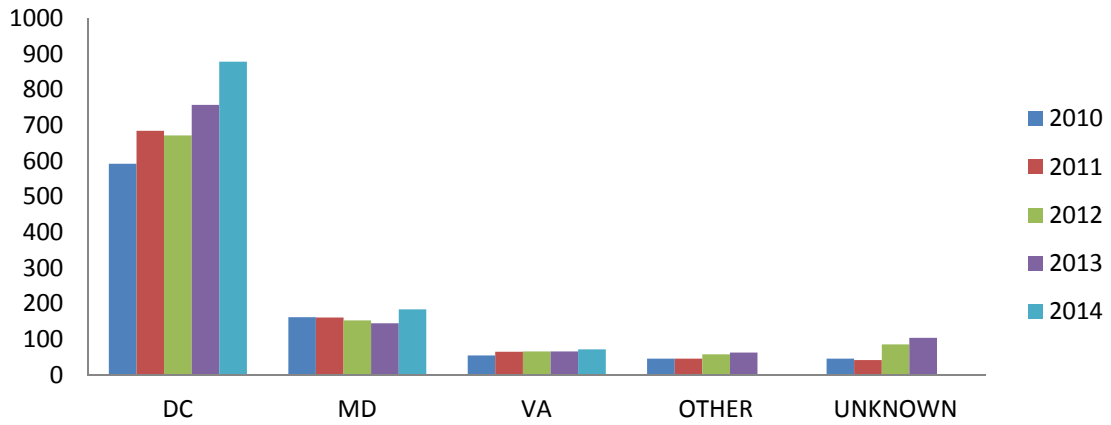
Age of Pedestrians involved in a Crash



Source: Metropolitan Police Department Crash data

The figures below illustrates that majority of the pedestrians are residence of the District.

Residence of Pedestrian involved in Crash

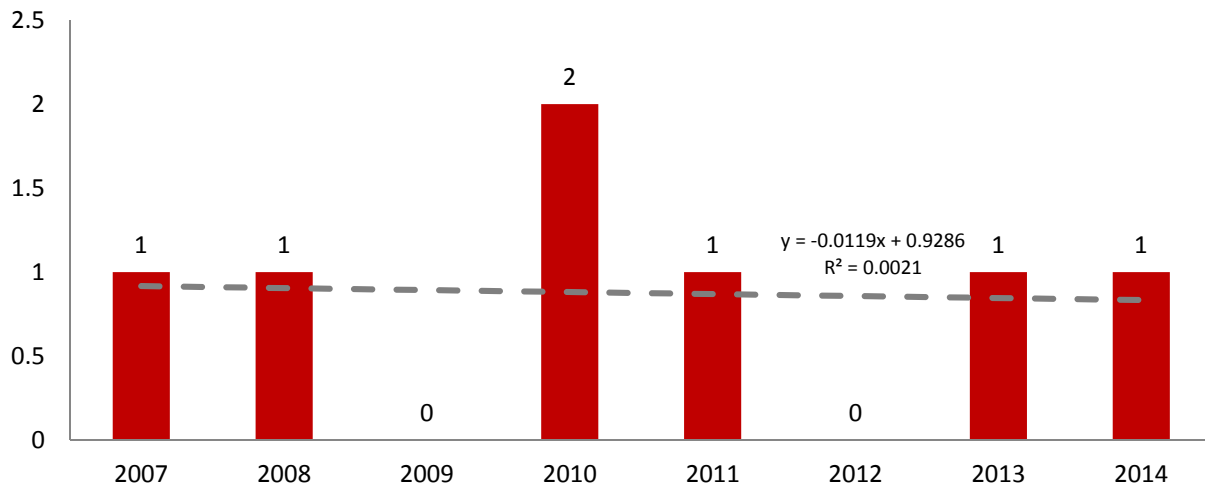


Source: Metropolitan Police Department Crash data

Bicycle Crashes

Bicyclists are among the most vulnerable roadway users and when involved in a crash with a motor vehicle they suffer serious injuries than the vehicle occupants.

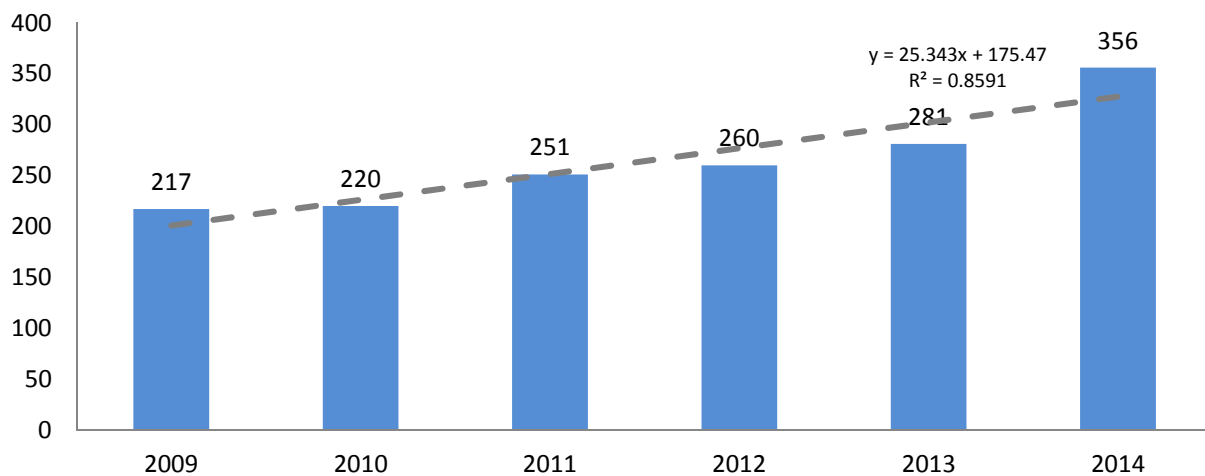
Bicycle Fatalities



Source: FARS and Metropolitan Police Department Crash data
Note: 2014 FARS data are preliminary.

As shown in figure below; in 2014 there was a 26.7 percent increase bicyclist-related injuries.

Bicyclist Serious Injuries

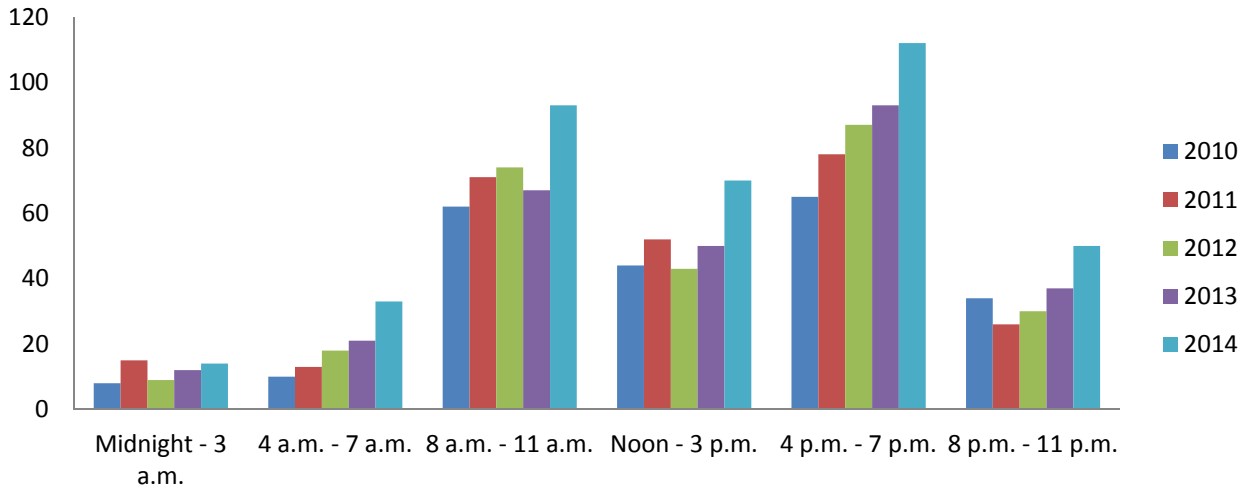


Source: Metropolitan Police Department Crash data

When are they happening?

The most dangerous hours where serious injuries occur where a bicyclist was involved was between 8 am and 7 pm.

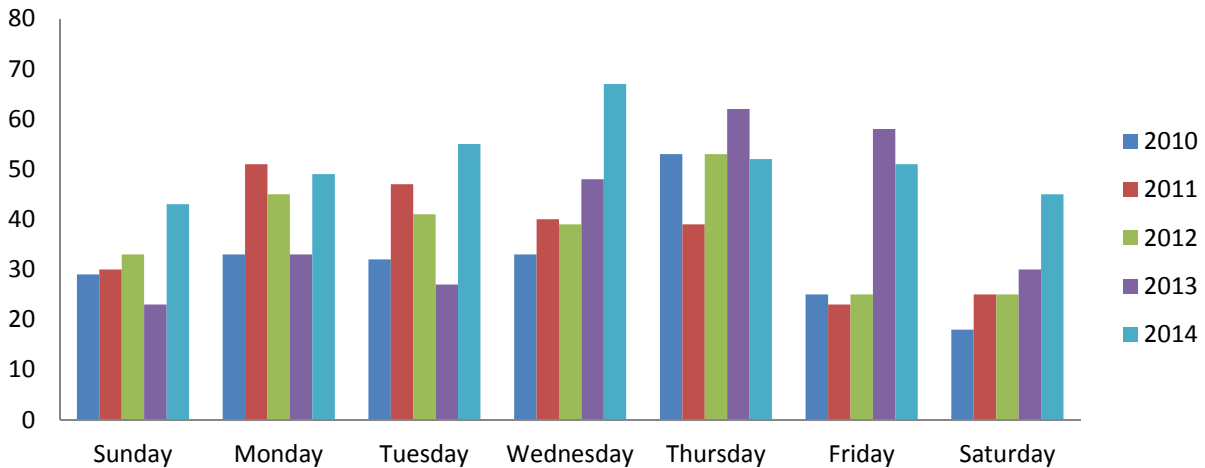
Bicycle-related Serious Injuries by Hour



Source: Metropolitan Police Department Crash data

Serious injuries crashes involving bicyclist occurred on Tuesdays, Wednesdays, and Fridays.

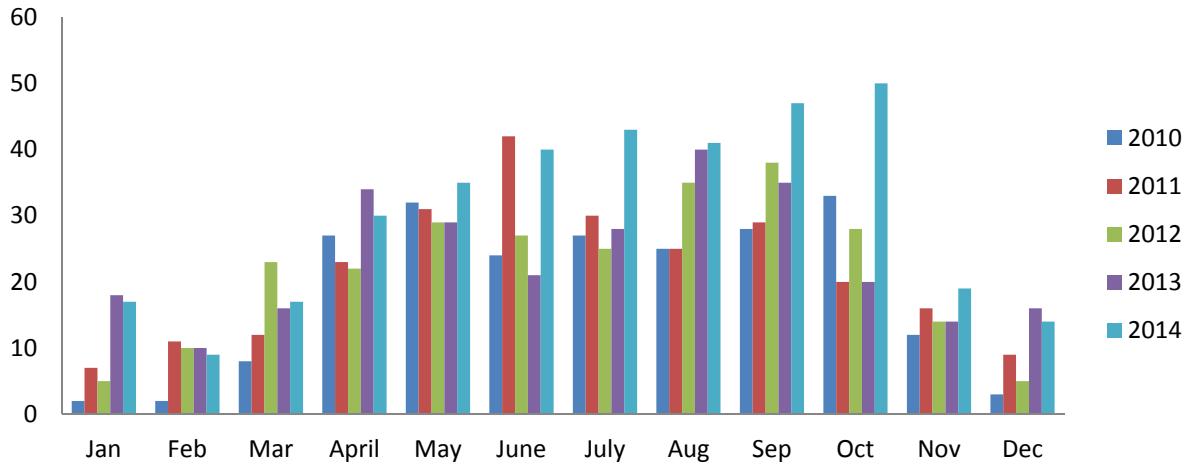
Bicycle-related Serious Injuries by Day



Source: Metropolitan Police Department Crash data

The months of April through October are the highest number of bicycle –related serious injuries occurred.

Bicyclist-Related Serious Injuries by Month

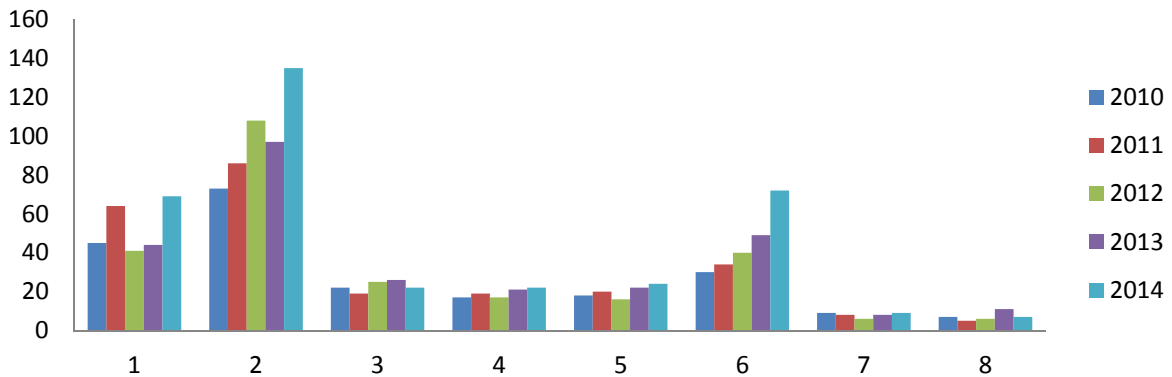


Source: Metropolitan Police Department Crash data

Where They Happened

Bicyclist-related serious injury crash occurred in wards 1, 2 and 6.

Bicycle-related Serious Injuries by Ward

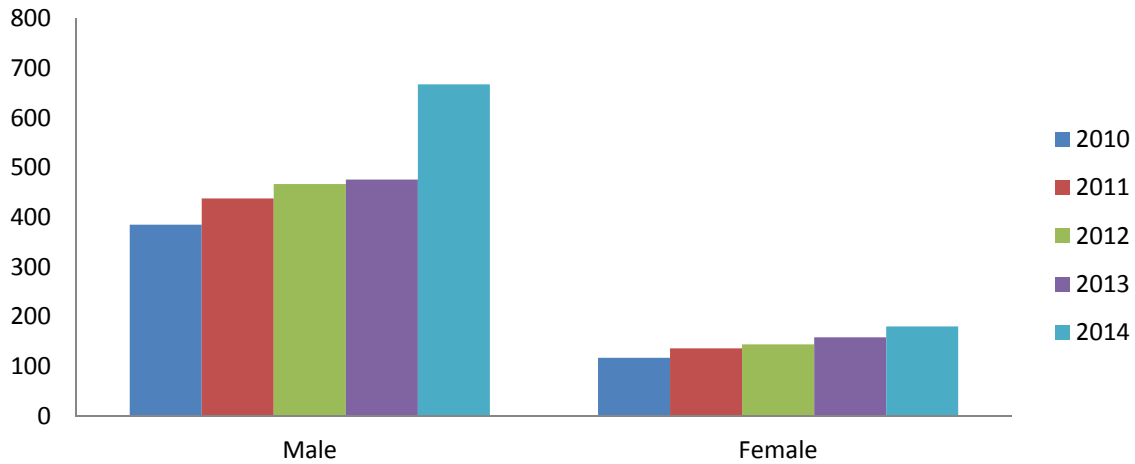


Source: Metropolitan Police Department Crash data

Who are involved?

The data revealed that male bicyclists are more likely to be involved in a crash than a female bicyclist.

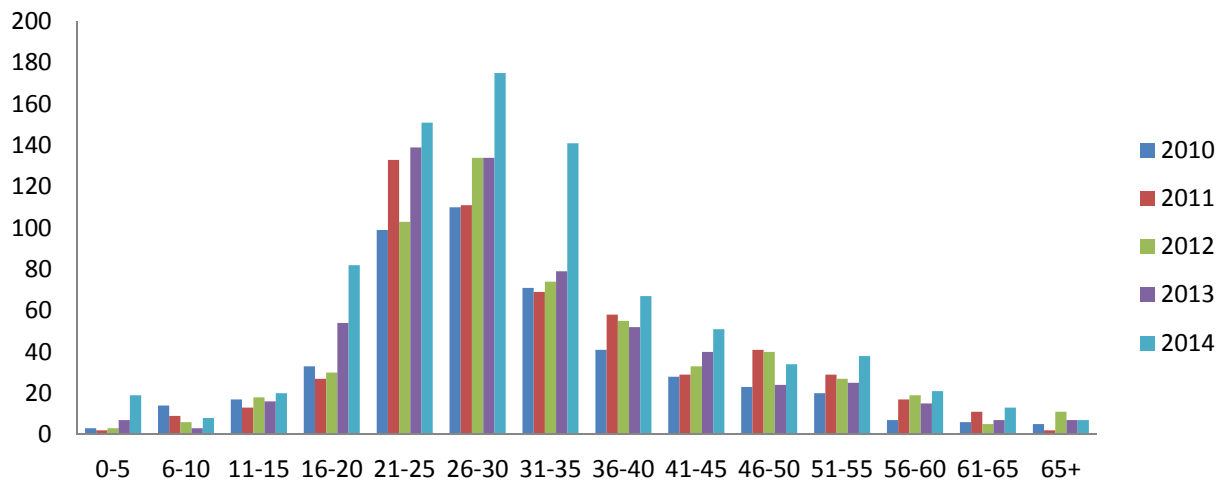
Bicyclist Gender in a Crash



Source: Metropolitan Police Department Crash data

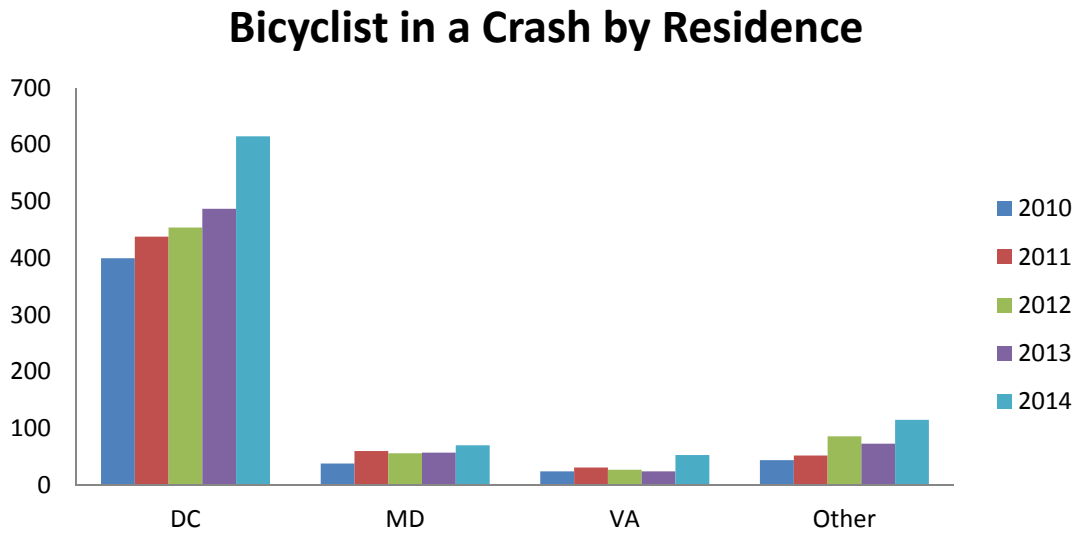
As shown in the figures below, pedestrian between 16 and 35 years old and bicyclist ages between 21 and 40 years are the most likely to be involved in a crash.

Bicyclist involved in a Crash by Age



Source: Metropolitan Police Department Crash data

The figures below illustrates that majority of bicyclists are residence of the District.



Source: Metropolitan Police Department Crash data

Motorcycle-related Crashes

Motorcyclist crashes are a unique and severe problem and as many analyses have demonstrated, motorcyclists are far more likely to be more severely injured in a collision than car occupants.

In 2014, motorcyclist fatalities accounts for 15 percent of all the District's fatalities.

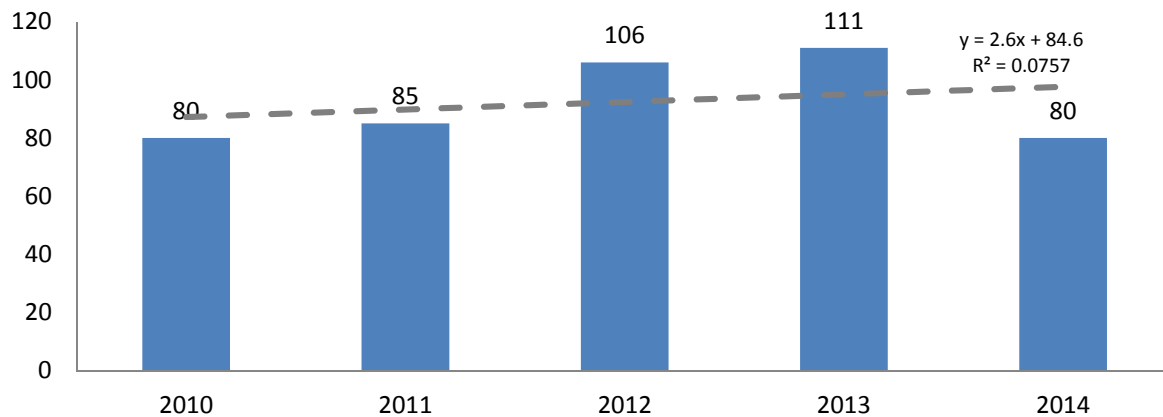
Motorcyclist-Related Fatalities



Source: FARS and Metropolitan Police Department Crash data
Note: 2014 FARS data are preliminary.

The data shows that in the District motorcyclist involved in a serious injury are increasing; however there was a 28 percent decrease from 111 in 2013 to 80 in 2014.

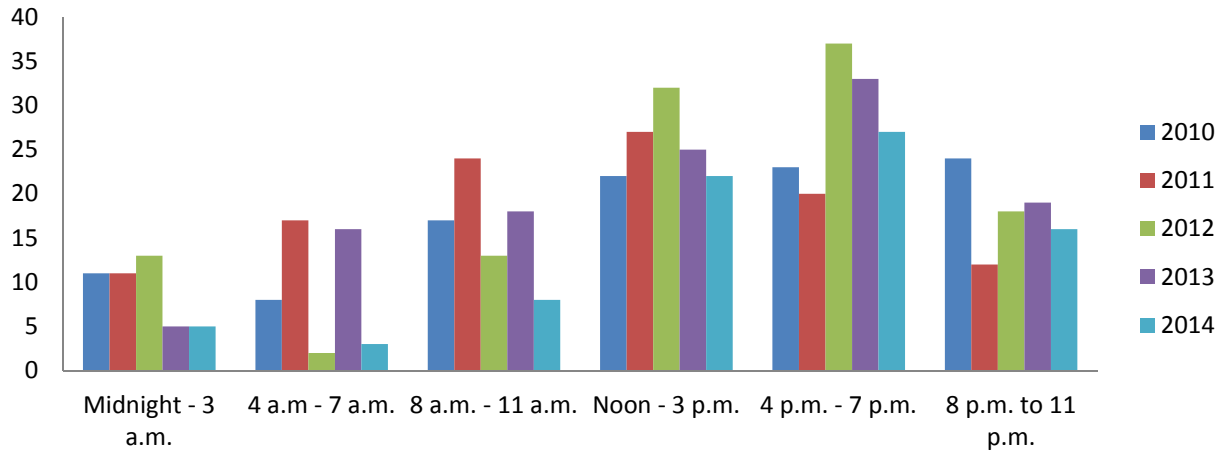
Serious Injuries involving a Motorcycle



When They Happened

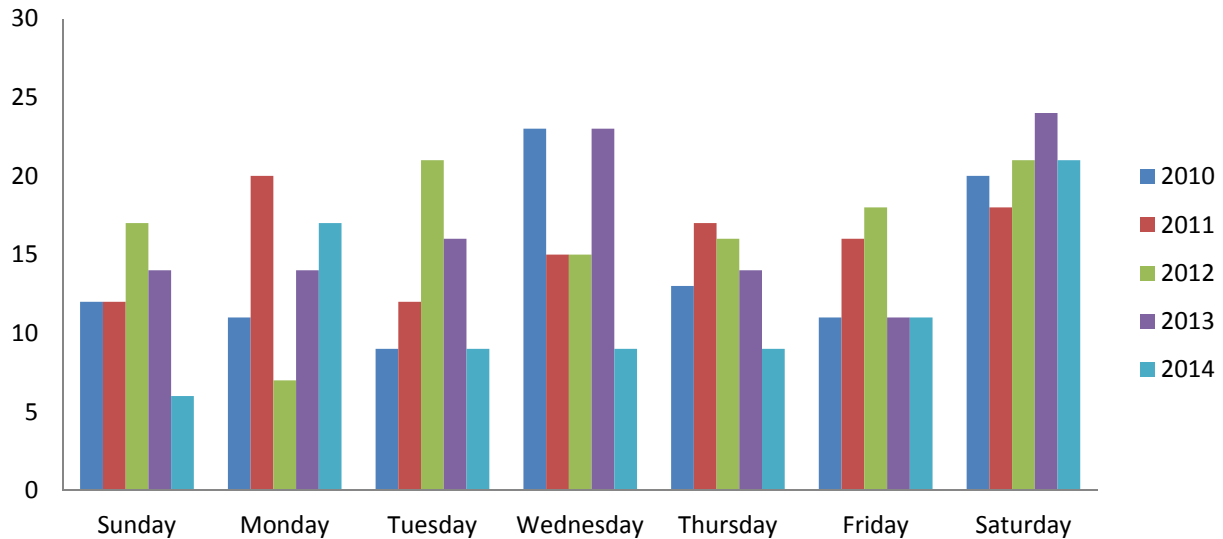
The most dangerous hours where serious injuries occur between noon and 7:00 p.m., on Tuesday, Wednesday, Thursday and Saturdays.

Serious Injuries by Time involving a Motorcycle



Source: Metropolitan Police Department Crash data

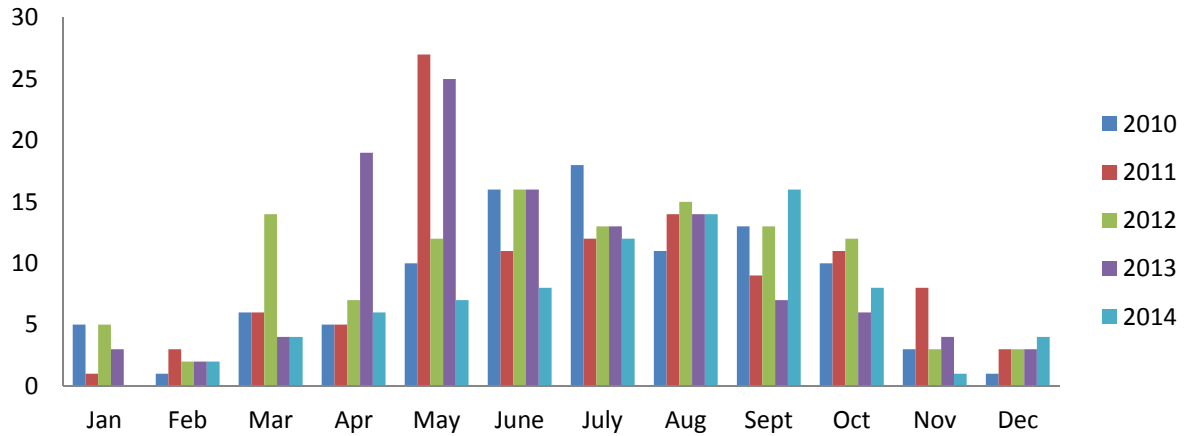
Serious Injuries by Day involving a Motorcycle



Source: Metropolitan Police Department Crash data

The most dangerous months of the year were May, June July and August.

Serious Injuries involving a Motorcycle by Month

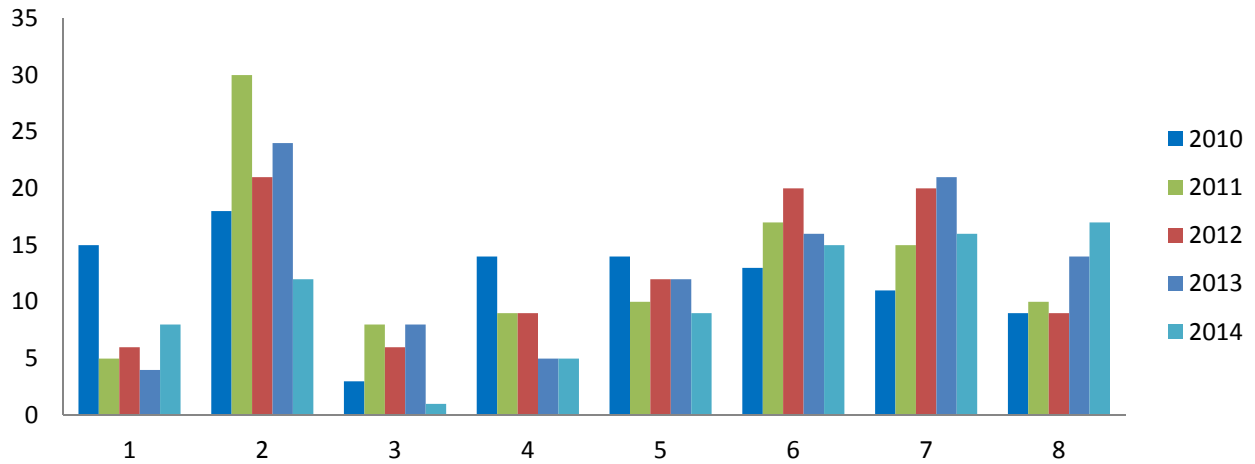


Source: Metropolitan Police Department Crash data

Where They Happened

Wards 2, 6 and 7 appear to have the most number of motorcyclists-related injuries in the District.

Serious Injuries involving a Motorcycle by Ward

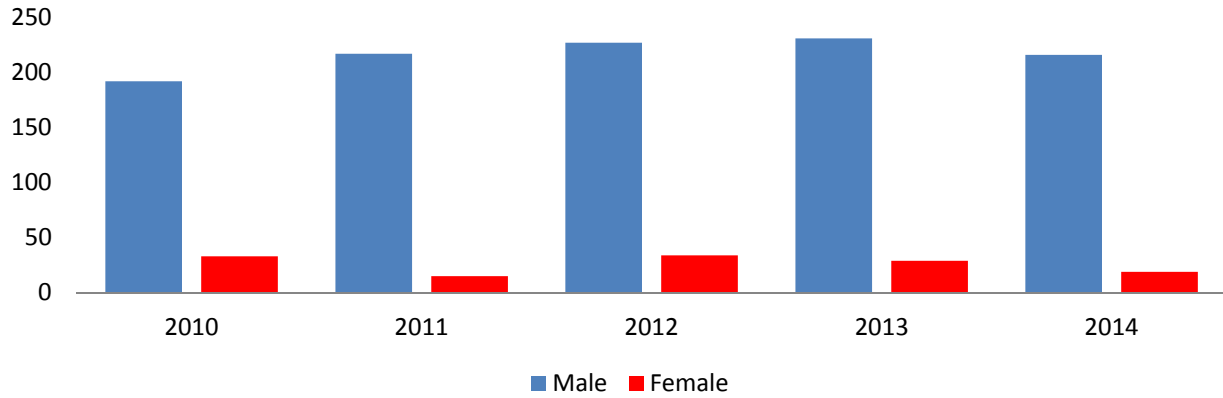


Source: Metropolitan Police Department Crash data

Drivers Involvement in Crashes by Age and Sex

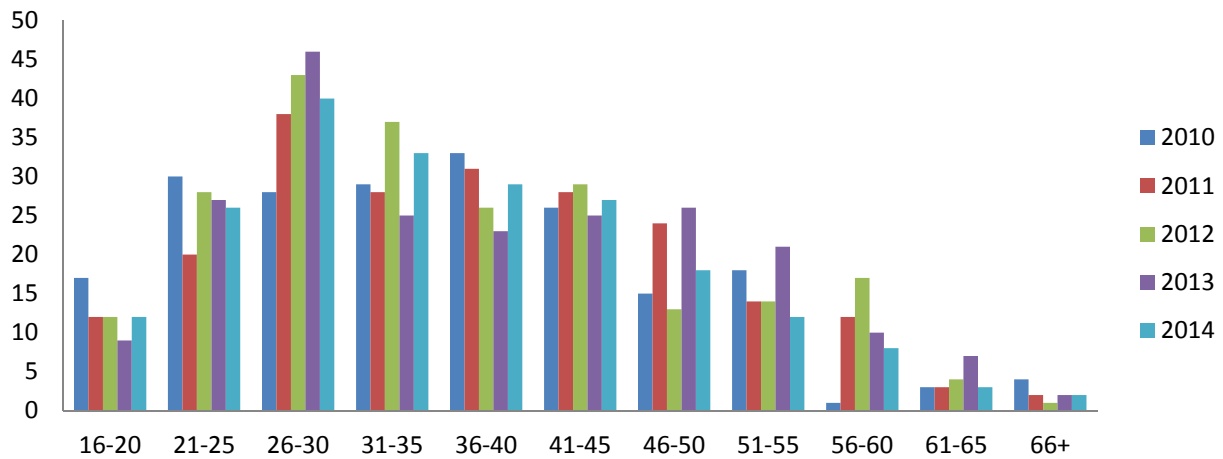
The data also revealed that male drivers between the ages 26 and 40 years old, were more likely to be involved in a serious crash.

Motorcyclist involved in a Crash by Gender



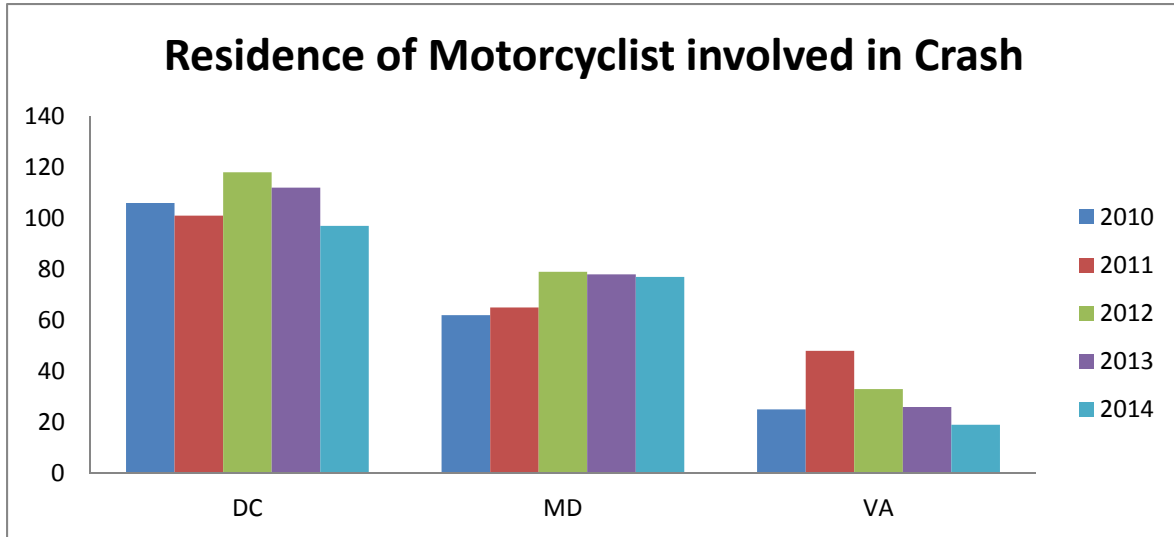
Source: Metropolitan Police Department Crash data

Motorcyclist Age involved in a Crash



Source: Metropolitan Police Department Crash data

The data revealed that in 2014, 39 percent of all motorcycle operators were residence of the District, with approximately 31 percent are Maryland residence.



Source: Metropolitan Police Department Crash data