

# Annual Evaluation of Traffic Enforcement Program

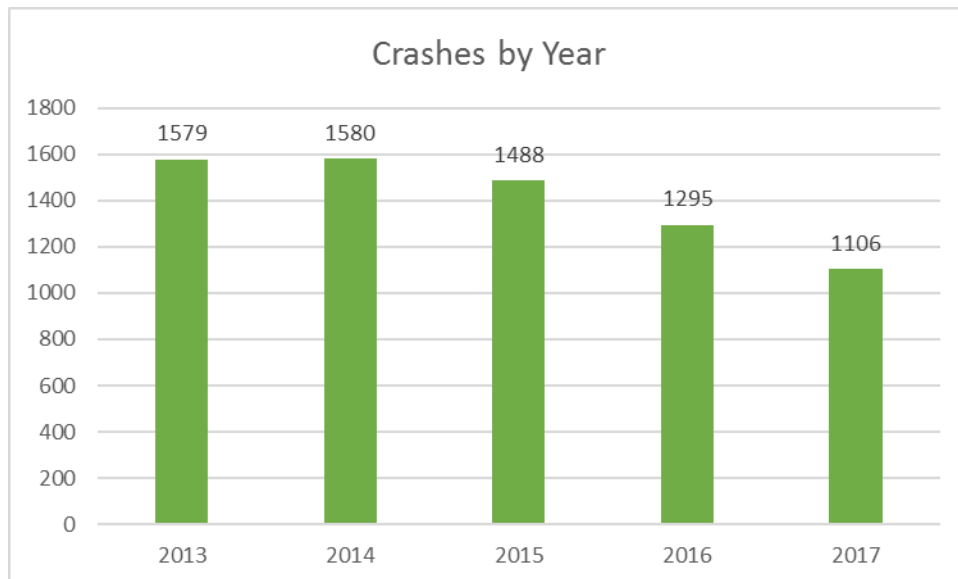
The 2017 annual evaluation of the traffic enforcement program for the Field Operation Bureau/Traffic Safety Section (TSS), in accordance with Police Directive 11.21 – Traffic Enforcement has been concluded with the following results:

## Traffic Crash Analysis

The following summarizes traffic crash data for Calendar Year (CY) 2017 and provides an analysis of crash trends according to various factors.

During CY 2017, the Department received a total of 5,905 calls for service for motor vehicle accidents; of those, 1,106 were reportable. This total represents a decrease of 14.6% in crashes from CY 2016 and a slightly larger decrease of 21.5% from the five-year average.

### CRASH PROFILE ANALYSIS

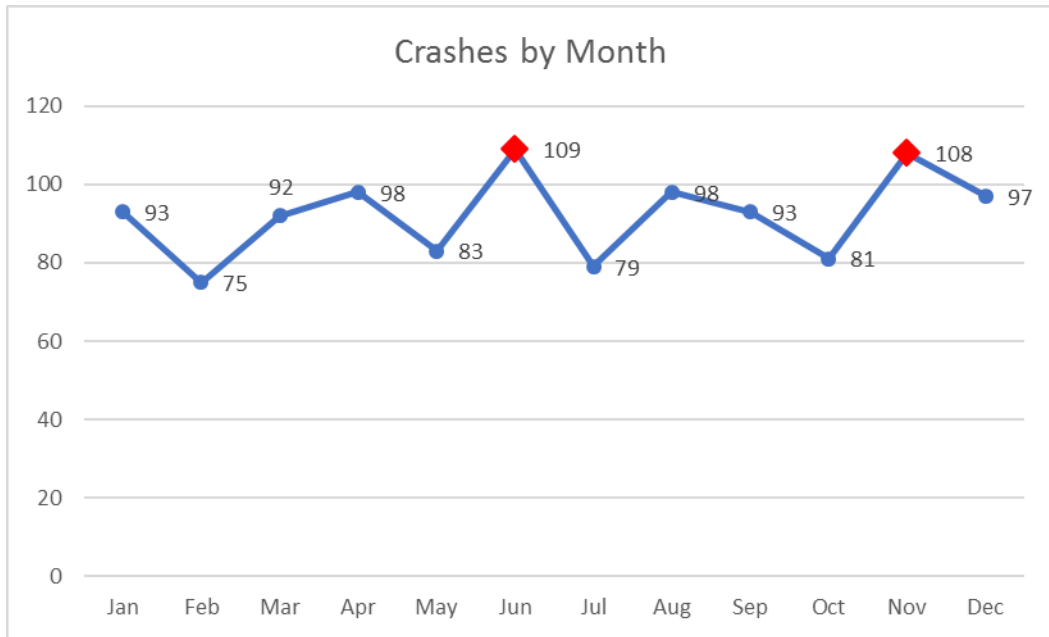


The total crashes for 2017 were reviewed in relation to the following factors:

- Month, day, and hour
- Location, weather, and road conditions
- Types of vehicles
- Driver action, to include violations

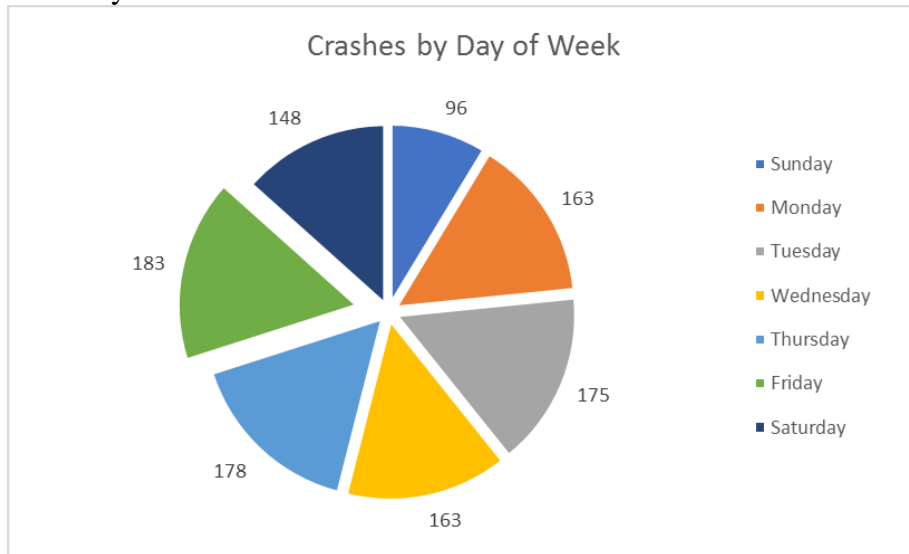
## Crashes by Month

The greatest number of crashes for 2017 occurred in the months of June (109) and November (108). The number of crashes that occurred during the listed two months in 2017 accounted for 20% of the total crashes for that year.



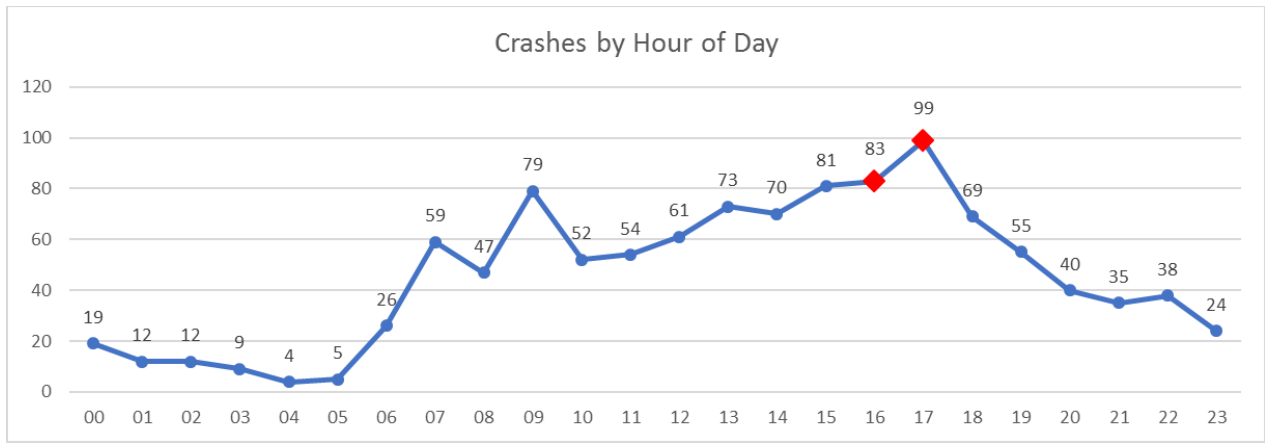
**Crashes by Day of Week**

In 2017, the day of the week with the most crashes was Friday (183) accounting for 17.0% of the total crashes. Thursday was next with 178 crashes or 16.0% of the total.



**Crashes by Timeframe**

The highest number of crashes (99) occurred between 5:00 pm and 5:59 pm, with the second highest (83) between 4:00pm and 4:59pm. These two timeframes represent 16.5% of the total crashes for CY 2017. They appear to correlate directly with the increased traffic volumes that are a part of afternoon rush hours.



**Crashes by Location, Weather and Road Conditions**

A contributing factor in 14.2% (157) of all crashes was inclement weather.

Weather Condition	Count
<b>No Adverse Conditions</b>	<b>949</b>
Rain	106
Mist	33
Snow	11
Fog	3
Other	2
Sleet or Hail	1
Smoke or Dust	1
<b>Total</b>	<b>1106</b>

A contributing factor in 2.1% (23) of all crashes was poor or altered road conditions.

Roadway Conditions	Count
<b>No Defects</b>	<b>1083</b>
Slick Pavement	13
Holes, Ruts, or Bumps	3
Restricted Width	2
Under Repair	2
Loose Material	1
Edge Pavement Drop Off	1
Other	1
<b>Grand Total</b>	<b>1106</b>

A contributing factor in 29.7% (329) of all crashes was lighting or lack of lighting on the roadway.

Lighting Conditions	Count
<b>Daylight</b>	<b>777</b>
Darkness - Road Lighted	247
Dusk	45
Dawn	22
Darkness - Road Not Lighted	12
Unknown	2
Darkness - Unknown Road Lighting	1
<b>Grand Total</b>	<b>1106</b>

### Crashes by Event Type

The two most common types of collisions were angle and rear end. These two types alone comprised 70.7% (782) of all crashes in CY 2017. Angle crashes were 40.7% (450) and rear end crashes were 30.0% (332).

Primary Crash Event	Count
<b>Angle</b>	<b>450</b>
Rear End	332
Sideswipe - Same Direction	112
Pedestrian	63
Fixed Object - Off Road	59
Head On	29
Other	28
Sideswipe - Opposite Direction	10
Backed Into	9
Fixed Object - In Road	7
Non-collision	4
Deer	3
<b>Grand Total</b>	<b>1106</b>

### **TOP 10 CRASH LOCATIONS 2017 BY SECTOR**

<b>Top Crash Locations Sector 1</b>	<b>2017</b>
GIBBON ST & S PATRICK ST	9
2500 DUKE ST	9
N WASHINGTON ST & PRINCESS ST	8
DUKE ST & S PATRICK ST	8

GIBBON ST & S WASHINGTON ST	7
PRINCE ST & S HENRY ST	7
N HENRY ST & PRINCESS ST	5
N WASHINGTON ST & ORONOCO ST	5
CAMERON ST & N WASHINGTON ST	5
DUKE ST & S HENRY ST	5
1000 N HENRY ST	5
DUKE ST & S WASHINGTON ST	5

<b>Top Crash Locations Sector 2</b>	<b>2017</b>
E GLEBE RD & JEFFERSON DAVIS HWY	7
N RADFORD ST & W BRADDOCK RD	6
CRESTWOOD DR & N QUAKER LN	5
FOUR MILE RD & MOUNT VERNON AVE	4
E HOWELL AVE & JEFFERSON DAVIS HWY	4
200 W GLEBE RD	3
3600 POTOMAC AVE	3
VALLEY DR & W BRADDOCK RD	3
KING ST & N QUAKER LN	3
N QUAKER LN & PRESTON RD	3

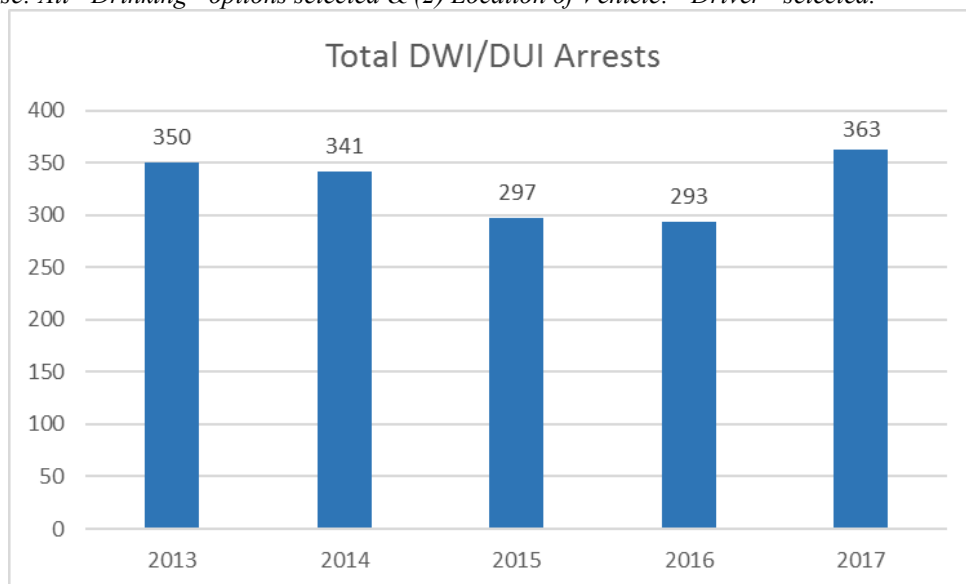
<b>Top Crash Locations Sector 3</b>	<b>2017</b>
N BEAUREGARD ST & SEMINARY RD	15
MARK CENTER AVE & SEMINARY RD	12
DUKE ST & N QUAKER LN	12
KING ST & PARK CENTER DR	10
DUKE ST & S WALKER ST	9
EISENHOWER AVE & S VAN DORN ST	8
KENMORE AVE & N VAN DORN ST	7
EDSALL RD & S VAN DORN ST	7
DUKE ST & S PICKETT ST	7
N BEAUREGARD ST & SANGER AVE	6
400 S VAN DORN ST	6
EDSALL RD & S WHITING ST	6
LIBRARY LN & SEMINARY RD	6
FILLMORE AVE & SEMINARY RD	6

### **Alcohol-Related Crashes**

There were 64 crashes where alcohol was a contributing factor in CY 2017. This number represents a 14.7% decrease from CY 2016.



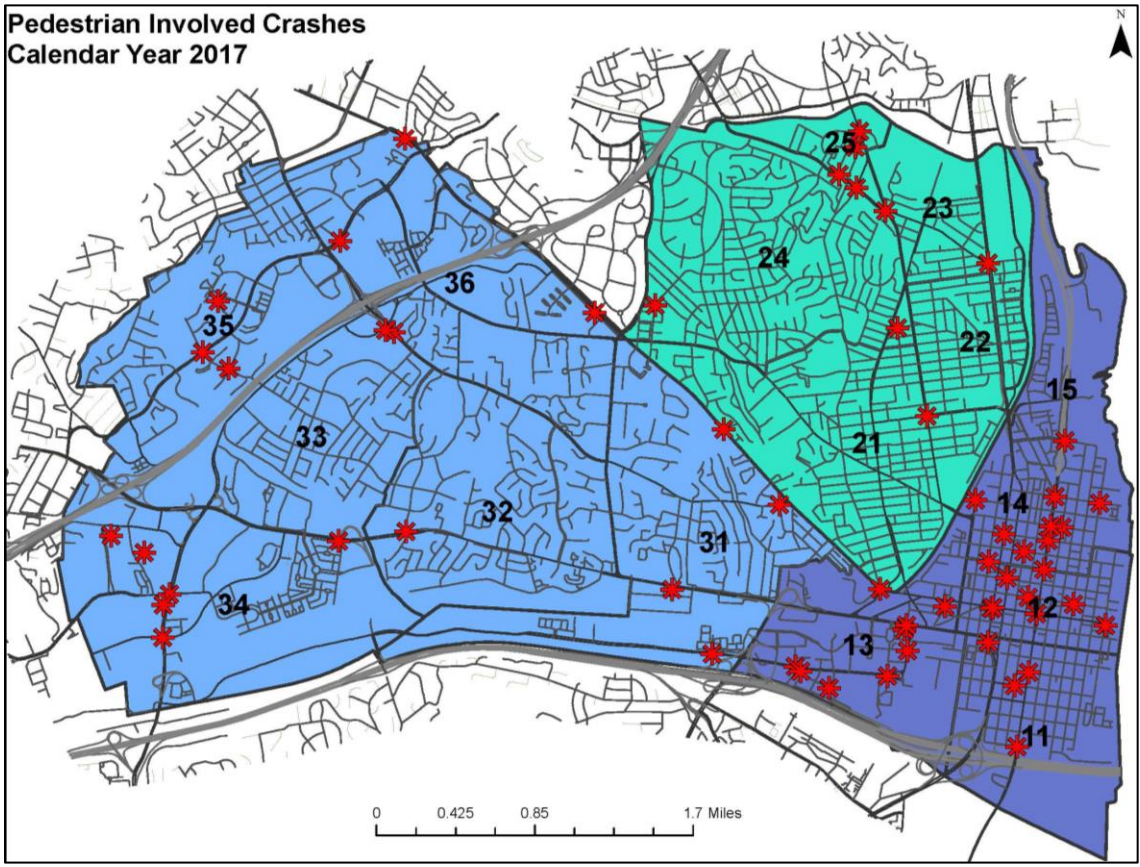
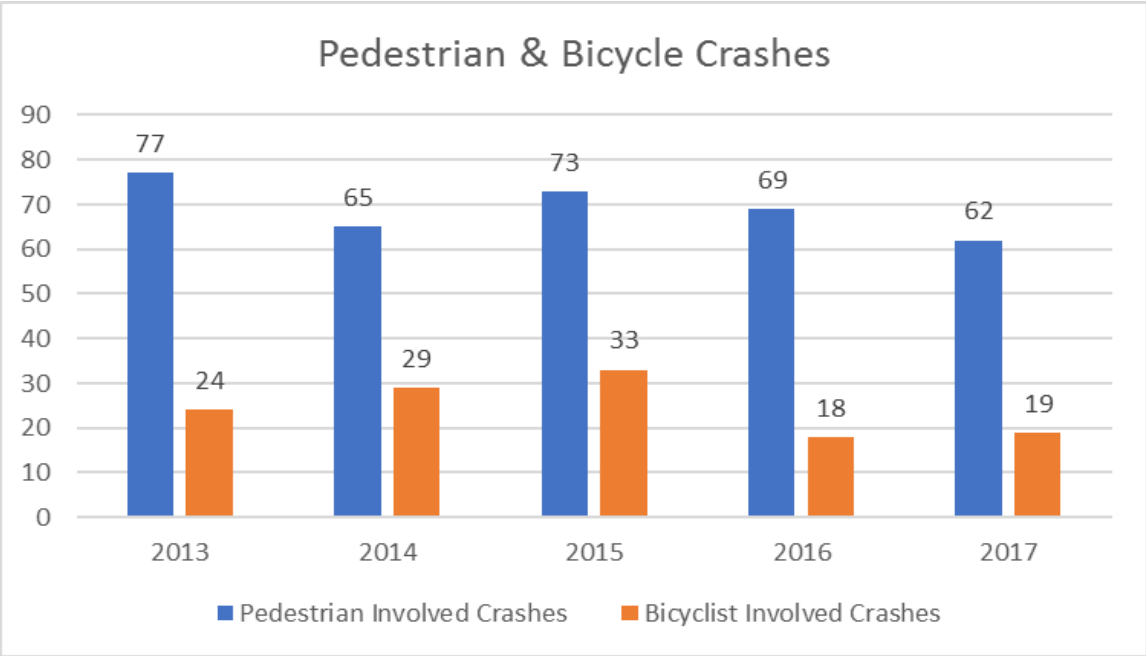
*Note: Alcohol-related crashes: Total crashes by year in PRISM Accident Module, with 2 filters: (1) Alcohol Use: All "Drinking" options selected & (2) Location of Vehicle: "Driver" selected.*

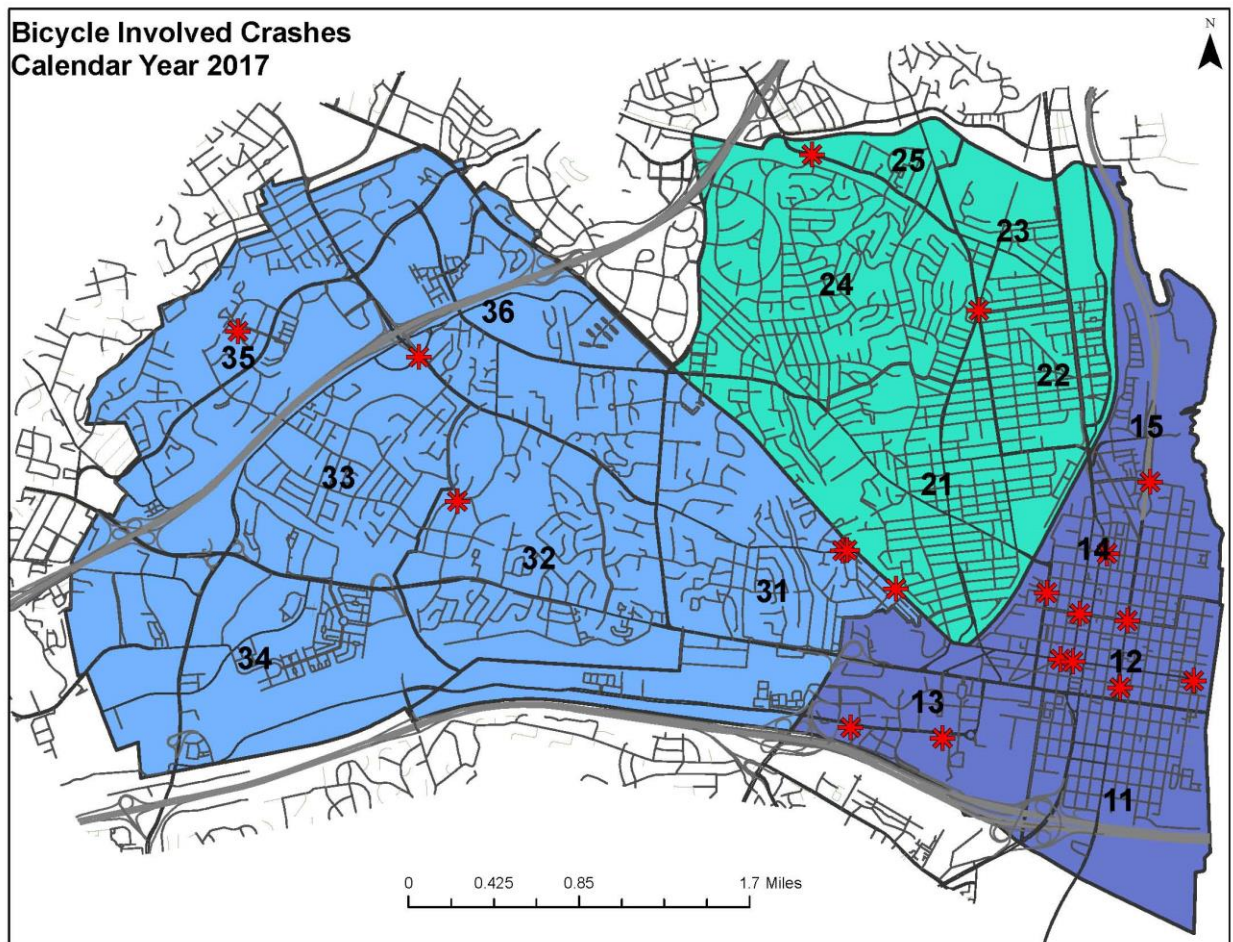


*Note: Crime Analysis Queries folder - Traffic Arrests Access Database - All Traffic Arrests by year for DWI-related items only*

Calendar Year 2017 netted 363 DWI arrests compared to 2016 which incurred 293 DWI arrests. Also in 2017, the Police Department conducted 17 mobile DWI details and one DWI check point. Also not counted in the total mobile DWI details were the numerous independent DWI patrols (IP) that officers were conducting. From these enforcement details, officers made 415 vehicle stops during the mobile details and 650 vehicle checks during the check point, 22 DWI arrests from all details, 24 criminal arrests and issued 308 traffic citations. This information was compiled by Sergeants Misti Battle and Tommy Ground. Sergeant Misti Battle managed the DUI grant until December of CY 2017. Sergeant Thomas Ground conducted the final mobile detail of CY 2017.

### **Pedestrian / Bicycle Crashes**

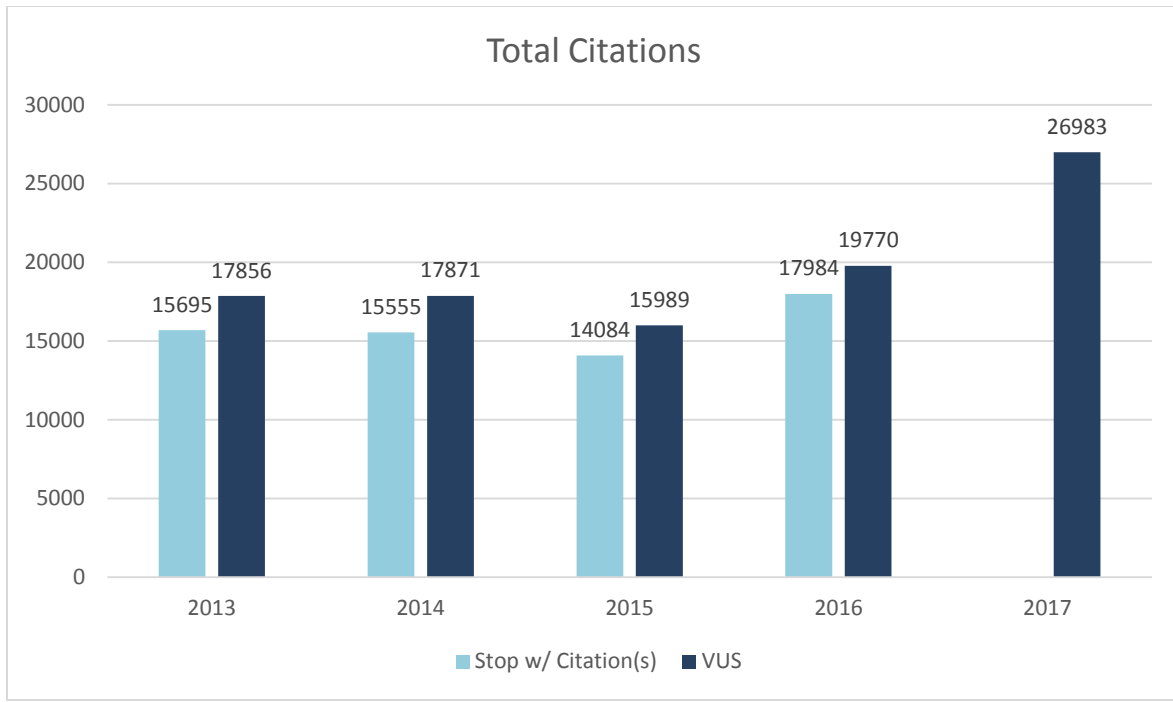




### Traffic Enforcement Activities

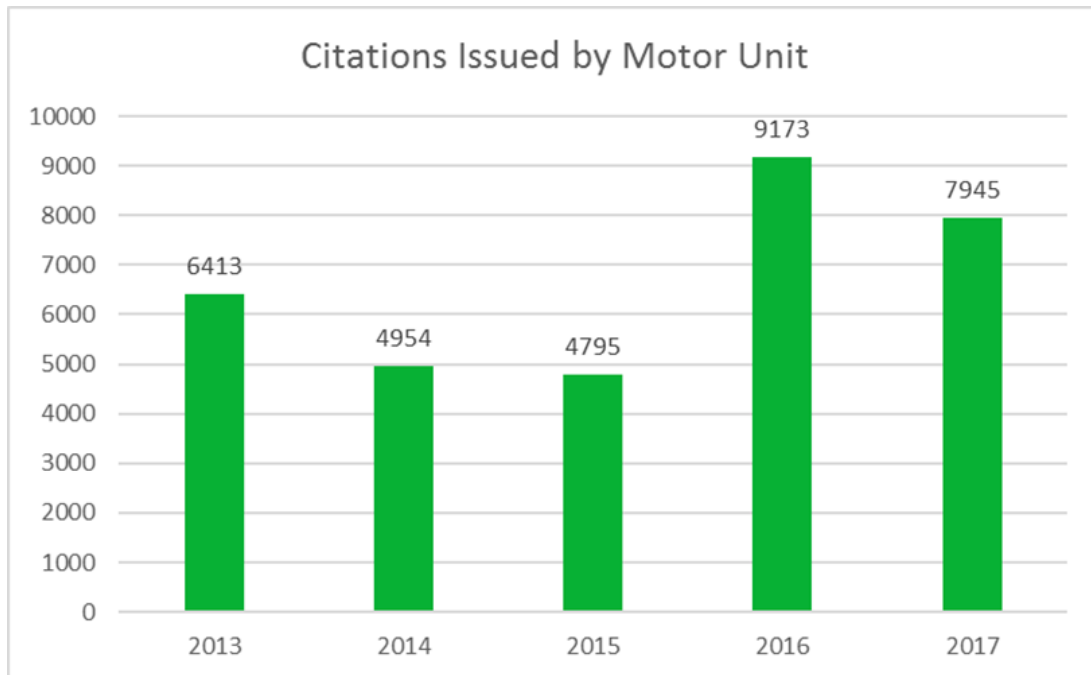
Traffic enforcement activities for speeding, DWI/impaired driving, violations in conjunction with crashes, pedestrian/bicycle violations and passenger safety violations were reviewed. In 2017, there were data entry issues and the number of Traffic Stops resulting in citations being issued is unavailable.





*Note: October-December VUSs were hand counted due to data entry delays. Due to data entry issues, the Stop Count for 2017 is unavailable.*

Out of 26,983 citations issued during CY 2017, the Traffic Safety Section issued a total of 7,945 citations, which accounted for 29.4% of the total citations issued for the entire police department.



Routine enforcement for speeding, violations associated with crashes, and other violations were conducted through proactive patrol, selective traffic enforcement campaigns, and deploying traffic enforcement measures during peak hours to address the higher incidence of violations and crashes.

To combat drunk driving in CY 2017, the Alexandria Police Department conducted six mobile saturation patrols, 14 independent patrols and one check point. A total of 1065 vehicles were stopped during these patrols and check point. During all of these events in CY 2017, 22 people were arrested for DWI, 24 people were arrested for criminal offenses, and 308 citations were issued for various traffic offenses.

The department participated in special enforcement programs to emphasize pedestrian and bicycle safety in CY 2017. These efforts will continue in CY 2018 to reduce injuries and crash rates involving pedestrians and bicyclist. The goal in CY 2018 will be to increase patrol awareness for bicycle and pedestrian safety and increase the warnings or written citations if warranted.

**Personnel Deployment**

Through the use of the Traffic Safety Plan, specific roadways are identified for selective enforcement and traffic complaints are handled in a systematic method. Speed is the primary traffic complaint received from residents. Complaints are received by phone, from department personnel, council members, social media and through the City’s webpage. Focusing our available resources into the areas where they can be most useful is logical and stands the best chance of having a positive impact. The availability of discretionary time for directed enforcement continues to have a significant impact on Unit effectiveness.

The Traffic Safety Section (TSS) maintains a log of all traffic complaints received. When a complaint is received, it is initially evaluated for validity. This process is accomplished by examining the frequency of complaints in that area, previous citation activity, and traffic surveys. If warranted by activity, a determination is then made as to whether motorist behavior can best be modified by use of the smart trailers, live enforcement, roadway modifications, or a combination.

All complaints are routed to the Traffic Safety Section for investigation and enforcement. If a traffic complaint requires sustained follow-up and documentation, an appropriate number of TSS officers will be assigned to the complaint. The TSS Sergeant notifies each Patrol Sector Commander of any logged traffic complaint received in his or her respective area. By doing so, the Patrol Commander can assign resources as best benefits the individual Sector needs in addition to TSS enforcement. A total of approximately 221 traffic complaints were logged in 2017. We believe that the slight increase in the number of complaints from CY 2016 to CY 2017 is due to the different avenues that the public has to send in their complaints (telephone, e-mail, Call Click Connect, through Civic groups, Facebook, and Twitter) as well as a more informed public on these different ways to convey their concerns and complaints.

<b>Year</b>	<b>Traffic Complaints Logged</b>
<b>2017</b>	<b>221</b>
2016	207
2015	110
2014	79
2013	71

Source data: 2016 Traffic Safety Section Complaint Log

Aside from enforcement, an effective means of educating the public, deterring violations and addressing complaints remains the continuous deployment of the Smart Trailers in locations known for unacceptable violator activity and high complaint rates. These trailers have become the tool of choice, effectively modifying violator behavior while allowing accurate assessments of traffic rates and speeds, broken down by location and time of day. Utilizing the trailers permits better allocation of staffing to achieve maximum effectiveness.

In 2017 we deployed the Smart Trailers on 50 occasions in an effort to gather speed data. This number is a significant increase from the number of times the trailers were deployed in the previous year. In 2017 the police department had four speed trailers that were running almost continuously for the entire year collecting data. When deploying the speed trailers, we would locate them at a specific location for a two week period. This was to gather data over a longer period of time to better evaluate the complaint and needs of that location.

<b>Year</b>	<b>Smart Trailer Deployments</b>	<b>Working Trailers</b>
<b>2017</b>	<b>50</b>	<b>4</b>
2016	31	2/4
2015	77	1
2014	49	2
2013	79	2
2012	315	4

Source data: 2017 Traffic Unit Smart Trailer Log

### **Technology**

We are currently utilizing the Naviline Records Management System that is managed by Information Services. This program allows us to obtain information regarding individual locations, officers, charge codes, types of offenses and other information as it relates to traffic citations issued and crash data. In 2017, officers began utilizing a new Field Based Reporting Software and WebRMS.

We work with PRISM2 (Police Reporting and Investigative Search Module), which receives data uploads multiple times per day, allowing us to conduct meaningful analysis from crash data. This data is produced for the S.A.F.E meetings by the Crime Analysis Unit and available for review by the Patrol Sector Commanders. It is critical that we have the means of examining entered data from crash reports to determine time, location, alcohol involvement, pedestrian involvement, injury, death, and causal factors in accidents if we expect to make informed decisions on how to effectively use resources or make our transportation system safer.

### **Conclusion**

With the development of the Traffic Safety Plan, the Traffic Safety Section and the integration of Vision Zero; traffic safety has grown to be an utmost importance for the department. Through these movements, several targeted safety problems have been identified throughout the City. With the assistance of the Crime Analysis Unit, data analysis of these targeted problems will determine hot spot areas for enforcement. This analysis will be reported at the weekly and monthly S.A.F.E meetings.

Selective enforcement locations are determined by the Traffic Safety Section Supervisors based on traffic data analysis. Selected enforcement efforts are assigned to specific TSS officers and the criteria used to determine the selective enforcement includes patterns of similar causes or sudden increases in the severity or number of collisions, violations at a specific location and citizen complaints/concerns. When areas of concern are brought to our attention by citizens, they are studied and determined for Selective Traffic Enforcement efforts. When possible, the citizen voicing the concern was contacted and advised of the department's efforts.

In CY 2017, the Selective Traffic Enforcement Program focused on the following issues:

- Decreasing the total number of crashes from CY 2016
- Decreasing crashes where alcohol was a factor
- Decreasing pedestrian and bicycle crashes
- Addressing citizen complaints
- Focusing efforts in locations that had increased traffic offenses or crashes
- Working in conjunction with the Traffic and Environmental Services to enhance traffic solutions

Locations with increased traffic offenses, pedestrian crossings and increased bicycle violations continued to be a high priority for selective enforcement efforts. These efforts in CY 2017 did show a slight reduction in the number of bicycle related crashes but an increase of one pedestrian related crash. Hopefully, the continued educational efforts with the Bicycle and Pedestrian Advisory Committee to get the word out among the cyclist and pedestrians to stop at controlled intersections (to include traffic signals and stop signs), follow the posted signs and use the marked cross walks will assist the police department in reducing the number of pedestrian and bicycle crashes in 2018.

The police department increased the number of deployments, locations deployed to and length of deployments for the Smart Trailers in CY 2017. The Smart Trailers alerted drivers of their actual speed for specific locations which appears to have reduced speeding and citizen complaints at these locations. The smart trailers were also used in a "ghost" status to record the actual speeds when drivers thought they were not working. For CY 2018 the police department will be deploying four Smart Trailers for an entire year and hopes to reduce citizen complaints as well as the number of violations taking place throughout the City.

The continued growth of the City of Alexandria in all sectors has negatively impacted the major roadways which were not originally designed to accommodate the current volume of traffic commuting through the City on a daily basis. The City of Alexandria serves as a "cut through" for commuters as it is surrounded by major access roads.

The Alexandria Police Department continued to participate in regional enforcement campaigns such as Street Smarts, both Spring and Fall. The department continues to stay involved with the department of Traffic and Environmental Services in locating and identifying roadway engineering issues that need to be changed or enhanced through design.

During the upcoming year, the Traffic Safety Section will not only look at enforcement, but education and promoting voluntary compliance with commuters throughout the City. This will rely heavily on continued participation in regional enforcement and educational campaigns such as Street Smarts, Bike Rodeos, and marketing Sober Ride programs. As well as a dedicated partnership with the department of Traffic and Environmental Services in locating and identifying roadway engineering issues that need to be changed or enhanced through design.

In addition, we continue to grow and build partnerships with Non-Government Organizations such as the Alexandria Bicycle and Pedestrian Advisory Committee (BPAC) and Alexandria Families for Safer Streets (AFSS).

In conclusion, selective traffic enforcement efforts are meeting their objectives in reducing the total crashes and crashes involving bicycles for CY 2017. However, continued diligence is needed to reduce citizen complaints/concerns and crashes involving pedestrians.