Roanoke County Police Department, VA
Impaired Driving

Problem Identification

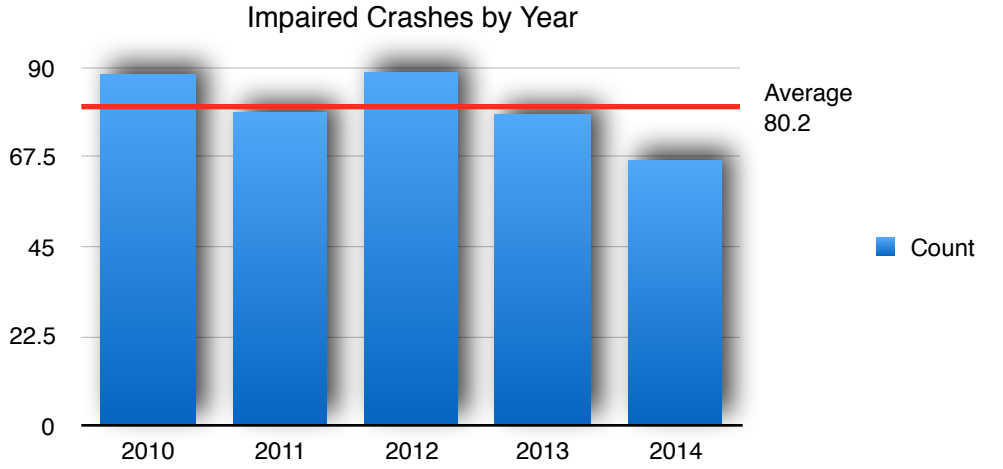
Since 1990, when the Roanoke County Police Department was established, there has been an emphasis on the reduction of impaired driving offenses through enforcement and educational efforts. For reporting purposes in the State of Virginia, an alcohol-related crash involves a driver that has been identified as consuming alcohol or drugs regardless of impairment. The continued efforts by the Department have kept crashes involving such a driver at an average of 7.6% during the last ten years as shown in the table below.

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
7.7%	8%	8.1%	8.2%	9.3%	6.5%	7%	7.2%	8%	6.9%

As stated, the above percentages are based upon the number of drivers identified as having consumed alcohol or drugs involved in crashes. However, a further analysis of the crash reports revealed that a smaller percentage of those drivers were identified as actually being impaired bt alcohol or drugs. The table below shows the percentage of drivers identified as being actually impaired during crash investigations from 2005-2014.

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
5.9%	6.1%	5.5%	5.7%	5.1%	4.7%	4.2%	5.4%	5.1%	4.8%

The two following tables show some overall impaired driving crash statistics over the past five years in Roanoke County.



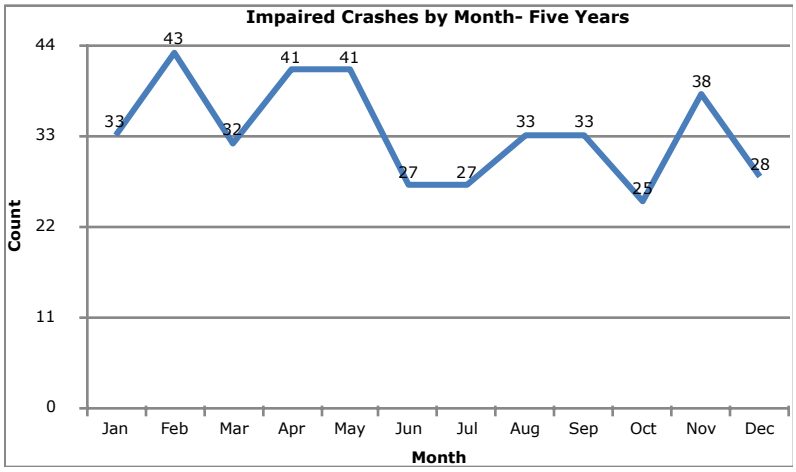
Impaired Crashes by Year

Year	Fatality	Property Damage	Personal Injury	Total
2010	1	49	38	88
2011	2	57	20	79
2012	0	68	21	89
2013	2	54	22	78
2014	1	43	23	67

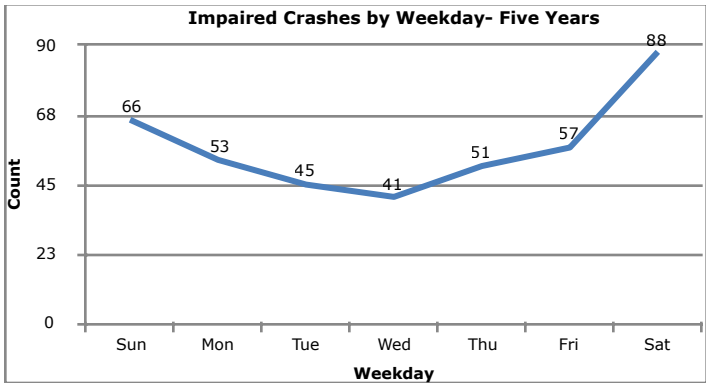
An analysis of the data during the past five years revealed the following streets had the highest number of impaired driving crashes:

Street Name	2010	2011	2012	2013	2014	Total
Bent Mountain Rd	9	3	7	5	5	29
Franklin Rd	4	6	4	4	4	22
Electric Rd	6	6	5	1	2	20
Plantation Rd	5	2	2	2	3	14
Williamson Rd	2	2	2	6	1	13
Catawba Valley Rd	3	1	2	3	3	12
Brambleton Ave	4	6	0	0	2	12
Challenger Ave	2	2	4	1	2	11

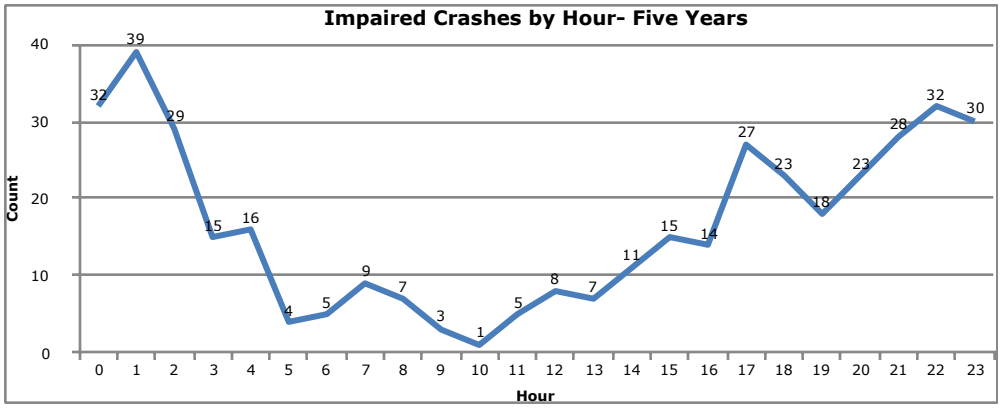
An analysis of when all impaired driving crashes had occurred during the same five year was an important factor for determining enforcement action.



February, April, and May had the highest number of impaired crashes.

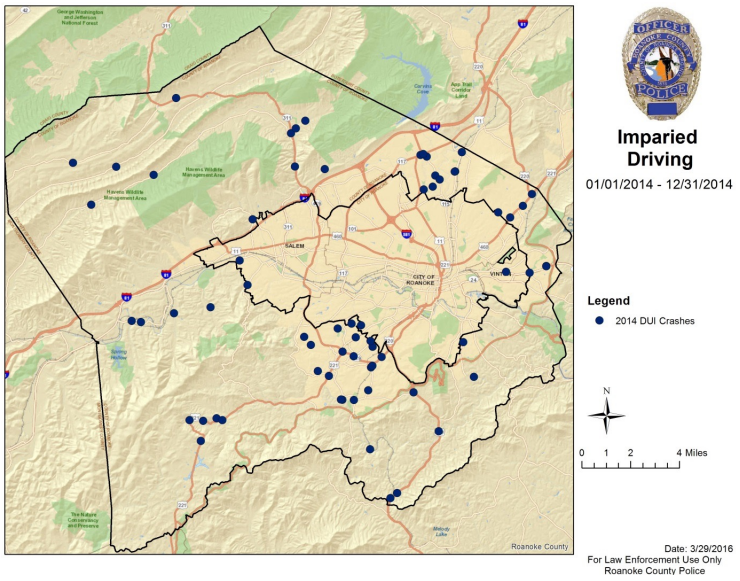


22% of the crashes occurred on Saturdays while 33% of the impaired driving crashes took place between the hours of 2200 and 0200.

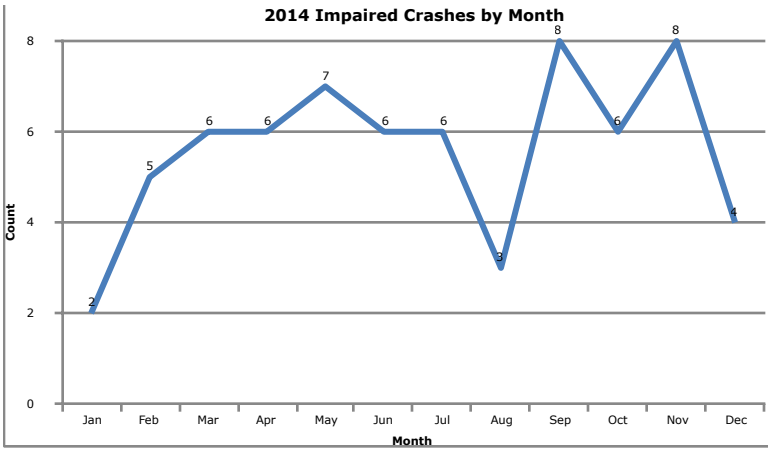


In addition to the five year crash data, the Department closely examined the results of its 2014 Traffic Crash and Traffic Enforcement Analysis. This analysis served several purposes including determining the effectiveness of the past year's enforcement in terms of reducing specific types of crashes and where the enforcement should be targeted. The crash analysis examines when and where the crashes occurred as well as the causative factors. The traffic enforcement analysis is performed to determine if personnel are being deployed at the proper times and locations. Data from the 2014 crash analysis and the mapping of alcohol-related crashes served to direct the Department's impaired driving enforcement during 2015.

At right, this map was reproduced for this publication but was originally created in the beginning of 2015 in order to assist in the determination where to deploy saturation patrols and sobriety checkpoints during the year by showing the location of impaired driving crashes during 2014.



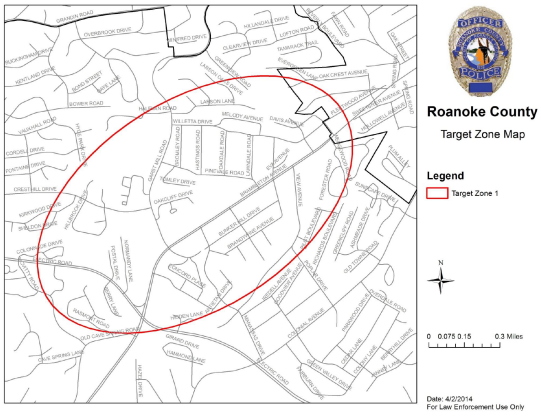
The same in-depth analysis of impaired driving crashes by month, day of week, and hour was performed for 2014 as done for the five year analysis and utilized in the determination of enforcement during 2015.



Planning

According to data from the 2014 Traffic Crash and Traffic Enforcement Analysis and supplemented by the five year information, the majority of alcohol-related crashes occurred between the hours of 1800 and 0300 hours on Sundays, Mondays, Wednesdays, Fridays, and Saturdays. A specific goal of the Department was to have at least 75% of impaired driving saturation patrols and checkpoints performed during these timeframes.

Additionally, the Department continued to utilize the Data-Driven Approaches to Crime and Traffic Safety (DDACTS) model during 2015. DDACTS involves combining location-based crime and traffic crash data to determine where and when to deploy law enforcement and other resources. After combining crime and traffic crash data, the Department chose two locations based upon a high number of reported incidents, one in the northern part of the County and one in the south. Each location is approximately one square mile and was an elliptical shape on a map. The figure at right represents the area chosen in the southern part of Roanoke County.



Subsequently, additional high visibility efforts were conducted in the two areas including saturation patrols, traffic checkpoints, business checks, bike patrols, and more in an effort to decrease the number of reported criminal offenses and traffic crashes. These efforts remained a vital component to the Department's traffic safety programs during the year.

The Department's efforts directly supported the Impaired Driving Program Area of the Virginia Highway Safety Plan (VHSP) for 2015 in several ways. Listed below are the key points to the VHSP and the support generated by the Roanoke County Police Department.

- ✦ Focus on non-interstate roadways between 6 pm and 3 am
  - All of the Department's DUI grant monies were spent on non-interstate roadways during the given timeframe. Additionally, the Department used many non-grant funded saturation patrols during the same timeframe in areas selected based upon alcohol related crashes.

- ✦ Implement statewide DUI Checkpoint Strike Force and Drive Sober or Get Pulled Over Campaigns with an emphasis from July through January
  - In 2005 the Department was asked by the Virginia Highway Safety Office to take the lead for the southwestern portion of the State in promoting Checkpoint Strike Force and since that time has conducted 315 sobriety checkpoints. Since 2006 the Department has provided checkpoint operation training to other law enforcement agencies in southwestern Virginia and served on the State's committee to develop standardized checkpoint operation procedures. During 2015, the Department conducted 31 sobriety checkpoints and 17 were conducted from July through January.
- ✦ Conduct a minimum of 100 DUI checkpoints and the use of low manpower checkpoints
  - As stated above, the Department conducted 31 sobriety checkpoints (31% of the entire State's minimum goal) during 2015; 18 of which were low manpower while ten were multi-jurisdictional having included surrounding local and state agencies. Since 2005 the Department has utilized low manpower checkpoints and has been asked to present its efforts at the state and national level.
- ✦ Continue to expand the Standardized Field Sobriety Test instructor database
  - For several years during the early 2000s, the Department had one of the very few nationally recognized Standardized Field Sobriety Testing (SFST) instructors in Virginia and subsequently began teaching its officers. Since the program expanded in Virginia, the Department has maintained more than one such instructor and currently has three certified instructors. In 2007, the Roanoke County Criminal Justice Academy was established and since that time every new officer has been trained in SFST. Every recruit receives basic impaired driver detection training during the academy and then begins the field training with a Field Training Officer (FTO). After having spent several weeks in the field training program, the new officers return to the academy and attend the three day SFST course. After completing the course, the recruits are assigned to work a sobriety checkpoint(s) under the direction of their FTO where they are given the opportunity to practice their new skills.
- ✦ Conduct Advanced Roadside Impaired Driving Enforcement (ARIDE) training (four per year throughout the state)
  - The ARIDE training was first offered in Southwestern Virginia in the Spring of 2014 at which time the Department sent eight officers. An additional eight officers were trained in 2015 when the training came to our area again.

Training

The table below shows the training received by officers during 2015 as well as the three years prior. To date, almost all of the uniformed patrol officers have been trained in SFST.

	2015	2012-2014
SFST Instructor	0	2
SFST Instructor Recert.	1	3
SFST Training	10	44
ARIDE	8	8
Intox. EC/IR II Basic	7	22
Intox. EC/IR II Recert.	39	71

In addition to the above list, officers received additional impaired driving enforcement training during 2015 through line-up, e-mailed power point, and the Department's on-line training tool- 'Moodle'. All uniformed officers received a refresher on the driving cues of an impaired driver as well as HGN. All uniformed officers also received training in implied consent and search warrant blood draws in preparation for the Department's new 'No Refusal' program which is described in the next section. Six officers that routinely work sobriety checkpoints were given a two hour block of training on the identification of impaired drivers at checkpoints to further hone their skills.

Public Information and Education

The Roanoke County Police Department has been a leader in law enforcement for Southwestern Virginia in providing public information and educational programs concerning impaired driving and other traffic safety issues. Since 2005, the Department has created several educational programs that address impaired driving and what follows is a brief description of a few of the programs that were conducted during 2015.

The Department has an impaired driving/distracted driving simulator consisting of a golf cart designed to look like a police vehicle that is utilized with 'Fatal Vision' goggles, which simulate the affects alcohol or drugs have on vision, and a coned course. When utilized for impaired driving presentations, participants are allowed to drive the cart through a coned course without the goggles then a second time with the goggles to show the affects alcohol has on a driver's vision. While participants are waiting in line to drive, another officer will speak about the associated problems of impaired driving and conduct field sobriety testing while the persons are wearing a set of the goggles. During 2015 the Department used the simulator at all five County high schools for a minimum of two days each allowing an estimated 750+ students to participate. Additionally, the simulator was used at more than 15 events during the year to include employee safety fairs, church groups, Boy Scout events, and community events such as the Vinton Fall Festival with an audience in excess of 1,500 people. Above right, PO II Cunningham takes a person through the impaired driving course at an event at Tanglewood Mall in May of 2015.

The Department maintains a strong relationship with the Roanoke County Schools, which provided many opportunities for impaired driving educational opportunities during 2015. Each of the five County high school's Driver's Education class had an officer speak to the class concerning impaired driving. Each school's School Resource Officer (SRO) worked with student clubs to publicize the inherent associated risks through outreach efforts including morning/afternoon announcements, artwork and social media, mock car crashes, and floats used in local parades. The SRO at each high school worked closely with the Youth of Virginia Speak Out About Traffic Safety (YOVASO) in support of impaired driving prevention promoted throughout the State.

Additionally, each high school hosted the 'Partnering for the Privilege' presentation for both parents and new drivers. This program is a joint adventure between the Allstate Foundation, YOVASO, Roanoke County Driver's Education, and the Roanoke County Police Department and is conducted each school year to educate parents and new drivers the risks associated with

teen drivers- with impaired driving being a large component of the program. Each agency that assists with the program addresses teen driver safety from their unique perspective then the parent of a teen killed in a crash speaks to the audience providing a powerful closing.

Throughout 2015, the Department kept the problem of impaired driving in the public spotlight through social media and print, multiple radio and television interviews, as well as electronic billboards with the assistance of the Virginia Department of Transportation. The Department created several different posters that were distributed electronically and printed for use by businesses for holidays as well as special events. Multiple press releases were sent out and interviews conducted with the media prior to and during several impaired driving campaigns throughout the year.

The Department began planning to adopt a 'No Refusal' program at the beginning of 2015 and it was officially launched for the St. Patrick's Day holiday. The Department was the first agency in the Virginia to implement a 'No Refusal' program. The 'No Refusal' program is simple, but had a profound effect with the publicity of impaired driving in the Roanoke Valley. 'No Refusal' simply means that if a driver refuses to submit to a chemical test after having been arrested for impaired driving; the officer will immediately apply for a search warrant to have blood drawn for testing. While the Department was developing plans for the program, the Roanoke County Sheriff's Office agreed to have jail medics do the blood draw when the search warrant was issued. This arrangement came with instant benefits as the search warrant application with a Magistrate and subsequent blood draw could be performed in the same facility saving downtime in transporting to a local hospital and waiting for service. This arrangement expanded within a few months to include not only blood draws as a result of a search warrant but also implied consent cases involving drivers under the influence of drugs.

The Department chose to initially deploy the 'No Refusal' program only during major holidays and key enforcement periods instead of year-round. As such, the program was utilized six times during 2015 and a press release with multiple media interviews was done before each. This pre-enforcement publicity served the Department well in bringing attention to the problem of impaired driving as the media consistently ran multiple stories for each campaign to alert drivers- which was the purpose for the media contacts. In addition to the six 'No Refusal' campaigns, the Department's four traffic officers routinely used the same procedure during the year when dealing with specific situations such as a crash, repeated offender, highly impaired drivers, and suspected DUID when the driver refused a chemical test.

Through its leadership role with the Blue Ridge Transportation Safety Board (BRTSB), the Department led or assisted in several traffic safety enforcement and public informational/ educational initiatives during 2015 concerning impaired driving. The BRTSB is a multi-jurisdictional, multi-discipline board made up of law enforcement, businesses, insurance, traffic engineers, and safety advocates all joined together to improve traffic safety throughout southwestern Virginia since 1988. Through the BRTSB, the Department coordinated impaired driving enforcement campaigns, such as joint checkpoints and saturation patrols, throughout the

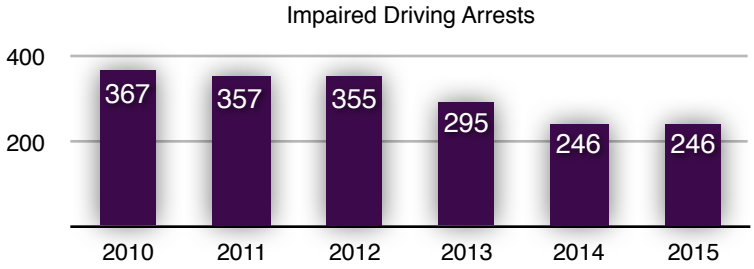
Board's service area while the non-law enforcement members supported the campaigns through social media, press, and other public speaking opportunities. These coordinated efforts allowed a much broader outreach and brought many different disciplines together to combat the same problem.

Enforcement

Because the Department analyzes impaired driving crashes for time and location, officers could be deployed more effectively to reduce such crashes. Additionally, the Department monitors social media and other means of publicizing events in order to stay abreast of events that tend to attract impaired driving offenses and subsequently deploys high visibility saturation patrols and/or checkpoints to reduce problems.

During 2015, the Department conducted more than 100 DUI saturation patrols and conducted 31 sobriety checkpoints. Eighteen of the checkpoints were low manpower; where officers would conduct a checkpoint in a location for two hours then move to another part of the County creating the idea that the checkpoints were 'everywhere'. Ten of the sobriety checkpoints were multi-jurisdictional such as the one at left staffed by officers from Roanoke City, Roanoke County, Salem City, Town of Vinton, and Virginia State Police. The multi-jurisdictional checkpoints typically attracted a good deal of media attention which allowed the Department to share its simple message- have a plan to get home safely.

Officers arrested 246 impaired drivers during 2015, the same number as 2014, which is fewer than in past years. Only 58 (23%) impaired drivers were arrested with grant funding; which shows that the Department directed a large amount of regular duty time at the problem including maintaining a dynamic schedule for the four traffic officers, so that they would be best deployed based upon the ongoing analysis of impaired driving crash data. At right, a driver is shown his preliminary breath test results just before being arrested, while another driver is being placed through field sobriety tests at a multi-jurisdictional checkpoint in the northern section of Roanoke County in the Winter of 2015.



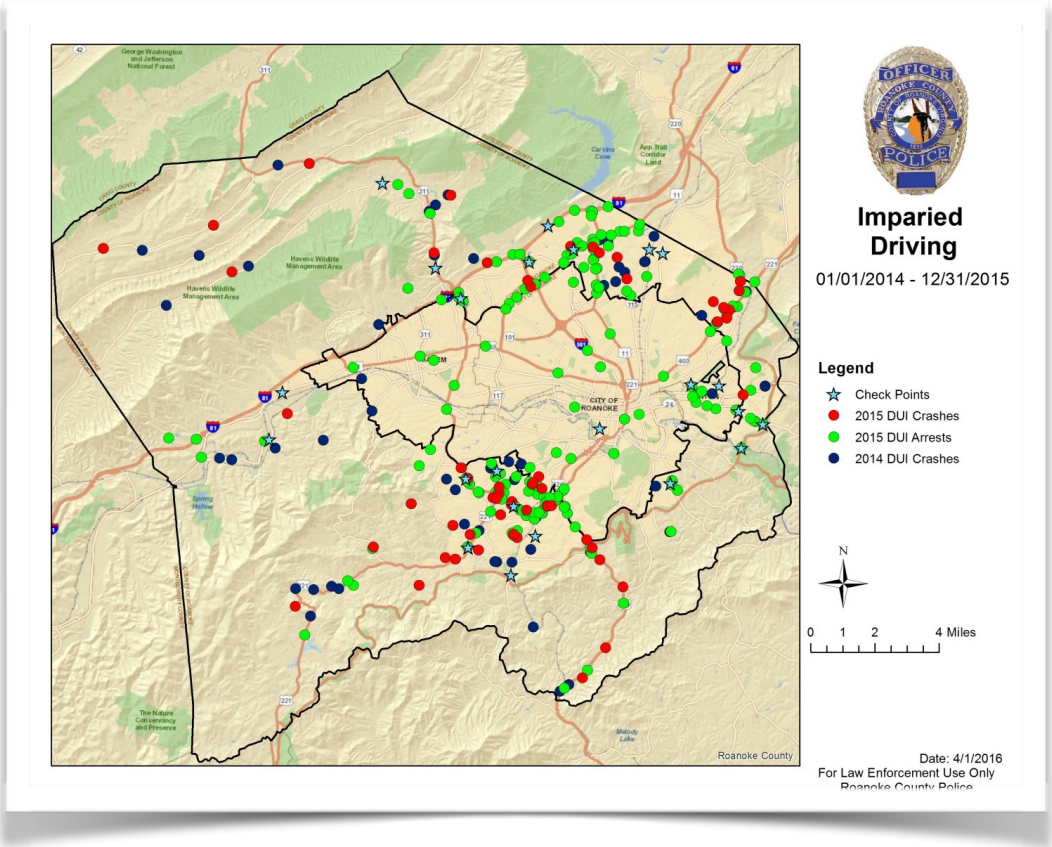
As previously mentioned, a specific goal of the Department was to have at least 75% of impaired driving enforcement performed between the hours of 1800 and 0300 hours on Sundays, Mondays, Wednesdays, Fridays, and Saturdays. By year's end, more than 90% of

the saturation patrols and sobriety checkpoints were conducted during this timeframe resulting in 151 (61%) impaired driving arrests.

Outcomes

For the third straight year, the Department has seen a significant drop in the number of arrests for impaired driving as compared to previous years. However, there has also been a significant drop in the number of impaired driving crashes as well (A/R includes DUID for the purposes of this report). The table at right shows the difference of impaired driving crashes between 2015 and the three year average from 2012-2014. There was a 25% reduction in such crashes in 2015. Please note that one of the A/R fatality crashes in 2015 was caused by an impaired pedestrian.

	Three Year Avg. 2012-2014	2015	% Change
A/R Crashes	78	58	-25.6%
A/R Fatalities	1	2	1 more
A/R Injuries	22	19	-13.6%



The map above shows the location of 2014-2015 impaired driving crashes as well as the location of sobriety checkpoints and impaired driving arrest (not involving a crash or at a checkpoint) in 2015. Please note that some of the checkpoint locations had more than one such operation during the year. The upper and lower left section of Roanoke County is rural and though there were multiple saturation patrols conducted in those areas over the year, there were few arrests.

The table below shows the overall crash data for Zone 1 of the Department's DDACTS program. While 2015 showed an increase in injury crashes over a four year average, overall there was a nearly 20% reduction in total crashes in the target zone.

Reportable Crashes: Target Zone 1										%Change
Crash Type	2011	2012	2013	2014	Yr Avg	St. Dev.	2015	z-score	Significance	from Avg
DMV-Fatality	0	1	0	0	0	0.433	0	-0.577	0.2820	-100.00%
DMV-Personal Injury	15	13	12	16	14	1.581	21	4.427	0.0000	50.00%
DMV-Property Damage	65	61	56	45	57	7.496	36	-2.768	0.0028	-36.56%
Total	80	75	68	61	71	7.176	57	-1.951	0.0255	-19.72%

Recognition

During the summer of 2015, the Department received the National MADD 'Outstanding Heroes Award- Agency' for its ongoing, proactive approach to impaired driving enforcement.

Each year the officer with the most impaired driving arrests is recognized with a letter of commendation from the Chief of Police. This year, PO II S. Hoopes was recognized for his 29 arrests during 2015. Additionally, he was recognized as Special Operations Officer of the Year for his efforts in promoting all areas of traffic safety, including impaired driving, as he was instrumental in planning and leading several efforts in reducing impaired driving crashes including civic presentations and working almost all sobriety checkpoints over the past three years.