ITSMR Research Note

KEY FINDINGS

DRIVERS TICKETED FOR DRUG-IMPAIRED DRIVING

- The number of drivers ticketed for drug-impaired driving is continuing on a general upward trend, increasing 8% between 2011 and 2015, while the number of drivers ticketed for alcohol-impaired driving decreased 17%.
- 28% of the drivers ticketed for drug-impaired driving in 2015 were women, up from 24% in 2011. To a lesser extent, the proportion of female drivers ticketed for alcohol-impaired driving also continued to increase between 2011 and 2015 (25%-26%).
- The largest proportion of drivers ticketed for drug-impaired driving and alcohol-impaired driving each year 2011-2015 were in the 21-29 year age group (37% and 35%, respectively, in 2015).
- 25% of the drug-impaired drivers were also ticketed for alcohol-impaired driving; 16% were also ticketed for speeding compared to 21% of the alcohol-impaired drivers ticketed.

CHARACTERISTICS OF DRUG-IMPAIRED DRIVING ARRESTS

- 31% of the drug-impaired driving arrests occurred on weekends, compared to 52% of the alcohol-impaired driving arrests.
- Drug-impaired driving arrests were more likely to occur during the day than alcohol-impaired driving arrests (32% vs.12% from 9am-6pm), while alcohol-impaired driving arrests were more likely to be occur at night (75% vs. 48% from 9pm-6am).

CONCLUSIONS

- Enhanced enforcement strategies that address the differences in driving patterns (time of day and day of week) between drivers ticketed for drug-impaired and alcohol-impaired driving should be considered.
- The finding that the number of drivers ticketed for drug-impaired driving is continuing to increase and that the involvement of women in these arrests is increasing are trends that should be a focus of enforcement and public awareness efforts by the GTSC and the Advisory Council on Impaired Driving to address the problem of impaired driving in New York State.

Drivers Ticketed for Drug-Impaired Driving on New York Roadways: 2015 Status Report

ABSTRACT

Funded by the Governor's Traffic Safety Committee, the Institute for Traffic Safety Management and Research (ITSMR) recently updated an earlier study on drivers who were ticketed for drugged driving between 2007 and 2011. This current study was designed to determine the number of drivers that have been ticketed for drug-impaired driving on New York's roadways during the five-year period, 2011-2015, and examine the demographic characteristics of those drivers. The study involved the analyses of arrest data from the state's Traffic Safety Law Enforcement and Disposition (TSLED) ticket system. The analyses also included comparisons to tickets issued for alcohol-impaired driving. Selected comparisons with the findings from the earlier study were also included. Key findings from the analyses are noted in the box on the left.

INTRODUCTION

A 2012 study conducted by the Institute for Traffic Safety Management and Research (ITSMR) found that the number of drivers ticketed for drug-impaired driving increased by 20% between 2007 and 2011. Drivers arrested for 1192.4 (DWAI drugs) offenses increased 10% and arrests for 1192.4a (DWAI Drugs & Alcohol) more than doubled over the five years.

These findings, combined with an awareness that the use of both prescription drugs and illegal drugs continues to expand, were of concern to the NYS Governor's Traffic Safety Committee (GTSC) and the state's Advisory Council on Impaired Driving. To address this concern, the GTSC funded ITSMR to update its 2012 study to determine if the upward trends in drivers ticketed and tickets issued for drugged driving on New York roadways are continuing. The study also examined the demographic characteristics of those drivers, as well as the differences and/or similarities with drivers ticketed for alcohol-impaired driving offenses.

RESEARCH METHODOLOGY

The primary objectives of the study were to determine the number of drivers ticketed for drug-impaired driving and identify the key characteristics of those drivers. The study also sought to identify and examine differences between drivers ticketed for drug-impaired driving and alcohol-impaired driving.

Based on these objectives, the study addressed the following key research questions:

- How many drivers each year are ticketed for drug-impaired driving? How many tickets for drugged-driving are issued each year?
- What are the characteristics (i.e., investigating police agency, day of week, time of day) associated with the arrest event? Are there identifiable differences in these characteristics between drug-impaired arrests and alcohol-impaired arrests?
- What characteristics (i.e., age and gender) are associated with the driver ticketed for drug-impaired driving and have those characteristics changed over the past five years? Are there identifiable differences in age and gender between drivers ticketed for drug-impaired driving and drivers ticketed for alcohol-impaired driving?
- In addition to being ticketed for drug-impaired driving, what other VTL violations were these drivers charged with during the same traffic stop?

The study defined a drug-impaired driving arrest as one in which the driver was charged with a violation of the VTL Section 1192.4 (DWAI Drugs) or 1192.4a (DWAI Drugs & Alcohol). An alcohol-impaired driving arrest is defined as one in which the driver was charged with a violation of VTL Section 1192.1 (DWAI), 1192.2 (Per Se) or 1192.3 (DWI).

Data Sources and Data Analyses

The data source for the study was the NYS Department of Motor Vehicles' Traffic Safety Law Enforcement and Disposition (TSLED) system. The TSLED file contains a variety of data on drivers ticketed for violations of the state's Vehicle and Traffic Law (VTL), including the age and gender of the driver, county where the ticket was issued, specific section of the VTL violated, disposition of the ticket and the sanctions imposed. TSLED captures data on tickets issued in all areas of the state except for New York City; prior to 2014, however, TSLED also excluded a portion of the five western townships of Suffolk County on Long Island. TSLED also excludes tickets issued in the cities of Buffalo and Rochester, except for tickets issued in violation of VTL Section 1192 (operating a motor vehicle while under the influence of alcohol or drugs).

The tickets issued in New York City for VTL Section 1192 violations are captured by a system maintained by the NYPD. Since the NYPD system does not have the same detailed data available as TSLED, the ticket analyses for this study were restricted to the data available from TSLED. As such, it is important to note that TSLED captures data on approximately 80% of the VTL 1192 tickets issued annually across the state.

Analyses were conducted to determine the number of drivers ticketed and the number of tickets issued for drug-impaired driving each year, 2011-2015. To conduct the analyses, data on all tickets issued for VTL violations 1192.1 - 1192.4 were extracted for these five years from the TSLED system. The analyses examined various characteristics associated with the issuance of the ticket, including the enforcement agency involved, day of week, time of day, and other tickets issued during the same traffic stop. The analyses also examined the demographic characteristics of the driver (age and gender) and differences between motorists ticketed for drug-impaired driving offenses and motorists ticketed for alcohol-impaired driving offenses. All of the data analyses were conducted by ITSMR project staff with the use of SAS and Excel software.

RESULTS OF TICKET ANALYSES

To address the research questions noted above, various analyses of the data on drug-impaired driving arrests were conducted for the five-year period, 2011-2015. The analyses examined: 1) the number of drivers ticketed and the number of tickets issued, 2) characteristics of the arrest event, and 3) characteristics of the drivers ticketed. In addition, the analyses also included comparisons between drivers ticketed for drug-impaired driving and drivers ticketed for alcohol-impaired driving.

Drivers Ticketed and Tickets Issued

As shown in Table 1, the number of drivers ticketed for drug-impaired driving increased between 2011 and 2012, followed by a decline in 2013. The number then rose steadily between 2013 and 2015, increasing from 3,679 to 4,282. Overall, between 2011 and 2015, the number of drivers ticketed for drug-impaired driving increased by 8% and the number of tickets issued for drug-impaired driving increased 9%. Tickets issued for 1192.4 (DWAI drugs) offenses increased 8% and tickets issued for 1192.4a (DWAI Drugs & Alcohol) increased 11% over the five years. These increases continued the pattern seen during the previous five-year period, 2007-2011, when the number of drivers ticketed increased by 20% and the number of tickets increased by 21%.

In contrast, the number of drivers ticketed for alcohol-impaired driving offenses has been on a downward trend for many years, decreasing 17% between 2011 and 2015 (39,164 vs. 32,502) following a decrease of 15% between 2007 and 2011. The number of tickets issued for alcohol-impaired driving offenses dropped from 68,804 in 2011 to 57,950 in 2015, representing a decrease of 16%, two times the decrease in tickets that occurred between 2007 and 2011. As further indicated in Table 1, the number of tickets issued for VTL 1192.2, 2aa or 2ab (Per Se and Aggravated DWI) between 2011 and 2015 dropped 19%, compared to a 13% decline in tickets issued for 1192.3 (DWI) and a 3% decline for 1192.1 (Driving While Ability Impaired).

TABLE 1
Drivers Ticketed and Tickets Issued for Impaired Driving

	2011	2012	2013	2014	2015	Change 2011-2015
Drug-Impaired Driving						
Drivers Ticketed	3,970	4,013	3,679	3,766	4,282	7.9%
Tickets Issued	4,198	4,294	3,943	4,025	4,569	8.8%
1192.4	3,488	3,533	3,260	3,317	3,781	8.4%
1192.4a	710	760	683	708	788	11.0%
Alcohol-Impaired Driving						
Drivers Ticketed	39,164	36,953	34,839	33,776	32,502	-17.0%
Tickets Issued	68,804	64,668	60,898	59,834	57,950	-15.8%
1192.1	1,257	1,207	1,378	1,516	1,216	-3.3%
1192.2, 2aa, 2ab	31,734	29,660	27,218	26,020	25,649	-19.2%
1192.3	35,813	33,801	32,302	32,298	31,085	-13.2%

Source: NYS DMV TSLED System.

CHARACTERISTICS OF THE ARREST EVENT

Analyses were conducted to examine various characteristics associated with drug-impaired driving arrests, including the issuing enforcement agency, day of week and time of day. Additional analyses were conducted to examine differences between drug-impaired and alcohol-impaired driving arrests. The results of these analyses are included below.

Enforcement Agency

The results of the analyses of drug-impaired and alcohol-impaired driving arrests by enforcement agency are shown in Figures 1A and 1B, respectively. In 2015, the distribution of arrests by enforcement agency is similar for both drug-impaired drivers and alcohol-impaired drivers. Local police agencies (excluding the NYPD) arrested the largest proportion of drivers (45% and 44%, respectively), followed by the State Police (33%). Although a comparison of the 2011 and 2015 data on drivers arrested for alcohol-impaired driving shows small differences by enforcement agency, there were noticeable differences among drivers arrested for drug-impaired driving. As shown in Figure 1A, the proportion of drivers arrested for drug-impaired driving by local police agencies and the State Police increased between 2011 and 2015 (40% vs. 45% and 28% vs. 33%, respectively), while the proportion arrested by the sheriff/county agencies dropped from 32% to 22%.

FIGURE 1A
Drug-Impaired Drivers Ticketed by Enforcement Agency

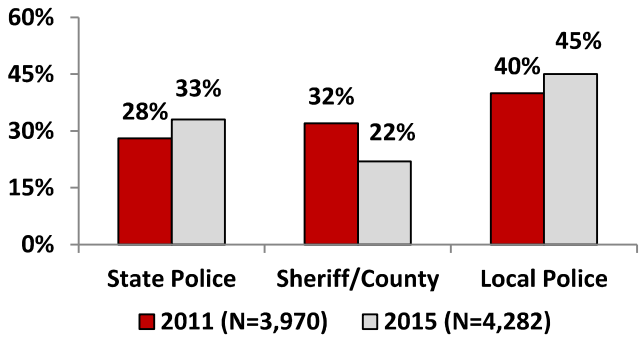
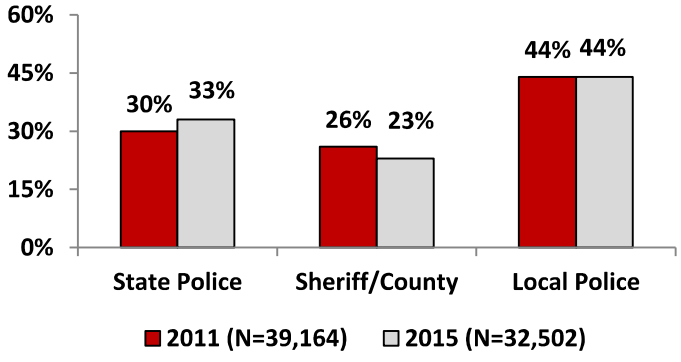


FIGURE 1B
Alcohol-Impaired Drivers Ticketed by Enforcement Agency

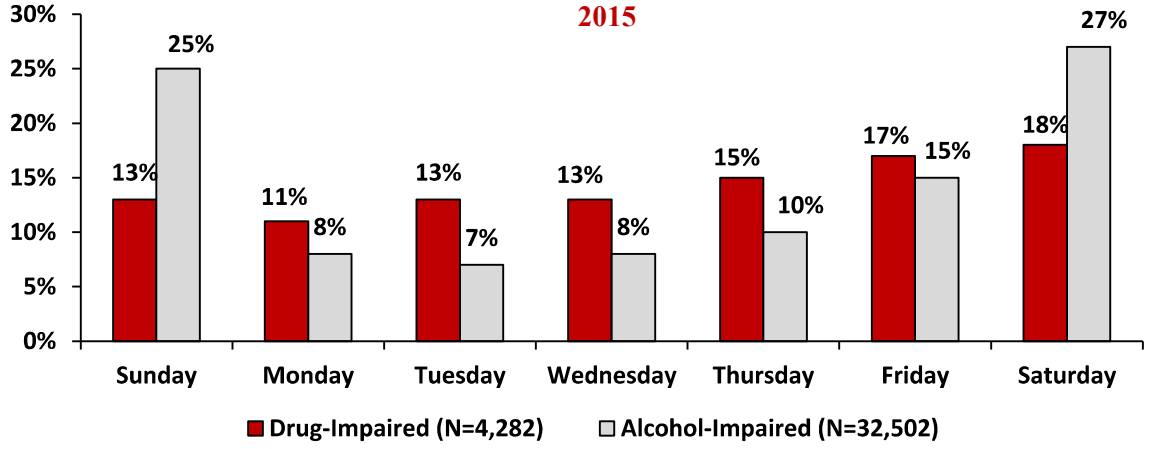


Source: NYS DMV TSLED System

Day of Week

Since the analyses of the 2011-2015 data by day of week showed only small variations from year to year, only the data for 2015 are presented below. As shown in Figure 2, while drug-impaired driving arrests were most likely to occur on Friday (17%) and Saturday (18%), they were fairly evenly distributed over the other days (11%-15%). This pattern is very different from that of alcohol-impaired driving offenses, with alcohol-impaired arrests being much more likely than drug-impaired arrests to occur on weekends (52% vs. 31%) and much less likely to occur on weekdays (48% vs. 69%).

FIGURE 2
Drivers Ticketed by Day of Week
Drug-Impaired vs. Alcohol-Impaired
2015

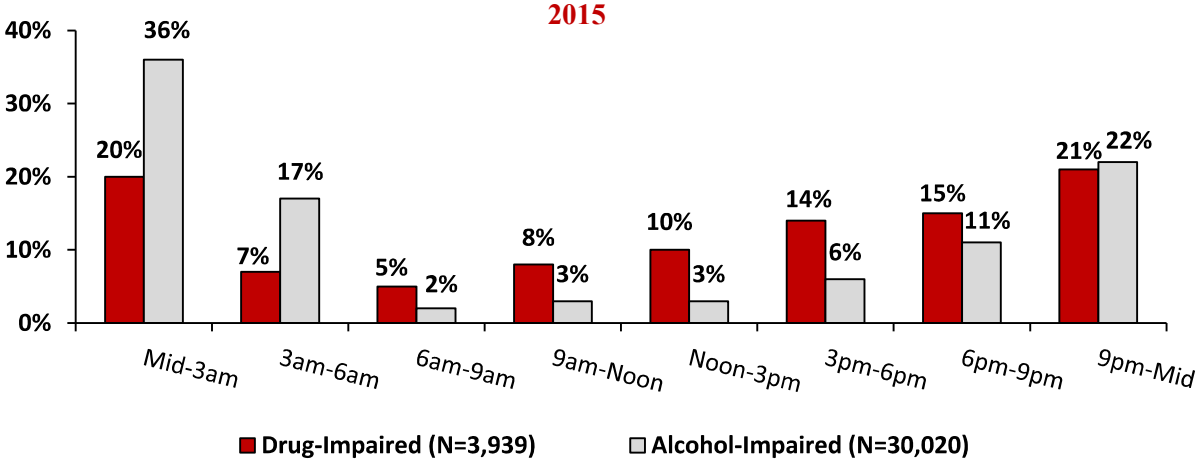


Source: NYS DMV TSLED System

Time of Day

Similar to the analyses by day of week, little variation occurred by time of day so only the data for 2015 are shown in Figure 3. The arrests for drug-impaired driving also followed a different pattern than arrests for alcohol-impaired driving when examined by time of day. Approximately one-half (48%) of the drug-impaired driving arrests occurred at night (9pm-6am) compared to three-quarters (75%) of the alcohol-impaired arrests, while 32% of the drug-impaired driving arrests occurred during the day (9am-6pm) compared to 12% of the alcohol-impaired driving arrests.

FIGURE 3
Drivers Ticketed by Time of Day
Drug-Impaired vs. Alcohol-Impaired
2015



Source: NYS DMV TSLED System

CHARACTERISTICS OF DRIVERS TICKETED FOR DRUG-IMPAIRED DRIVING

To determine the characteristics of drivers ticketed for drug-impaired driving, analyses were conducted to examine the age and gender of the drug-impaired driver. Also examined were other tickets issued during the same arrest event. In addition, analyses sought to identify changes over time with respect to these variables and to examine differences between drivers ticketed for drug-impaired offenses and alcohol-impaired offenses.

Driver Gender

Analyses of the annual 2011-2015 data by gender show that the proportion of drivers arrested for drug-impaired driving who were women is continuing to increase. As shown in Figure 4A, the proportion of drivers ticketed for drug-impaired driving who were women increased from 24% in 2011 to 28% in 2015; this continues the upward trend from 17% in 2007 reported in the earlier study and exceeds the proportion of women who were arrested for alcohol-impaired driving for the first time.

Although at a slower pace, the proportion of drivers arrested for alcohol-impaired driving who were women has also continued to increase. The proportion of drivers arrested for alcohol-impaired driving who were women was 25% in 2011 and 26% in 2015 (Figure 4B); in 2007, female drivers accounted for 22% of the drivers arrested.

FIGURE 4A
Drivers Ticketed for Drug-Impaired Driving by Gender

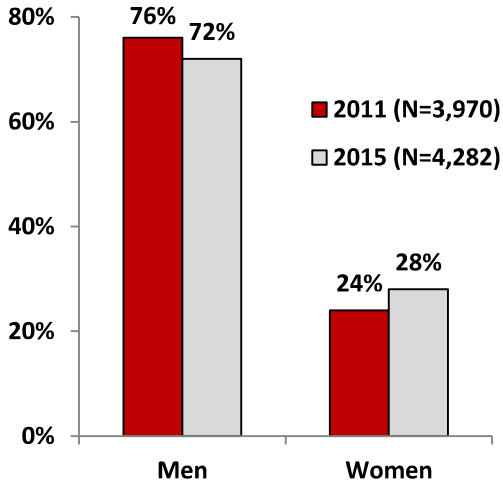
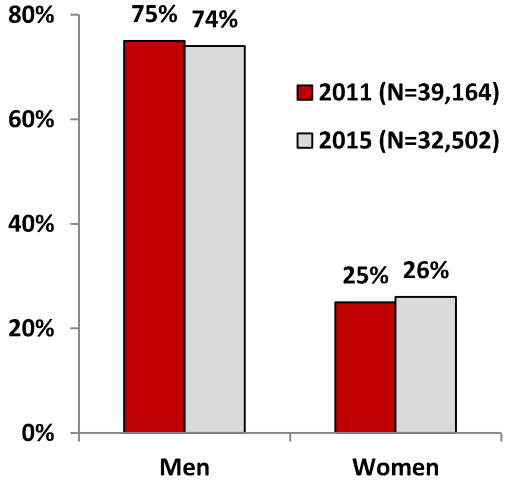


FIGURE 4B
Drivers Ticketed for Alcohol-Impaired Driving by Gender

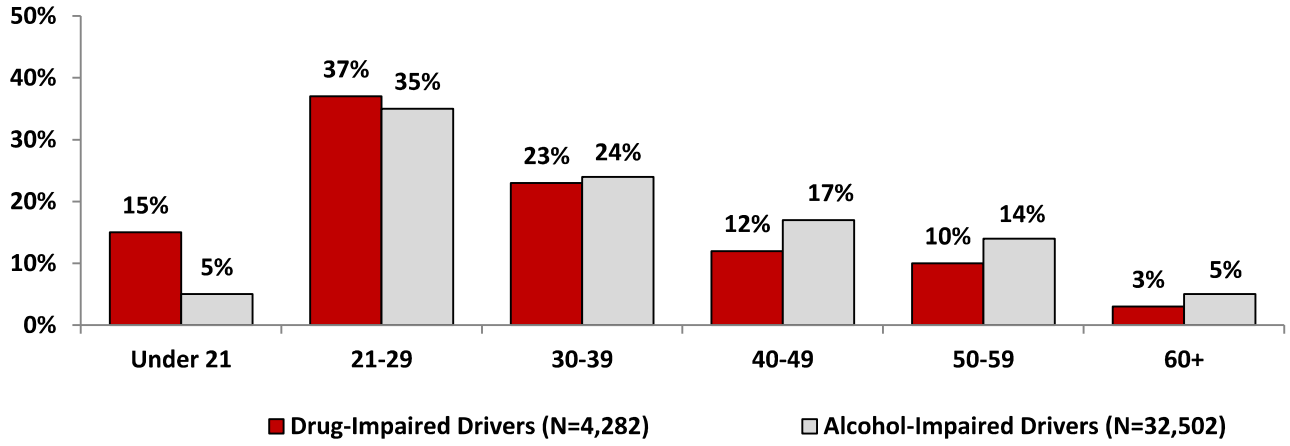


Source: NYS DMV TSLED System

Driver Age

Because the analyses of the 2011-2015 data by driver age showed only small variations from year to year, only the data for 2015 are presented below. The largest proportion of drivers ticketed for drug-impaired and alcohol-impaired driving each year were in the 21-29 age group. Figure 5 shows that in 2015, 37% and 35%, respectively, of the drivers ticketed for drug-impaired and alcohol-impaired driving were ages 21-29. The next largest proportion of drivers ticketed each year were in the 30-39 age group (23% and 24%, respectively). As might be expected due to the state's impaired driving laws, drivers ticketed for alcohol-impaired driving were far less likely than drivers ticketed for drug-impaired driving to be under age 21 (5% vs. 15%).

FIGURE 5
Drivers Ticketed for Impaired Driving by Age
Drug-Impaired vs. Alcohol-Impaired
2015



Source: NYS DMV TSLED System

Tickets Issued for Other VTL Violations

Analyses were also conducted to examine the extent to which drivers ticketed for drug-impaired driving were also ticketed for other VTL violations during the same traffic stop and to identify differences between the other violations associated with drug-impaired and alcohol-impaired drivers ticketed. The results of these analyses are summarized in Table 2.

As shown in Table 2, of the drug-impaired drivers ticketed, 25% were also ticketed for an alcohol-impaired driving offense and 16% were ticketed for a speeding violation. In comparison, 3% of the drivers ticketed for alcohol-impaired driving were also ticketed for drug-impaired driving and 21% were ticketed for a speeding violation.

TABLE 2
Tickets Issued for Other Selected VTL Violations
2015

VTL Violation	Drug-Impaired Drivers (N=4,282)	Alcohol-Impaired Drivers (N=32,502)
Speeding	16%	21%
Alcohol (1192.1-.3)	25%	NA
Drugs (1192.4 & 4a)	NA	3%
Seat Belts	4%	3%
Cell Phones	2%	1%

Source: NYS DMV TSLED System

SUMMARY AND CONCLUSIONS

A 2012 study conducted by ITSMR found that the number of drivers ticketed for drug-impaired driving increased by 20% between 2007 and 2011. Based on its awareness that the use of both prescription and illegal drugs continues to expand, the GTSC funded ITSMR to update its 2012 study to determine if the upward trend in drivers ticketed for drugged driving on New York roadways is continuing. The study also examined the demographic characteristics of those drivers, as well as the differences and/or similarities with drivers ticketed for alcohol-impaired driving offenses.

The overall findings of this study indicate that arrests for drug-impaired driving are continuing on an upward trend, increasing 8% between 2011 and 2015, while arrests for alcohol-impaired driving are on a general downward trend, decreasing 17% between 2011 and 2015 (Table 3).

TABLE 3
Drivers Ticketed & Tickets Issued for Impaired Driving
Change between 2011 and 2015

	Drug-Impaired Drivers	Alcohol-Impaired Drivers
Drivers Arrested	+ 7.9%	- 17.0%
Tickets Issued	+ 8.8%	- 15.8%

Source: NYS DMV TSLED System

Specific key findings of the study include:

- 31% of the drug-impaired driving arrests occurred on weekends, compared to 52% of the alcohol-impaired driving arrests.
- 32% of the drug-impaired driving arrests occurred during the day (9am-6pm) and 48% occurred at night (9pm-6am); in contrast, 12% of the alcohol-impaired driving arrests occurred during the day and 75% occurred at night.
- 28% of the drivers arrested for drug-impaired driving in 2015 were women, up from 24% in 2011 and 17% in 2007, while the proportion of drivers arrested for alcohol-impaired driving increased to a much lesser extent (22% to 25% between 2007 and 2011 and 25% to 26% between 2011 and 2015).
- Largest proportion of drivers ticketed for drug-impaired or alcohol-impaired driving were ages 21-29 (37% and 35%, respectively, in 2015).

The findings that the number of drivers ticketed for drug-impaired driving has continued on a general upward trend since 2007 while the number of drivers ticketed for alcohol-impaired driving has been on a steady decline are significant for the future focus of efforts by the GTSC and the Advisory Council on Impaired Driving to reduce impaired driving. The differences between drug-impaired and alcohol-impaired drivers highlighted in this report, including the increasing involvement of women particularly in drug-impaired arrests, should provide useful information for developing effective enforcement and public awareness strategies to address the problem of drug-impaired driving among motorists in New York State.

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