ITSMR Research Note

KEY FINDINGS

IMPAIRED DRIVING ARRESTS: 2009 VS. 2018

➢ The total number of drivers arrested for impaired driving (alcohol or drugs or both) under the TSLED system dropped 29%:

✓ Drivers arrested for alcohol-impaired driving dropped by 32%.

✓ Drivers arrested for drug-impaired driving increased by 27%.

✓ Drives arrested for both alcohol- and drug-impaired driving dropped by 23%.

➢ Tickets issued under TLSED for violations of VTL 1192.1-1192.4 dropped 28%.

CHARACTERISTICS OF THE ARREST EVENT: 2018

➢ Alcohol-impaired driving arrests were much more likely than drug-impaired driving arrests to occur on weekends (50% vs. 31%).

➢ Drug-impaired driving arrests were much more likely to occur during the day than alcohol-impaired arrests (33% vs.11% from 9am-6pm), while alcohol-impaired driving arrests were more likely to occur at night (74% vs. 47% from 9pm-6am).

CHARACTERISTICS OF THE DRIVERS ARRESTED: 2018

➢ 27% of the drivers ticketed for alcohol-impaired driving and 26% of the drivers ticketed for drug-impaired driving were women, up from 23% and 20%, respectively, in 2009.

➢ The largest proportion of alcohol-impaired drivers and drug-impaired drivers ticketed were in the 21-29 year age group, the same as in 2009.

➢ 22% of the alcohol-impaired drivers and 15% of the drug-impaired drivers were also ticketed for speeding, similar to 2009.

CONCLUSIONS

➢ Enforcement strategies addressing differences in the driving patterns (day & time) of drug-impaired and alcohol-impaired drivers should be considered.

➢ The findings that drug-impaired driving arrests are increasing while alcohol-impaired driving arrests are decreasing are trends that should be a focus of enforcement and public awareness efforts by the GTSC and the state's Advisory Council on Impaired Driving.

Impaired Driving Arrests on New York Roadways: A Decade of Change

INTRODUCTION

The past decade has brought about a number of changes across the nation that by nature are likely to have an effect on the issue of impaired driving. Changes have ranged from tougher laws and stiffer penalties for violations of impaired driving laws to the legalization of both medicinal and recreational marijuana use. Although New York has not yet legalized the recreational use of marijuana, New York has enacted tougher laws and stiffer penalties. Such laws have focused on drivers with a BAC at or above the 0.18 level and the expanded use of ignition interlocks.

Since many factors, from enforcement of the impaired driving laws to public information and awareness campaigns to treatment for substance abuse, have an impact on a person's decision to drive while impaired, whether by alcohol, drugs or a combination of both, it is a challenge to attribute changes in impaired driving behavior to any single factor. However, it can be informative to examine any one of the factors over time to identify any changes that may have occurred. Recognizing the value in such an effort, the New York Governor's Traffic Safety Committee (GTSC) recently funded the Institute for Traffic Safety Management and Research (ITSMR) to conduct a study on the number of drivers arrested for impaired driving over the past decade.

Information about drivers arrested for impaired driving is presented as follows:

❖ Overview
❖ Drivers ticketed & tickets issued
❖ Characteristics of arrest event
❖ Characteristics of drivers arrested
❖ Drivers ticketed for other VTL violations

The data for this ten-year study (2009-2018) were obtained from the NYS DMV's Traffic Safety Law Enforcement & Disposition system (TSLED), New York City Police Department (NYPD) and the Suffolk County STOP-DWI program.

OVERVIEW

Over the ten-year period, 2009-2018, the total number of drivers arrested statewide for impaired driving violations (VTL 1192) dropped from 60,375 in 2009 to 41,331 in 2018, representing a decline of 32% (Figure 1).

FIGURE 1
Drivers Arrested Statewide for Impaired Driving
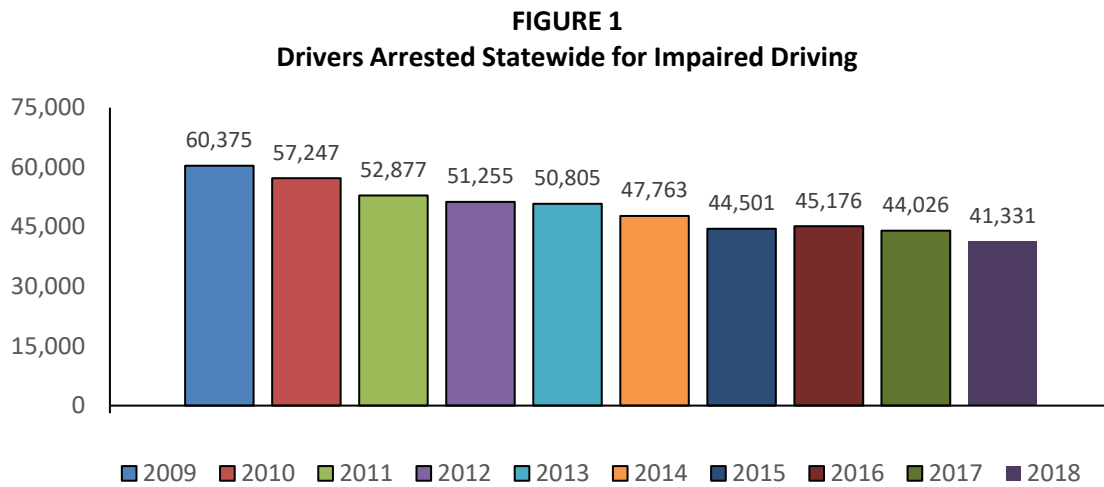
Because detailed data on impaired driving arrests in New York City are not available from the NYPD, the remaining analyses were conducted using only the data available from the TSLED system. For purposes of this study, the drivers arrested for impaired driving under the TSLED system are divided into three groups:

1) Drivers arrested for *alcohol-impaired driving*: defined as one in which the driver was charged only with a violation of VTL Section 1192.1 (DWAI), 1192.2 (Per Se) or 1192.3 (DWI).
2) Drivers arrested for *drug-impaired driving*: defined as one in which the driver was charged only with a violation of the VTL Section 1192.4 (DWAI Drugs) or 1192.4a (DWAI Drugs & Alcohol).
3) Drivers arrested for both *alcohol and drug- impaired driving*: defined as one in which the driver was charged with both a violation of VTL 1192.1-3 and a violation of 1192.4.

To examine changes between 2009 and 2018, the impaired driving arrest data for these three groups of drivers were compared on a variety of variables, including: 1) the number of drivers ticketed and the number of tickets issued, 2) characteristics of the arrest event, 3) characteristics of the drivers arrested and 4) tickets issued to drivers for other violations during the same road stop.

DRIVERS TICKETED AND TICKETS ISSUED

From 2009 to 2018, the total number of drivers ticketed for impaired driving under the TSLED system decreased by 29% (Table 1). An examination of the three groups of drivers shows that the drivers arrested for alcohol-impaired driving and those arrested for both alcohol- and drug-impaired driving decreased by 32% and 23%, respectively, between 2009 and 2018. In contrast, drivers arrested for drug-impaired driving rose 27% between 2009 and 2018.

Table 1 also shows that the number of tickets issued under TSLED for VTL 1192.1-4 violations dropped 28%, with the largest drop occurring in 1192.1 DWAI tickets (52%), followed by VTL 1192.2 Per Se tickets (32%) and VTL 1192.3 DWI tickets (28%). Again, in contrast, the number of tickets issued for 1192.4 & 4a (ADWI Drugs) violations rose 13%.
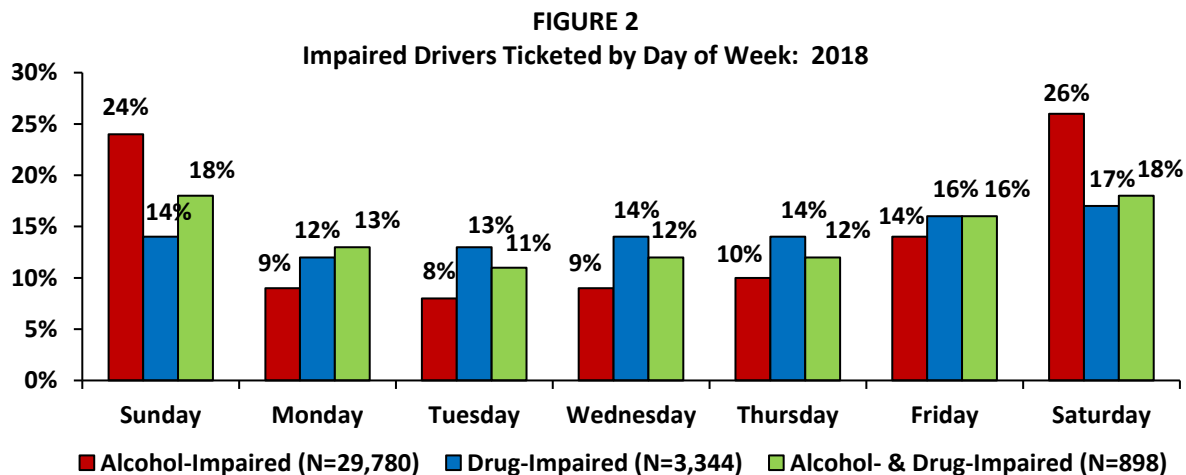
TABLE 1 Drivers Ticketed and Tickets Issued for Impaired Driving: 1192.1 - 4 (TSLED Only)			
	2009	**2018**	**Change 2009-2018**
Drivers Ticketed	47,663	34,022	-28.6%
Alcohol-Impaired	43,860	29,780	-32.1%
Drug-Impaired	2,638	3,344	26.8%
Alcohol- & Drug-Impaired	1,165	898	-22.9%
Tickets Issued for 1192.1 – 1192.4	81,797	58,884	-28.0%
1192.1 (DWAI)	2,215	1,070	-51.7%
1192.2, 2aa, 2ab (Per Se & Aggravated DWI)	35,218	24,100	-31.6%
1192.3 (DWI)	40,317	29,146	-27.7%
1192.4 & 4a (DWAI Drugs)	4,047	4,568	12.9%

CHARACTERISTICS OF THE ARREST EVENT

Comparison analyses of the impaired driving arrests were conducted by day of week, time of day and the issuing enforcement agency. The results are shown below in Figures 2 - 4.

Day of Week

Since no notable differences by day of week occurred between 2009 and 2018, only the data for 2018 is presented below. As Figure 2 shows, alcohol-impaired drivers were far more likely to be arrested on weekends (50%) than either drug-impaired drivers (31%) or drivers arrested for both alcohol- and drug-impaired driving (36%). In general, drug-impaired arrests were fairly evenly spread out over the seven days (12%-17%).

FIGURE 2
Impaired Drivers Ticketed by Day of Week: 2018

Legend: ■ Alcohol-Impaired (N=29,780) ■ Drug-Impaired (N=3,344) ■ Alcohol- & Drug-Impaired (N=898)

Time of Day

As shown in Figure 3b, only small variations occurred by time of day with regard to the distribution of drug-impaired arrests between 2009 and 2018. In comparison, notable shifts in the distribution by time of day occurred among alcohol-impaired drivers arrested and drivers arrested for both alcohol-and drug-impaired driving (Figures 3a & 3c). Both in 2009 and 2018, the largest proportion of drug-impaired drivers were arrested between 9pm-midnight (22%), while the largest proportion of alcohol-impaired drivers were arrested between midnight-3am each year (36% and 34%, respectively). A different pattern is seen for drivers arrested for both alcohol- and drug-impaired driving, with the largest proportion in 2009 occurring midnight-3am (23%) and the largest proportion in 2018 shifting to 9pm-midnight (20%).

FIGURE 3a
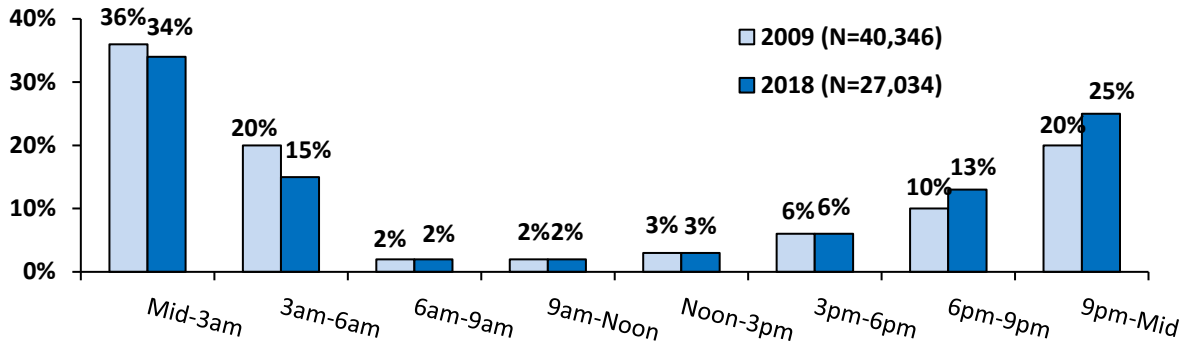## Alcohol-Impaired Drivers Ticketed by Time of Day
2009 vs. 2018

Legend:
- 2009 (N=40,346)
- 2018 (N=27,034)

Time of Day	2009	2018
Mid-3am	36%	34%
3am-6am	20%	15%
6am-9am	2%	2%
9am-Noon	2%	2%
Noon-3pm	3%	3%
3pm-6pm	6%	6%
6pm-9pm	10%	13%
9pm-Mid	20%	25%

FIGURE 3b
Drug-Impaired Drivers Ticketed by Time of Day
2009 vs. 2018

Legend:
- 2009 (N=2,398)
- 2018 (N=3,049)

Time of Day	2009	2018
Mid-3am	19%	18%
3am-6am	9%	7%
6am-9am	3%	5%
9am-Noon	8%	8%
Noon-3pm	11%	11%
3pm-6pm	11%	14%
6pm-9pm	15%	17%
9pm-Mid	22%	22%
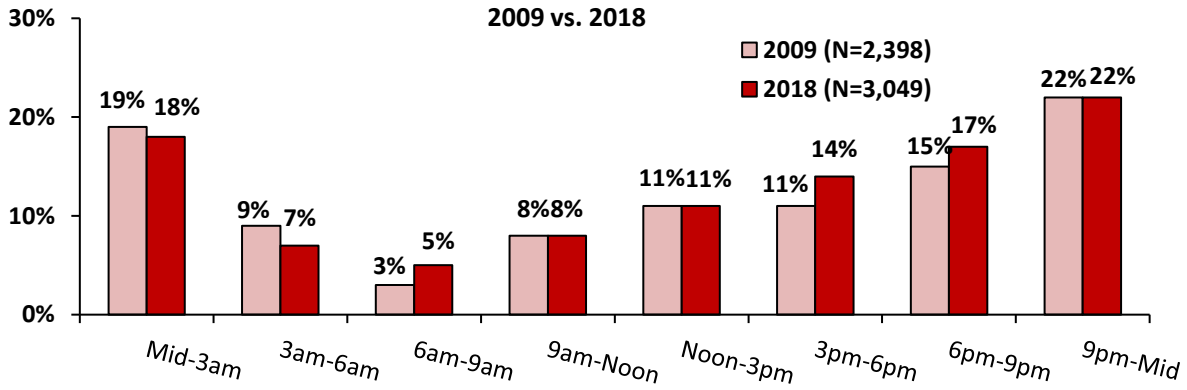
FIGURE 3c
Alcohol- & Drug-Impaired Drivers Ticketed by Time of Day
2009 vs. 2018

Legend:
- 2009 (N=1,096)
- 2018 (N=826)

Time of Day	2009	2018
Mid-3am	23%	18%
3am-6am	13%	9%
6am-9am	4%	4%
9am-Noon	7%	8%
Noon-3pm	9%	12%
3pm-6pm	12%	14%
6pm-9pm	13%	15%
9pm-Mid	19%	20%
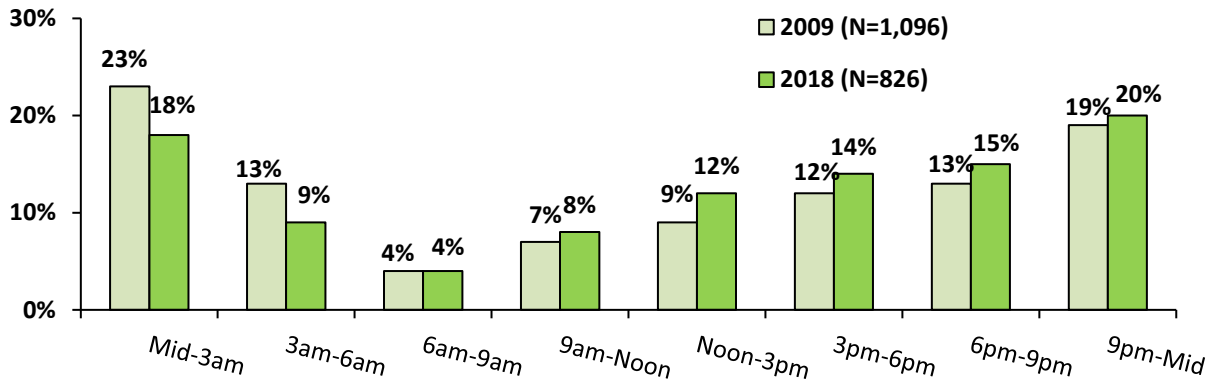
Enforcement Agency

Both in 2009 and 2018, the largest proportion of arrests were made by local police agencies (excluding the NYPD), regardless of whether it was for impairment by alcohol, drugs or both. (Figures 4a-4c). Between 2009 and 2018, there were noticeable differences among drivers arrested for alcohol-impaired driving and drivers arrested for drug-impaired driving. Figure 4a shows that the proportion of drivers arrested by the State Police for alcohol-impaired driving increased from 32% to 39% between 2009 and 2018, while the proportion arrested by the sheriff/county agency or local police dropped. Figure 4b shows that the proportion of drivers arrested for drug-impaired driving by local police agencies and the State Police increased between 2009 and 2018 (35% vs. 40% and 30% vs. 36%, respectively), while the proportion arrested by the sheriff/county agencies dropped from 35% to 24%.

A comparison of the 2009 and 2018 data on drivers arrested for both alcohol- and drug-impaired driving show only small differences by enforcement agency (Figure 4c).
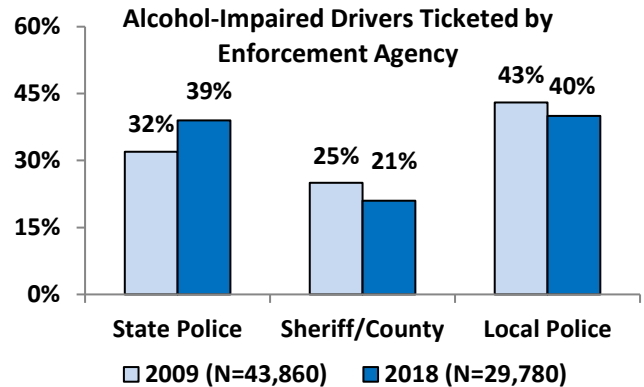
FIGURE 4a
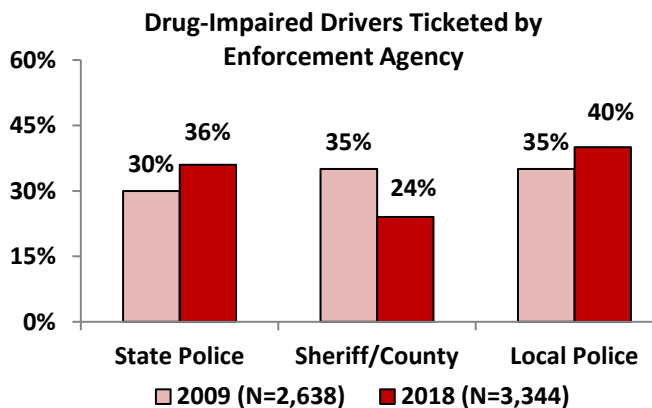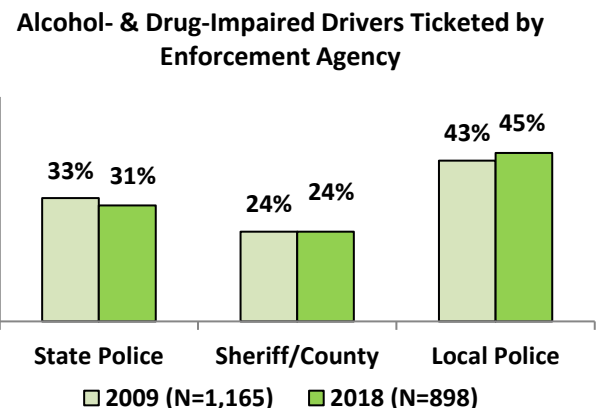**Alcohol-Impaired Drivers Ticketed by Enforcement Agency**

FIGURE 4b
Drug-Impaired Drivers Ticketed by Enforcement Agency

FIGURE 4c
Alcohol- & Drug-Impaired Drivers Ticketed by Enforcement Agency
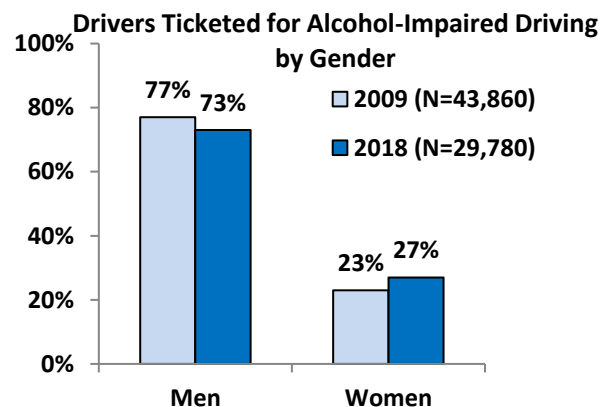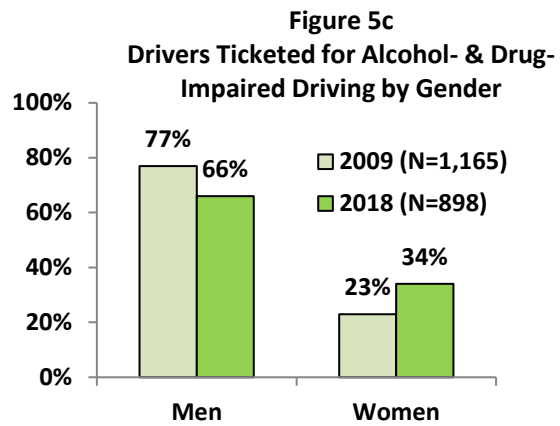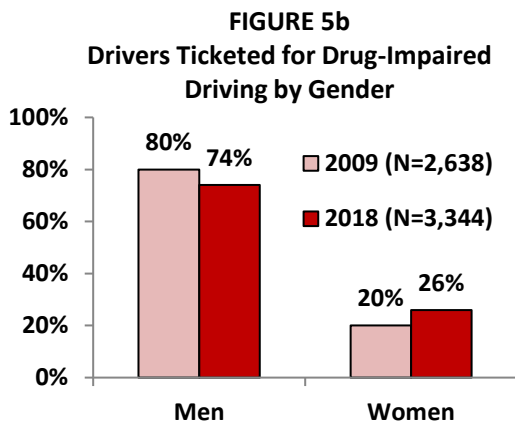

CHARACTERISTICS OF THE DRIVERS ARRESTED

Analyses were also conducted to examine the age and gender of impaired drivers and the extent to which these drivers were issued other tickets during the same arrest event.

Driver Gender

Over the past decade, the proportion of drivers arrested for impaired driving who were women has increased in each of the three groups of drivers (Figures 5a-c). The greatest increase occurred among drivers arrested for both alcohol- and drug-impaired driving, increasing from 23% in 2009 to 34% in 2018 (Figure 5c).

FIGURE 5a
Drivers Ticketed for Alcohol-Impaired Driving by Gender

FIGURE 5b
Drivers Ticketed for Drug-Impaired Driving by Gender

- 2009 (N=2,638)
- 2018 (N=3,344)

Men: 80% (2009), 74% (2018)
Women: 20% (2009), 26% (2018)

Figure 5c
Drivers Ticketed for Alcohol- & Drug-Impaired Driving by Gender

- 2009 (N=1,165)
- 2018 (N=898)

Men: 77% (2009), 66% (2018)
Women: 23% (2009), 34% (2018)

Driver Age

The largest proportions of drivers ticketed for impaired driving in 2009 and 2018 were in the 21-29 age group (Figures 6a-c). As would 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. As shown in Figures 6a-c, between 2009 and 2018, the proportion of alcohol-impaired drivers arrested who were under 21 dropped from 8% to 3%, the proportion of drug-impaired drivers arrested fell from 21% to 12%, and the proportion of drivers arrested for both alcohol- and drug impaired dropped from 17% to 8%.

These decreases among young drivers were offset primarily by increases among drivers ages 30-39 and drivers over age 50. Between 2009 and 2018, the proportion of alcohol-impaired drivers who were ages 30-39 increased from 21% to 27%, the proportion of drug-impaired drivers who were ages 30-39 increased from 18% to 26%, and the proportion among drivers arrested for both alcohol and drug-impaired driving rose from 20% to 29%.
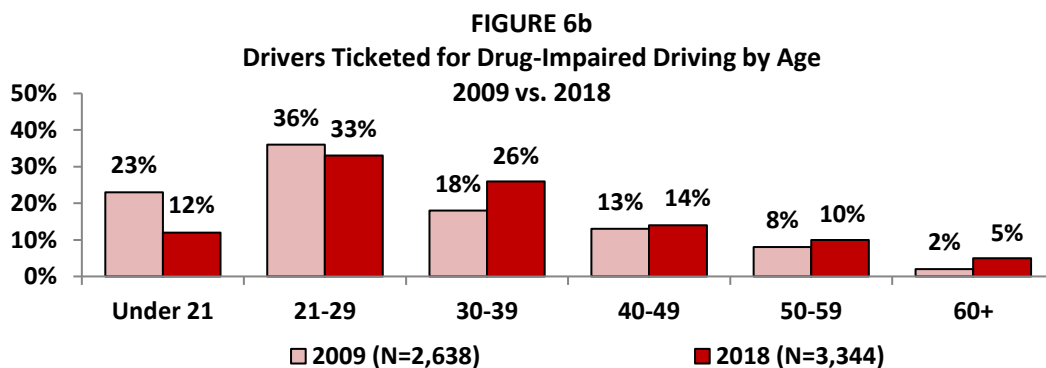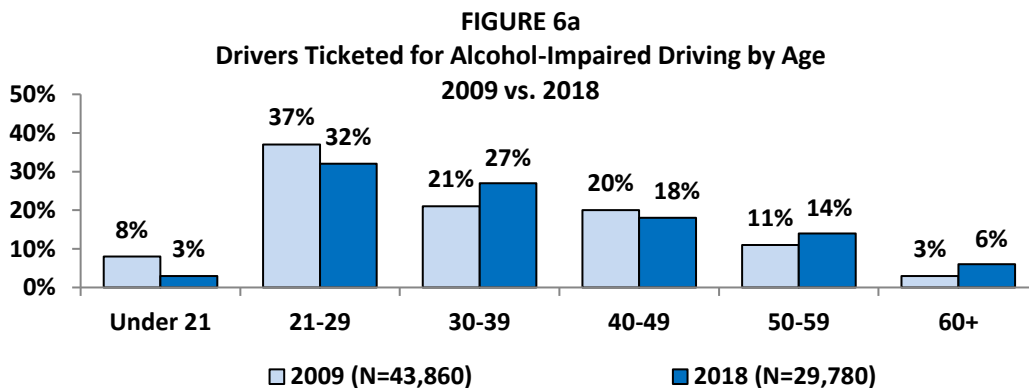
FIGURE 6a
Drivers Ticketed for Alcohol-Impaired Driving by Age
2009 vs. 2018

Age	2009	2018
Under 21	8%	3%
21-29	37%	32%
30-39	21%	27%
40-49	20%	18%
50-59	11%	14%
60+	3%	6%

2009 (N=43,860) — 2018 (N=29,780)

FIGURE 6b
Drivers Ticketed for Drug-Impaired Driving by Age
2009 vs. 2018

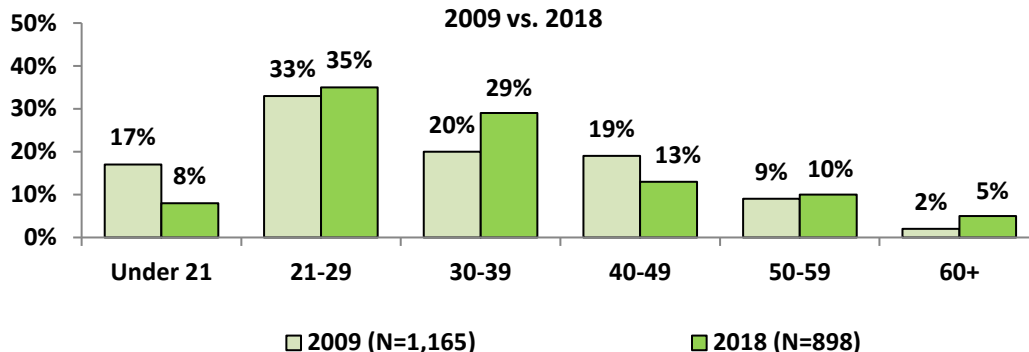| Age	2009	2018
Under 21	23%	12%
21-29	36%	33%
30-39	18%	26%
40-49	13%	14%
50-59	8%	10%
60+	2%	5%

2009 (N=2,638) — 2018 (N=3,344)

FIGURE 6c
Drivers Ticketed for Alcohol- and Drug-Impaired Driving by Age
2009 vs. 2018

DRIVERS TICKETED FOR OTHER VTL VIOLATIONS

Analyses were also conducted to examine the extent to which drivers ticketed for drug-impaired or alcohol-impaired driving were ticketed for other VTL violations during the same traffic stop. Table 2 shows that a sizable proportion of drivers were also ticketed for speeding, regardless of whether they were arrested for alcohol-impaired driving or drug-impaired driving or both. The table also shows that little variation occurred between 2009 and 2018. In 2018, 22% of the alcohol-impaired drivers were also ticketed for speeding, compared to 15% of the drug-impaired drivers and 17% of the drivers ticketed for both alcohol- and drug-impaired driving.

As might be expected, the proportion of drivers who were also ticketed for seat belt violations dropped between 2009 and 2018 for each of the three groups of drivers. In 2018, 2% of the alcohol-impaired drivers and drug-impaired drivers were also ticketed for seat belt violations, compared to 4% of the drivers arrested for both alcohol- and drug-impaired driving.

Approximately 1% of the drivers in each of the three groups were also issued tickets for cell phone violations in both years, 2009 and 2018.

	TABLE 2 Drivers Ticketed for Other VTL Violations					
	Alcohol-Impaired Drivers		Drug-Impaired Drivers		Alcohol- & Drug-Impaired Drivers	
VTL Violation	**2009 (N=43,860)**	**2018 (N=29,780)**	**2009 (N=2,638)**	**2018 (N=3,344)**	**2009 (N=1,165)**	**2018 (N=898)**
Speeding	19.6%	21.8%	14.6%	15.2%	17.3%	17.5%
Seat Belts	3.6%	2.3%	5.9%	2.5%	6.8%	4.3%
Cell Phones	1.2%	0.8%	1.0%	1.0%	1.5%	1.0%

SUMMARY AND CONCLUSIONS

The key findings from the analyses of arrest data obtained from the TSLED system for the ten-year period 2009-2018 are summarized in the table below.

TABLE 3 Impaired Driving Arrests: A Decade of Change			
	Alcohol-Impaired Drivers	Drug-Impaired Drivers	Alcohol- & Drug-Impaired Drivers
Change: 2009 vs. 2018			
Number of drivers arrested	- 32%	+27%	-23%
Characteristics of Arrest Event: 2009 vs. 2018			
Weekends	51% vs. 50%	32% vs. 31%	35% vs. 36%
9pm-3am	56% vs. 59%	41% vs. 40%	42% vs. 38%
Noon-9pm	19% vs. 22%	37% vs. 42%	34% vs. 41%
Characteristics of Drivers Arrested: 2009 vs. 2018			
Women	23% vs. 27%	20% vs. 26%	23% vs. 34%
Ages 21-29	37% vs. 32%	36% vs. 33%	33% vs. 35%
Ages 30-39	21% vs. 27%	18% vs. 26%	20% vs. 29%
Also ticketed for speeding violation	20% vs. 22%	15% vs. 15%	17% vs. 17%

These findings 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 should provide useful information for developing effective enforcement and public awareness strategies to address the problems of both drug-impaired and alcohol-impaired driving among motorists in New York State.

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