

IMPAIRED DRIVING IN NEW YORK STATE

STUDY ON HOW FREQUENTLY MOTORISTS DRINK AND DRIVE

September 2009

Conducted by
The Institute for Traffic Safety Management and Research
University at Albany, State University of New York

for
New York State
Governor's Traffic Safety Committee

TABLE OF CONTENTS

	Page
Executive Summary	i
Chapter 1: Introduction	1
Chapter 2: Research Methodology	3
Chapter 3: Study Results	7



EXECUTIVE SUMMARY

INTRODUCTION

Over the past two decades, New York has made significant strides in reducing the incidence of impaired driving on its roadways. The number of alcohol-related fatal crashes has declined by 60%, dropping from 884 fatal crashes in 1981 to 355 in 2008. However, there is concern that further progress will be difficult to achieve since the alcohol-related fatal crash rate has been on an upward trend in recent years, increasing from 24% in 2004 to 31% in 2008. To address this concern, in Spring 2008, New York's Governor's Traffic Safety Committee (GTSC) established the New York State Impaired Driving Work Group. The Work Group has been charged with conducting a comprehensive examination of the scope and causes of the problem of impaired driving and developing recommendations for reducing crashes resulting from impaired driving. To support the work of the Work Group, the GTSC is funding the Institute for Traffic Safety Management and Research (ITSMR) to conduct a series of research studies on specific topics that have been identified by the Work Group. This document reports on the initial study conducted by ITSMR to establish an estimate of how often motorists drink and drive.

RESEARCH METHODOLOGY

The study addressed the following key research questions:

- How many motorists drink and drive and how frequently do they engage in this behavior?
- What would influence drinking drivers to change their behavior?

The research design for the study used a multi-method approach that incorporated:

1. A telephone survey of New York State drivers (a random sample of 865 drivers were interviewed)
2. Focus groups of convicted impaired driving offenders (9 focus groups involved drivers who had completed the state's Drinking Driver Program and 9 groups involved drivers who were on probation for DWI-related violations)

KEY FINDINGS

- ❖ There are approximately 85,000 impaired driving trips every day in New York State.
- ❖ Only about 1 out of every 500 impaired driving trips results in an arrest.
- ❖ There is public support for key initiatives: increased enforcement, ignition interlocks, and alcohol assessment and treatment.

Frequency of Drinking and Driving

The analyses conducted to answer the questions of “how many motorists drink and drive and how frequently” used weighted data from the telephone survey in conjunction with the number of New York State licensed drivers. To provide representative and reliable measurements of New York State drivers’ perceptions, attitudes, knowledge, and experiences related to drinking and driving, 865 motorists ages 18 and over were interviewed as part of the telephone survey. To estimate how many of New York’s licensed drivers drink and drive, a series of survey questions directly addressed the issue of driving after consuming alcohol. Specific questions collected information from the survey respondents who said they had driven after drinking on the amount of alcohol they usually consume and the frequency with which they drink.

In 2008, there were approximately 11.3 million licensed drivers in New York State. Key estimates on their drinking and driving behavior include:

- ❖ In the past year, 1.7 million licensed drivers (15% of New York’s 11.3 million licensed drivers) drove at least once after having 3 or more drinks, a level at which they were likely to be impaired.
- ❖ These 1.7 million drivers made 31 million trips while they likely were impaired, averaging more than 85,000 trips per day.
- ❖ With 64,800 arrests for drinking and driving and 31 million impaired driving trips in 2008, the probability of arrest for drinking and driving is only about 1 out of every 500 impaired driving trips.

The statistical sampling error is ± 3.3 percentage points at the 95% confidence level. It is important to note that the above estimates may be conservative because most people probably under report rather than over report their drinking behavior.

Opinions on How to Reduce Drinking and Driving

To address the research question of “What would influence drinking drivers to change their behavior?”, the telephone survey respondents were asked specific questions on how to reduce drinking and driving among the general driving population, whereas the focus group participants were asked questions about deterring convicted drinking drivers from becoming repeat offenders.

Opinions of Telephone Survey Respondents

All 865 of the survey respondents were asked what should be done to reduce drinking and driving:

- 21% thought that more enforcement was needed
- 15% thought more education was needed
- 10% thought the fine should be changed and 5% thought the license sanction should be changed
- 6% thought stricter penalties in general were needed

When asked whether the total cost of being convicted for drinking and driving would influence most people to reduce the frequency of their drinking and driving, 20% said the cost would have to be at least \$10,000. Another 20% said that no amount would be high enough to cause those who drink and drive to change their behavior.

The survey respondents who had driven after drinking in the past year were asked what would have the greatest deterrent effect on them:

- 53% said that the fear of hurting someone
- 19% said the \$5,000-\$10,000 costs associated with drinking and driving convictions
- 10% said the loss of the driver's license

All 865 respondents were asked about their attitudes toward the evaluation of drinking drivers and the use of ignition interlocks:

- 84% felt that all drivers should be evaluated after the first offense to see if they have a serious drinking problem; an additional 13% felt they should be evaluated after the second offense.
- 94% thought that all drivers convicted of impaired driving should be required to have an ignition interlock (57% thought drivers should be required to have an ignition interlock after the first offense and 37% thought they should be required after the second offense).

Opinions of Focus Group Participants

Since the focus group participants were drivers who had been convicted of drinking and driving at least once, they were asked their opinions on what might deter convicted drinking drivers from becoming repeat offenders. Four key themes emerged from the focus group discussions:

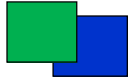
- **Knowing others who have had a DWI is not a deterrent**
 - Despite almost all participants knowing family members or friends who had been arrested for DWI, participants generally did not think it would happen to them. One participant said "I don't think hearing about anybody who has a DWI has an effect on anybody until it happens to them."
- **Penalties for repeat offenders should be stricter**
 - The DDP participants indicated that the penalties should "make punishment more of a punishment." However, some DDP participants and some Probation participants said that stiffer penalties such as longer periods of license suspension/revocation or jail sentences are not effective.
 - Almost all Probation group participants said an ignition interlock should be a penalty or sanction for a second offense; some said it should be required after a first offense.

- **Treatment (if appropriate) should be mandatory**
 - Almost all DDP participants and many of the Probation participants said that treatment should be mandatory.
 - Many Probation group participants said that a sentence to probation should be combined with treatment.
- **Public information and education efforts need to be changed**
 - Participants said that education should occur at all levels, beginning in school well before kids are old enough to drive and then be given at key points in their driving history, including at time of permit test, road test, full licensure and at age 21.
 - Participants also said that public information messages (PSAs) need to target several different audiences.
 - Public information messages should be graphic, accurate and “real”. Use real people to tell what really happens when you get arrested and convicted for drinking and driving. Involve real victims of alcohol-related crashes in messages.
 - Limit alcohol advertisements

SUMMARY

The multi-method approach was designed to provide a comprehensive overview of the impaired driving issue in New York State, and, in particular, to provide an estimate of how frequently motorists drink and drive. The findings from the telephone survey and focus groups provide an unprecedented opportunity to examine the issue of drinking and driving from different perspectives by providing information on drivers’ reported attitudes, perceptions, knowledge, and experiences related to drinking and driving.

Specific findings from the study should produce opportunities for the various Impaired Driving Work Group teams to develop and implement new programs and policies designed to reduce drinking and driving among New York’s motorists. The results from this study should also provide more realistic input for the computer simulation model that was built in 2007 and 2008 to examine the flow of impaired driving offenders through the system, from the time of arrest to relicensing by the DMV.



INTRODUCTION

Since the early 1980s, with the passage of the landmark anti-DWI law in 1981 that established the STOP-DWI program, New York has made significant strides in reducing the incidence of impaired driving on its roadways. The number of alcohol-related fatal crashes has declined by 60%, dropping from 884 fatal crashes in 1981 to 355 in 2008. Despite this dramatic decline, there is concern that further progress will be difficult to achieve. This is evidenced by the fact that New York's alcohol-related fatal crash rate has been on an upward trend in recent years, increasing from 24% in 2004 to 31% in 2008. In addition, over the past several years, the number of motorists ticketed annually for impaired driving has remained fairly constant at approximately 64,000. To address this concern, New York's Governor's Traffic Safety Committee (GTSC) has provided support for a number of new initiatives in recent years to reduce impaired driving. One key initiative is the New York State Impaired Driving Work Group.

Established in Spring 2008, the Work Group has been charged with conducting a comprehensive examination of the scope and causes of the problem of impaired driving and developing recommendations for reducing crashes resulting from impaired driving. The Work Group is organized into nine teams that focus on the various components of the impaired driving system: general deterrence; legislation; enforcement; prosecution; courts; probation; assessment, evaluation, and treatment; licensing/relicensing; and research. Each team is responsible for investigating the issues relevant to its area, identifying priority concerns, and making recommendations. In carrying out their responsibilities over the past year, the teams have recognized the need for more comprehensive research and in-depth data analyses in the area of impaired driving. To meet the need for more in-depth information and data on impaired driving, the GTSC is funding the Institute for Traffic Safety Management and Research (ITSMR) to conduct a series of research studies on specific topics that have been identified by the Work Group.

This document reports on the initial study conducted by ITSMR which involved establishing an estimate of how often motorists drink and drive. The results from this study should provide the Work Group teams with the information they need to make informed decisions in the design and development of new initiatives that address the problem of impaired driving.

BACKGROUND ON THE STUDY

The primary purpose of this study was to establish a reasonable estimate of the extent to which motorists drink and drive in New York State. Rather than base the estimate on the number of drivers who are "caught" drinking and driving by the police or are found to be impaired as a result of their involvement in a crash, the intent is to estimate the size of the larger pool of impaired drivers on the roadways who do not come into contact with enforcement. The study was designed to supplement and expand the work undertaken in 2007 and 2008 to build a computer simulation model that examined the flow of impaired driving offenders through the system, from the time of arrest to relicensing by the Department of Motor Vehicles (DMV). Legislative initiatives and policies in recent years have focused primarily on the back-end of the system, i.e., strengthening existing sanctions and penalties or implementing new ones that will deter drivers from drinking and driving again. Despite these initiatives, the system remains static.

Of the approximately 64,000 drivers arrested for impaired driving annually in recent years, approximately 75% have been first time offenders and 25% repeat offenders. Built to replicate these historical data, the model was used to explore the effectiveness of various policies and legislative sanctions on the system. In doing so, the model tested many different “best case” scenarios, examining what impact a 100% effectiveness rate of specific policies and sanctions will have on the system. While the findings from these “what if” tests indicated that some policies and sanctions were highly effective in reducing recidivism, some were not. Furthermore, none of the policies or sanctions tested had an effect on first time offenders, i.e., the front-end of the system.

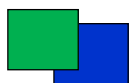
The findings from the model raised important questions related to who these drinking drivers are and what can be done about reducing their numbers. To generate the historical number of persons arrested, the model uses a “probability of arrest” rate of 1 in 200 or .005¹, with the number of persons drinking and driving being based on the number of licensed drivers. The differences in the size of the pool of drivers who drink and drive and the number of times a motorist must drink and drive each year to generate the historical data document the importance of obtaining a better estimate of the extent to which motorists drink and drive. Hence, the primary goal of the study was to determine how often motorists drink and drive.

The results from this study should provide a more realistic input to the model as to how often persons drink and drive. The specific findings from the study should produce opportunities for the various Work Group teams to develop and implement new programs and policies designed to reduce drinking and driving among New York’s motorists.

ORGANIZATION OF THE REPORT

The next section of this report describes the research methodology used to conduct the study, which included a telephone survey and the use of focus groups. The third section discusses the key results of the telephone survey and the focus groups as they relate to the study’s research questions.

¹ The literature shows that the probability of arrest for impaired driving ranges from 1:50 to 1:2000.



RESEARCH METHODOLOGY

This section of the report presents a description of the research design and methodology used to conduct the study. With a primary goal of determining how often motorists drink and drive, the study was designed to address the following two key research questions:

- How many motorists drink and drive and how frequently do they engage in this behavior?
- What would influence drinking drivers to change their behavior?

Designing a study to establish a reasonable estimate of the extent to which motorists drink and drive is a challenging task. Since there is no direct method to use in identifying who is on the roadway at any given point in time after having been drinking, the research design for the study used a multi-method approach.

MULTI-METHOD APPROACH

Based on the nature of the research questions to be addressed, the multi-method approach incorporated two major components:

1. A telephone survey of New York State drivers
2. Focus groups of convicted impaired driving offenders

TELEPHONE SURVEY OF NEW YORK STATE DRIVERS

The telephone survey was conducted by Fact Finders, Inc., a marketing research firm located in Albany, New York. Conducted for the Governor's Traffic Safety Committee and the Institute for Traffic Safety Management and Research (ITSMR), the survey was designed to provide representative and reliable measurements of New York State drivers' perceptions, attitudes, knowledge, and experiences related to drinking and driving. In collecting such information, the survey serves the dual purpose of providing information that can be used to 1) answer the study's research questions and 2) assist the Impaired Driving Work Group teams in their design and development of effective countermeasures.

Sample Design and Composition of Sample

In order to reliably measure public opinion in New York State, a scientific random probability sample was designed. The primary sample was comprised of 800 randomly selected respondents living in one of New York State's 62 counties and driving at least a few times a year. To address issues related to the large proportion of young drivers that use cell phones exclusively, an additional 65 surveys were conducted to provide comparable data on the behaviors, attitudes, and experiences related to drinking and driving from young drivers living in New York State. For the purpose of this research, "young drivers" were defined as adults between the ages of 18 and 24. All interviews were conducted by telephone. This probability sample design ensured that each household in New York State had an equal

and unbiased probability of inclusion in the sample. The final sample of 865 was obtained through the use of a random digit dialing and the use of purchased lists of households in New York State. Of the 865 interviews conducted, 629 were done through random digit dialing, 171 were obtained from a purchased list of downstate households, and 65 were obtained through a purchased list of households with at least one resident in the target age group of 18 to 24.

Survey Questionnaire

The survey questionnaire was designed by the ITSMR project staff in consultation with Fact Finders. Fact Finders conducted telephone interviews to pilot test draft versions of the questionnaire with New York State drivers. Intermediate changes to the questionnaire were made as required to produce a questionnaire that was comprehensive, valid, and free from contextual bias. The final questionnaire was pilot tested by telephone prior to implementation of interviewing for the study. Interviews conducted during pilot tests were not included in the final sample.

Data Collection

All interviews were completed between April 27 and July 3, 2009. Data collection shifts extended from 5:00 PM to 9:00 PM EDT weekdays, 11:00 AM to 4:00 PM EDT Saturdays and Sundays, and 8:00 AM to 5:00 PM EDT weekdays as needed for those who requested callbacks during the day. All interviews were conducted in English using Fact Finder's CATI (Computer Aided Telephone Interviewing) system.

Once randomly selected for inclusion in the survey sample, as many as ten repeat phone calls (callbacks) were made until a final disposition was assigned. Without continued pursuit of the initially-selected drivers, a sample of convenience may have resulted from disproportionate contacts with the easiest-to-reach drivers. These repeated phone calls represent the persistence required to ensure that the final sample is unbiased and representative of the entire New York State licensed driver population. To enhance the response rate while minimizing non-response error and self-selection response bias, respondents in this research were guaranteed anonymity for their participation.

Data Processing and Analysis

All data were collected using the CATI system, in which interviewers enter responses electronically while conducting each telephone interview. Responses to open-ended questions were collected verbatim and content coded. Following data collection, all data were thoroughly reviewed, checked, and cleaned.

The data analyses were conducted by ITSMR project staff with the use of Stata and SAS[®] software. Because of a potential bias due to the large proportion of respondents ages 55 and over, all of the analyses conducted used data that were weighted based on the age distribution of licensed drivers in New York State.

FOCUS GROUPS OF CONVICTED IMPAIRED DRIVING OFFENDERS

While the telephone survey was designed to capture information on the perceptions, attitudes, knowledge and driving behaviors of the general driver population in New York State, the primary objective of the focus group approach was to collect detailed information from drivers convicted of drinking and driving. Specific topics addressed in the focus group discussions included: 1) how often did the participants drink and drive before they got caught, 2) what, if anything, would have prevented

them from drinking and driving, and 3) what sanctions/penalties did they think should be imposed for second and third offenses.

Focus groups were conducted using two different populations of convicted impaired drivers: 1) first-time offenders who had completed the state's Drinking Driver Program (DDP), and 2) repeat offenders on probation. A total of 18 focus groups were conducted between late April and mid-June 2009, nine involving drivers who had completed the DDP and nine involving drivers who were on probation for DWI-related violations.

Selection of Focus Group Participants

To establish the focus groups, the directors of the state's 70 DDP programs and the state's 62 county probation departments were contacted and invited to participate in a focus group. Of those who indicated interest in participating, nine DDP programs and nine county probation departments were selected for inclusion in the study. They were selected from around the state to ensure that the focus groups would represent various geographical regions of the state (urban, suburban, and rural).

The directors of the selected DDP programs and county probation departments were responsible for identifying 6-12 volunteers from their program or department to participate in the focus group. All focus groups were facilitated by a member of the ITSMR project staff; each focus group met for one 90 minute session and the session was audio-recorded. To show appreciation for their participation in the project, each participant was given a \$25 Mobil gas card and a \$10 Dunkin Donuts card.

Focus Group Questionnaire

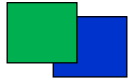
Because the participants from the DDP programs were primarily first time offenders, while the participants from the county probation departments were primarily repeat offenders, separate questionnaires were designed for the DDP focus groups and for the Probation focus groups. Each questionnaire was designed by the ITSMR project staff and contained nine questions. ITSMR project staff pilot tested the draft questionnaires and revised them as warranted.

Data Collection, Processing, and Analyses

The audio-recordings from each focus group session were transcribed by a professional transcription service. Using qualitative methods, the transcriptions were analyzed to identify the major themes from the 18 focus group discussions. The themes related to the study's research questions are presented in the next section of the report.

SUMMARY

Incorporating the two components described above, the multi-method approach is designed to provide a comprehensive overview of the impaired driving issue in New York State, and, in particular, provide an estimate of how frequently motorists drink and drive. The findings from the telephone survey and focus groups are indicative of actual drinking and driving behavior from different perspectives.



STUDY RESULTS

Using the information collected through the telephone survey and the focus groups, this chapter discusses the study's research questions:

- How many motorists drink and drive and how frequently do they engage in this behavior?
- What would influence drinking drivers to change their behavior?

ESTIMATE OF FREQUENCY OF DRINKING AND DRIVING

The primary purpose of this study was to establish a reasonable estimate of the extent to which motorists drink and drive in New York State. Rather than base the estimate on the number of drivers who are “caught” drinking and driving by the police or are found to be impaired as a result of their involvement in a crash, the intent was to estimate the size of the larger pool of impaired drivers on New York's roadways who do not come into contact with enforcement. The study was designed to supplement and expand the work undertaken in 2007 and 2008 to build a computer simulation model that examined the flow of impaired driving offenders through the system, from the time of arrest to relicensing by the Department of Motor Vehicles (DMV).

The simulation model provided a holistic view of the state's drinking and driving problem, and provided a means by which to better comprehend the structure of the impaired driving system and test new or proposed changes in policies for discussion purposes prior to implementation. The findings from the model raised important questions as to “How many motorists drink and drive and how frequently do they engage in this behavior?” As indicated previously, these research questions were addressed using a multi-method approach that involved gathering information from a telephone survey of New York drivers and focus groups involving convicted impaired driving offenders. This approach enabled various aspects of the problem to be examined from different perspectives.

ANALYSIS OF DATA COLLECTED

The analyses conducted to answer the questions of “how many motorists drink and drive and how frequently” used various data collected from the telephone survey in conjunction with the number of licensed drivers in New York State. As noted previously, because of a potential bias due to the large proportion of respondents ages 55 and over, all of the analyses conducted used data that were weighted based on the age distribution of licensed drivers in New York State.

The analysis began by identifying the number of licensed drivers who drink, followed by determining the number of licensed drivers who drive after they have been drinking.

Licensed Drivers Who Drink

In 2008, there were approximately 11.3 million licensed drivers in New York State. The weighted data from the telephone survey were used to estimate how many of these licensed drivers drink.

As shown in Table 1, 76% of the survey respondents drink alcoholic beverages. Applying this percentage to the number of New York State licensed drivers shows that approximately 8.6 million licensed drivers drink alcoholic beverages; approximately 2.7 million licensed drivers do not drink alcoholic beverages.

Table 1		
<i>Do you ever drink alcoholic beverages, such as beer, liquor, or wine?</i>		
	Survey Respondents (N=865)	NYS Licensed Drivers (N=11,284,545)
Yes	76.1%	8,587,539
No	23.6%	2,663,152
No opinion/not answered	0.3%	33,854

The estimated 8.6 million licensed drivers who drink does not mean that these people all drink and drive. Rather, because they drink alcohol and are licensed to drive a motor vehicle, the 8.6 million represents an upper limit on the pool of people who could potentially drink and drive. Using similar reasoning, the estimated 2.7 million licensed drivers who do not drink alcohol at all will never be at risk for DWI.

Licensed Drivers Who Drive After Drinking

The survey respondents interviewed who said they drink alcoholic beverages were asked a series of questions about their driving behavior after consuming alcohol. In response to these questions, 41% of the 865 survey respondents had driven after consuming alcohol at least once in the past year (Table 2). Extrapolating to the general licensed driver population, an estimated 4.6 million licensed drivers operated a motor vehicle after having consumed alcohol in the past year. Again, this does not imply that all these people drove impaired. People may have consumed only a small amount of alcohol and then driven or perhaps their body size may have allowed them to drink and remain under the legal limit and therefore they would not be considered an impaired driver. The 4.6 million, which represents an upper limit of those people who may put themselves at risk for an impaired driving arrest, can be reduced by examining the amount of alcohol consumed.

Specific survey questions sought to collect information from the survey respondents who said they had driven after drinking on the amount of alcohol they usually consume and the frequency with which they drink. Table 2 shows that 15% of the 865 survey respondents had driven after drinking in the past year and usually consume three or more drinks when they drink. Applying this proportion to the 11.3 million NYS licensed drivers indicates that approximately 1.7 million drivers have driven after three or more drinks.²

² In New York State, three or more drinks during a single event could potentially put the driver at risk of arrest for impaired driving, since the BAC typically associated with three drinks is about 0.06%. New York's Vehicle and

Of that 15% of the survey respondents, one percent drink on a daily basis, two percent drink 3 to 4 times a week, five percent drink on weekends only, and six percent drink occasionally (Table 2). The results from applying this frequency distribution to licensed drivers are also shown in Table 2. For example, it is estimated that about 260,000 motorists drive 3 to 4 times a week after typically consuming 3 or more drinks in one event.

Table 2				
	Survey Respondents	NYS Licensed Drivers	Estimated Times/Yr	Estimated Drinking Incidents/Yr
Total	865	11,284,545		
Motorists Who Drink	76.1%	8,587,539		
Motorists Who have Driven After Drinking at Least Once in Past Year	40.8%	4,604,094		
Motorists Who Have Driven After Drinking at Least Once in Past Year and Usually Have 3+ Drinks/Event	15.1%	1,703,966		128,779,227
Daily	1.0%	112,845	365	41,188,589
3 to 4 times week	2.3%	259,545	182	47,237,105
Weekends	5.4%	609,365	52	31,687,002
Occasionally	6.4%	722,211	12	8,666,531
The statistical sampling error is ± 3.3 percentage points at the 95% confidence level.				

Drinking and Driving Trips

Further analyses were conducted to estimate the total number of drinking and driving trips that occur each year. The first step in deriving that estimate involved multiplying the number of drinking drivers by their frequency of drinking (Table 2). For example, the 112,845 drivers drinking daily were estimated to generate 41,188,589 drinking incidents in a year. As indicated in Table 2, there are an estimated 129 million potential drinking incidents in New York State each year.

To determine how many of the 129 million potential drinking incidents involved driving, analyses were conducted using the weighted data from the telephone survey with regard to the extent motorists drink outside their home and use a motor vehicle to get to and from these other locations. The results are summarized in Table 3. As shown in Table 3, of the survey respondents who have driven after drinking in the past year and usually have 3 or more drinks when they drink, the proportion who drink someplace other than at home ranged from 23% for drivers drinking daily or 3 to 4 times a week to 77% for those who drink occasionally. Multiplying the estimated number of drinking incidents per year by these

Traffic law specifies a two-tier system for impaired driving, with a BAC of 0.08% and above being defined as “driving while intoxicated” and a BAC level of 0.06-0.07% being defined as “driving while ability impaired.”

proportions indicates that there are an estimated 38 million incidents of drinking outside the home each year.

Table 3					
	Estimated Total Drinking Incidents/Yr	Proportion of Respondents Who Usually Drink at Location Other Than Home	Estimated Drinking Incidents at Locations Other Than Home/Yr	Proportion of Respondents Who Usually Drive To/From Drinking Location	Estimated Drinking & Driving Trips/Yr
Motorists Who Have Driven After Drinking at Least Once in Past Year and Usually Have 3+ Drinks/Event	128,779,227		38,101,590		31,183,559
Daily	41,188,589	23%	9,473,376	78%	7,389,233
3 to 4 times week	47,237,105	23%	10,864,534	78%	8,474,337
Weekends	31,687,002	35%	11,090,451	90%	9,981,406
Occasionally	8,666,531	77%	6,673,229	80%	5,338,583

The final step of the analysis sought to estimate how many of the 38 million incidents of drinking outside the home each year involved driving. To derive this estimate, the weighted data from the telephone survey with respect to whether a motorist usually drove to/from the drinking location were analyzed. As shown in Table 3, 78% of the drivers who drink daily or drink 3 to 4 times a week usually get to/from the location by driving their vehicle, compared to 90% of those who drink only on weekends and 80% of those who drink occasionally. In total, it is estimated that there are 31 million drinking and driving trips each year on New York's roadways, which represents an average of more than 85,000 impaired driving trips per day.

Probability of Arrest for Drinking and Driving

The results of the above analyses were then used to estimate the probability of being arrested for drinking and driving in New York State. To calculate the probability of arrest, the estimated number of drinking and driving trips (31,183,559) was divided by the number of people arrested in 2008 (64,800). The results show that for every 481 impaired driving trips, one driver is arrested, representing a probability of arrest of 0.0021.

SUMMARY

In 2008, there were approximately 11.3 million licensed drivers in New York State. Key estimates on their drinking and driving behavior include:

- ❖ In the past year, 1.7 million licensed drivers (15% of New York's 11.3 million licensed drivers) drove at least once after having 3 or more drinks, a level at which they were likely to be impaired.

- ❖ These 1.7 million drivers made 31 million trips while they were likely to be impaired, averaging more than 85,000 impaired driving trips per day.
- ❖ With 64,800 arrests for drinking and driving and 31 million impaired driving trips in 2008, the probability of arrest for drinking and driving is only about 1 out of every 500 impaired driving trips.

The statistical sampling error is ± 3.3 percentage points at the 95% confidence level. It is important to note that the above estimates may be conservative because most people probably under report rather than over report their drinking behavior.

OPINIONS ON HOW TO REDUCE DRINKING AND DRIVING

To address the research question of “What would influence drinking drivers to change their behavior?”, both the telephone survey respondents and the focus group participants were asked about their opinions on how to reduce drinking and driving. The telephone survey respondents were asked specific questions on how to reduce drinking and driving among the general driving population, whereas the focus group participants were asked questions about deterring convicted drinking drivers from becoming repeat offenders.

OPINIONS OF TELEPHONE SURVEY RESPONDENTS

The survey respondents were asked two key questions that related to this research question. One question was asked of all 865 survey respondents, while the second question was asked only of the respondents who said that they had driven after drinking in the past year.

When all 865 survey respondents were asked the general question of what should be done to reduce drinking and driving, 21% thought that more enforcement was needed and 15% thought that more education was needed (Table 4). Various changes to the penalties assessed for impaired driving offenses were also mentioned, including the fines (10%) and license sanctions imposed (5%), and 6% thought stricter penalties in general were needed.

Table 4	
<i>In your opinion, what should be done to reduce drinking and driving?</i>	(N=865)
More DWI enforcement	20.9%
More education	15.1%
Change fines	9.5%
Stricter penalties	5.9%
License sanction (suspension/revocation)	4.9%
Jail	4.6%
Greater awareness of DWI	4.3%
Bar-related (e.g., server training)	4.2%
Ignition interlock	3.2%
Other	12.0%

No opinion/not answered	15.4%
-------------------------	-------

Those respondents who reported that they had driven after drinking in the past year were asked what would have the greatest deterrent effect on them (Table 5). Over half of the respondents (53%) indicated that the fear of hurting someone would have the greatest influence on getting them to stop or reduce how often they drink and drive. The next most frequent responses were the \$5,000-\$10,000 costs associated with drinking and driving convictions (19%) and the loss of the driver's license (10%).

Table 5	
<i>For drivers who reported they had driven after drinking in the past year, which of the following would have the greatest influence on stopping or reducing how often you drink and drive?</i>	
	(N=353)
Fear of hurting someone	52.9%
Costs of \$5,000 to \$10,000	18.6%
Loss of license	10.2%
Arrest and booking	8.8%
Vehicle being impounded	3.5%
Ignition Interlock	1.9%
No opinion/not answered	4.1%

Also of interest was whether the total cost of being convicted for drinking and driving would influence most people to reduce the frequency of their drinking and driving. Asked of all 865 survey respondents, 20% said the cost would have to be at least \$10,000 (Table 6). Another 20% said that no amount would be high enough to cause those who drink and drive to change their behavior.

Table 6	
<i>At what total cost do you think most people would reduce the number of times they drink and drive?</i>	
	(N=865)
Less than \$1,000	6.5%
\$1,000 - \$2,499	13.6%
\$2,500 - \$4,999	3.3%
\$5,000 - \$9,999	14.2%
\$10,000 or over	20.0%
No amount	19.7%
No opinion/not answered	22.7%

To capture information on specific strategies that are designed to reduce the problem of drinking and driving, all 865 respondents were asked about their attitudes toward the evaluation of drinking drivers and the use of ignition interlocks. As indicated in Table 7, 84% of the survey respondents felt that all persons should be evaluated after the first offense to see if they have a serious drinking problem, and an additional 13% felt they should be evaluated after the second offense. Similarly, 57% of the survey respondents thought that all persons should be required to have an ignition interlock after the first offense, with another 37% indicating that persons should be required to have an ignition interlock after the second offense.

Table 7	
<i>All persons should be evaluated to see if they have a serious drinking problem...</i>	(N=865)
After the first offense	84.3%
After two or more offenses	12.7%
Persons convicted of drinking and driving should not be evaluated	2.5%
No opinion/not answered	0.4%
<i>All persons should be required to have an ignition interlock device placed on their vehicle to prevent them from driving after drinking...</i>	
After the first offense	56.6%
After two or more offenses	37.2%
Persons convicted of drinking and driving should not be required to have an ignition interlock	4.9%
No opinion/not answered	1.2%

OPINIONS OF FOCUS GROUP PARTICIPANTS

Since the focus group participants were drivers who had been convicted of drinking and driving at least once, they were asked their opinions on what might deter convicted drinking drivers from becoming repeat offenders. Four key themes emerged from the focus group discussions:

- Knowing others who have had a DWI is not a deterrent
- Penalties for repeat offenders should be stricter
- Treatment (if appropriate) should be mandatory
- Public information and education efforts need to be changed

Knowing Others Who Have Had a DWI Is Not a Deterrent

Participants in the DDP focus groups were asked if prior to their arrest they knew anybody (family/friend/work colleague) who had gotten arrested for DWI, and if they did, why they thought that failed to stop them from putting themselves at risk for DWI.

- Almost all of the participants said that they had family members and/or friends who had been arrested for DWI prior to their own arrest for DWI.
- Despite knowing family members or friends who had been arrested for DWI, participants gave a variety of answers when asked why that personal knowledge failed to deter them:

“I did it because I was stupid, young and dumb.”

“Why did I fail to stop? Alcoholic...I’m an alcoholic...full blown alcoholic.”

“I assumed he got DWIs because he was drinking and driving all the time. I wasn’t, so I figured it wouldn’t happen to me.”

“I don’t think hearing about anybody who has a DWI has an effect on anybody until it happens to them.”

Penalties for Repeat Offenders Should Be Stricter

Participants in both the DDP and Probation focus groups were asked what sanctions or penalties should be imposed for a second or third offense.

- The DDP participants indicated that the penalties should “make punishment more of a punishment”; i.e., stiffer penalties are needed. However, some DDP participants and some Probation participants said that stiffer penalties such as increased fines, longer periods of license suspension/revocation or jail sentences are not effective.
- Some DDP participants said the second offense should be a felony. However, some Probation participants said a felony is too severe a penalty because it affects getting a job and will likely result in more people fighting the charge, which will burden the courts.
- Almost all DDP participants and many of the Probation participants said that treatment should be mandatory. Some participants said that if the driver is an alcoholic, they will continue to drink and drive. A few participants said that “nothing is going to change behavior unless the person is ready to change.”
- On the issue of jail as an effective penalty or sanction, many DDP and Probation group participants said that jail is not a deterrent, noting that jail makes people worse – it makes them angry and it usually does not provide any education or treatment to get drivers to change their behavior.
- The Probation group participants believed that probation was a positive penalty or sanction for second or third offenses. Many also said that a sentence to probation should be combined with treatment.
- Almost all of the Probation group participants said an ignition interlock should be a sanction for a second offense; some said it should be imposed after a first offense. One participant said “If we look back...seat belts were not required. The government came and said ‘We will save lives, including your own...you must wear a seat belt.’ If we truly want to do away with DWIs and not just play the statistics game, the political game, why shouldn’t it [sic: an ignition interlock] be mandatory in every car?”

Treatment (if appropriate) Should Be Mandatory

- Almost all DDP participants and many of the Probation participants said that treatment should be mandatory.
- Many Probation group participants said that a sentence to probation should be combined with treatment.

Public Information and Education Efforts Need To Be Changed

All of the focus group participants were asked what they thought would be the most effective “message” to stop motorists from drinking and driving and what is the best way to communicate that message. They had definite ideas about what would be effective, including:

- Provide education at all levels, beginning in school well before kids are old enough to drive and then at key points in their driving history, including at time of permit test, road test, full licensure, and when they turn 21
- Revamp current public information messages (PSAs) to target several different audiences
- Use all forms of media, from television and radio to the internet, for public information messages; all messages should be graphic, accurate, and “real”:
 - Be accurate in all messages when telling motorists what will happen to them if they drink and drive
 - Use real people in messages to tell what really happens when you get arrested and convicted for drinking and driving
 - Involve real victims of alcohol-related crashes in messages
- Limit alcohol advertisements

SUMMARY

The key findings from the telephone survey of New York State drivers and the focus groups of drivers who have been convicted of drinking and driving make a valuable contribution to the comprehensive overview on impaired driving by providing information on drivers’ reported attitudes, perceptions, knowledge, and personal experiences related to drinking and driving. The results from the study should provide a more realistic input to the model as to how often persons drink and drive, and the specific findings from the study should produce opportunities for the various Impaired Driving Work Group teams to develop and implement new programs and policies designed to reduce drinking and driving among New York’s motorists.



INSTITUTE FOR TRAFFIC SAFETY MANAGEMENT AND RESEARCH

80 WOLF ROAD, SUITE 607, ALBANY NY 12205-2604 • PHONE 518-453-0291 • FAX 518-453-0298