

ALTERNATIVES TO ALCOHOL-IMPAIRED DRIVING Safe Ride Home Programs and Public Transportation

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Financial support provided by: Anheuser-Busch

This fact sheet is based on data gathered as part of an annual public opinion survey, the 2015 USA Road Safety Monitor (RSM), conducted by the Traffic Injury Research Foundation USA, Inc. (TIRF USA) with funding from Anheuser-Busch.



The first fact sheet, published in December 2015, summarized national results regarding alcohol-impaired driving in the United States. This second fact sheet compares national and regional differences in driver practices across the U.S., and investigates concern associated with the consequences of impaired driving. It also takes a special look at familiarity with, and use of, alternative transportation options in the U.S. to avoid alcohol-impaired driving.

The survey takes the pulse of the nation on the alcohol-impaired driving issue by means of an online survey of a random, representative sample of American drivers aged 21 years or older. A total of 5,009 participants within the U.S. completed the poll in October and November of 2015. The first section of the fact sheet summarizes available research on alternative transportation options, and subsequent sections present 2015 data in terms of practices, concern associated with consequences of impaired driving, and the availability and use of alternative transportation programs.

Background

What are some alternatives to alcohol-impaired driving? Two alternatives to help reduce alcohol-impaired driving are safe ride home programs and designated driver programs (Rivara et al. 2007; Decina et al. 2009). Safe ride home programs can be operated by various types of organizations such as businesses, bus or taxi companies, volunteer groups, and lawyers among others. These services offer to transport impaired drivers home or drive both the impaired driver

and the driver's vehicle home. There may be a fee to use these programs; however, some offer free services, such as city buses during special holidays like New Year's Eve.

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The knowledge source for safe driving

Designated driver programs are less structured and typically promote the selection of one or more people in a social group who agree to drive other people home after a night out and alcohol has been consumed. In other words, friends, family members or colleagues are typically a designated driver.

Do drivers in the U.S. make use of safe ride home programs or public transportation after drinking?

Few studies have been conducted to examine the use and impact of alternative options for transportation to avoid driving while impaired (Rivara et al. 2007; Decina et al. 2009). Among them, one study analyzed driver familiarity with, and use of, some safe ride home programs in the state of New York (Molof et al. 1995). It showed that between 57% and 78% of people were familiar with one specific program (I'm Smart) relative to where participants were surveyed (e.g., department of motor vehicles, drinking establishments), and between 81% and 94% were familiar with another program (Sober Cab) relative to the amount of alcohol they reported consuming. Familiarity with many other programs was extremely low. Just 2% of respondents who felt they were unsafe to drive used a safe ride home program; only 3% used public transit.

Common barriers to the use of safe ride home programs included that these programs were not well-publicized, some programs were provided at a cost, and such programs were often unable to accommodate higher levels of demand within larger communities (Decina et al. 2009). Public transit options were

associated with different types of barriers including unavailability or limited access in many jurisdictions, inconvenience (i.e., does not bring impaired driver to their doorstep), pick up of the personal vehicle the following day, limited operational hours, and usage costs (Molof et al. 1995; Rivara et al. 2007; Decina et al. 2009).

What characteristics are common among U.S. drivers who use transportation alternatives to avoid impaired driving?

Few studies analyzed alternative transportation strategies, and limited information was available regarding the characteristics of users. In terms of sex, some studies reported that males were more frequent users of safe ride home programs (Molof et al. 1995; Caudill et al. 2000; Sarkar et al. 2005). Studies have also shown that young adult drivers (i.e., 20-35 range) used safe ride home programs more so than older drivers (Caudill et al. 2000; Sarkar et al. 2005; Decina et al. 2009). In addition, some studies showed that drivers who consumed larger quantities of alcohol or who drank more frequently (i.e., heavy drinkers) tended to more often use safe ride home programs as compared to persons who drank less often.

Reasons for, and concerns associated with, alcohol-impaired driving

This section explores national results as well as regional comparisons related to reasons for impaired driving and concerns associated with this behavior using the

Table 1: U.S. States and territories according to 2015 NHTSA regions

Region	States and Territories
1	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont
2	New Jersey, New York and Pennsylvania;
3	Delaware, DC, Kentucky, Maryland, North Carolina, Virginia and West Virginia;
4	Alabama, Florida, Georgia, South Carolina and Tennessee
5	Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin;
6	Louisiana, Mississippi, New Mexico, Oklahoma and Texas;
7	Arkansas, Iowa, Kansas, Missouri and Nebraska;
8	Colorado, Nevada, North Dakota, South Dakota, Utah and Wyoming;
9	Arizona, California and Hawaii;
10	Alaska, Idaho, Montana, Oregon and Washington;
* Source: NHTSA (http://www.nhtsa.gov/About+NHTSA/Who+We+Are+and+What+We+Do)	
** As shown in Table 1, Connecticut was included in Region 1 at the time the 2015 questionnaire was fielded. Regional boundaries have since been revised and as of January 2016, Connecticut became part of Region 2.	

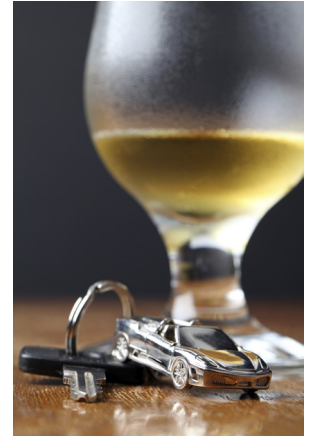
2015 RSM data. Regions were defined in the analyses in accordance with the ten regions identified by the National Highway Traffic Safety Administration (NHTSA) which are highlighted in Table 1 below.

Reasons reported by drivers for alcohol-impaired driving

Were there regional differences among drivers who thought they can drive when they believe they are over the illegal limit of .08? The 2015 USA RSM (Meister et al. 2015) fact sheet released in December 2015 revealed that 8% of respondents reported drinking and driving when they thought they were over the illegal limit. This report also highlighted some of the common reasons why people chose to drive when they thought they were over the illegal limit. The top two reported reasons that persons drove when they thought they were over the illegal limit were that they thought they were okay to drive (44%), and drivers believed they could drive carefully (12%). Less common reasons included that they were not far from their destination (11%) or they thought there was no alternative transportation option (8%).

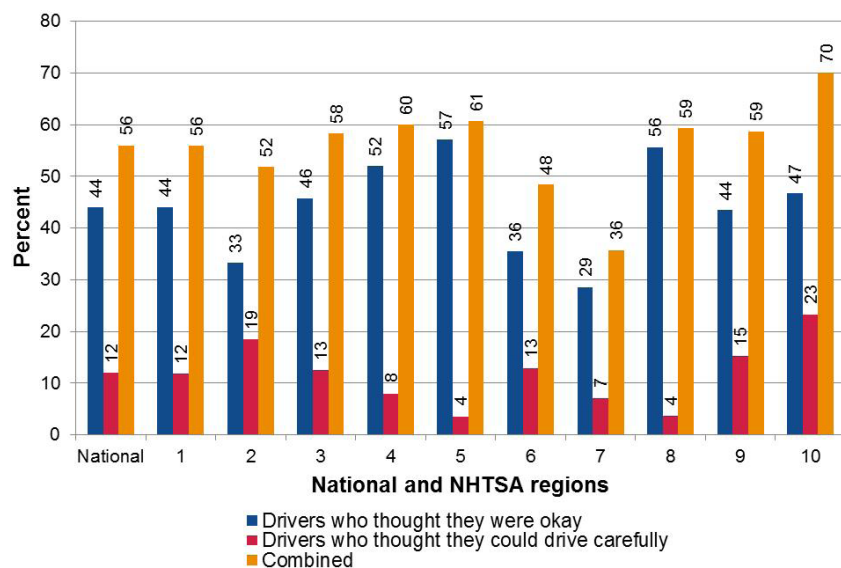
To gain a better understanding of any regional variations regarding why people opted to drive impaired, available responses were analyzed according to the ten NHTSA regions identified previously. As shown in Figure 1, more than half of drivers in Regions

4, 5, and 8 who reported driving when they thought they were over the illegal limit indicated that they did this because they believed they were okay to drive (52%, 57% and 56% respectively). Respondents in Region 7 recorded the lowest percentage of those who reported driving when they thought they were over the illegal limit; however, among those that reported doing this, still more than one-quarter of them did so also because they believed they were okay to drive. The percentage of persons who indicated that they thought they could drive carefully was not as large; this reason was most often identified by drivers who chose to drive when they thought they were over the illegal limit in Region 10 (23%), and least often reported in Region 5 (4%).



Results regarding the top reasons why people were willing to drive even though they believed they were over the illegal limit suggested that a substantial proportion of drivers shared a common misperception about the impairing effects of alcohol. Of concern, these drivers were willing to take risks because they believed they were less impaired, and were capable of driving even when they felt they were over the illegal

Figure 1: Drivers who reported driving when they thought they were over the illegal limit because they thought they were okay or thought they could drive carefully



limit. Overall, these findings revealed that a substantial portion of persons who drove while impaired did so because they believed they were capable of driving, with these two combined responses ranging from a high of 70% in Region 10, to a low of 36% in Region 7. When results from all ten regions were compared to further explore reasons for driving while impaired, no other noteworthy differences were found.

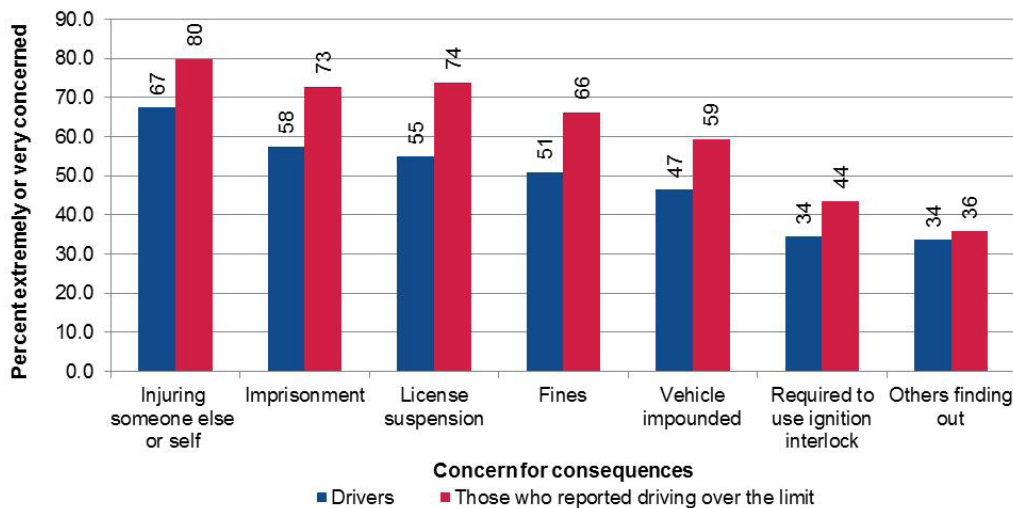
Concern about consequences associated with alcohol-impaired driving

How concerned were drivers in the U.S. about different consequences of alcohol-impaired driving? The top concern that was reported by a majority of U.S. drivers involved high levels of concern about injuring someone else or themselves as a result of driving impaired; more than two-thirds (67%) of drivers reported they were extremely or very concerned (see Figure 2). In addition, drivers were also extremely

very consistent with top concerns identified by the general population. However, more drivers who reported driving over the illegal limit were concerned as compared to other drivers (see Figure 2). Specifically, 80% of drivers who reported driving over the limit were concerned about injuring someone else or themselves, 73% were concerned about imprisonment, 74% about license suspension, and 66% about fines. In addition, 59% reported concern about vehicle impoundment, 44% about the required use of an ignition interlock, and 36% were concerned about others finding out.

80% of drivers who reported driving over the limit were concerned about injuring someone else or themselves.

Figure 2: Percent of respondents who were extremely or very concerned about different consequences of alcohol-impaired driving



or very concerned about imprisonment (58%), license suspension (55%), and fines (51%). Slightly less than half of respondents (47%) reported that vehicle impoundment was extremely or very concerning, whereas just one-third of respondents (34%) were concerned about the use of an ignition interlock and other persons finding out (34%).

Further analyses were conducted to compare results with persons who reported driving when they thought they were over the illegal limit. Analyses revealed that the attitudes of alcohol-impaired drivers were

With the exception of concern associated with others finding out, concern was more prevalent among alcohol-impaired drivers as compared to the national population ($p < .01$).

Concern for consequences was further explored across regions with respect to all respondents generally (i.e., not just those who reported driving when they thought they were over the limit). Differences in the proportion of drivers reporting concern regarding different consequences were found in some instances

and key findings are summarized. In particular, a significantly lower proportion of drivers in Region 3 reported being extremely or very concerned about the different consequences of impaired driving as compared to several other regions; and, a significantly larger proportion of drivers in Region 6 reported being extremely or very concerned about different consequences as compared to many other regions ($p < .05$).

There were fewer significant differences observed across regions in terms of the proportion of drivers that reported driving alcohol-impaired and who were extremely or very concerned. In particular, no significant differences were observed with regard to concern for injuring someone else or themselves, or in terms of others finding out. However, four regions revealed more significant differences as compared to concern reported in other regions. Significantly smaller proportions of drivers in Regions 4 and 5 were extremely or very concerned about consequences including driver license suspension, imprisonment, and the required use of an ignition interlock ($p < .05$). In contrast, significantly larger proportions of drivers in Regions 9 and 10 were extremely or very concerned about consequences such as imprisonment and fines ($p < .05$).

Profile of drivers who were concerned about consequences of impaired driving

Concern associated with consequences varied in terms of driver age. In general, older drivers were significantly

less concerned about the consequences of alcohol-impaired driving than young adult drivers. More specifically, for every ten-year increase in age, the odds of a driver being extremely or very concerned about:

- > injuring someone else or self decreased by 16%;
- > imprisonment decreased by 21%;
- > license suspension decreased by 12%;
- > fines decreased by 16%;
- > vehicle impoundment decreased by 11%;
- > required use of an ignition interlock decreased by 11%; and,
- > others finding out decreased by 15%.

What these results may reflect is that as drivers age, they are less likely to drive impaired and therefore these concerns may be of less relevance to older populations. With respect to

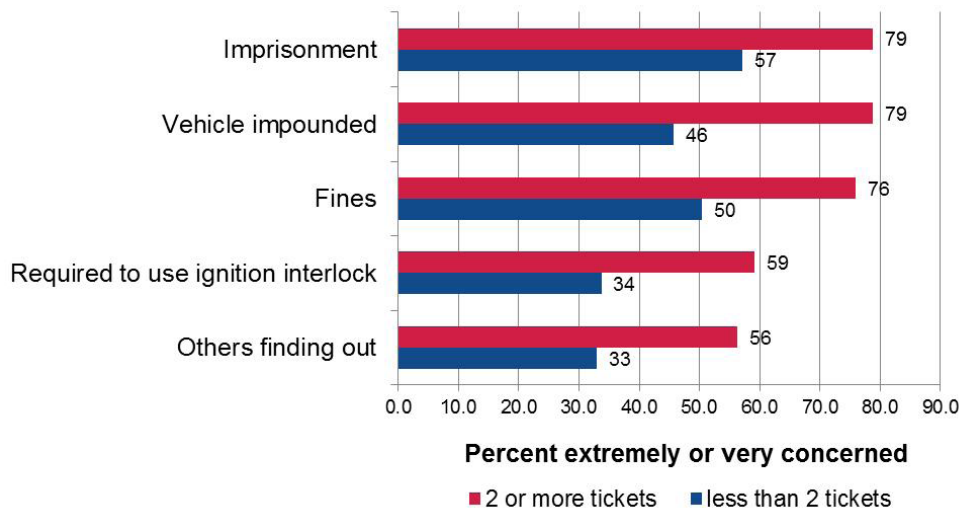
sex, women were more likely to report concern associated with others finding out as compared to men. More precisely, the odds of being extremely or very concerned about others finding out



increased by 26% if drivers were female versus male.

A larger proportion of drivers who reported receiving

Figure 3: Concern for consequences of impaired driving and number of tickets U.S. drivers reported having in the last 12 months



two or more tickets in the past 12 months prior to the survey were extremely or very concerned about various consequences versus drivers who reported having received fewer than two tickets (see Figure 3). More specifically, more drivers who had previously been ticketed multiple times (i.e., two or more tickets) were concerned about imprisonment, vehicle impoundment, fines, required use of an ignition interlock, and others finding out. Conversely, no significant differences were found in terms of injuring someone else or themselves, and license suspension.

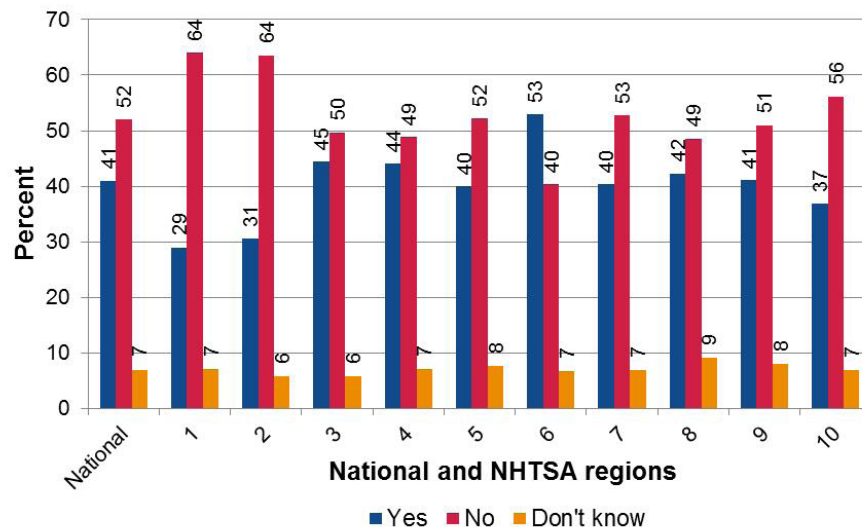
Driver self-reported knowledge and use of alternatives to alcohol-impaired driving

Safe ride home programs

How familiar were U.S. drivers with safe ride home programs? Across the U.S., less than half of drivers (41%) reported familiarity with safe ride home programs; a larger proportion of drivers (52%) stated they were not familiar with them, and just 7% indicated they did not know if they were familiar with them or not (see Figure 4). National and regional results were consistent across response categories. However, the percentage of

Among drivers who reported familiarity with safe ride home programs, how many stated that there was a program in their area? National analyses revealed that 53% of drivers who reported being familiar with safe ride home programs noted that there was such a program in their area. However, one-third (33%) of these respondents indicated they did not know if programs were available, and just 14% said there were no programs in their area (see Figure 5). Differences in the percentage of drivers who reported that safe ride home programs were available (among drivers reporting familiarity with these programs) were also visible across regions. In Regions 1 and 2, a smaller proportion of drivers reported that safe ride home programs were available in their area (47% and 38%, respectively) as compared to a much larger proportion of drivers in Regions 6 and 8 (60% and 59%, respectively). Region 2 was also the only region where more respondents reported they did not know whether safe ride home programs were available relative to fewer respondents who reported that safe ride home programs were available. Additionally, across regions, the proportion of drivers who did not know if safe ride home programs were available in their area varied from a low of 25%, to as high as 49%.

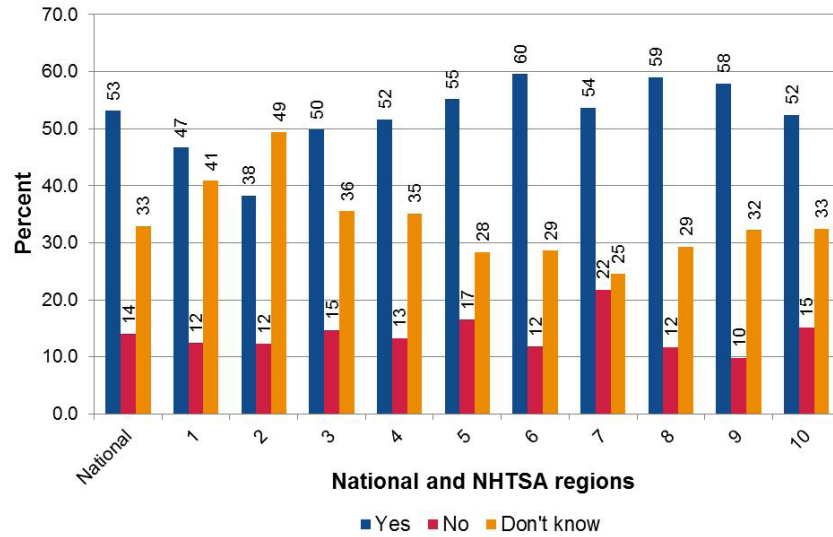
Figure 4: Percent familiar with safe ride home programs



drivers that indicated familiarity with these programs was distinct in three regions. Smaller proportions of drivers in Regions 1 and 2 were knowledgeable about safe ride home programs (29% and 31%, respectively) whereas a larger proportion of drivers in Region 6 were knowledgeable (53%) about these programs.

What percentage of drivers familiar with safe ride home programs used programs if one was available in their area? National and regional analyses revealed that less than 10% of drivers who reported familiarity with these programs reported

Figure 5: Percent who reported that programs were/ were not available in their area among those familiar with safe ride home programs



using them always or almost always. At the national level, only 5% reported that they always or almost always used the program (see Figure 6). Regional analyses revealed similar results and varied from a low of 3% of drivers who used them if they were available (Regions 3, 4, and 7), whereas in Region 2, the largest proportion of drivers (9%) who were familiar with these programs reported using them always or almost always when available. This suggests that usage by drivers of safe ride home programs that were available in their jurisdictions was quite low, and more work is needed to understand the most effective ways to promote these

programs and facilitate their use by persons who can benefit from them.

Public transportation

Do drivers have access to public transportation in their area? Among U.S. drivers, 49% reported that they had access to public transportation in their area, 28% said they did not, 18% indicated it was only available in urban areas and not residential, and 5% did not know if there was public transportation in their area (see Figure 7).

Figure 6: Percent who were familiar with safe ride home programs and used them if one was available in their area

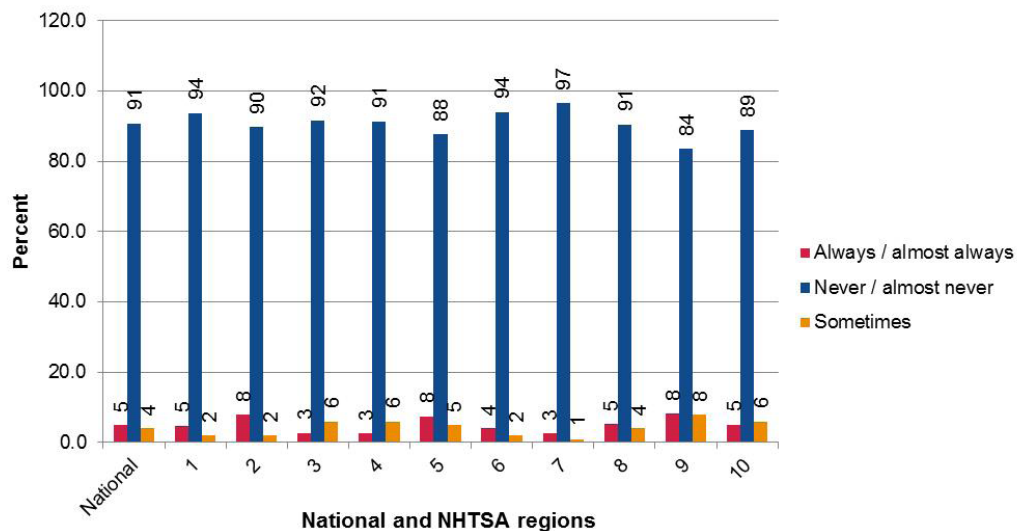
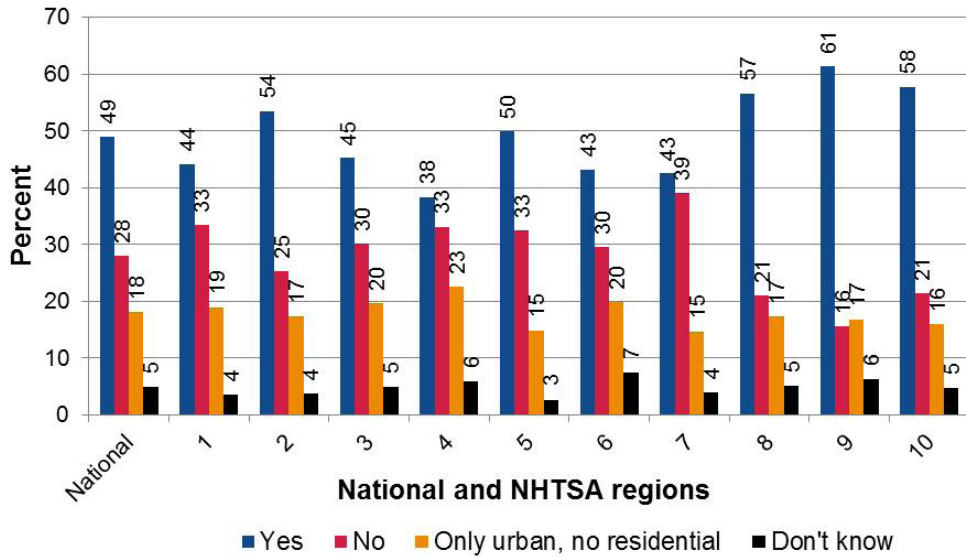
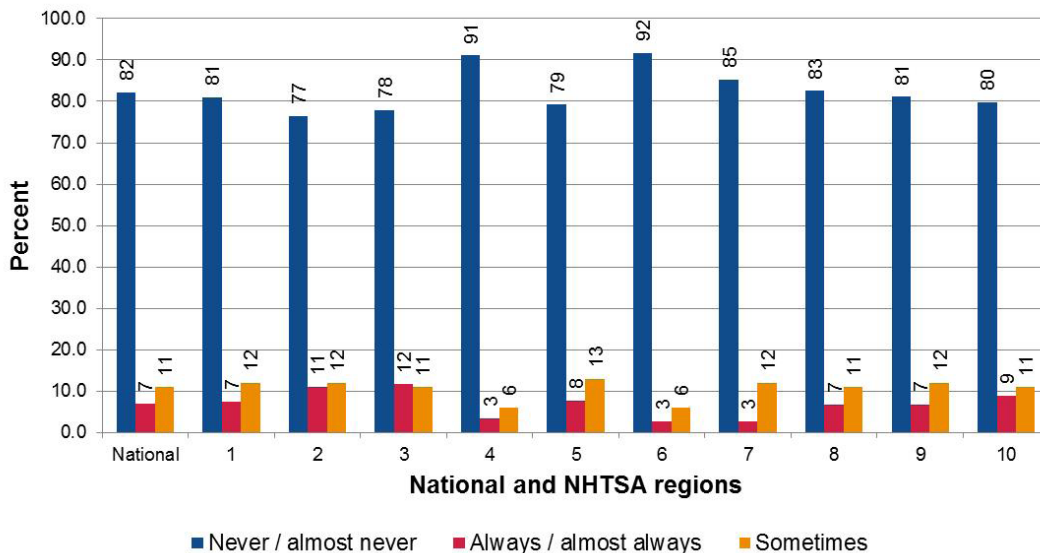


Figure 7: Drivers who reported public transportation was/ was not available in their area



Regionally, access to public transportation varied from a low of 38% of drivers reporting the availability of public transportation in Region 4 to as high as 61% of drivers indicating that public transportation was available in Region 9. Overall, the collective examination of the proportion of drivers that reported that public transportation was available, and those who reported availability only in urban areas, revealed that public transportation options were most often reported as being available in Regions 8, 9 and 10. Very small proportions of drivers ranging from 3% to 7% reported that they did not know if public transportation was available in their area, suggesting that when public

Figure 8: How often drivers who had access to public transportation used it when going out and drinking occurred



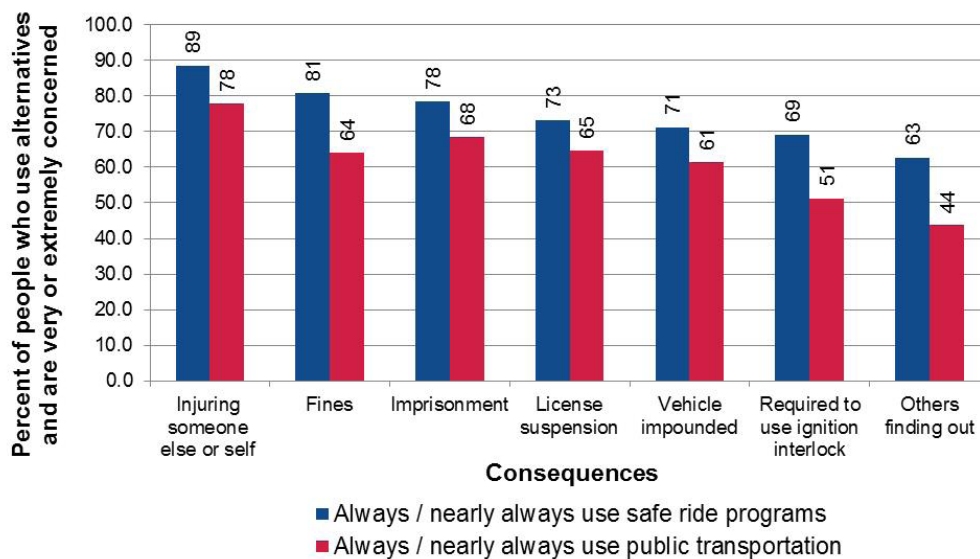
transportation options were available, drivers were aware of them.

Among drivers who had access to public transportation, how often did they make use of this option when going out and drinking occurred? Nationally, only 7% of drivers who had access to public transportation reported that they always or almost always used it when they consumed alcohol (see Figure 8). Regionally, the results ranged from as few as 3% of drivers in Regions 6 and 7 who used this option, while as many as 11% or 12% of drivers in Regions 2 and 3, respectively, relied on this option. Although the variations between these regional results and national findings were significant, the overall picture suggested that the majority of drivers that had access to public transportation did not make use of it when they were drinking.

consequences. More specifically, the proportion of drivers who reported they were concerned about the specific consequences of impaired driving varied from 63% to 89% (see Figure 9):



Figure 9: Percent of people who always or nearly always used alternative transportation that are extremely or very concerned about impaired-driving



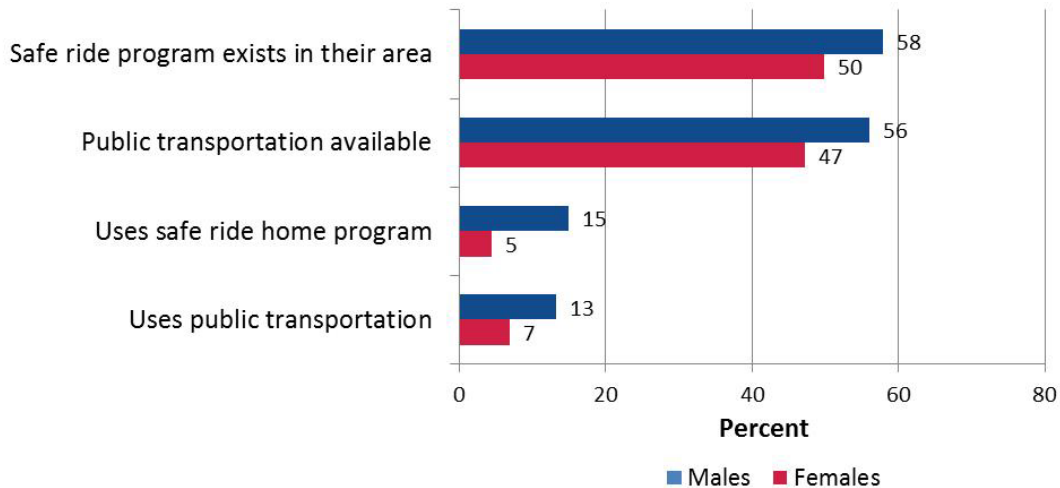
Concern for consequences between safe ride home users and users of public transportation

Further data analyses were conducted to investigate concern among the subgroup of drivers who reported always or nearly always using alternative methods of transportation when they consumed alcohol. Results revealed that, among the subgroup of drivers who reported using safe ride home programs, the majority were concerned about all of the potential

- > injuring someone else or themselves (89%);
- > imprisonment (78%);
- > license suspension (73%);
- > fines (81%);
- > vehicle impoundment (71%);
- > required use of an ignition interlock (69%); and,
- > others finding out (63%).

In comparison to safe ride home users, fewer respondents who used public transportation options

Figure 10: Males versus females and alternatives to alcohol-impaired driving



reported they were extremely or very concerned about different consequences. The proportions of users of public transportation who reported they were very or extremely concerned about specific consequences of impaired driving are summarized below (see Figure 9):

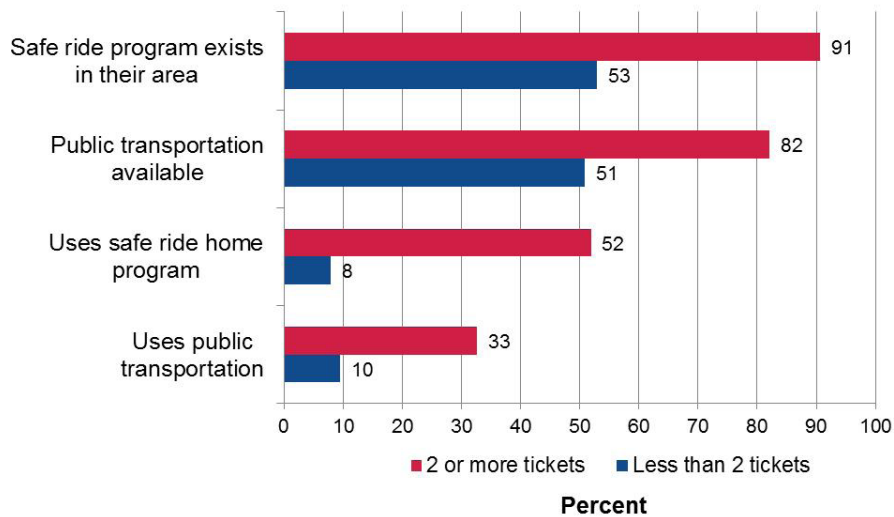
- injuring someone else or themselves (78%);
- imprisonment (68%);
- license suspension (65%);
- fines (64%);
- vehicle impoundment (61%);
- required use of an ignition interlock (51%); and,
- others finding out (44%).

A larger proportion of drivers that used safe ride

home programs were concerned with regard to three specific consequences when comparing safe ride home users and the public transportation users. These consequences included fines, required use of an ignition interlock, and others finding out ($p < .05$).



Figure 11: Knowledge and use of alternatives to impaired driving and number of tickets respondents received in last 12 months



Profile of drivers who used alternative transportation instead of driving impaired

Among drivers who reported that there was a safe ride home program in their area, the odds of using the program always or almost always decreased 46% for every ten-year increase in age. Similar to safe ride home programs, the odds of drivers reporting they used public transportation decreased by 31% for every ten-year increase in age. In other words, young adults were more inclined to always or almost always utilize both safe ride home programs and public transportation options in comparison to persons in older age groups.

However, older drivers were less likely to report that access to public transportation was available. More specifically, for every ten-year increase in age, the odds of U.S. drivers reporting that they had access to this service decreased by 18%.

Significant differences between males and females were also revealed in terms of reported availability and use of alternatives to impaired driving. As displayed in Figure 10, males were more likely to report that both safe ride home programs and public transportation were available in their area. In addition, males were more likely to report using both of these options in comparison to females.

The odds that respondents were aware of alternatives to impaired driving and used alternatives to driving were significantly higher among drivers who reported having two or more tickets within the last 12 months (see Figure 11). More specifically, more drivers with multiple tickets reported knowing about safe ride home programs and the availability of public transportation in their area; a larger proportion of these drivers also reported using both modes of transportation than drivers with one or no tickets.

Conclusion

Results of this national survey revealed that a majority of drivers who reported drinking and driving when they thought they were over the illegal limit did so because they believed they were okay to drive, or that they could drive carefully. These findings are concerning because they indicate that many persons who report driving while impaired may not understand the impairing effects of alcohol on driving, or may under-

estimate the real effects of alcohol on motor skills, reaction times and cognition which increases their risk of being involved in a collision.

Levels of concern and the proportion of drivers that indicated concern regarding the consequences of impaired driving were substantial. Concern for consequences associated with injuring someone else or themselves were most often reported by drivers, particularly among drivers who reported driving when they thought they were over the limit. As such, it may be useful to focus educational efforts to underscore the risks and consequences for drivers themselves as well as other road users. Additionally, the odds of being concerned about the consequences of alcohol-impaired driving were greater for young adult drivers and those who had received multiple tickets. Targeting specific educational initiatives and information as well as campaigns in relation to these demographics to highlight risks of involvement in crashes, as well as alternatives to driving alcohol-impaired may be beneficial.

Drivers in the U.S. reported that alternative transportation options were generally, but not consistently, available to them. These options are one important solution to help drivers avoid driving after drinking. However, this survey revealed that safe ride home programs and public transportation were not consistently available in all areas, and at least a proportion of drivers seeking these options were not aware of whether such programs were available in their area. These results suggest that awareness of these programs may be low, and more educational initiatives are needed to increase driver awareness of these options when they are available.

Several regional differences were also observed in



relation to availability and use, which suggests that some areas may need to do more to ensure drivers are aware of available alternatives.

Of concern, in places where safe ride home programs and other alternatives were available, they were under-utilized. Additional research is needed to better understand the reasons why some drivers specifically choose not to use alternative options when available, and what features may help to encourage increased use of these programs.

About the poll. These results are based on 5,009 drivers who responded to the 2015 TIRF USA RSM in October and November of 2015, an annual public opinion survey developed and conducted by TIRF USA. Results can be considered accurate within plus or minus 1.4%, 19 times out of 20. The data were stratified and weighted by sex, age, and region. The majority of the questions were answered using a scale from one to six where six indicated high agreement, concern, or support and one indicated low agreement, concern, or support, as well as numerous yes/no questions. All of the respondents completed the survey online.

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*Financial support provided by
Anheuser-Busch*

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October 2016
Traffic Injury Research Foundation USA, Inc.
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