ALTERNATIVES TO ALCOHOL-IMPAIRED DRIVING
Results from the 2016 TIRF USA Road Safety Monitor

By: Ward G.M. Vanlaar[1], Marisela Mainegra Hing[1], Tara Casanova Powell[2], and Robyn D. Robertson[1]

Financial support provided by: Anheuser-Busch

This fact sheet is based on data gathered as part of an annual public opinion survey, the 2016 USA Road Safety Monitor (RSM), conducted by the Traffic Injury Research Foundation USA, Inc. (TIRF USA) with funding from Anheuser-Busch.

A similar fact sheet about alternatives to alcohol-impaired driving from the first TIRF USA RSM conducted in 2015 was published in October 2016. This second fact sheet compares results from both data years. A special emphasis is placed on attitudes and behaviors regarding three alternatives to alcohol-impaired driving: safe ride home programs, public transportation, and designated drivers.

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 5,050 participants completed the poll in October 2016 and 5,009 in October/ November 2015.

Background

Tremendous progress has been made in reducing the alcohol-impaired driving problem in the past decade. To illustrate, the number of fatalities per 100 million vehicle miles traveled (VMT) has been reduced by 27 percent from 0.45 in 2005 to 0.33 in 2014 (NCSA 2016). More recently, from 2013 to 2014, alcohol-impaired driving fatalities decreased by 1.65 percent (from 10,110 to 9,943 fatalities). However, after many years of progress, fatality data reported for 2015 showed that 10,265 people died in alcohol-impaired driving fatalities, representing a 3.2 percent increase from 2014. These recent data demonstrate that continued action is needed. One solution to help address the problem is to encourage more people to use alternatives to alcohol-impaired driving such as safe ride home programs, public transportation, and designated drivers.

Safe ride home programs provide alternative transportation options such as taking taxi services or

[1] Traffic Injury Research Foundation, Ottawa, Ontario, Canada
[2] TIRF USA, Inc.

THE TRAFFIC INJURY RESEARCH FOUNDATION USA, Inc.

The mission of the Traffic Injury Research Foundation USA, Inc. (TIRF USA) is to develop and share the knowledge that saves – preventing injuries and loss of life on American roads, reducing related social, health and insurance costs, and safeguarding productivity. TIRF USA is an independent road safety research institute that obtained 501(c)3 non-profit status in the US in 2014.

public transportation to get home (Sarkar et al. 2005); they include both for-profit and non-profit safe ride home programs. For-profit safe ride home programs such as Uber and Lyft are similar to city taxis but they typically offer a lower fare and can be hailed through a mobile application, which is less common for regular taxis. Researchers have investigated the effect that these safe ride home programs have had on the number of alcohol-impaired traffic-related incidents. While the evidence is not definitive, some studies have led researchers to conclude that safe rides are an effective method of decreasing impaired driving arrests, crashes, and fatalities (for a complete, up-to-date review of the literature on safe ride home programs, see: Barrett, Vanlaar and Robertson 2017).

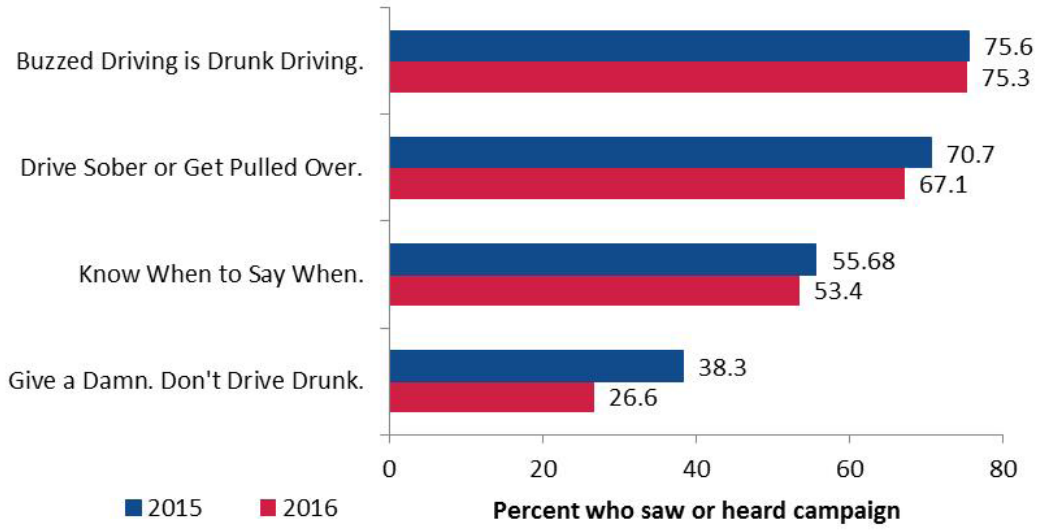
Safe ride home programs actually evolved from the concept of a "designated driver" which is defined as one person within a group who refrains from the consumption of alcohol so that they can transport passengers home safely (Logan 2014). Among a group of friends, common practice involves taking turns being the designated driver. In recent years, using a safe ride has become a viable alternative to using a designated driver and helps to ensure drivers refrain from drinking.

Using a safe ride has become a viable alternative to using a designated driver and helps to ensure drivers refrain from drinking.

This fact sheet describes the level of familiarity among U.S. drivers regarding these alternative solutions to alcohol-impaired driving and how often they use them. The profile of users versus non-users is also compared. This information is presented in relation to the level of familiarity people have about anti-impaired driving campaigns, as it can be argued that higher levels of familiarity with campaigns may help foster increased awareness of the need to use alternatives, or greater receptivity to the use of alternatives. In this regard, Figure 1 shows levels of familiarity among U.S. drivers regarding four such campaigns. Note that the "Make a Plan to Make it Home" campaign in 2015 was changed to "Give a Damn. Don't Drive Drunk." in 2016.

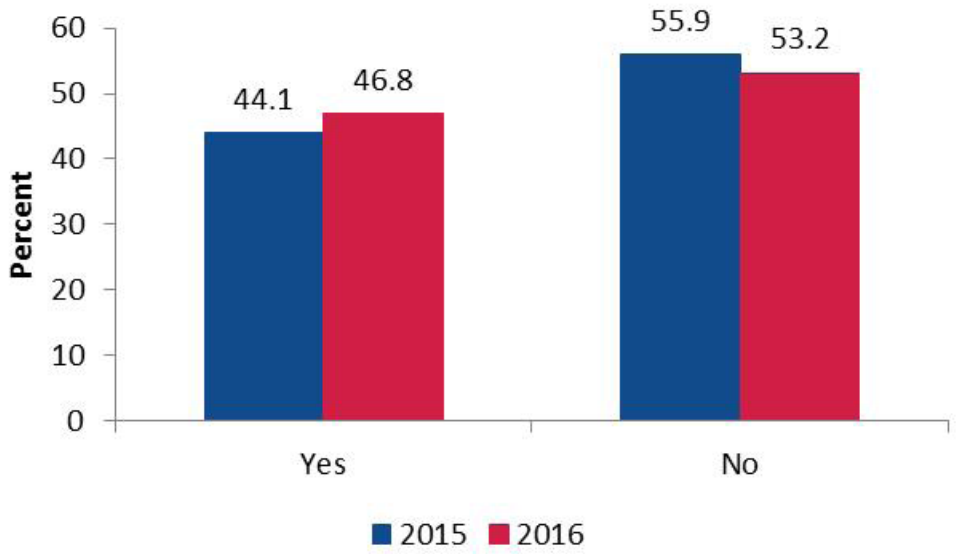
As can be seen, a majority of U.S. drivers have been exposed to at least one campaign but awareness about any of the campaigns appears to have decreased somewhat across the board in 2016. The largest difference was in relation to "Give a Damn. Don't Drive Drunk.", however, this was no doubt because this campaign slogan changed from 2015 to 2016.

Figure 1: Percent of U.S. drivers who have seen or heard four anti-impaired driving campaigns[3]



[3] The percentage shown is for those respondents who answered 3, 4, 5 or 6 on a scale from 1 to 6, where 1 means "never" and 6 means "very often" heard the campaign.

Figure 2: Percent familiar with safe ride home programs



Safe ride home programs

Respondents to the TIRF USA RSM were informed that safe ride home programs were defined as "offering to drive impaired drivers home or drive both the impaired driver and the driver's vehicle home, such as businesses, bus or taxi agencies, or volunteer groups". They were asked if they are familiar with such programs. Figure 2 shows levels of familiarity among U.S. drivers, both for 2015 and 2016. As can be seen, the number of U.S. drivers who said they are familiar with these programs slightly increased from 44% in 2015 to 47% in 2016.

Persons who reported familiarity with safe ride home programs were also asked whether these programs were available in their area. Results from this question are presented in Figure 3. Virtually no differences were observed between both years, indicating that in 2015 and 2016 programs were available to almost four out of five respondents who were familiar with these programs.

After asking respondents whether they thought safe ride home programs were available in their area, they were asked if they used them when available. The proportion of respondents who answered they always or almost always used these programs when available

Figure 3: Percent who reported that programs were / were not available in their area among those familiar with safe ride home programs

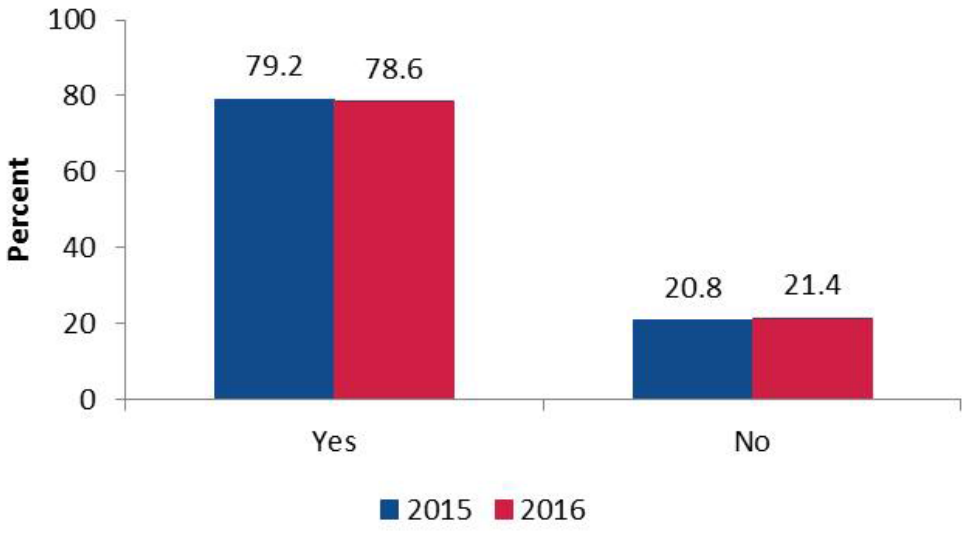
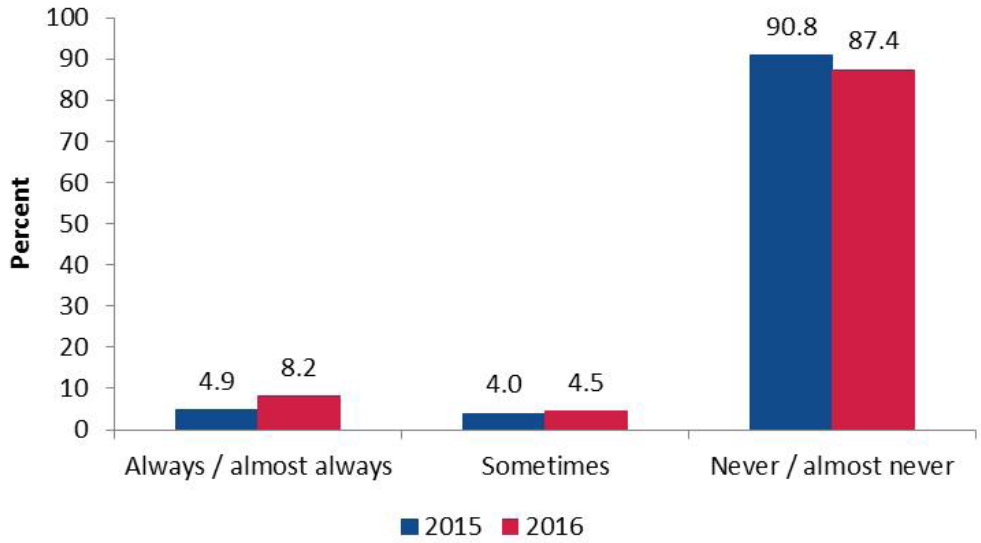


Figure 4: Percent who were familiar with safe ride home programs and used them if one was available in their area



increased from 5% in 2015 to 8% in 2016 (see Figure 4). Approximately another four percent of respondents in both years indicated they sometimes used safe ride home programs. On the other hand, a large majority of respondents indicated that they never or almost never used safe ride home programs: 91% attested to this in 2015 and 87% in 2016.

Finally, in 2016, respondents were asked for the first time if they had ever used another alternative, namely a ride share service that you pay for, such as Uber or Lyft after drinking alcohol beverages; approximately 19% answered yes.

The profile of those respondents who indicated they use safe ride home programs versus those who do not use these programs was further analyzed, and the results showed that the following characteristics were significant.

- As people aged, they were less likely to use safe ride home programs. To illustrate, among those aged 21-39, approximately 11% said they always or almost always use safe ride home programs, whereas among those aged 40-59, this dropped to approximately 1%, and below 1% for those older than 60.
- Persons who had been injured in the past in a motor vehicle crash were more likely to use safe ride home programs compared to those who have not been injured before (among those injured 12% reported always or almost always using safe ride home programs versus 2% among those not injured).
- With respect to tickets received in the past 12 months, those who received two or more of them were also more likely to report using safe ride home programs than those who received fewer than two tickets (53% versus 2%).
- Finally, people living in rural or suburban areas were much less likely to rely on safe ride home programs than those in urban areas (among those in rural areas less than 1% reported high usage, among those in suburban areas almost 2% and in urban areas 14%).

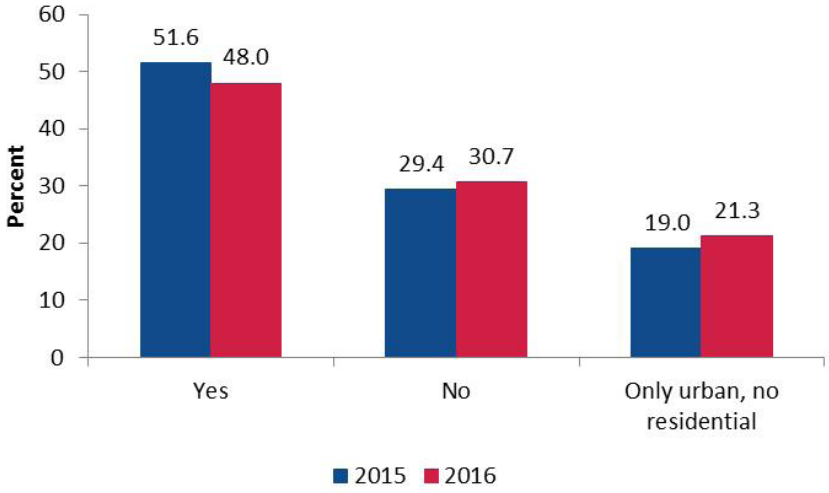
An analysis of the characteristics of users of ride share services such as Uber or Lyft versus non-users, revealed comparable results, with a few notable exceptions.

- Females were less likely than males to report using such ride share services (among females 14% reported ever using ride share services versus 24% among males).
- The consumption of beverages containing alcohol in the past 12 months was a factor in the usage of ride share services specifically, as opposed to safe ride home programs, generally. In fact, persons who have had a drink in the past 12 months were approximately eight times more likely to report using ride share services compared to those who have not had a drink. Or, among those who reported having had a drink, 24% stated they have taken a ride home with Uber or Lyft, while among those who have not had a drink, approximately 3% had ever taken a ride home with Uber or Lyft.

Public transportation

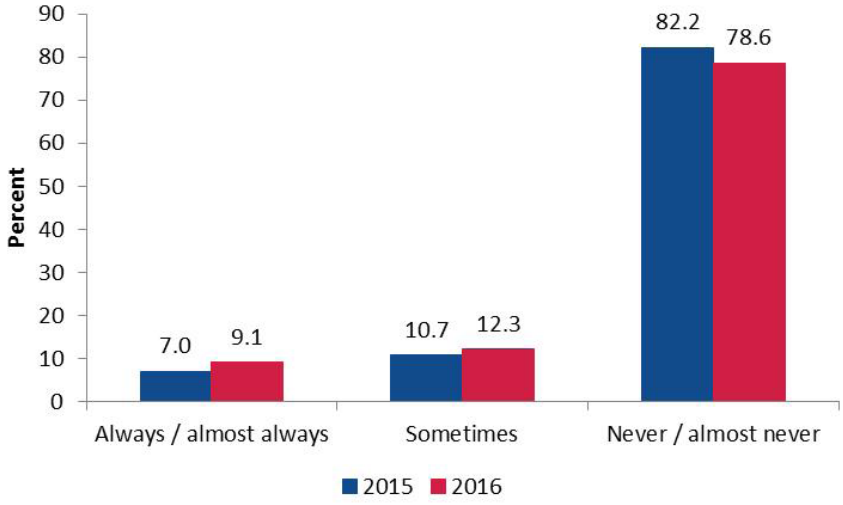
Another alternative to alcohol-impaired driving is the use of public transportation. Similar to questions about safe ride home programs, we asked U.S. drivers about availability and usage of public transportation. Figure 5 shows the percent who reported whether public transportation was or was not available in their area. It shows a slight decrease in availability: 52% reported public transportation was available in their area in 2015 and only 48% said this was the case in 2016. Another 19% indicated in 2015 that public transportation was available in their area but only in cities and urban areas and not in residential areas; in 2016 this increased to 21%.

Figure 5: Percent who reported public transportation was / was not available in their area



The majority of U.S. drivers reported not using public transportation when it is available as an alternative to alcohol-impaired driving. In this regard, Figure 6 reveals that a large majority in both years stated that they never or almost never used it (82% and 79% respectively) despite having access to it. It further shows small increases among persons who stated they almost or almost always used it (from 7% in 2015 to 9% in 2016) and those stating they sometimes used it (from 11% in 2015 to 12% in 2016).

Figure 6: How often drivers who had access to public transportation used it when going out and drinking occurred



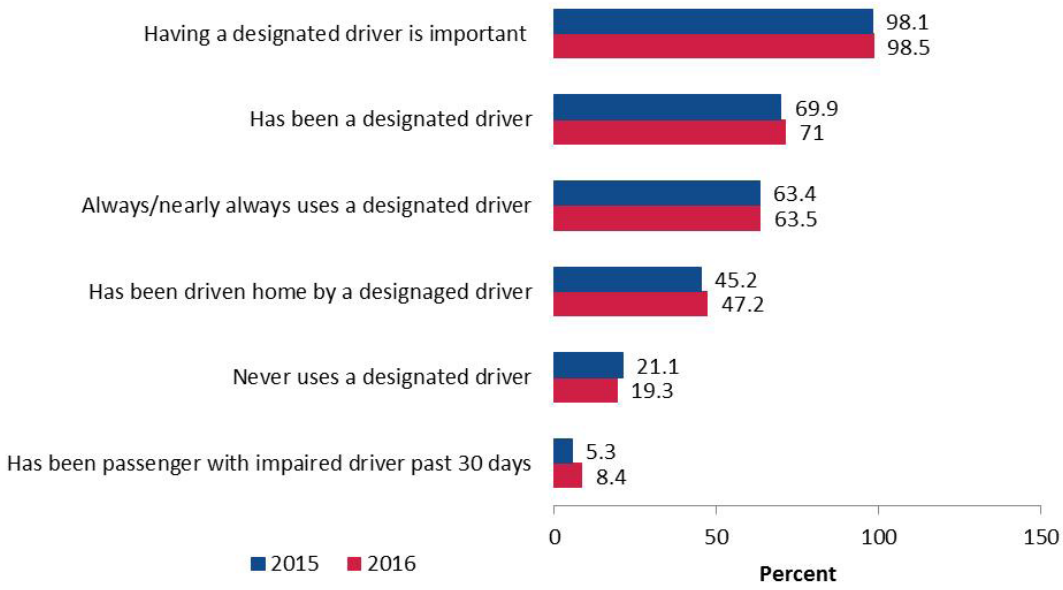
Similar to safe ride home programs, the profile of users of public transportation versus non-users was also explored, and the results were consistent.

- As people aged, they were less likely to report using public transportation (among those aged 21-39, approximately 14% reported always or almost always using public transportation whereas this dropped to 4% for those aged 40-49, to 3% for those aged 50-59 and to less than 2% for those older than 59).
- Similar to ride share services, females were also less likely to report using public transportation, albeit the difference was slightly more pronounced (3% versus 10%).
- People who were injured in a collision in the past still reported a greater likelihood of using the alternative, in this case public transportation, similar to safe ride home programs, but the difference with those who had not been injured in the past was smaller (12% versus 5%).
- Persons who had received at least two tickets were more likely to use public transportation compared to those with less than two tickets (53% versus 4%).
- Finally, individuals living in rural or suburban areas were much less likely to use public transportation than those in urban areas (1.5% in rural areas, 4% in suburban areas and 17% in urban areas).

Designated drivers

Drivers in the U.S. were polled about a third alternative solution involving the use of designated drivers. Figure 7 provides an overview of the different questions about designated drivers and responses for 2015 and 2016. It is clear that virtually all U.S. drivers agreed that having a designated driver was important: in 2015 and 2016 approximately 98% of U.S. drivers agreed this was somewhat or very important. However, while virtually the entire population of drivers agreed it was important to have a designated driver, a smaller proportion of drivers stated that they have been one themselves (70% in 2015 and 71% in 2016) or used one (63% in 2015 and 64% in 2016 said they always or nearly always used a designated driver).

Figure 7: Views and use of designated drivers



Conversely, the percent of respondents who stated they never used a designated driver also remained nearly unchanged with 21% in 2015 and 19% in 2016. A slight increase among those respondents who reported that they had been driven home by a designated driver was noted from 45% in 2015 to 47% in 2016. Perhaps a somewhat more concerning difference was the significant increase from 5% to 8% of respondents who admitted that they had been a passenger of an impaired driver in the past 30 days.

Regarding the profile of users of designated drivers, the most notable difference was that females were more likely to report using a designated driver than males (among females 69% reported always or almost always using a designated drivers versus 57% among males), which was in contrast to the usage of previously described alternatives (among females 14% reported ever using ride share services versus 24% among males; 3% of females reported using public transportation always or almost always versus 10% of males). Similar to using ride share services, those who did not have a drink containing alcohol in the past 12 months were less likely to report using a designated driver than those who had consumed alcohol (59% versus 65%).

Conclusion

This second TIRF USA RSM fact sheet on alternatives to alcohol-impaired driving reveals interesting information about levels of familiarity regarding each of these alternatives as well as the use of them. Since only two years of data have been collected at this time, it is premature to draw conclusions about trends. The information is nevertheless quite informative. In particular, the main conclusion is that while overall levels of familiarity with, and access to, alternative solutions to alcohol-impaired driving are high, actual use of them is low. To illustrate, 44% of respondents in 2015 and 47% in 2016 indicated they were familiar with safe ride home programs; among respondents who were familiar with programs, they were available to almost four out of five respondents. Still, only 5% in 2015 and 8% in 2016 said they used them often or very often and approximately 4% in both years reported using them sometimes. A large majority (91% in 2015 and 87% in 2016) said they never used them. When respondents were asked if they ever used a ride share service like Uber or Lyft after drinking alcohol beverages, less than one respondent in five (or 19%) responded they did.

Similar results were found in relation to public transportation usage. This alternative was available to at least half of U.S. drivers, either across the board (available to approximately 50% in both years), or in urban environments only, but not in residential areas (available to another 20% in both years). Again, despite this availability, only a small proportion reported using public transportation. Finally, while virtually all U.S. drivers agreed that having a designated driver was important, a much smaller proportion of the driving population relied on this alternative.

It could be argued that these alternatives were only relevant to persons that were going out and consuming alcohol. In this regard, note that this survey inquired about usage when planning to go out when drinking would occur. As such, these low levels of usage indicate that there is great potential to increase reliance on, and usage of, these alternative solutions than is currently the case.

Perhaps it is not surprising that there are such high levels of familiarity with these solutions. After all, the majority of the public is concerned about the alcohol-impaired driving problem; in 2016, 75% considered this a serious or very serious problem while 79% did so in 2015. Also, the majority of the public has been exposed to one or more educational campaigns about the topic (e.g., three-quarters in 2015 and 2016 said they had heard of "Buzzed Driving is Drunk Driving"). The challenge, then, seems to revolve around ways to motivate people to actually change their behaviors and more often use these alternatives.

This study also investigated the profile of respondents who used alternative solutions and compared them to individuals who did not use them. These profiles can provide much-needed insight into ways to encourage increased usage of these alternatives. For example,

results revealed that people in suburban and rural areas were much less likely to rely on safe ride home programs compared to those in urban areas, which is probably related – at least partially – to lower access to safe ride home programs. Indeed, 76% of respondents in rural and suburban areas stated these programs were available compared to 85% in urban areas. The same is true of public transportation, but interestingly, not when it comes to using designated drivers. It appears that whether respondents live in an urban area or not does not have any bearing on the reported level of usage of a designated driver. Another interesting finding was that a large majority of respondents who consumed alcohol during a night out indicated that they did not often use safe ride home programs, however, they indeed used ride share services like Lyft and Uber more often. This result provides insight into the types of alternative transportation options that are more preferable, and perhaps more easily encouraged among different groups of users. In the same vein, females are less likely to rely on ride share services or public transportation and more likely to use a designated driver. It can be hypothesized that this is related to feeling safe, as a designated driver would be someone they know, which is not typically the case when using a ride share service or a safe ride home program. This result is consistent with recent findings from a Canadian study in which women cited personal safety concerns, and for this reason did not identify alternative transportation options as a viable solution to avoid alcohol-impaired driving (Robertson and Ireland 2017).

In conclusion, data from the TIRF USA RSM revealed that there is room to increase growth in the number of users of alternative solutions to alcohol-impaired driving. While the research may not have definitely demonstrated the effectiveness of these alternatives on alcohol-related incidents, certainly it supports the notion that within a comprehensive approach to address the problem, safe ride home programs, ride sharing services and designated drivers can be promising components. Continued monitoring of this issue is necessary to better understand trends over time and to reveal the most efficient levers to increase usage of these viable solutions.

References

Barrett, H., Vanlaar, W.G.M., Robertson, R.D. (2017). Safe rides as an alternative to alcohol-impaired driving and their effects: A literature review. Ottawa, ON: Traffic Injury Research Foundation.

Logan, R. M. (2014). College students and safe ride programs: Analysis of student drinking behavior and attitudes.

National Center for Statistics and Analysis (2016). 2015 motor vehicle crashes: Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 318). Washington, DC: National Highway Traffic Safety Administration.

Robertson, R.D., Ireland, L. (2017). Drinking & Driving Among Women in Ontario: A Qualitative Study. Traffic Injury Research Foundation. Ottawa, Canada.

Sarkar, S., Andreas, M., & De Faria, F. (2005). Who uses safe ride programs: an examination of the dynamics of individuals who use a safe ride program instead of driving home while drunk. The American Journal of Drug and Alcohol Abuse, 31(2): 305-325.

Financial support provided by Anheuser-Busch

TRAFFIC INJURY RESEARCH FOUNDATION (TIRF)

171 Nepean Street, Suite 200
Ottawa, Ontario
Canada K2P 0B4

www.tirf.ca

Toll Free: 1-877-238-5235
Fax: 613-238-5292

Registered Charity No. 10813 5641 RR0001

TIRF USA Inc.

Corporate Office
20 F Street, 7th Floor
Washington, DC 20001

www.tirf.us

Email: tirf@tirf.us

September 2017