



2014 High-Risk Driver Analysis

Minnesota Department of Public Safety, Office of Traffic Safety

Note:

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INTRODUCTION

BACKGROUND AND LAYOUT

In 2014, the Minnesota Department of Public Safety's Office of Traffic Safety retained Corona Insights to conduct a random telephone survey of Minnesotans for the purpose of examining the behaviors of Minnesotans with regard to a variety of risky driving behaviors. The results of this survey will help to better understand the characteristics of high-risk drivers in the state in order to inform efforts to improve driver safety.

REPORT LAYOUT

This report is divided into a number of major sections, which include the following:

- **Background and Methodology** – This section provides a detailed description of the approach used for this project in terms of goals and methodologies used.
- **Communications and Outreach Implications** – This section provides a high-level discussion of the implications of the research.
- **Key Research Conclusions** – This section contains a brief overview of the key findings and themes of the research.
- **Detailed Findings** – This section is divided into numerous subsections and focuses on the results of the research in each of the major question topic categories addressed in the survey.
- **Appendix A: Survey Instrument** – This appendix contains the actual survey instrument used for this study.
- **Appendix B: Detailed Analysis Tables (*available separately*)** – This appendix contains tables of responses from all questions in the survey cross-tabulated by 1) risk groups, 2) high-level risky behaviors, and 3) detailed combinations of risky behaviors.
- **Appendix C: Open Ended Responses (*available separately*)** – This appendix contains the unedited responses that survey respondents gave in response to the open ended questions.

METHODOLOGY

RISKY BEHAVIOR DEFINITIONS

As described previously, the study was designed to examine the attitudes and behaviors of the state's population as a whole and, in particular, drivers who exhibit certain risky driving behaviors during the previous 30 days, including:

- **Drinking and driving:** Driving at least once after drinking two or more drinks.
- **Driving without a seat belt:** Driving at least once without wearing a seat belt.
- **Speeding:** Driving 10 miles per hour or faster than the posted speed limit more than half the time.
- **Texting/Internet use:** Texting or accessing the Internet while driving at least once.

Note: For the sake of brevity, the above behaviors are sometimes shortened as “drinking,” “texting,” etc. in the report. In all cases, the above definitions apply.

Using these definitions, survey respondents were grouped into levels of risk based on their behaviors in the past 30 days, and quotas were set to ensure that a sufficient number of responses were collected for each group. These groups were defined as follows:

- **High risk:** Drinking and driving OR two or more risky behaviors (of any type).
- **Moderate risk:** One (and only one) of the following: driving without a seat belt, speeding, or texting/using the Internet and driving.
- **Low risk:** No risky behaviors.

SURVEY INSTRUMENT DESIGN

The survey instrument for this study was developed through a collaborative process between Corona Insights and the Office of Traffic Safety. Initial ideas for the survey were developed in preliminary discussions about the project. Using these ideas, Corona prepared an initial draft of the survey instrument, which was then revised collaboratively until a final version was agreed upon.

SURVEY IMPLEMENTATION

All surveys were conducted via telephone between mid-April and the end of May, 2014, through a randomly generated sample of telephone numbers. The telephone sample included both landlines and cell phones (with 60 percent of responses gathered from the cell phone sample). The proportion of cell phone to landline surveys was determined based on NHIS (National Health Interview Survey) data for “cell only” and “cell mostly” households. Dual users (i.e., households who have both cell phones and landlines) were not excluded from the cell sample, nor were they excluded from the landline sample.

In order to ensure that a sufficient number of responses were available for analysis, quotas were set for high-risk, moderate-risk (non-text/Internet), text/Internet use only, and low-risk drivers. In total, 7,359 individuals were contacted and screened for the survey, and 1,570 successfully completed the survey. The specific number of respondents in each of the various subpopulations examined is shown in the following table:

Audience	Total Completed Surveys
Total Population	1,570
High risk	862
Moderate risk (driving without a seat belt or speeding)	100
Moderate risk (texting/Internet use)	108
Low risk	500

WEIGHTING

Telephone surveys, like any other type of survey, do not precisely reflect the entire population when merely summed and totaled. Older residents, for example, are more likely to respond to telephone surveys than are younger residents. In addition, the quotas used to ensure sufficient quantities of responses were available for analysis artificially altered the balance of respondents with various risky behaviors. Because of this, the study team developed a final unique weighting factor for every single respondent that adjusted that person’s representation in the survey data. Weights are based on three variables: gender, age, and risk category.

Population estimates for gender and age were obtained from the 2012 American Community Survey conducted by the U.S. Census. Population estimates for risky behaviors were calculated by looking at the profile of all individuals who were contacted to participate – regardless of whether or not they were actually chosen to participate based on their behaviors.

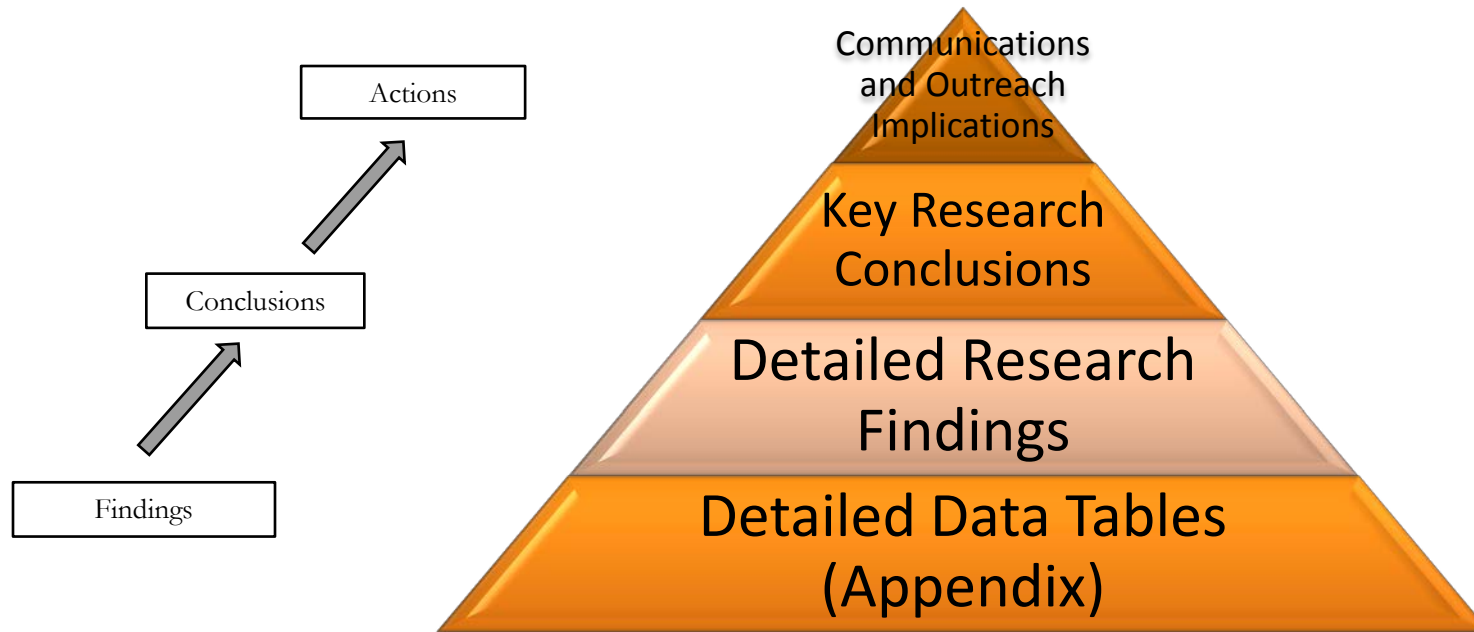
The responses of those respondents who have traits that were underrepresented in the group of survey participants were therefore weighted more heavily than those whose traits were overrepresented among the survey participants. For this reason, the survey findings represent a much more complex, but also more accurate analysis than would a mere tabulation of the raw data.

MARGIN OF ERROR

A total of 1,570 surveys were completed during the survey period, resulting in an overall adjusted margin of error of ± 3.5 percent with a 95 percent confidence level. This margin of error takes into account the weighting factors. In addition to this overall margin of error, many analyses focus on a specific segment of the population. The margins of error of these findings vary depending on the sample size for each segment. However, readers can generally consider findings based on sample sizes greater than 400 to be robust (± 5 percent or less), those with sample sizes between 100-399 to be moderately strong (± 5 -10 percent), and those with sample sizes smaller than 100 to be directional in nature.

REPORT STRUCTURE

The research process involves first understanding the details of the research, then congealing them into broad research findings, and finally examining the implications of those findings on outreach efforts and strategies. To keep the big picture in mind, these are presented in the opposite order in this report, so the most actionable information is presented first. Readers should keep in mind that conclusions are based on the more detailed information that is progressively introduced later in the report. The detailed research findings and data tables are therefore more of a resource that the reader can use as additional information and can be considered optional reading.



COMMUNICATIONS AND OUTREACH IMPLICATIONS

In reviewing the findings for the different behaviors and segments of drivers, the following are initial recommendations:

1. General efforts to communicate safety messages to high-risk drivers as a group should consider the following themes:
 - a. Drivers aren't above average if they exhibit high-risk behaviors. Many high-risk drivers believe that they are above average in terms of driving safety and that they are less likely than average to be in a crash. This simply isn't true. Communicate that these high-risk behaviors increase your odds of a crash, citation, or loss of license no matter how good a driver you think you are.
 - b. Risky behaviors are far less common than they are thought to be by those who participate in them. The vast majority of drivers protect their vehicles, their finances, and their health by avoiding risky behaviors. Those who choose to participate in the risky behaviors pay for it with more crashes, more citations, and more suspensions.
 - c. The identified high-risk behaviors make drivers more likely than average to be involved in a crash, no matter how good a driver they are (in their own perception). As a communications tool, an online game or app to measure drivers' level of risk increase by participating in these behaviors may have impact.
 - d. High-risk drivers are more likely than other drivers to describe themselves as competitive, stubborn, impatient, and in particular, thrillseeking. Messages that use these traits to safety's advantages may be more effective. In general, higher-risk drivers tend to be more emotional in general. This is particularly true of the highest-risk cluster that participates in three or more risky behaviors. Messages that are based on emotion may have more impact than those based on logic.
2. General targeting recommendations for high-risk drivers include:
 - a. Messages should particularly target younger populations. Nearly half of high-risk drivers are under 35. Texting and speeding are particularly concentrated in this younger category, with more than half of offenders being under 35. Drinking and seat belt use tilt toward younger drivers, but are notably closer to an even distribution by age. The average age of those who both speed and text is 31, and the average age of those who participate in three or more risky behaviors is 32.
 - b. Messages should continue to target males. Males are two times more likely than females to fall among the high risk group, and are three times more likely to be drinking drivers. Men also are three times more likely to fall into the highest-risk group of those who participate in three or more risky behaviors.
 - c. As one exception, texting is nearly 50/50 between men and women, and the combination of speeding and texting actually skews slightly toward women, so that message should target both groups equally.

- d. In part due to age differences, higher-risk drivers are more likely to go online, and they are also more likely to listen to AM/FM radio. They are much less likely than lower-risk drivers to read newspapers and slightly less likely to watch TV.
 - e. When asked in general about ways to become a safer driver, a number of changes were suggested. Common ones included decreased phone use, increased seat belt use, decreased texting, and paying more attention. Speed was also mentioned, but changing drinking was cited much less often. While the problem identification process should drive decisions about campaign priorities, those decisions can be informed by understanding these areas that are already identified by drivers as priorities for behavior change. Campaigns reinforcing these ways to become safer will likely resonate more strongly since the respondents are already considering those behavior changes as improvements.
3. Speeding appears to be a notable factor in increasing one's driving risk, either alone or with other high-risk behaviors. Twenty-two percent of speeders aren't concerned about either enforcement or crashes, so strong enforcement is the only way to reach them. For the remainder of speeders, messaging and communications themes that can be used include:
- a. Communicating that speeding amplifies the risk of anything else you do that's bad.
 - b. Most speeders think they're above average drivers, and yet they're 60% more likely to be in a crash than the average driver.
 - c. Increasing perceptions of the dangers of speeding would be helpful. High-risk drivers in particular don't believe that it's "extremely dangerous", but all populations underestimate the risk of speeding relative to other unsafe behaviors.
 - d. Speeders are more likely than any other group to describe themselves as "thrillseeking". Suggest to them that there are ways to get your thrills that don't involve undue risks of injury.
 - e. Speeders are less likely than other groups to worry about injuring or killing others and more likely to worry about their own well-being. Messages regarding speeding that address injury to oneself will resonate more strongly than requests for empathy to other drivers.
 - f. Speeders disproportionately fear enforcement over a crash, which means that more education about crashes would be effective to increase the power of that motivator.
 - g. Speeders who fear being in a crash are more remorseful about their behavior than other speeders, which can be leveraged. Messages about the crash risk can help prompt these drivers to behave.
 - h. Speeders have historically been the risk group that is most likely to change their behavior. More speeders have historically stopped speeding than any other group, with 30 percent of non-speeding drivers saying that they once fit the definition of a speeder.

- i. When former speeders who changed their behavior were asked why, common motivations were getting older and getting tickets. Given the younger demographic of speeders, messages to “grow up and be an adult” may be effective, along with continued high-visibility enforcement messages.
- 4. While high-risk drivers share many common traits, drinking drivers differed from other high-risk drivers in selected key areas:
 - a. Particularly concerning is the 15 percent of drinking drivers that are concerned about neither crashes nor enforcement, and the vast majority of those don’t feel that their behavior is even risky. Roughly one in seven drinking drivers therefore feels that their behavior is fine and fears neither enforcement nor crashes. Strong enforcement may be the only way to reach this group.
 - b. For segments that can be responsive to non-enforcement messaging, the following are recommended:
 - i. Drinking drivers have a belief that they are very careful drivers. Deliver the message that if you drive after drinking, you can’t offset the alcohol by trying to drive more carefully.
 - ii. Continued education on the risks and thresholds of drinking and driving are warranted. On average, drinking drivers believe that they can consume almost three drinks and still be safe to drive. A quarter of all those who have driven after at least two drinks believe that they would be okay to drive after four or more drinks. They believe that they are better able to function with alcohol than the average person.
 - iii. Drinking drivers are just as likely to be indifferent about their behavior as to recognize they shouldn’t do it. Regardless of their area of higher concern (fear of enforcement versus fear of a crash), they are more likely to believe that their behavior isn’t a problem. Messaging needs to reinforce that it is indeed a problem and that driving after drinking is associated with a higher crash risk and a much higher likelihood of getting citations or losing one’s license.
 - iv. When former drinking drivers who changed their behavior were asked why, the common reasons were getting older and “growing up”, along with getting stopped. The “grow up” message resonates with other research that Corona has conducted over the years, and the simple words “Grow Up” may be the core of an effective campaign.
- 5. Text/Internet users should be targeted in the following manner:
 - a. Text/Internet users fear being in a crash as a result of their behavior far more than they fear enforcement, so enforcement should be stressed in messages to increase the power of that tool. Those who fear getting a ticket for texting also predominantly realize that they shouldn’t text, so there’s an acknowledgement on broad scale that texting is improper. There is likely a need for more emphasis on enforcement for this group.

- b. With regard to communications and messaging, text/Internet users are more likely than other groups to identify themselves as stubborn, and so likely react more to messages that let them learn as opposed to messages that force behavior.
 - c. In an exception to most high-risk behaviors, females are equal offenders with males. Messages particularly targeted to females may resonate well since messaging about other behaviors should be targeted to males.
 - d. When former text/Internet users who changed their behavior to stop engaging in high-risk behaviors were asked why, the most common reasons were a recognition that the behavior was dangerous and a concern about crashes. This is already a concern of current text/Internet users, and so may be a predictor that a natural decrease may be on its way.
6. Seat belt violators are equally split in their concern about being in a crash or getting a ticket, so both messages will add value.
- a. However, among the segment that is more worried about a crash, a communications element could be effective. They believe that they should wear a seat belt, but just don't (all the time, anyway). This group represents nearly half of seat belt violators, and is a willing audience to receive cues and reminders to wear their belt. There is likely a need for more emphasis on friendly messaging targeted to this subgroup, particularly with "reminder" themes to wear their seat belt. Be on their side to "remind them about enforcement" and simply to remind them to wear their belt.
 - b. When former seat belt violators who changed their behavior were asked why, the law was the most commonly mentioned motivator. Continued education of younger drivers about the law may support efforts alongside reminders for those who have good intentions but cannot yet develop the habit.
7. After examining the data in detail, one key conclusion is that the data gathered in this study may yield even more rich insights with further in-depth analysis. Given that the investment in collecting the data has already been made, more value could be realized by further mining and examining the data to identify more nuanced conclusions and insights.

KEY RESEARCH CONCLUSIONS

Readers are encouraged to review the detailed findings in the following pages for a full overview of how respondents answered the various questions included in the survey. However, the following is a brief discussion of some of the key conclusions of the survey's results.

DEFINING HIGH-RISK DRIVERS

- 1. Most drivers do not exhibit any unsafe behaviors.** Over half of respondents had not done any of the four key risky behaviors (drinking and driving, texting/using the Internet while driving, speeding, or not wearing a seat belt) in the past 30 days. Among those who did, most only did one of the four behaviors (most commonly, text/Internet use), and almost none exhibited three or more behaviors. This nonetheless means that messages targeting one or more of the four identified unsafe behaviors will be relevant to more than 40 percent of the population. *Exhibits 1a-d*
- 2. High-risk drivers are at increased risk of being in more crashes, receiving moving violations, and having their license suspended.** The definitions used for the three risk groups were derived based on the hypothesized likelihood that a person would be involved in a vehicle crash, as well as the expected severity of such crashes. However, it is important to note the real-world implications of these groupings – most notably that high-risk drivers (drivers who exhibited two or more risky behaviors *or* had driven after drinking at all) were more likely than low-risk drivers to be involved in all three types of traffic incidences addressed in the survey. *Exhibit 2a*
- 3. Despite their increased risk, high-risk drivers generally believe themselves to be above-average drivers who are less likely than others to be involved in a crash.** Though high-risk drivers were less likely than low-risk drivers to consider themselves to be above-average drivers, a majority of high-risk drivers (53 percent) considered themselves to be above average drivers, and almost none (4 percent) believed they were more likely to be in a crash than others. This seems to indicate that high-risk drivers largely have an inflated estimation of their own driving abilities. *Exhibits 3a and 4a*

PERCEPTIONS OF RISKY BEHAVIORS

- 4. High-risk drivers overestimate the prevalence of risky driving behaviors.** Among all respondents (including low-risk drivers), perceptions of how common each of the risky behaviors are among all drivers were dramatically higher than the actual incidence rates of such behaviors. Furthermore, high-risk drivers had even higher perceptions of how common the behaviors were among all drivers and, more specifically, those who themselves exhibited a particular behavior had a higher perception of how common that behavior really is. *Exhibits 5, 6a, and 6b*
- 5. High-risk drivers have a much lower perception of the dangers of their behaviors than low-risk drivers.** Similar to perceptions of the prevalence of behaviors, perceptions of the dangers of each of the four behaviors were considerably lower among high-risk drivers than low-risk drivers. Similarly, those who exhibit a particular behavior generally have a lower perception of the dangers of that behavior. *Exhibits 7a and 7b*

6. **Those who drink and drive generally believe they can drink more than others and still be safe to drive.** Drinking drivers in the survey (on average) estimated that the average person could have 2.6 drinks and still be safe to drive. However, when asked to estimate their own abilities, this average climbed to 2.9 drinks before being unsafe to drive. In other words, drinking drivers believe that they can better handle their alcohol compared to the average person.

CHARACTERISTICS OF RISKY DRIVERS

7. **Compared to low-risk drivers, high-risk drivers tend to be:**

- > ***Younger*** – High-risk drivers had an average age of 38, compared to an average age of 51 among low-risk drivers. *Exhibit 9a*
- > ***Male*** – Two-thirds of high-risk drivers are men, while low-risk drivers were slightly more likely to be women. *Exhibit 10a*
- > ***Employed*** – Largely due to the fact that low-risk drivers are generally older (and, thus, more likely to be retired), high-risk drivers are more likely to be employed. *Exhibit 12a*
- > ***Thrillseeking and competitive*** – High-risk drivers were more likely to associate themselves with those personality traits, as well as impatient and stubborn. *Exhibit 14a*
- > ***Less likely to read newspapers and watch TV*** – High-risk drivers were more likely to go online, listen to the radio, and go out to bars. *Exhibit 15a*

8. **Low-risk drivers and high-risk drivers do not seem to differ in terms of:**

- > ***Geography*** – High-risk drivers were equally likely to be from urban/rural areas as low-risk drivers. *Exhibit 11a*
- > ***Household income*** – High-risk drivers come from all walks of life; no significant differences were observed between the household incomes of various risk groups. *Exhibit 13a*
- > ***Optimism*** – Both high- and low-risk drivers had similar associations with optimism and social aspects. *Exhibit 14a*
- > ***Spending time with family members*** – Both high- and low-risk drivers were very likely to spend free time with family members. *Exhibit 15a*

MOTIVATIONS TO CHANGE

9. **Drinking drivers, in particular, are relatively unlikely to believe there is a problem with their actions.** Three in five drinking drivers felt that they can handle drinking and driving, so doing so isn't a problem. Similarly, nearly half of speeders felt that their speeding isn't a problem. On the other hand, most of those who drive without a seat belt and who text/use the Internet while driving knew that they shouldn't do the behavior. This would seem to indicate that changing the habits of drinking drivers and speeders will be more difficult than those of non-seat belt users and text/Internet users since they will need to be convinced they have a problem before they are willing to change. *Exhibit 16*
10. **Concerns about being in a crash are strongly correlated with a belief that behavior change is needed for all except drinking drivers.** Among text/Internet users, seat belt violators, and speeders, a vast majority of those who said their biggest concern was being in a crash (rather than getting a ticket) knew that they shouldn't do the behavior. However, among drinking drivers, those who feared being in a crash were equally likely to believe they could handle drinking and driving. Even concern with being in a crash is not enough to convince many drinking drivers to want to change their behavior. *Exhibits 18a-d*
11. **Speeders, in particular, are unlikely to be concerned about being in a crash due to their speeding.** A majority of speeders were more concerned about getting a ticket than they were about getting in a crash. However, speeders were actually more likely than any other behavior group to have been in a crash in the past three years. Clearly, many speeders are at more risk than they realize. *Exhibits 2b and 17*
12. **Based on past history, speeders are the most likely to change their behavior over time.** Nearly one-third (30 percent) of non-speeders said that they had consistently sped at some point in their lives. Speeding is a relatively easy violation to enforce, so many speeders said that they had stopped speeding after getting tickets, and others simply felt less of a need to speed as they got older. *Exhibits 20 and 21b*
13. **Enforcement is an effective driver of behavior change.** For all four behaviors, many of those who had changed their behavior mentioned enforcement (tickets, arrests, DUIs, etc.) as motivating factors in their decision to stop their behavior. In particular, those who had started wearing a seat belt mentioned the recent change in Minnesota's seat belt law (to a primary violation) as a reason for changing their behavior. *Exhibits 21a-d*

DETAILED FINDINGS

RESULTS INTERPRETATION

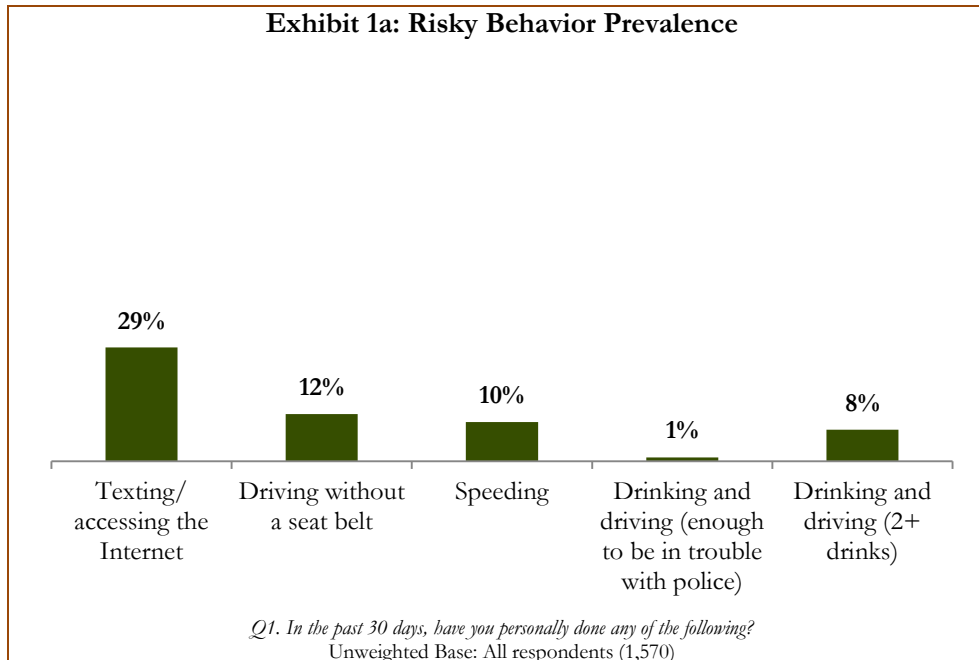
Throughout this report, a relatively consistent format is used to present the results of each question. The following is a general description of how to interpret these results.

- All figures shown are weighted as described in the methodology discussion. Unweighted base sizes are provided to give readers context about the sample size being used in each analysis.
- In most cases, questions are analyzed from three perspectives:
 - ⇒ **By Risk Group** – In this first view, the results are broken out into groupings of high risk, moderate risk, and low risk drivers (as defined previously in the methodology discussion).
 - ⇒ **By Risky Behavior** – In this second view, results are broken out by the specific types of unsafe behaviors exhibited by respondents. Respondents are categorized based on their exhibiting of each behavior, either alone or in conjunction with other unsafe behaviors.
 - ⇒ **By Detailed Combinations of Behaviors** – In this final view, results are broken out by the specific types of unsafe behaviors exhibited by respondents. Respondents are categorized based on their specific combination of unsafe behaviors. Definitions include:
 - > NONE - No unsafe behaviors
 - > DR - Drinking and driving
 - > SB - Driving without a seat belt
 - > SP - Speeding
 - > TX - Texting/using the Internet and driving
 - > 3+ - Three or more unsafe behaviors
- It should be noted that all figures are self-reported, and therefore likely to be conservative when estimating the prevalence of risky behaviors.
- When tables are used:
 - ⇒ The row heading (going down) contains all of the answers given by respondents to the question. The column heading (going across) contains each of the various subpopulations being examined. Therefore, the distribution of answers to each question is shown in each column.

- ⇒ Each analysis cell contains the percentage of respondents of each type who gave each answer, based on the weight-corrected figures.
- ⇒ Findings among subgroups with fewer than 100 respondents should be considered to be directional only. They can be useful in comparison with other groups where differences are large, but results should be viewed with a conservative caution since the margins of error are relatively large. Such findings are shown in light grey in order to distinguish them from other subgroups.
- Figures have been rounded for reporting purposes. Occasionally, a result may not add exactly to 100 percent for this reason.
- Though not explicitly shown in the body of the report, analyses between subgroups were tested to identify statistically significant differences between groups. Detailed tables that include these significance tests are included in Appendix B.
- “Word clouds” are used to provide a glimpse at open-ended responses. These visualizations show words mentioned more frequently by respondents in larger fonts and words mentioned less frequently in smaller fonts. The colors used are for clarity in reading only. A full listing of verbatim responses to open-ended questions is provided in Appendix C.

DEFINING HIGH-RISK DRIVERS

TEXT/INTERNET USE WHILE DRIVING IS THE MOST COMMON RISKY BEHAVIOR



The survey primarily focused on four types of risky driving behaviors:

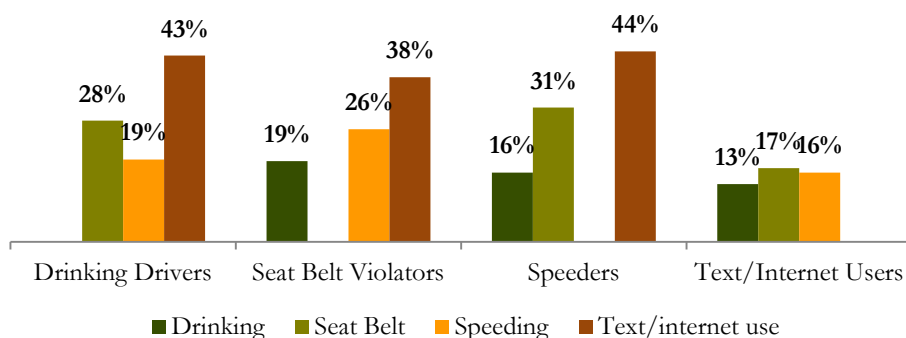
- > Texting (or accessing the Internet) while driving
- > Driving without wearing a seat belt
- > Driving 10 mph or more over the speed limit
- > Driving after drinking

(Note that a fairly conservative definition was used to define “drinking and driving” for the purposes of this study: driving after having two or more drinks. The actual self-reported prevalence of driving enough to be in trouble with police was much lower.)

As shown in *Exhibit 1a*, nearly one-third (29 percent) of drivers in Minnesota had texted and driven in the past 30 days – by far the most prevalent of the risky behaviors. Other behaviors were similarly common, as roughly one in ten respondents had driven without a seat belt, sped, or driven after having two or more drinks in the past 30 days.

TEXT/INTERNET USE IS A COMMON VIOLATION BY THOSE WHO EXHIBIT OTHER RISKY BEHAVIORS

Exhibit 1b: Risky Behavior Combinations



Q1. In the past 30 days, have you personally done any of the following?

Unweighted Bases: Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621)

Exhibit 1b illustrates the likelihood that someone who exhibits one type of risky behavior will also exhibit another type of risky behavior. For example, the leftmost column illustrates that 28 percent of drinking drivers also didn't wear their seat belt at least once in the past month.

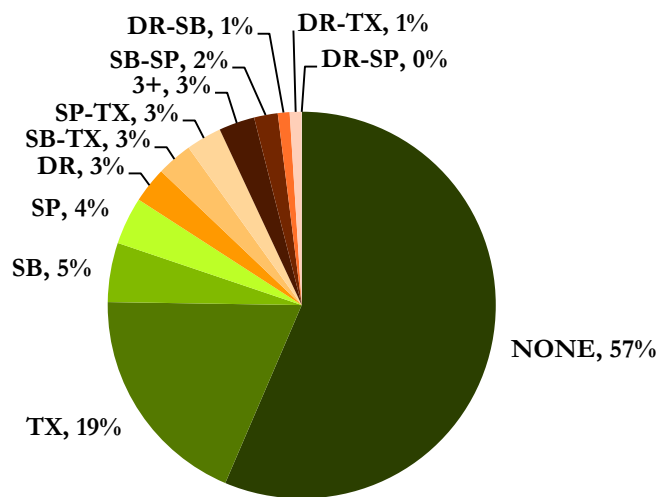
As shown, texting is a common violation across other behavior groups. For example, 43 percent of those who have drunk and driven have also texted while driving in the past 30 days. Similarly, texting is a common behavior among seat belt violators and speeders as well.

Though other behaviors are not as prevalent as texting, many of those who have drunk and driven or sped in the past 30 days are also likely to have driven without a seat belt recently.

An individual driver may exhibit, 0, 1, 2, 3, or even all 4 of these behaviors, and differing combinations may involve different levels of risk, different manifestations of attitude and behaviors, and different strategies to address them. Thus, it is important to keep in mind that there are many different combinations of safety violations exhibited by drivers and that those who exhibit one behavior are fairly likely to also exhibit others. These combinations will be compared and examined later in this report.

THOSE WHO EXHIBIT MULTIPLE RISKY BEHAVIORS ARE ONLY A SMALL PORTION OF THE POPULATION

Exhibit 1c: Overall Behavior Combinations



Given the high prevalence of other risky behaviors among those who exhibit another behavior (see *Exhibit 1b*), another aim of this report is to examine how drivers who exhibit specific *combinations* of behaviors compare to those who exhibit other specific combinations.

A majority of drivers exhibited no risky behaviors at all. Beyond these individuals, nearly another third of respondents (31 percent) only exhibited one of the four behaviors, and ten percent exhibited two behaviors in combination. Finally, only three percent of drivers exhibited three or more risky behaviors in combination.

Future exhibits will examine the characteristics of how respondents who have each of these combinations of behaviors differ.

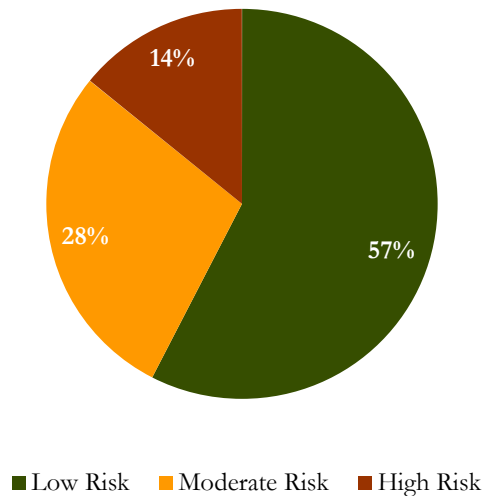
	<i>Drinking and driving (2+ drinks)</i>	<i>Driving without a seat belt</i>	<i>Speeding</i>	<i>Texting/ Internet use</i>
TOTAL	8%	12%	10%	29%
and no other risky behaviors	3%	5%	4%	19%
and drinking and driving		1%	0%	1%
and not wearing a seat belt	1%		2%	3%
and speeding	0%	2%		3%
and texting/Internet use	1%	3%	3%	
and 2+ others	3%	2%	2%	3%

Q1. In the past 30 days, have you personally done any of the following?

Unweighted Base: All respondents (1,570)

A MAJORITY OF DRIVERS ARE LOW-RISK, BUT MANY DRIVERS EXHIBIT AT LEAST ONE RISKY BEHAVIOR

Exhibit 1d: Assigned Risk Groups



Q1. In the past 30 days, have you personally done any of the following?
Unweighted Base: All respondents (1,570)

In order to further understand how individuals who exhibit risky driving behaviors behave, the research team developed groupings of respondents based on their overall risk when driving. The definitions for those groups are as follows:

- **High risk:** Drinking and driving OR two or more risky behaviors (of any type).
- **Moderate risk:** One (and only one) of the following: driving without a seat belt, speeding, or text/Internet use while driving.
- **Low risk:** No risky behaviors.

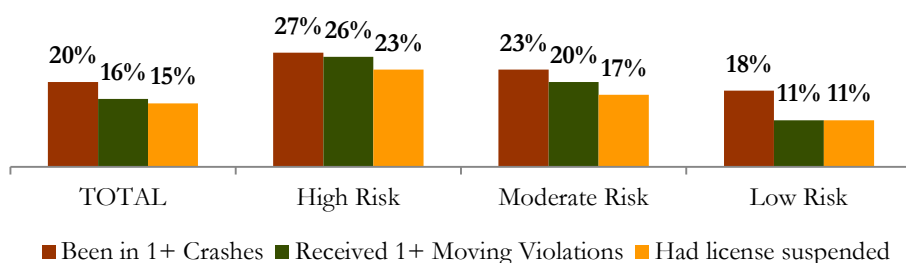
Using these definitions, over half of respondents were low-risk drivers (57 percent), while roughly one in four were moderate-risk (28 percent), and 14 percent were high-risk drivers.

While a majority of drivers are low-risk, this still means that over 40 percent are engaging in at least one of the four risky behaviors and that messaging is still targeting a large proportion of the populace.

Note that these definitions were created prior to the research, and as noted in the key findings, some evidence exists to adjust the definitions. However, for the purpose of this study the original definition is used.

HIGH RISK DRIVERS ARE INDEED AT HIGHER RISK FOR VARIOUS TRAFFIC INCIDENTS

Exhibit 2a: History of Incidences by Risk Group



Q18. How many crashes have you been in during the last three years?

Q19. How many moving violations have you received in the last three years?

Q20. Has your license ever been canceled, revoked, or suspended?

Unweighted Bases: Total (1,570), High Risk (862), Moderate Risk (208), Low Risk (500)

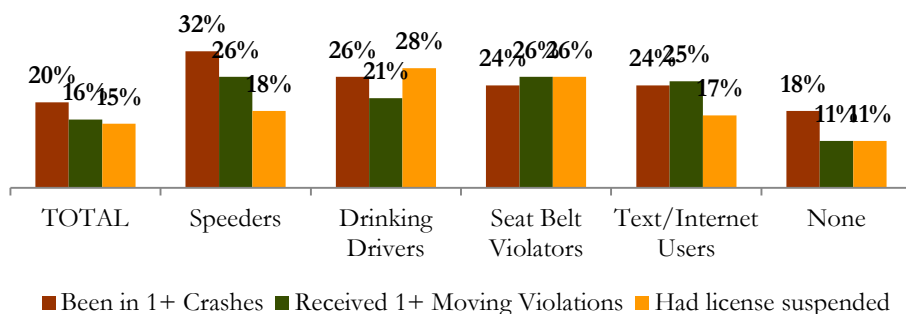
The definitions used for the three risk groups were derived based on the hypothesized likelihood that a person would be involved in a vehicle crash, as well as the expected severity of such crashes. For that reason, high-risk drivers were defined as anyone who had driven after drinking – no matter what other risky behaviors they exhibited. In addition, drivers who exhibited two or more other risky behaviors were classified as high-risk drivers as well.

However, it is important to validate the hypothesis that these groupings would accurately predict the true risk that such drivers would be involved in a traffic incident. As shown in *Exhibit 2a*, high-risk drivers were indeed more likely than other groups to be involved in a crash in the past three years, were more likely to have received moving violations in the past three years, and were more likely to have had their license suspended at some point in their lives.

In fact, high-risk drivers were 50 percent more likely to have been involved in at least one crash in the past three years compared to low-risk drivers. These data suggest that the definitions derived based on combinations of behavior are truly a good predictor of actual risk of being involved in a traffic incident.

SPEEDERS ARE THE MOST LIKELY TO HAVE BEEN IN A VEHICLE CRASH

Exhibit 2b: History of Incidences by Risky Behavior



Q18. How many crashes have you been in during the last three years?

Q19. How many moving violations have you received in the last three years?

Q20. Has your license ever been canceled, revoked, or suspended?

Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621), None (500)

Though it is informative to understand how the various risk groups compare, it is also useful to examine how drivers who exhibit the specific behaviors compare. *Exhibit 2b* suggests that roughly one-third of speeders have been in a crash in the past three years – more than any other behavior group. Interestingly, those who had drunk and driven, driven without a seat belt, or texted/used the Internet while driving were all similarly likely to have been in a crash (roughly one in four).

Despite this high incidence of crashes among speeders, speeders were not significantly more likely to receive moving violations than those who exhibited the other behaviors – the incidence of such violations among all four groups ranged from 21-26 percent. However, only one in ten of those who had *not* shown any of the risky behaviors had received a moving violation.

Finally, it is not surprising that the highest incidence of license suspensions was among those who had drunk and driven (28 percent), followed closely by seat belt violators (26 percent). Comparatively, speeders (18 percent) and text/Internet users (17 percent) were less likely to have had their license suspended.

Given that seat belt violations alone are not typically sufficient to warrant a license suspension, it is likely that those who violate seat belt laws are also likely to exhibit a number of other risky behaviors. Further, a lack of seat belt use alone would not generally increase one's risk of a crash, yet there is a higher crash rate for seat belt violators than for low-risk drivers. Again, this points to other risky behaviors combining with seat belt use, including potentially factors not included in this study such as aggressive driving or non-text distracted driving.

THOSE WHO EXHIBIT THREE OR MORE RISKY BEHAVIORS ARE VERY LIKELY TO BE IN A CRASH

Exhibit 2c: History of Incidences by Detailed Behaviors

	<i>TOTAL</i>	<i>3+</i>	<i>SP</i>	<i>SP-TX</i>	<i>SB-SP</i>	<i>DR-SP</i>	<i>SB-TX</i>	<i>DR</i>	<i>TX</i>	<i>DR-SB</i>	<i>SB</i>	<i>DR-TX</i>	<i>NONE</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>128</i>	<i>22</i>	<i>131</i>	<i>100</i>	<i>29</i>	<i>143</i>	<i>208</i>	<i>149</i>	<i>48</i>	<i>37</i>	<i>75</i>	<i>500</i>
Been in 1+ Crashes	20%	39%	31%	30%	26%	24%	24%	23%	22%	20%	19%	19%	18%
Received 1+ Moving Violations	16%	48%	12%	29%	29%	19%	23%	11%	22%	12%	17%	17%	11%
Had license suspended	15%	32%	15%	14%	19%	20%	24%	23%	14%	39%	27%	23%	11%

Q18. How many crashes have you been in during the last three years?

Q19. How many moving violations have you received in the last three years?

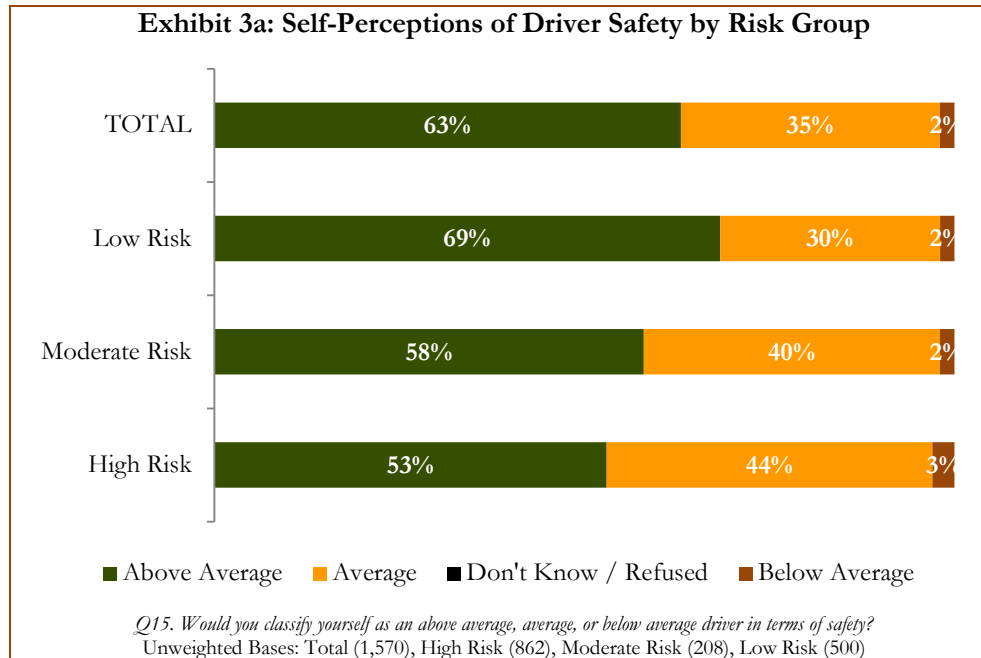
Q20. Has your license ever been canceled, revoked, or suspended?

Nearly 40 percent of those who had exhibited three or more risky behaviors had been in a crash in the past three years, and half had received a moving violation in the past three years. Furthermore, one-third had had their license suspended. This clearly indicates that there is a small group of drivers that have very little respect for the laws regarding these violations, and their lack of compliance is indeed likely to result in a traffic incident.

Similar to the results seen in *Exhibit 2b*, speeders are the most likely to be involved in crashes, as evidenced by the fact that the highest incidence rates for crashes were all among groups that involved speeding as at least one of the risky behaviors. Regular speeding appears to be a core behavior in all of the highest-risk groups.

On the other hand, it is interesting to note that those who *only* drank and drove (without exhibiting any other risky behaviors) were only slightly more likely than non-violators to be involved in a crash. However, it is important to consider that this analysis does not consider the risk per incidence, and speeding was defined as a more frequent behavior than drinking, texting, or seat belt violations. Further, this analysis does not consider the seriousness of crashes that occur, which could vary by behavior type. For that reason, this result should not necessarily be interpreted to indicate that drinking and driving is a less risky behavior than speeding or others. However, it can be used to conclude that speeding regularly is strongly associated with a higher likelihood of being involved in a crash.

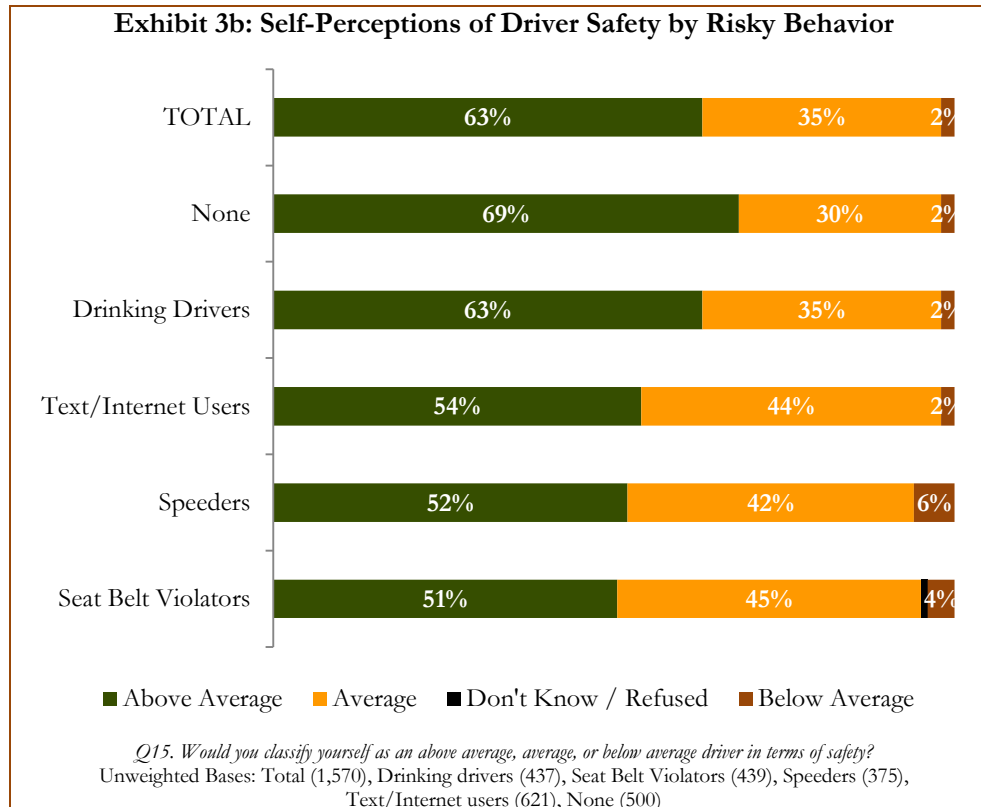
ALL GROUPS, EVEN HIGH-RISK DRIVERS, THINK THAT THEY ARE ABOVE AVERAGE IN TERMS OF SAFETY



Nearly two-thirds of the general population (63 percent) considered themselves to be above average drivers, and almost none consider themselves to be below average drivers. This trend is similar among all groups; over half of high-risk drivers (53 percent) consider themselves to be above average drivers.

It is interesting to note that, while all risk groups generally believed they are above average drivers, high-risk drivers are more likely to consider themselves to be average drivers, indicating that many high-risk drivers to at least acknowledge that their behaviors are not ideal in terms of safety. However, a majority do not make that connection.

ASIDE FROM LOW-RISK DRIVERS, DRINKING DRIVERS ARE THE MOST LIKELY TO BELIEVE THEY ARE ABOVE AVERAGE



Similar to the results of *Exhibit 3a*, over half of respondents from all groups of exhibited risky behaviors believed themselves to be above average drivers in terms of safety. While seat belt violators, speeders, and text/Internet users all had similar ratings of their own abilities, drinking drivers were only second to those who had no risky behaviors in terms of ratings of their driving safety.

This would seem to indicate one of two possible explanations:

- > Individuals who believe themselves to be above average drivers are more likely to drink and drive because they think their above-average abilities will allow them to effectively handle the effects of alcohol on their driving.
- > Individuals who drink and drive do not consider their drinking and driving to be a strong indicator of their overall safety on the roads. Previous unrelated research by Corona Insights has indicated that many of these drivers claim to drive “more carefully” when they’ve been drinking to avoid law enforcement, and perhaps they carry this belief forward to the point that they think the behavior outweighs the negative impact of alcohol.

This first explanation will be discussed in more detail later in this report (*see Exhibit 16a*).

DRIVERS WHO DON'T WEAR A SEAT BELT AND TEXT/USE THE INTERNET WHILE DRIVING ARE THE LEAST LIKELY TO CONSIDER THEMSELVES TO BE ABOVE-AVERAGE DRIVERS

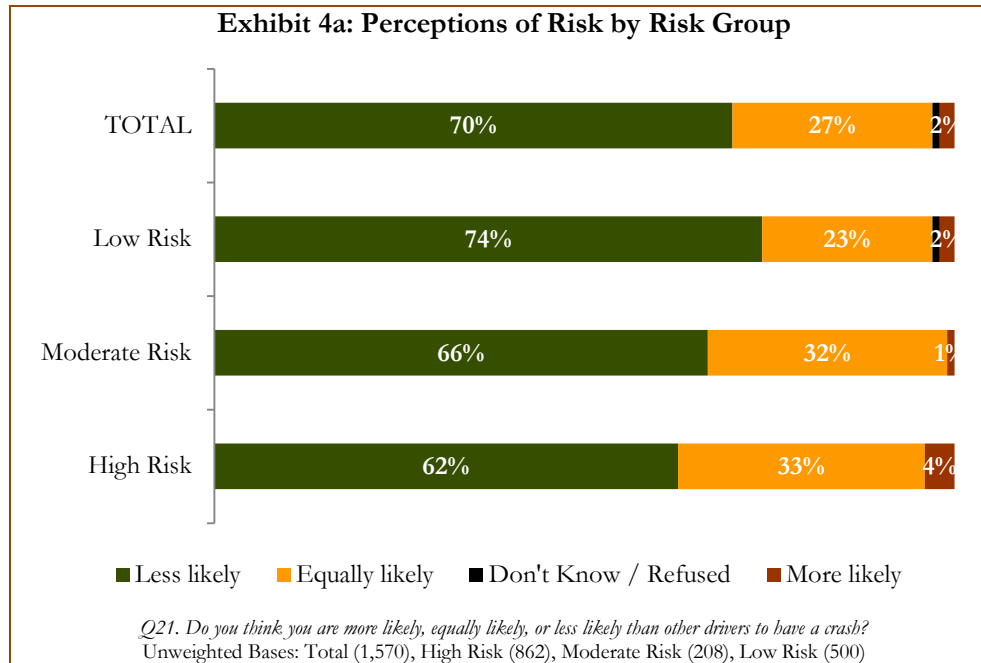
Exhibit 3c: Self-Perceptions of Driver Safety by Detailed Behaviors

	<i>TOTAL</i>	<i>DR</i>	<i>NONE</i>	<i>DR-SB</i>	<i>SP</i>	<i>DR-SP</i>	<i>TX</i>	<i>DR-TX</i>	<i>SB</i>	<i>3+</i>	<i>SP-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>208</i>	<i>500</i>	<i>48</i>	<i>22</i>	<i>29</i>	<i>149</i>	<i>75</i>	<i>37</i>	<i>128</i>	<i>131</i>	<i>100</i>	<i>143</i>
Above Average	63%	73%	69%	64%	63%	60%	58%	57%	55%	48%	47%	46%	43%
Average	35%	26%	30%	36%	31%	40%	42%	42%	41%	43%	51%	50%	55%
Below Average	2%	1%	2%	-	7%	-	1%	1%	2%	9%	2%	4%	2%
Don't Know / Refused	0%	-	0%	-	-	-	-	-	2%	-	-	0%	-

Q15. Would you classify yourself as an above average, average, or below average driver in terms of safety?

Similar to the findings seen in *Exhibit 3b*, drinking drivers tend to have higher ratings of their driving safety than other groups. The results of *Exhibit 3c* are even more striking among those whose only risky behavior was drinking; among this group, nearly three-fourths considered themselves to be above-average drivers. This is an even higher percentage than even among drivers who had no risky behaviors at all. It is possible that this is an artifact of another issue such as age or gender bias between groups, but more research would be necessary to confirm or refute any such theories.

MOST DRIVERS BELIEVE THEY ARE LESS LIKELY THAN THE AVERAGE TO BE IN A CRASH

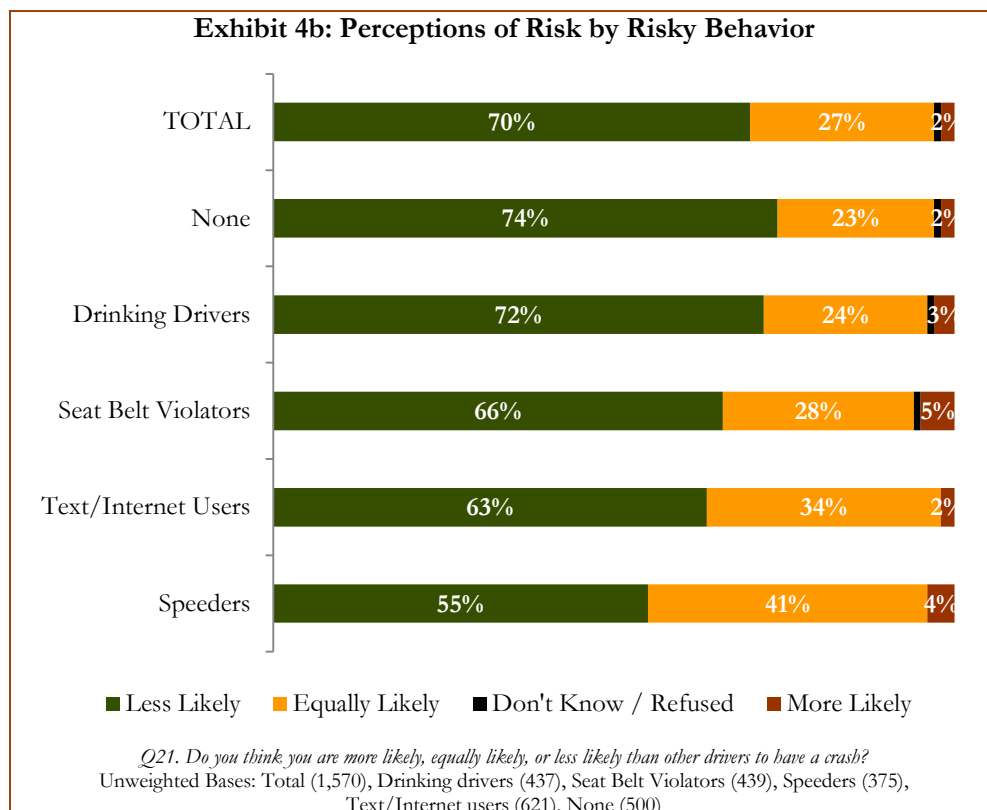


Similar to the results seen in *Exhibit 3a*, a majority of drivers believed that they are less likely than other drivers to be in a car crash, and almost none believe they are more likely to be in a crash.

In addition, the results among the three risk groups are similar to the previous findings as well – a majority of even high-risk drivers believed that they were less likely to be in a crash than other drivers, though fewer high-risk drivers held this perception than low-risk drivers.

While this examination doesn't include the impacts of certain legitimate risk factors such as annual miles driven, there is no reason at this time to assume that those behaviors differ by group.

SPEEDERS ARE THE MOST LIKELY TO BELIEVE THEY WILL BE IN A CRASH



As was seen in *Exhibit 3b*, a majority of respondents from all of the risky behavior groups believed they were less likely than other drivers to be in a crash. Also similar to those previous findings, drinking drivers were only second to those who had no risky behaviors in terms of feeling that they were unlikely to be in a crash. In contrast, speeders were the least confident that they could avoid a crash, though they were still confident on the whole that they are low-risk drivers.

Again, this seems to indicate that individuals who drink and drive either do not believe that their actions are dangerous, or those who believe themselves to be better or more careful drivers are more likely to drink and drive – believing that their superior abilities allow them to drive after drinking safely.

THOSE WHOSE ONLY SAFETY VIOLATION IS DRIVING AFTER DRINKING ARE THE LEAST LIKELY TO BELIEVE THEY WILL BE IN A CRASH

Exhibit 4c: Perceptions of Risk by Detailed Behaviors

	<i>TOTAL</i>	<i>DR</i>	<i>SB</i>	<i>NONE</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>TX</i>	<i>3+</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>SP</i>
<i>Unweighted</i>	<i>1570</i>	<i>208</i>	<i>37</i>	<i>500</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>149</i>	<i>128</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>22</i>
Less Likely	70%	78%	76%	74%	71%	71%	70%	66%	63%	55%	54%	53%	51%
Equally Likely	27%	21%	18%	23%	28%	25%	25%	33%	28%	41%	40%	43%	49%
More Likely	2%	1%	4%	2%	2%	5%	3%	1%	8%	4%	6%	4%	-
Don't Know / Refused	1%	1%	2%	1%	-	-	1%	-	1%	-	1%	-	-

Q21. Do you think you are more likely, equally likely, or less likely than other drivers to have a crash?

Paralleling the results of *Exhibit 3c*, those whose only risky behavior was drinking were the least likely to believe that they would be in a crash – even compared to individuals who exhibited no unsafe driving behaviors. This indicates a belief among drinking drivers that the risk of their actions is lower compared to other types of risky behaviors, or that they offset their behavior with more careful driving.

Among other subgroups, those who speed in combination with texting/using the Internet (or speed only, though the sample size is small) were the most likely to believe that they would be in a crash (though a majority still believed that this is unlikely). Similarly, those who don't wear a seat belt and either speed or text/use the Internet were also relatively unlikely to believe they would be in a crash.

PERCEPTIONS OF RISKY BEHAVIORS

DRIVERS GENERALLY PERCEIVE THAT RISKY BEHAVIORS ARE MUCH MORE COMMON THAN THEY REALLY ARE

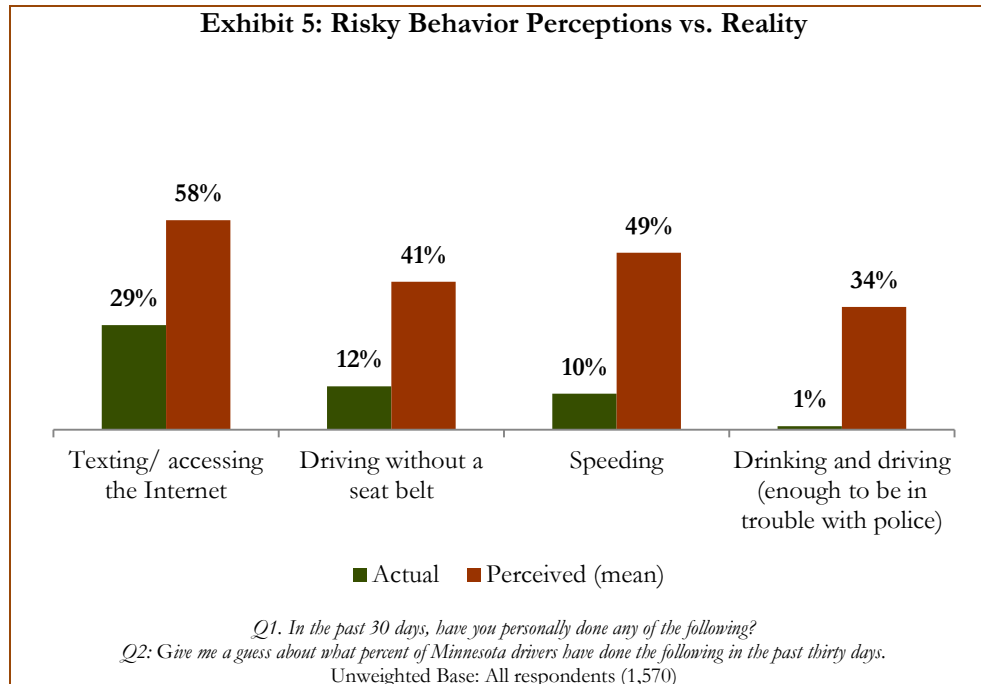


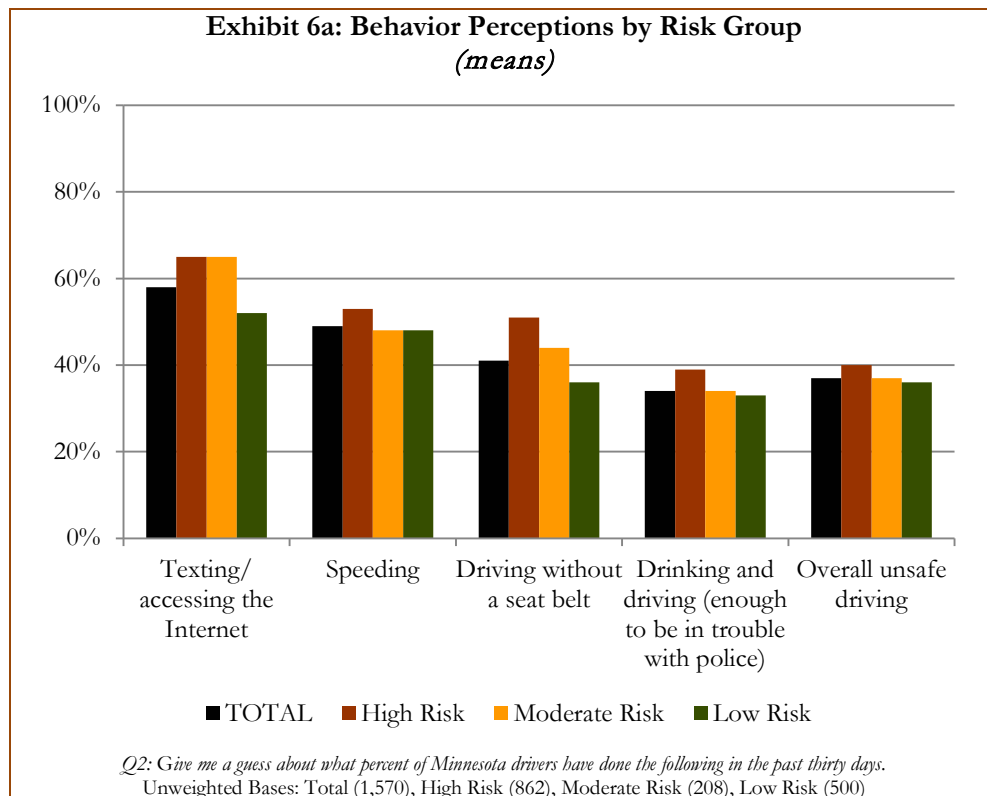
Exhibit 5 compares the actual percentage of survey respondents who reported the four key risky behaviors to the average percentage of drivers respondents believed to exhibit the four behaviors.

Overall, people believed risky behaviors to be far more common than were reported. This is especially true with regard to drinking and driving; only a very small percentage had drunk and driven enough to be in trouble with police, but respondents guessed that one-third of drivers had done so.

Among the behaviors, perception was closest to reality with regard to texting; though respondents believed text/Internet use while driving was twice as common as it really is, this is a much smaller ratio than can be observed in perceptions of the other risky behaviors.

Of course, these findings could simply be an artifact of under-reporting of self-reported behaviors. However, the differences in outcomes (crashes, citations, and suspensions) argue that reporting is reasonably honest.

HIGH-RISK DRIVERS BELIEVE THAT ALL RISKY BEHAVIORS ARE MORE COMMON COMPARED TO LOW-RISK DRIVERS

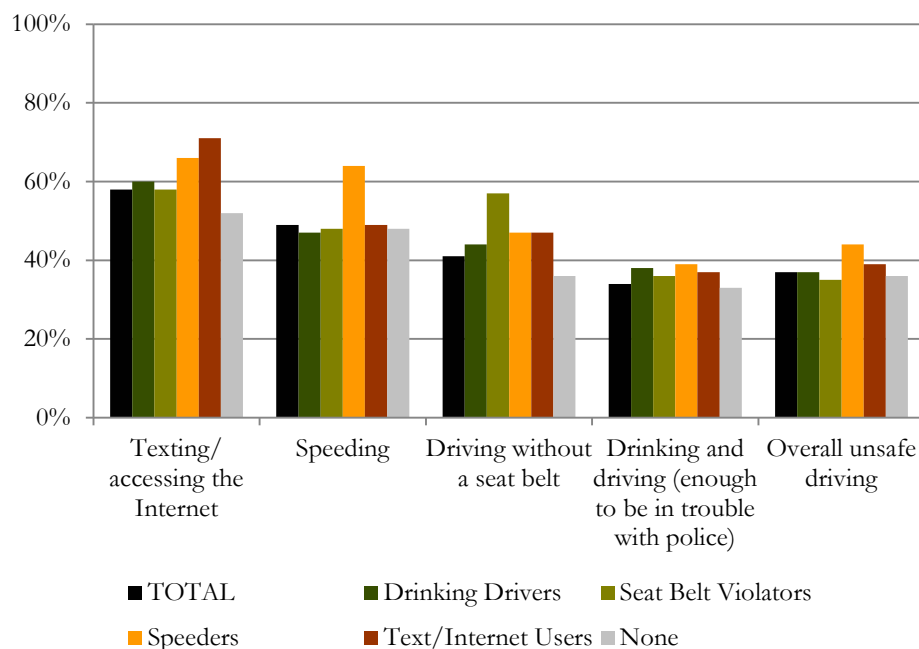


When asked what percentage of drivers exhibited each of the four risky behaviors, high-risk drivers believed each behavior was more common than low-risk drivers. The difference was most striking with regard to seat belt use: high-risk drivers estimated that 51 percent of drivers don't use a seat belt compared to only 31 percent of low-risk drivers

This could argue that high-risk drivers tend to affiliate more with other high-risk drivers, or simply that high-risk drivers don't understand how most other drivers behave to lower their risks.

THOSE WHO EXHIBIT AN UNSAFE DRIVING BEHAVIOR TEND TO BELIEVE THAT BEHAVIOR IS MORE COMMON AMONG ALL DRIVERS

Exhibit 6b: Behavior Perceptions by Risky Behavior
(means)



Q2: Give me a guess about what percent of Minnesota drivers have done the following in the past thirty days.
Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375),
Text/Internet users (621), None (500)

Among almost all of the behaviors addressed in the survey, those who actually do the behavior tend to believe that the behavior is more common among other drivers. For example, text/Internet users believed that 71 percent of drivers text/use the Internet while driving (on average), compared to an estimate of only 58 percent among all respondents.

Similarly, speeders believed that 64 percent of the general population speed compared to a belief of 49 percent among all respondents. Finally, seat belt violators believed that 57 percent of drivers don't use a seat belt compared to only 41 percent among all respondents.

Interestingly, the only exception to this trend is with regard to drinking and driving. Perceptions of the prevalence of drinking and driving don't tend to vary based on one's own behavior. On that topic, the difference between perceptions among drinking drivers and among all respondents was only 4 percent – a difference that is not statistically significant.

PERCEPTIONS OF THE COMMONNESS OF RISKY BEHAVIORS ARE SIMILAR ACROSS DIFFERENT COMBINATIONS OF BEHAVIORS

Exhibit 6c: Behavior Perceptions by Detailed Behaviors
(means)

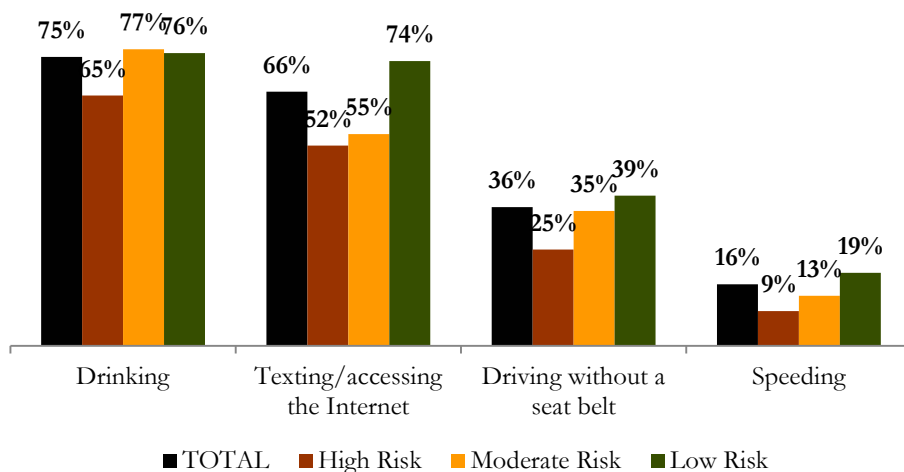
	<i>TOTAL</i>	<i>NONE</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>3+</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>500</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>149</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>128</i>
Texting/ accessing the Internet	58%	52%	51%	46%	61%	71%	56%	53%	71%	63%	68%	73%	70%
Speeding	49%	48%	42%	42%	61%	47%	43%	68%	42%	67%	44%	65%	57%
Driving without a seat belt	41%	36%	34%	50%	34%	44%	56%	38%	42%	63%	63%	44%	63%
Drinking and driving (enough to be in trouble with police)	34%	33%	34%	31%	31%	36%	39%	45%	35%	39%	36%	40%	45%
Overall unsafe driving	37%	36%	33%	29%	44%	38%	34%	45%	36%	44%	36%	46%	43%

Q2: Give me a guess about what percent of Minnesota drivers have done the following in the past thirty days.

As was seen in *Exhibit 6b*, drivers who exhibit a particular behavior tend to believe that that behavior is more common among all drivers. However, there were only slight differences in perceptions among the various combinations of detailed behaviors. For example, text/Internet users estimated that 71 percent of drivers text/use the Internet while driving overall (from *Exhibit 6b*). This is very similar to the average estimate among those whose only violation was text/Internet use while driving (71 percent), seat belt violator-text/Internet users (68 percent), speeder-text/Internet users (73 percent), and those who exhibit three or more unsafe behaviors (70 percent). In other words, perceptions of any individual behavior don't tend to skew if other behaviors are present.

HIGH-RISK DRIVERS HAVE A LOWER PERCEPTION OF HOW RISKY THE VARIOUS BEHAVIORS TRULY ARE

Exhibit 7a: Perceived Danger by Risk Group
(percent responding “extremely dangerous”)



Q6. On a scale of 1 to 5, where 1 is not dangerous and 5 is extremely dangerous, how dangerous do you think the following behaviors are for the typical driver?

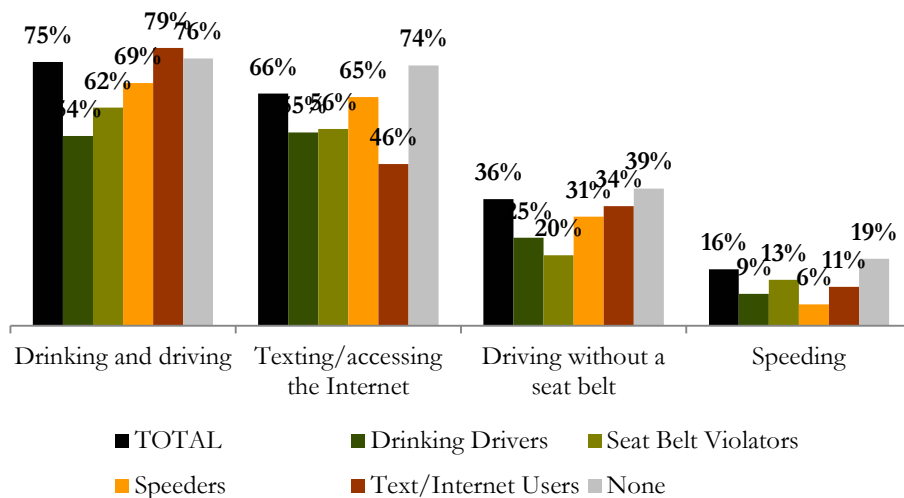
Unweighted Bases: Total (1,570), High Risk (862), Moderate Risk (208), Low Risk (500)

Overall, drinking and driving was viewed as the most dangerous behavior of the four tested in the survey, followed closely by text/Internet use while driving. Driving without a seat belt was seen as being extremely dangerous by roughly one-third of respondents (36 percent), while speeding was seen as being extremely dangerous by only a small portion of respondents (16 percent).

For all four risky driving behaviors, high-risk drivers were considerably less likely than low-risk drivers to believe that each behavior is “extremely dangerous.” This trend is especially striking with regard to speeding; low-risk drivers were twice as likely to consider speeding to be extremely dangerous as high-risk drivers (9 vs. 19 percent).

DRIVERS WHO EXHIBIT A BEHAVIOR GENERALLY DON'T BELIEVE IT IS AS DANGEROUS COMPARED TO OTHER DRIVERS

Exhibit 7b: Perceived Danger by Risky Behavior
(percent responding “extremely dangerous”)



Q6. On a scale of 1 to 5, where 1 is not dangerous and 5 is extremely dangerous, how dangerous do you think the following behaviors are for the typical driver?

Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621), None (500)

Similar to the trend seen in *Exhibit 6b*, perceptions about the danger of the four risky behaviors tended to depend on what risky behaviors the respondent themselves were guilty of. For example, 75 percent of all respondents believed that drinking and driving was extremely dangerous, but among those who themselves had driven after drinking, this figure was only 54 percent. This comparison is seen among all four behaviors – if you do it, you (on average) don’t think it’s as dangerous as other drivers do.

It is interesting to note that text/Internet users are more likely than even non-violators to believe that drinking and driving is extremely dangerous. This may be partially due to the relatively young age of text/Internet users compared to other groups (see *Exhibit 9b*), but this seems to indicate that the dangers of drinking and driving have been conveyed well among this group, but the dangers of text/Internet use while driving are still not entirely believed.

THOSE WHO EXHIBIT THREE OR MORE RISKY BEHAVIORS ARE GENERALLY LESS LIKELY TO BELIEVE THAT ALL BEHAVIORS ARE DANGEROUS

Exhibit 7c: Perceived Danger by Detailed Behaviors
(percent responding “extremely dangerous”)

	<i>TOTAL</i>	<i>NONE</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>3+</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>500</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>149</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>128</i>
Drinking and driving	75%	76%	53%	58%	66%	84%	41%	68%	65%	74%	73%	75%	58%
Texting/accessing the Internet	66%	74%	68%	62%	92%	47%	64%	55%	45%	69%	49%	45%	38%
Driving without a seat belt	36%	39%	29%	26%	32%	38%	20%	41%	25%	15%	17%	44%	16%
Speeding	16%	19%	13%	18%	4%	12%	8%	2%	7%	8%	11%	9%	7%

Q6. On a scale of 1 to 5, where 1 is not dangerous and 5 is extremely dangerous, how dangerous do you think the following behaviors are for the typical driver?

Similar to the trend seen in *Exhibit 6c*, those who exhibit a behavior tend to believe that that behavior is less dangerous than all drivers. Again, however, there are only slight differences in perceptions among the various combinations of behaviors.

It is interesting to note, though, that those who exhibit three or more risky behaviors generally believe that all of the behaviors are less dangerous compared to all drivers. This seems to indicate that this group has an overall lower perception of the dangers of risky driving behaviors.

DRINKING DRIVERS GENERALLY BELIEVE THEY CAN DRINK MORE THAN OTHERS AND STILL BE SAFE TO DRIVE

Exhibit 8: Number of Drinks that can be Consumed and Still be Safe to Drive



Q3. How many drinks can the average person have and still be okay to drive within two hours of drinking?

Q4. How many drinks can you have and still be okay to drive within two hours of drinking?

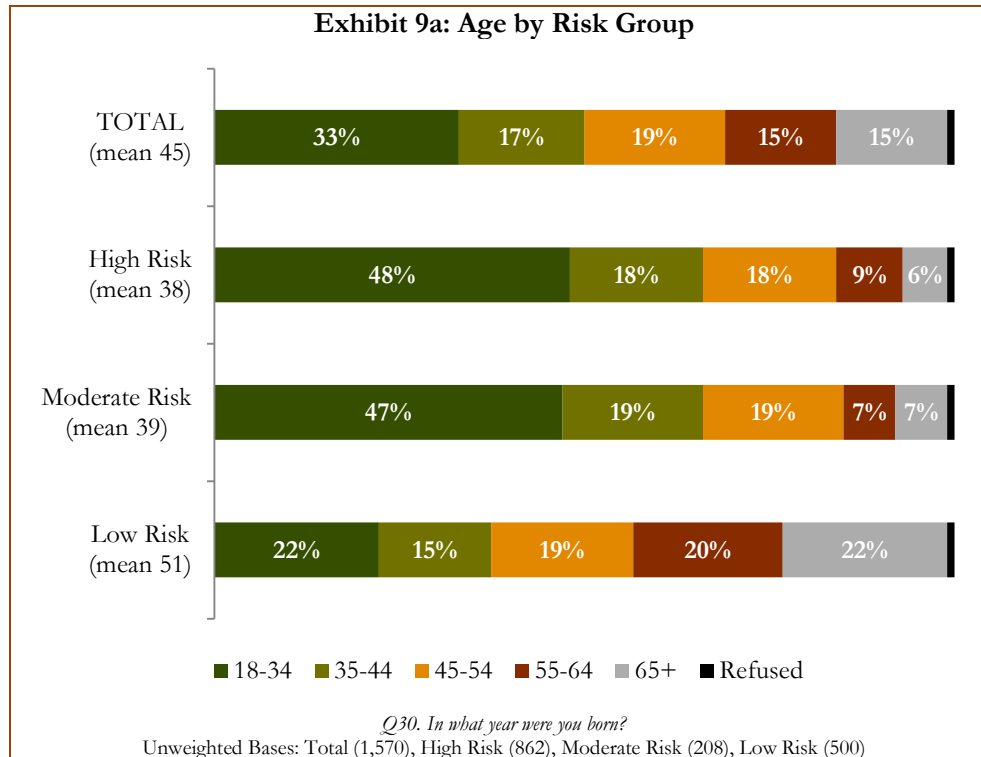
Unweighted Base: Drinking drivers (437)

On average, drinking drivers believed that they could consume 2.9 drinks and still be safe to drive. However, when asked how much the *average person* can drink and still be safe to drive, the average response was 2.6. Similarly, one in four drinking drivers believed that they would still be safe to drive after having four or more drinks, but only 15 percent believed that the average person would be safe after having four or more drinks.

In other words, drinking drivers believe that they can handle their alcohol more than the average person. This likely contributes to the perceptions of the dangers of drinking and driving as discussed in previous exhibits.

CHARACTERISTICS OF RISKY DRIVERS

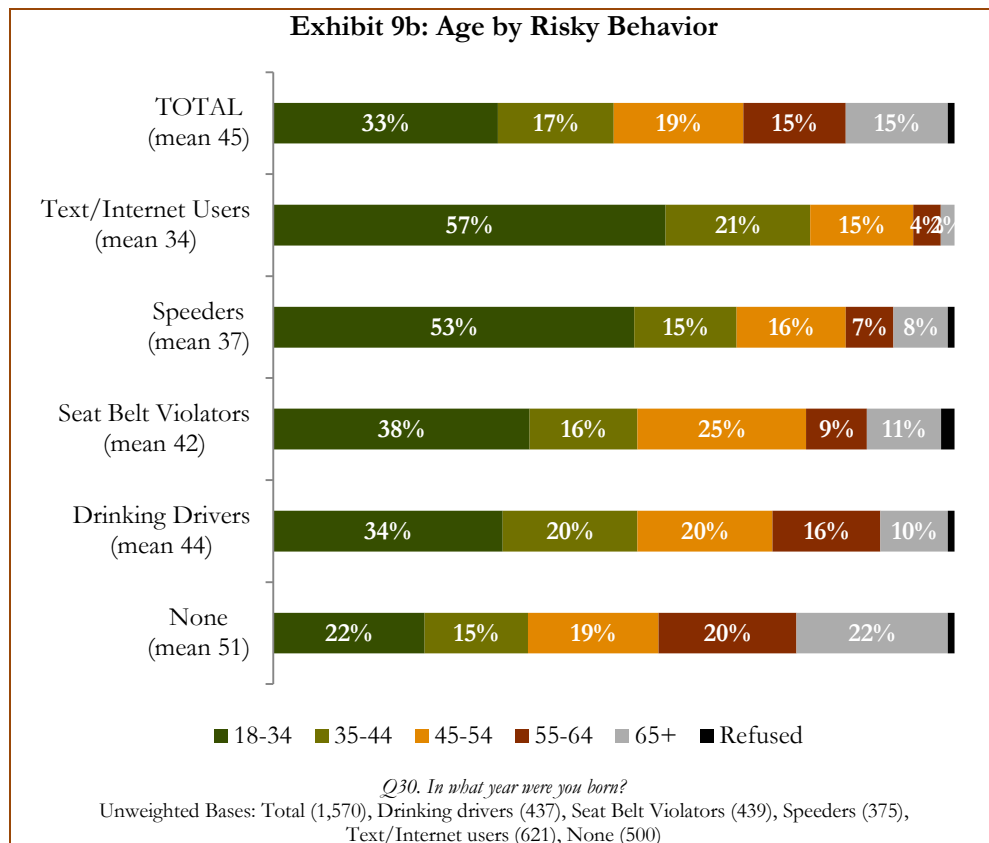
HIGH-RISK DRIVERS TEND TO BE YOUNGER



Nearly half of both high- and moderate-risk drivers are between ages 18-34. This supports other recent surveys conducted by the Minnesota Office of Traffic Safety that have indicated that younger drivers (particularly unmarried males) are less safe drivers than their older, female counterparts.

On the other hand, nearly one-fourth of low-risk drivers are age 65 or older. Clearly, there is a trend toward safer driving as drivers age.

TEXT/INTERNET USERS AND SPEEDERS TEND TO BE YOUNGER THAN SEAT BELT VIOLATORS AND DRINKING DRIVERS



Given the proliferation of texting among younger generations, it is not surprising to note that text/Internet users tend to be very young compared to those who exhibit other risky driving behaviors. In fact, nearly four in five text/Internet users (78 percent) were under age 45, with an average age of 34. In addition, speeders tend to be younger than other risky drivers, with an average age of 37.

On the other hand, seat belt violators and drinking drivers tend to be older, with average ages of 42 and 44 respectively. However, as discussed in *Exhibit 9a*, those who don't exhibit any risky driving behaviors tend to be much older, with an average age of 51.

THOSE WHO BOTH TEXT/USE THE INTERNET WHILE DRIVING AND SPEED ARE YOUNGER THAN THOSE WITH OTHER BEHAVIOR COMBINATIONS

Exhibit 9c: Age by Detailed Behaviors

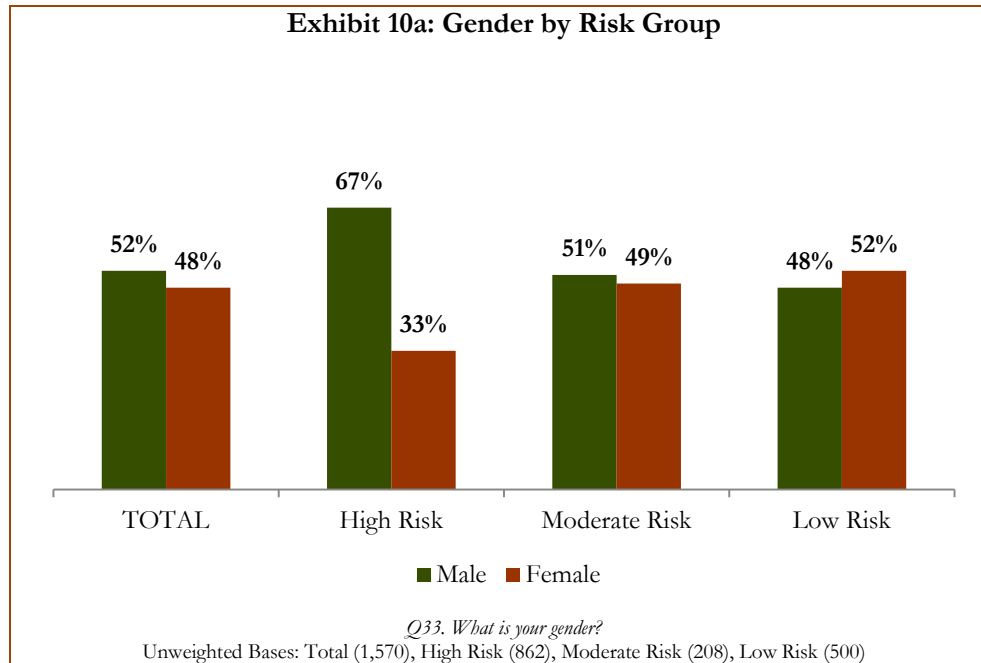
	<i>TOTAL</i>	<i>SP-TX</i>	<i>3+</i>	<i>TX</i>	<i>SB-TX</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SP</i>	<i>DR-SP</i>	<i>DR-SB</i>	<i>SB</i>	<i>NONE</i>	<i>DR</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>131</i>	<i>128</i>	<i>149</i>	<i>143</i>	<i>75</i>	<i>100</i>	<i>22</i>	<i>29</i>	<i>48</i>	<i>37</i>	<i>500</i>	<i>208</i>
18-34	33%	69%	65%	57%	50%	45%	45%	37%	38%	23%	19%	22%	16%
35-44	17%	17%	21%	22%	21%	27%	13%	13%	14%	16%	13%	15%	14%
45-54	19%	11%	9%	15%	22%	24%	25%	20%	17%	22%	33%	19%	22%
55-64	15%	1%	3%	5%	4%	1%	8%	12%	19%	27%	12%	20%	28%
65+	15%	0%	-	2%	2%	3%	7%	18%	11%	13%	20%	22%	19%
Refused	1%	1%	2%	-	1%	-	1%	-	-	-	3%	1%	1%
Mean	45	31	32	35	36	37	40	44	44	49	50	51	52

Q30. In what year were you born?

Among the various combinations of behavior groups, those who both speed and text were the youngest in the survey with an average age of 31. Similarly, those who exhibited three or more risky behaviors were also very young with an average age of 32.

It is interesting to note that those who have driven after having two or more drinks *only* (with no other risky behaviors) were actually older on average than even drivers who did not exhibit any unsafe driving behaviors at all.

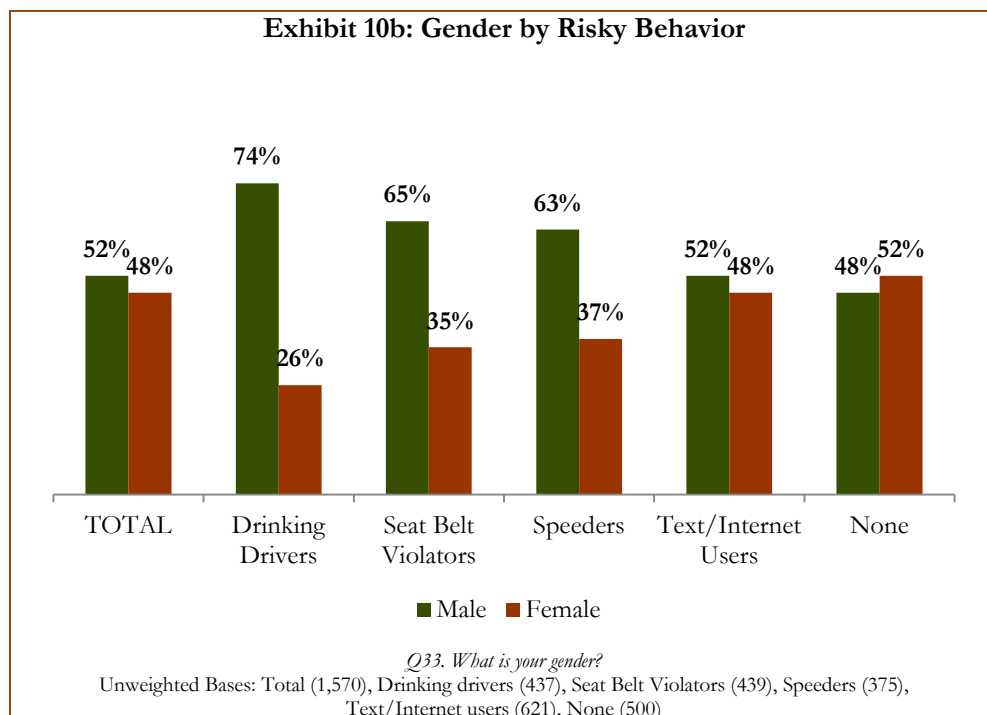
HIGH-RISK DRIVERS ARE TWICE AS LIKELY TO BE MEN THAN WOMEN



Low-risk drivers were slightly more likely to be women than men, and moderate risk drivers were slightly more likely to be men than women. However, the differences between genders among these two groups were very slight.

However, two-thirds of high-risk drivers were men. This again supports other recent surveys conducted by the Minnesota Office of Traffic Safety that have indicated that men are more likely to exhibit unsafe driving behaviors than women.

DRINKING DRIVERS ARE THREE TIMES AS LIKELY TO BE MEN THAN WOMEN



Even more striking than the overall comparison of genders among high-risk drivers is the comparison of genders among drinking drivers. Only 26 percent of those who had driven after drinking were female compared to 74 percent who were male. Men were also much more likely than women to be guilty of seat belt violations and speeding.

On the other hand, men and women were equally likely to be guilty of text/Internet use while driving.

THOSE WHO EXHIBIT THREE OR MORE RISKY DRIVING BEHAVIORS ARE PARTICULARLY LIKELY TO BE MEN

Exhibit 10c: Gender by Detailed Behaviors

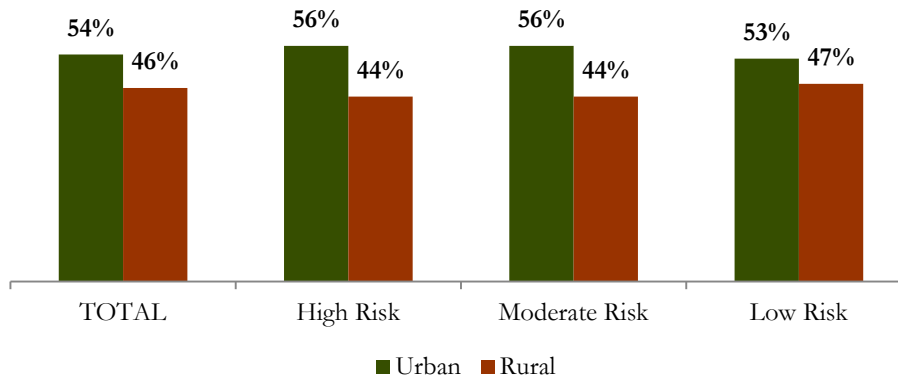
	TOTAL	DR-SB	3+	DR	SP	DR-TX	SB-TX	SB-SP	DR-SP	SB	SP-TX	NONE	TX
<i>Unweighted Base</i>	1570	48	128	208	22	75	143	100	29	37	131	500	149
Male	52%	84%	77%	73%	67%	67%	66%	65%	63%	57%	49%	48%	47%
Female	48%	16%	23%	27%	33%	33%	34%	35%	37%	43%	51%	52%	53%

Q33. What is your gender?

Among the various detailed behavior combinations, those who exhibit three or more risky driving behaviors were the most likely to be men, while those who text *only* (with no other risky behaviors) were the most likely to be women. (Though those who both drive without a seat belt and who drink and drive were even more likely to be men, this finding is based on a relatively small number of respondents and should be interpreted with caution.)

DRIVERS IN URBAN AND RURAL AREAS ARE SIMILARLY LIKELY TO EXHIBIT RISKY BEHAVIORS

Exhibit 11a: Area Type by Risk Group



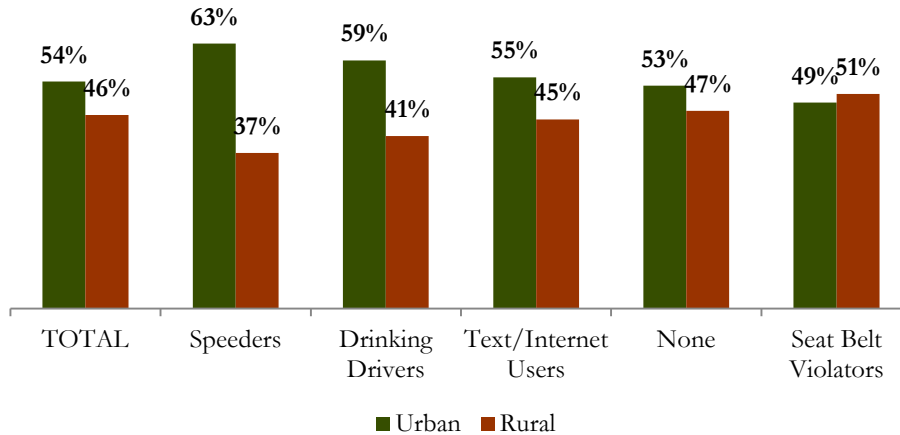
Q31. What county do you live in?

Unweighted Bases: Total (1,570), High Risk (862), Moderate Risk (208), Low Risk (500)

Across all three risk groups, a slight majority of respondents were in urban areas. Though some slight variances can be observed between the three risk groups, these differences were not statistically significant.

SPEEDING IS MORE COMMON IN URBAN AREAS

Exhibit 11b: Area Type by Risky Behavior



Q31. What county do you live in?

Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621), None (500)

Among speeders surveyed, nearly two-thirds (63 percent) were in urban areas – a higher percentage than was observed among any other behavior group. On the other hand, seat belt violators were slightly more likely to be in rural areas (51 percent).

All other behavior groups were similar to respondents as a whole in terms of their likelihood of being from urban and rural areas.

THOSE WHO BOTH SPEED AND TEXT/USE THE INTERNET WHILE DRIVING ARE THE MOST LIKELY TO BE IN URBAN AREAS

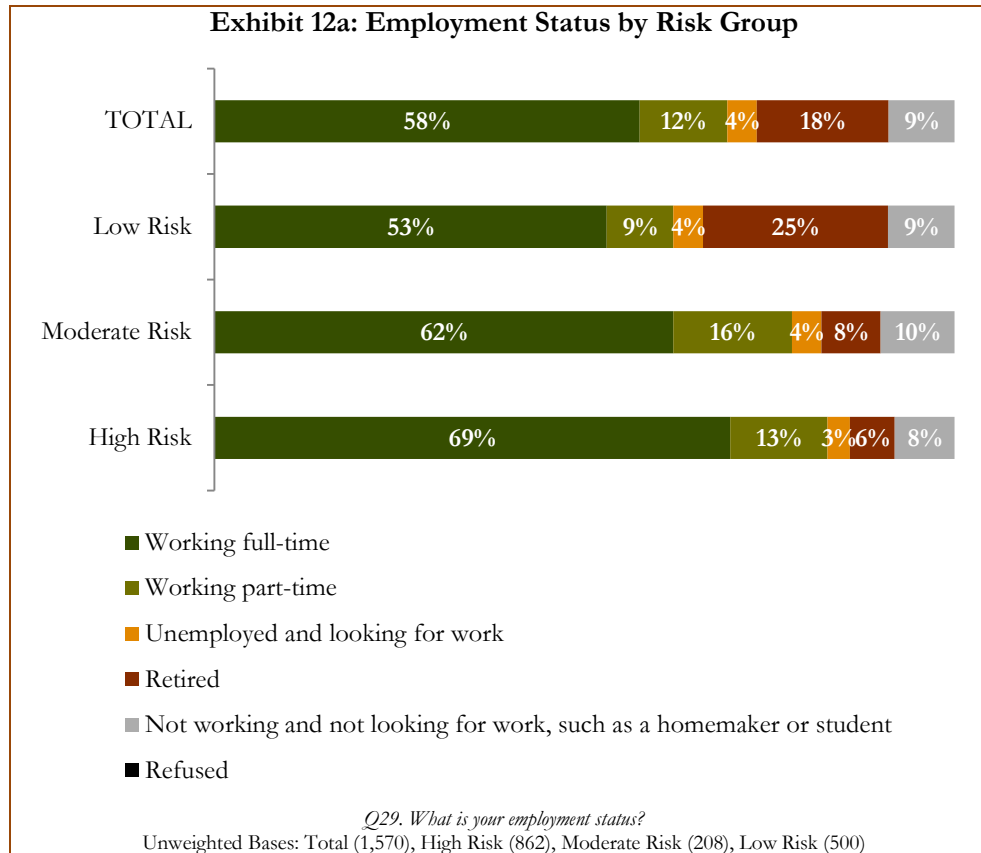
Exhibit 11c: Area Type by Detailed Behaviors

	<i>TOTAL</i>	<i>DR-SP</i>	<i>SP</i>	<i>SP-TX</i>	<i>DR</i>	<i>DR-TX</i>	<i>TX</i>	<i>NONE</i>	<i>SB-SP</i>	<i>3+</i>	<i>SB</i>	<i>DR-SB</i>	<i>SB-TX</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>29</i>	<i>22</i>	<i>131</i>	<i>208</i>	<i>75</i>	<i>149</i>	<i>500</i>	<i>100</i>	<i>128</i>	<i>37</i>	<i>48</i>	<i>143</i>
Urban	54%	72%	71%	65%	62%	57%	56%	53%	53%	53%	49%	47%	46%
Rural	46%	28%	29%	35%	38%	43%	44%	47%	47%	47%	51%	53%	54%

Q31. What county do you live in?

As was seen in *Exhibit 11b*, speeders were the most likely overall group to be located in urban areas. It is not surprising, therefore, that many of the detailed behavior groups examined that included speeders were also more likely to be from urban areas. In particular, those who both speed and text/use the Internet while driving were especially likely to be from urban areas.

HIGH-RISK DRIVERS ARE MORE LIKELY THAN LOW RISK DRIVERS TO BE EMPLOYED

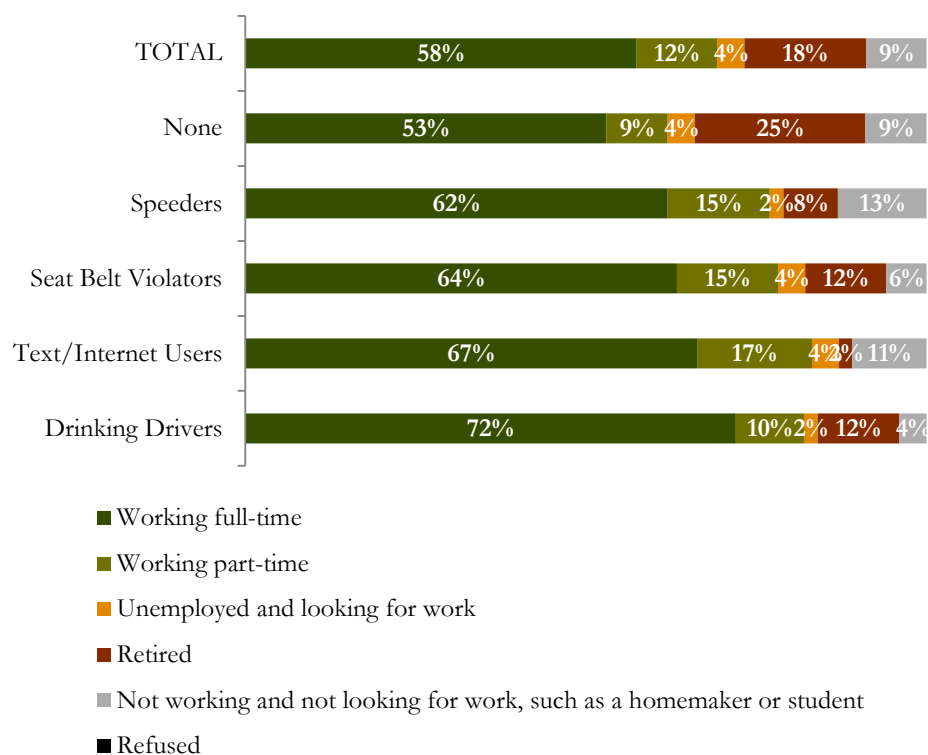


Over two-thirds of high-risk drivers were working full-time (69 percent), and an additional 13 percent were working part-time. On the other hand, low-risk drivers were relatively unlikely to be working and were instead likely to be retired.

Though these findings are interesting in and of themselves, it is important to recall that low-risk drivers are typically much older than high-risk drivers (see *Exhibit 9a*). For this reason, these differences are likely significantly impacted by the fact that the older individuals in the low risk group are more likely to be retired.

DRINKING DRIVERS ARE THE MOST LIKELY GROUP TO BE IN THE WORK FORCE

Exhibit 12b: Employment Status by Risky Behavior



Q29. What is your employment status?

Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621), None (500)

Among the four risky behavior groups examined, drinking drivers were the most likely to be employed full time, followed by text/Internet users and seat belt violators. Speeders were the least likely to be employed full time.

Among speeders and text/Internet users, it is also interesting to note that these groups were more likely to be not working and not looking for work – likely due to the fact that many of these individuals are students.

DRINKING DRIVERS WHO DON'T EXHIBIT ANY OTHER RISKY BEHAVIORS ARE RELATIVELY UNLIKELY TO BE EMPLOYED

Exhibit 12c: Employment Status by Detailed Behaviors

	<i>TOTAL</i>	<i>DR-TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>TX</i>	<i>SP-TX</i>	<i>3+</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>NONE</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>75</i>	<i>48</i>	<i>29</i>	<i>100</i>	<i>143</i>	<i>149</i>	<i>131</i>	<i>128</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>500</i>
Working full-time	58%	85%	84%	75%	72%	72%	65%	65%	64%	61%	56%	55%	53%
Working part-time	12%	9%	-	-	11%	16%	17%	18%	20%	10%	15%	11%	9%
Unemployed and looking for work	4%	2%	-	5%	5%	1%	5%	3%	4%	2%	4%	-	4%
Retired	18%	1%	16%	10%	7%	2%	2%	0%	-	24%	22%	18%	25%
Not working and not looking for work, such as a homemaker or student	9%	3%	-	10%	6%	9%	11%	13%	11%	3%	3%	15%	9%
Refused	0%	-	-	-	-	-	-	0%	1%	1%	-	-	0%

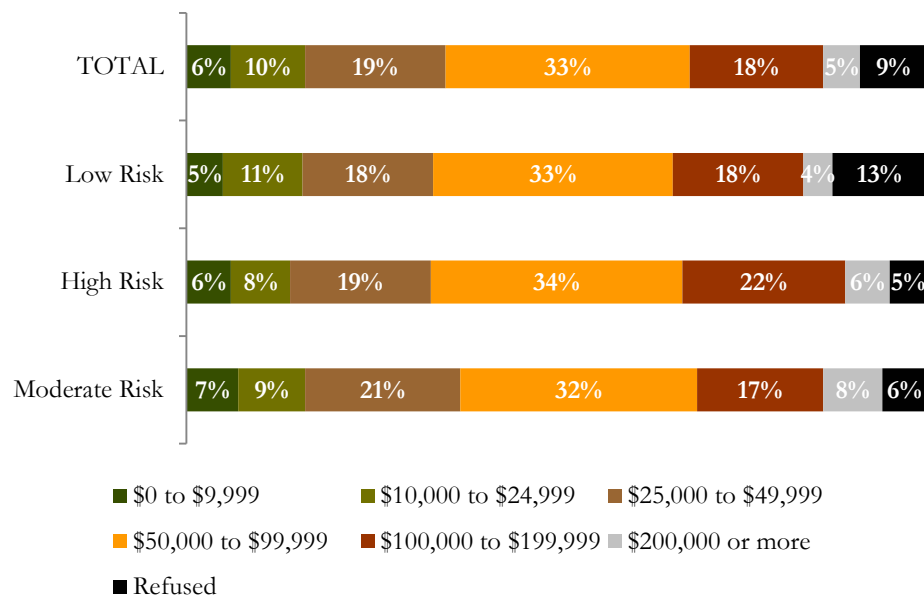
Q29. What is your employment status?

There appears to be a clear difference between those who drink *only* (without exhibiting any other risky behaviors) and those who drink in conjunction with other risky behaviors. Among those who drink only, only 61 percent were employed. However, among those who drink in conjunction with other behaviors, full-time employment ranged from 75-85 percent.

On the other end of the employment spectrum, those who text/use the Internet while driving – either alone or in conjunction with other risky behaviors – were generally likely to be not working and not looking for work. Again, this is likely caused by the fact that many of those who text/use the Internet while driving are younger and, therefore, are more likely to be students.

HOUSEHOLD INCOME LEVELS GENERALLY DO NOT VARY SIGNIFICANTLY BETWEEN GROUPS

Exhibit 13a: Household Income by Risk Group



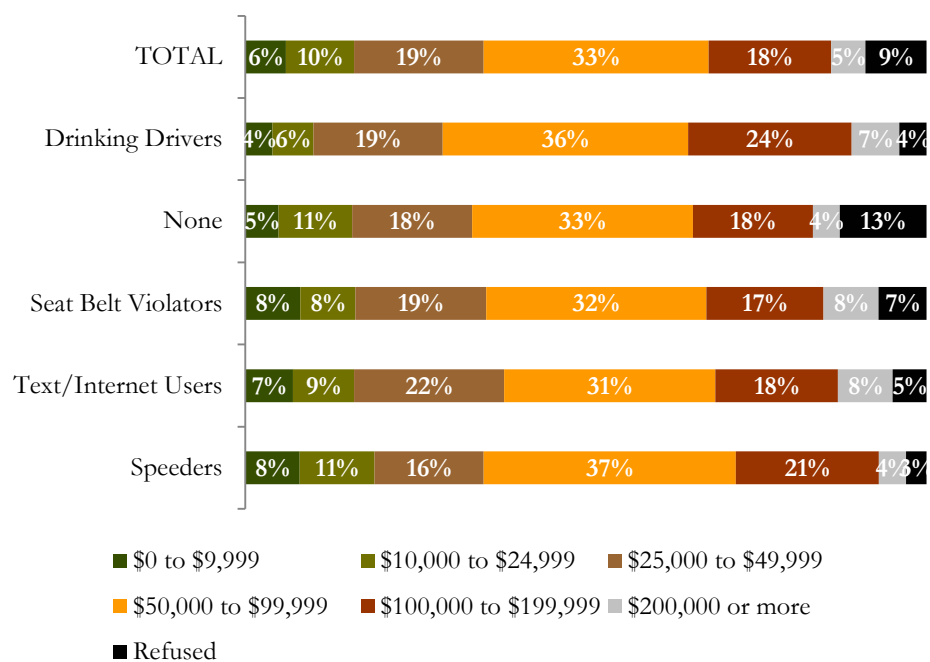
Q32. Which of the following categories includes your total household income?

Unweighted Bases: Total (1,570), High Risk (862), Moderate Risk (208), Low Risk (500)

Among all three risk groups, between 68-69 percent of respondents had household incomes of less than \$100,000. There is very little meaningful variation of household incomes between groups.

HOUSEHOLD INCOME LEVELS GENERALLY DO NOT VARY SIGNIFICANTLY BETWEEN GROUPS

Exhibit 13b: Household Income by Risky Behavior



Q32. Which of the following categories includes your total household income?
 Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375),
 Text/Internet users (621), None (500)

Similar to the results of *Exhibit 13a*, no strong conclusions can be drawn about differences in household incomes between risky behavior groups. Among all three risk groups, between 65-72 percent of respondents had household incomes of less than \$100,000. While some variation can be observed between groups, these variations were generally slight and not statistically significant.

THOSE WHO EXHIBIT THREE OR MORE RISKY BEHAVIORS TEND TO HAVE HIGHER HOUSEHOLD INCOMES

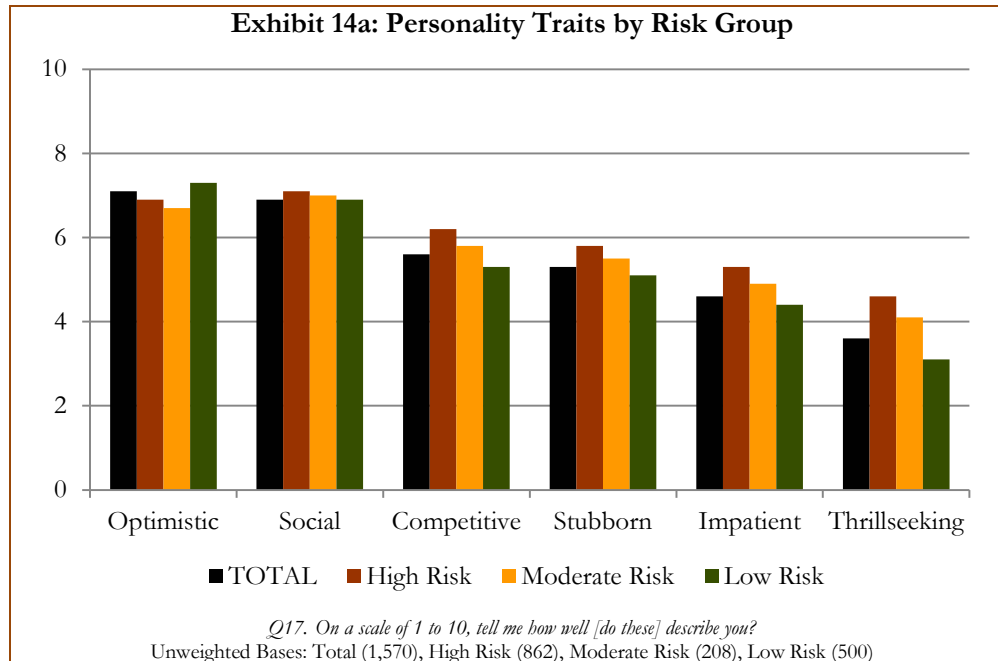
Exhibit 13c: Household Income by Detailed Behaviors

	<i>TOTAL</i>	<i>DR-SP</i>	<i>3+</i>	<i>TX</i>	<i>SP</i>	<i>NONE</i>	<i>SP-TX</i>	<i>DR</i>	<i>DR-TX</i>	<i>SB</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>DR-SB</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>29</i>	<i>128</i>	<i>149</i>	<i>22</i>	<i>500</i>	<i>131</i>	<i>208</i>	<i>75</i>	<i>37</i>	<i>100</i>	<i>143</i>	<i>48</i>
\$0 to \$9,999	6%	7%	1%	12%	-	10%	5%	0.08	6%	6%	3%	7%	6%
\$10,000 to \$24,999	10%	5%	5%	8%	17%	11%	11%	11%	9%	6%	6%	10%	10%
\$25,000 to \$49,999	19%	17%	18%	13%	10%	12%	18%	16%	24%	27%	27%	14%	26%
\$50,000 to \$99,999	33%	32%	38%	30%	36%	31%	33%	32%	30%	34%	38%	46%	35%
\$100,000 to \$199,999	18%	25%	28%	17%	29%	26%	18%	18%	17%	16%	22%	21%	15%
\$200,000 or more	5%	12%	3%	10%	9%	5%	4%	8%	9%	7%	3%	3%	2%
Refused	9%	1%	7%	10%	-	4%	13%	7%	5%	5%	-	-	4%

Q32. Which of the following categories includes your total household income?

Similar to the trends seen previously, there was relatively little variation between the household incomes of the various detailed combinations examined; the percentage of respondents with household incomes lower than \$100,000 ranged from 61-77 percent. Though there are some variations between these groups, it is difficult to ascertain if these results are meaningful in any way. For example, 31 percent of drivers who exhibited three or more risky behaviors had household incomes of \$100,000 or above, but this is equal to the percentage of those who had no risky behaviors at all. For these reasons, the most likely explanation is that household income is driven by many other factors that do not necessarily accurately correlate with risky driving behaviors.

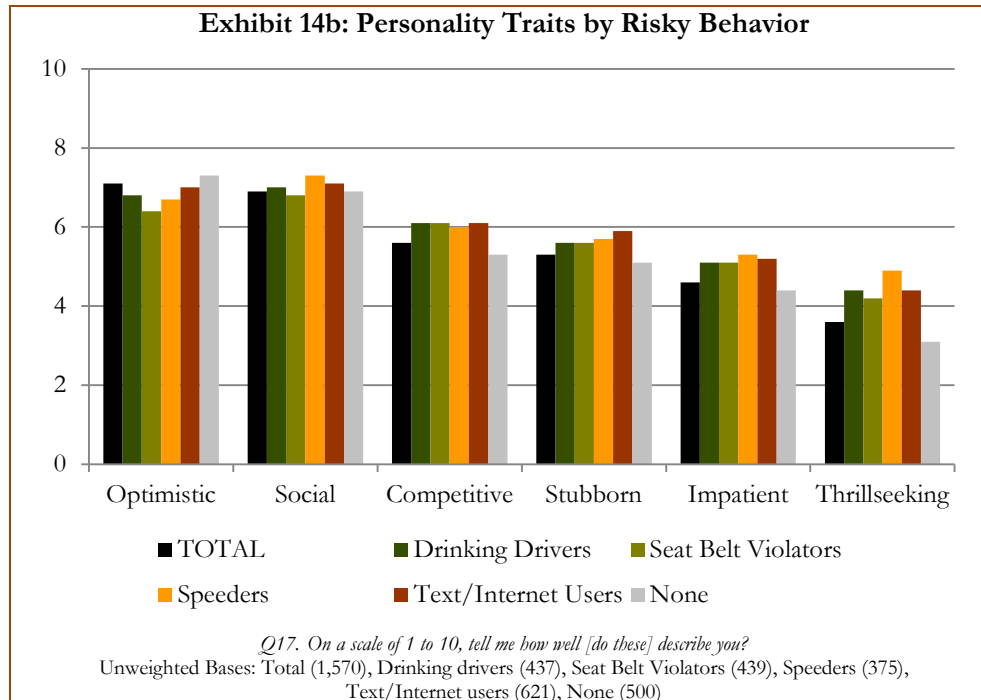
HIGH-RISK DRIVERS TEND TO INDEX HIGHER ON ALL OF THE PERSONALITY TRAITS TESTED



Overall, optimistic and social were the two personality traits respondents identified with most closely of the six traits tested.

High-risk drivers were more likely to identify with all of the personality traits tested except “optimistic.” High-risk drivers were particularly more likely to rate themselves as being “thrillseeking”, “impatient”, and “competitive.”

PERSONALITY TRAITS VARY SLIGHTLY BETWEEN THE RISKY BEHAVIOR CATEGORIES



Similar to the trend seen in the previous exhibit, low-risk drivers were more likely to identify with “optimistic”, but were less likely to identify with all of the other personality traits tested compared to drivers who exhibit one of the four risky behaviors. Conversely, seat belt violators were the least likely to identify with “optimistic”.

Text/Internet users tended to over-index slightly on being “stubborn”, while speeders tend to over-index on being “thrillseeking” and “social.” Finally, drinking drivers tended to be in the middle of the four risky behavior groups on all of the traits tested.

DRIVERS WHO EXHIBIT THREE OR MORE RISKY BEHAVIORS ARE LESS OPTIMISTIC THAN OTHERS, BUT IDENTIFY MORE CLOSELY WITH ALL OTHER PERSONALITY TRAITS

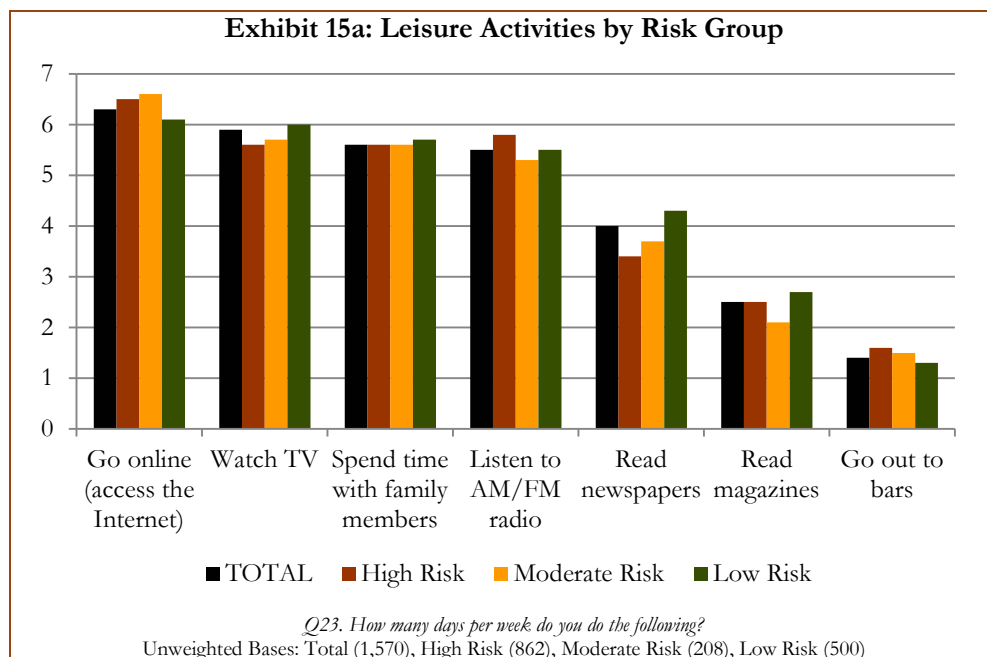
Exhibit 14c: Personality Traits by Detailed Behaviors

	<i>TOTAL</i>	<i>NONE</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>3+</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>500</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>149</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>128</i>
Optimistic	7.1	7.3	7.0	5.9	5.9	7.0	6.1	7.4	7.1	7.0	6.9	7.2	6.7
Social	6.9	6.9	6.7	6.4	7.2	7.1	6.4	7.4	7.3	7.4	7.0	7.3	7.3
Competitive	5.6	5.3	5.5	5.8	5.5	5.9	5.8	5.8	6.7	6.3	6.1	6.2	6.6
Stubborn	5.3	5.1	5.0	5.0	5.0	5.8	5.4	6.0	5.8	6.0	6.1	5.8	6.3
Impatient	4.6	4.4	4.6	4.6	4.8	5.0	4.5	4.8	5.6	5.5	5.2	5.6	5.9
Thrillseeking	3.6	3.1	3.4	3.2	4.6	4.2	4.1	4.7	4.8	4.9	4.2	4.6	5.8

Q17. On a scale of 1 to 10, tell me how well [do these] describe you?

Similar to the trends seen among high-risk drivers as a whole, those who exhibit multiple risky behaviors are more likely to identify with being “social”, “competitive”, “stubborn”, “impatient”, and “thrillseeking” than nearly every other behavior combination. On the other hand, it is somewhat surprising that those who drove after drinking *only* actually had perceptions of themselves that closely mirrored the opinions of individuals who didn’t exhibit any of the four risky behaviors.

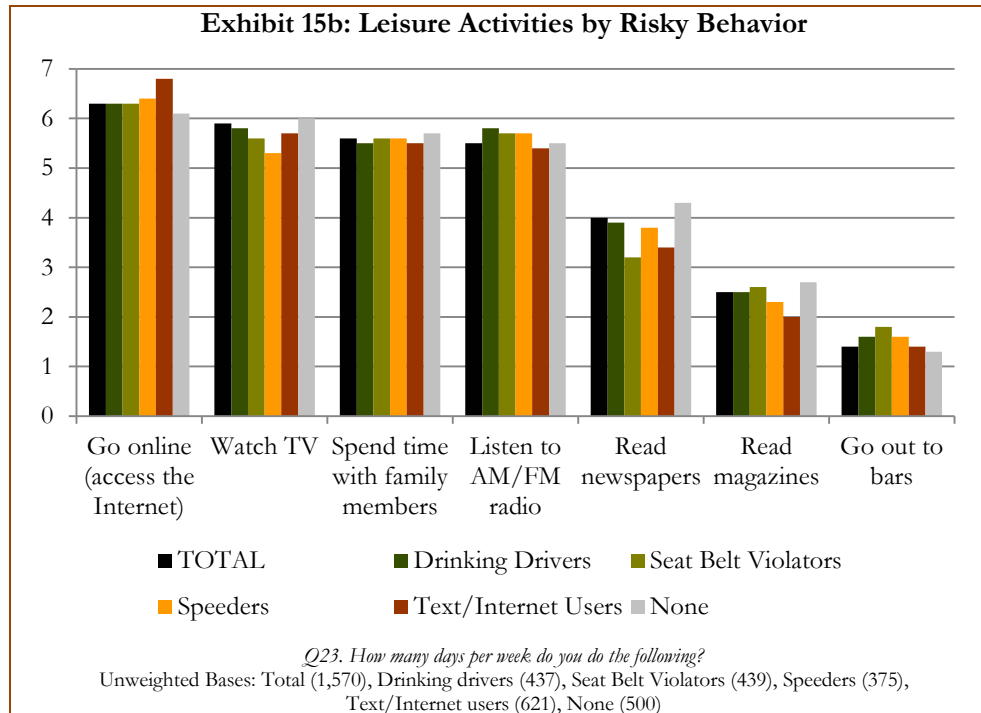
HIGH-RISK DRIVERS ARE LESS LIKELY TO READ NEWSPAPERS AND WATCH TV THAN LOW-RISK DRIVERS



Not surprisingly, Internet and television usage was very common among all respondents, with a majority using both nearly every day. In addition, spending time with family and listening to the radio are very common activities, while reading newspapers, reading magazines, and going out to bars are common activities among smaller segments of the population.

Among the three risk groups, low risk drivers were more likely to read newspapers and watch TV than high-risk drivers, while high-risk drivers were more likely to go online, listen to the radio, and go out to bars.

LEISURE ACTIVITIES VARY SLIGHTLY BETWEEN RISK GROUPS



Among the four groups of risky driving behaviors, only slight variations can be observed:

- > Drinking drivers were the most likely group to listen to the radio.
- > Seat belt violators were the least likely to read newspapers and the most likely to go out to bars.
- > Speeders were the least likely to watch TV.
- > Text/Internet users were the most likely to go online.

THOSE WHO EXHIBIT THREE OR MORE RISKY BEHAVIORS ARE VERY UNLIKELY TO READ MAGAZINES

Exhibit 15c: Leisure Activities by Detailed Behaviors

	<i>TOTAL</i>	<i>NONE</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>3+</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>500</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>149</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>128</i>
Go online (access the Internet)	6.3	6.1	6.0	6.2	6.2	6.8	5.9	6.2	6.8	5.9	6.6	6.9	6.6
Watch TV	5.9	6.0	6.0	5.7	5.4	5.8	6.1	5.6	5.9	5.4	5.4	5.1	5.6
Spend time with family members	5.6	5.7	5.6	5.7	5.8	5.5	5.2	5.3	5.8	5.2	5.9	5.6	5.4
Listen to AM/FM radio	5.5	5.5	5.8	5.5	5.6	5.2	6.0	5.7	6.0	5.8	5.9	5.7	5.6
Read newspapers	4.0	4.3	4.5	3.5	4.8	3.5	4.3	4.3	3.0	3.2	2.9	3.2	2.8
Read magazines	2.5	2.7	3.0	2.6	2.4	2.0	3.0	2.1	2.3	2.8	2.5	1.9	2.2
Go out to bars	1.4	1.3	1.5	1.9	1.7	1.3	1.9	1.4	1.6	1.9	1.4	1.4	1.7

Q23. How many days per week do you do the following?

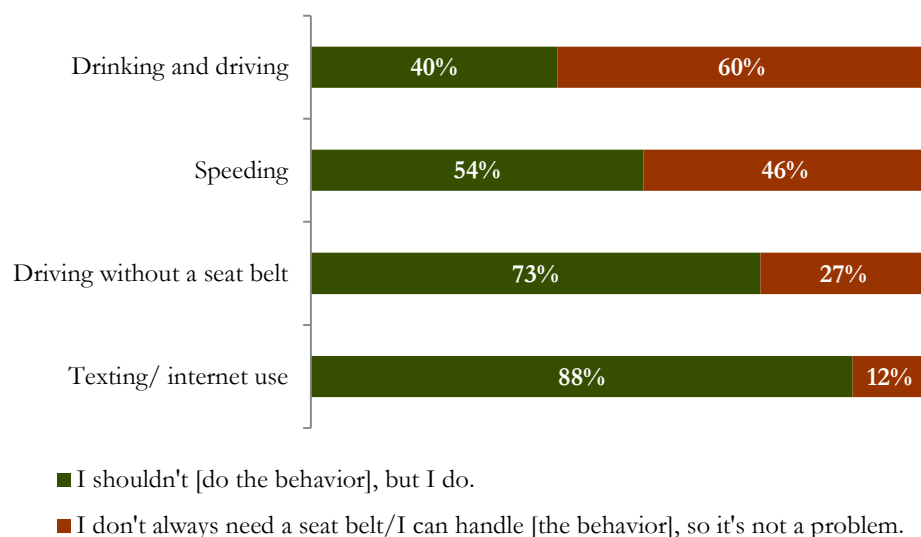
While a variety of differences can be observed between the various combinations of behaviors, most of these differences are fairly small. However, a few items of note include:

- > Magazine readership is particularly low among many key behavior groups including:
 - ⇒ Those who exhibit three or more risky behaviors
 - ⇒ Those who both speed and text/use the Internet while driving
- > Those who text are more likely than other groups to go online, whether combined with other behaviors or not.
- > Those who drink *only* are more likely than other groups to go out to bars and read magazines
- > The highest-risk group, those who participate in three or more behaviors, is more likely to go online and less likely to read newspapers and magazines.

MOTIVATIONS TO CHANGE

DRINKING DRIVERS ARE RELATIVELY UNLIKELY TO BELIEVE THERE IS A PROBLEM WITH THEIR ACTIONS

Exhibit 16: Propensity to Change by Risk Group



Q7. Which of the following best describes your thoughts about wearing seat belts?

Q9. Which of the following best describes your thoughts when [speeding]?

Q11. Which of the following best describes your thoughts about driving after drinking alcohol?

Q13. Which of the following best describes your thoughts about texting or accessing the Internet while driving?

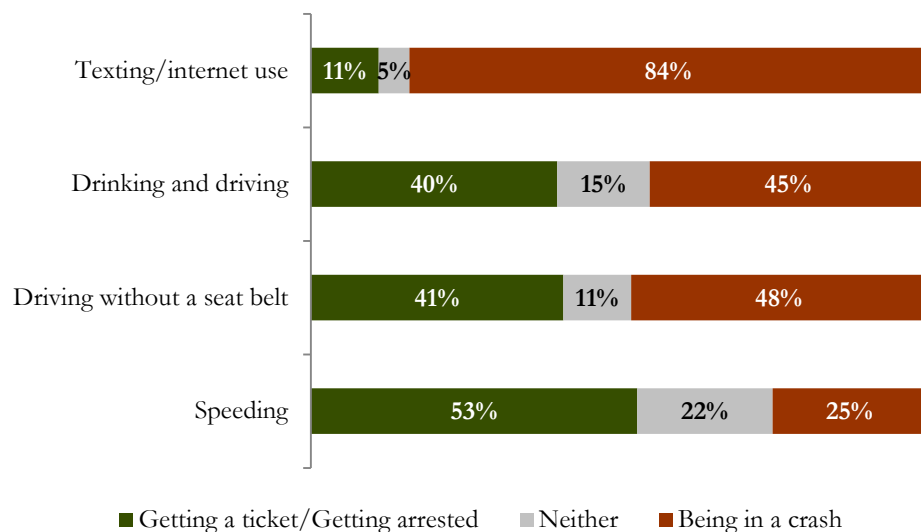
Base Sizes: Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621)

Respondents from the four risk groups were asked to say whether they knew that there is a problem with their behavior, a vast majority of text/Internet users (88 percent) acknowledged that they shouldn't text/use the Internet while driving even though they do. Similarly, a majority of seat belt violators (73 percent) also seemed to understand that they should wear a seat belt.

On the other end of the spectrum, three in five drinking drivers (60 percent) felt that they could handle driving after drinking and that it, therefore, isn't a problem. It is important to keep in mind that these individuals were categorized based on their having two or more drinks prior to driving, but this clearly indicates a lack of understanding of the risks of driving after drinking among this group.

SPEEDERS ARE RELATIVELY UNLIKELY TO FEAR BEING IN A CRASH

Exhibit 17: Motivations to Change by Risk Group



Q8. What concerns you more when not wearing a seat belt?

Q10. What concerns you more when driving 10 miles per hour or more than the posted speed limit?

Q12. What concerns you more when you drive after drinking alcohol?

Q14. What concerns you more when you're texting or accessing the Internet while driving?

Base Sizes: Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621)

Only one in four speeders (25 percent) said that they were more concerned about being in a crash when speeding, and another 22 percent said that they weren't worried about either getting a ticket or being in a crash.

On the other hand, being in a crash was the primary concern for text/Internet users, among whom 84 percent said that they were more concerned about being in a crash than they were about getting a ticket.

Finally, drinking drivers and seat belt violators were slightly more likely to be concerned about being in a crash than they were about punishment (via tickets or being arrested), but both concerns were relatively equal.

THOSE WHO ARE CONCERNED ABOUT BEING IN A CRASH ARE CONSIDERABLY MORE LIKELY TO BELIEVE THEY SHOULD WEAR A SEAT BELT

Exhibit 18a: Motivations to Change by Propensity to Change (seat belts)

	Total	Biggest Concerns		
		Getting a ticket	Being in a crash	Neither of these is a concern
Unweighted Base	439	41%	48%	11%
I should wear a seat belt all the time. I just don't.	73%	24%	44%	5%
I don't always need a seat belt.	27%	18%	4%	5%

Q7. Which of the following best describes your thoughts about wearing seat belts?

Q8. What concerns you more when not wearing a seat belt?

Among those whose biggest concern with not wearing a seat belt was getting a ticket, responses were relatively even between believing that they should wear a seat belt all the time and feeling that they don't always need a seat belt.

On the other hand, a vast majority of those whose biggest concern was being in a crash believed that they should wear a seat belt all the time. This indicates that a belief that a crash is a real possibility is a strong driver of behavior change among this group.

SPEEDERS WHO AREN'T CONCERNED WITH EITHER BEING IN A CRASH OR GETTING A TICKET ARE VERY UNLIKELY TO VIEW THEIR ACTIONS AS A PROBLEM

Exhibit 18b: Motivations to Change by Propensity to Change (speeding)

	Total	Biggest Concerns		
		Getting a ticket	Being in a crash	Neither of these is a concern
Unweighted Base	375	53%	25%	22%
I shouldn't drive that fast, but I do.	54%	31%	20%	3%
I can handle driving that speed, so it's not a problem.	46%	22%	5%	19%

Q9. Which of the following best describes your thoughts when [speeding]?

Q10. What concerns you more when driving 10 miles per hour or more than the posted speed limit?

Similar to the trend seen among seat belt violators, speeders who were concerned about getting in an accident were very likely to believe that they should change their behavior.

However, among speeders, many weren't concerned with either getting a ticket or being in a crash. Among these individuals, a vast majority believed that they can handle speeding and that their actions were not a problem.

For speeders, it appears that many simply do not believe that there are consequences for their actions – either punitive or physical – and they are unlikely to change until those beliefs are shifted.

A MAJORITY OF THOSE WHO TEXT/USE THE INTERNET WHILE DRIVING KNOW THAT THEY SHOULDN'T – REGARDLESS OF WHETHER THEY ARE MORE CONCERNED WITH GETTING A TICKET OR BEING IN A CRASH

Exhibit 18c: Motivations to Change by Propensity to Change (texting/Internet use)

	<i>Total</i>	Biggest Concerns		
		Getting a ticket	Being in a crash	Neither of these is a concern
<i>Unweighted Base</i>	<i>621</i>	<i>11%</i>	<i>84%</i>	<i>5%</i>
I shouldn't text or access the Internet while driving, but I do.	88%	8%	78%	3%
I can handle texting and accessing the Internet while driving, so it's not a problem.	12%	3%	6%	2%

Q13. Which of the following best describes your thoughts about texting or accessing the Internet while driving?

Q14. What concerns you more when you're texting or accessing the Internet while driving?

Similar to the trend seen among seat belt violators and speeders, a vast majority of those who were concerned about being in a crash believed that they shouldn't text/use the Internet while driving even when they do.

However, text/Internet users appear to differ from speeders and seat belt violators in that a strong majority of those who were mostly concerned about getting a ticket still believed that they shouldn't text/use the Internet while driving.

MANY DRINKING DRIVERS FEEL THEY CAN HANDLE DRIVING AFTER DRINKING – EVEN THOSE WHO ARE MORE CONCERNED ABOUT BEING IN A CRASH

Exhibit 18d: Motivations to Change by Propensity to Change (drinking)

	<i>Total</i>	Biggest Concerns		
		Getting arrested	Being in a crash	Neither of these is a concern
<i>Unweighted Base</i>	<i>437</i>	<i>40%</i>	<i>45%</i>	<i>15%</i>
I shouldn't drive after drinking, but I do.	40%	16%	22%	2%
I can handle driving home after drinking that amount, so I won't get into trouble.	60%	24%	23%	13%

Q11. Which of the following best describes your thoughts about driving after drinking alcohol?

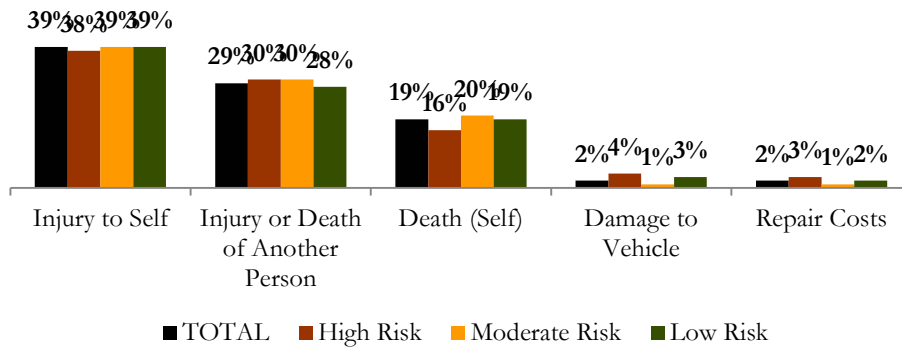
Q12. What concerns you more when you drive after drinking alcohol?

Unlike the trend seen for the other three types of risky behaviors, those whose biggest concern was being in a crash were equally likely to believe that they can handle driving after drinking as they were to believe that they shouldn't drive after drinking at all.

That said, those who were concerned about being in a crash were slightly more likely than those who were concerned about being arrested to believe that they shouldn't drive after drinking.

SPECIFIC FEARS DO NOT VARY AMONG RISK GROUPS

Exhibit 19a: Specific Fears by Risk Group
(top five)



Q22. What most worries you about being in a crash?

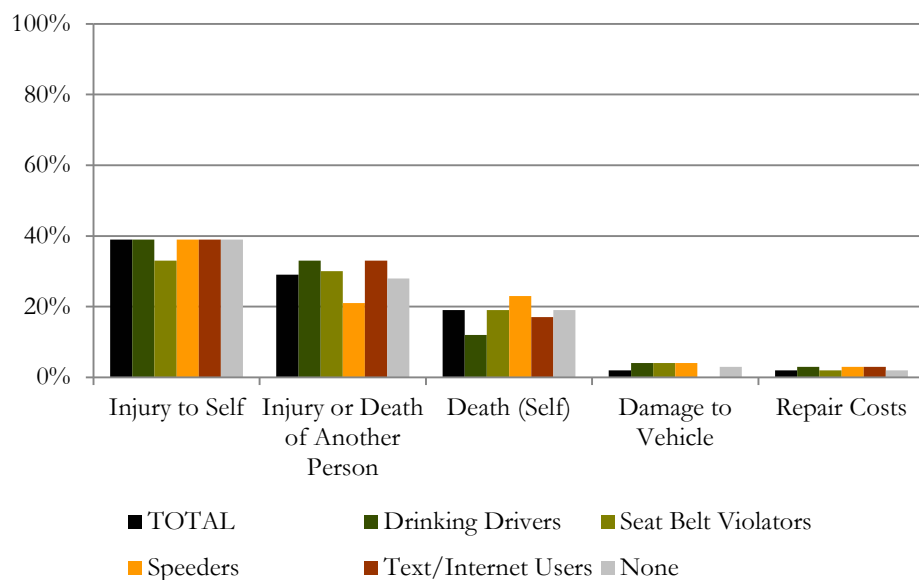
Unweighted Bases: Total (1,570), High Risk (862), Moderate Risk (208), Low Risk (500)

When asked what worries them most about being in a crash, injuries to self or others were the overwhelmingly most common responses. Two in five (39 percent) said that personal injury was the biggest concern, while 29 percent said injury or death of others was the biggest concern. Finally, 19 percent said that dying themselves was their biggest concern.

Though some slight variations in responses can be observed among the three risk groups, these differences were very slight and were not statistically significant.

SPEEDERS ARE LESS LIKELY TO BE WORRIED ABOUT OTHERS' SAFETY

Exhibit 19b: Specific Fears by Risky Behavior
(top five)



Q22. What most worries you about being in a crash?

Unweighted Bases: Total (1,570), Drinking drivers (437), Seat Belt Violators (439), Speeders (375), Text/Internet users (621), None (500)

There were slight differences in opinions between the various risky behavior groups. Most notably, seat belt violators were less likely to be concerned about injuries to themselves, while speeders were less likely to be concerned about injuries or death to other people. Finally, drinking drivers were less likely to be concerned about their own death than other drivers.

INJURIES ARE PRIMARY CONCERNS FOR DRIVERS OF ALL TYPES

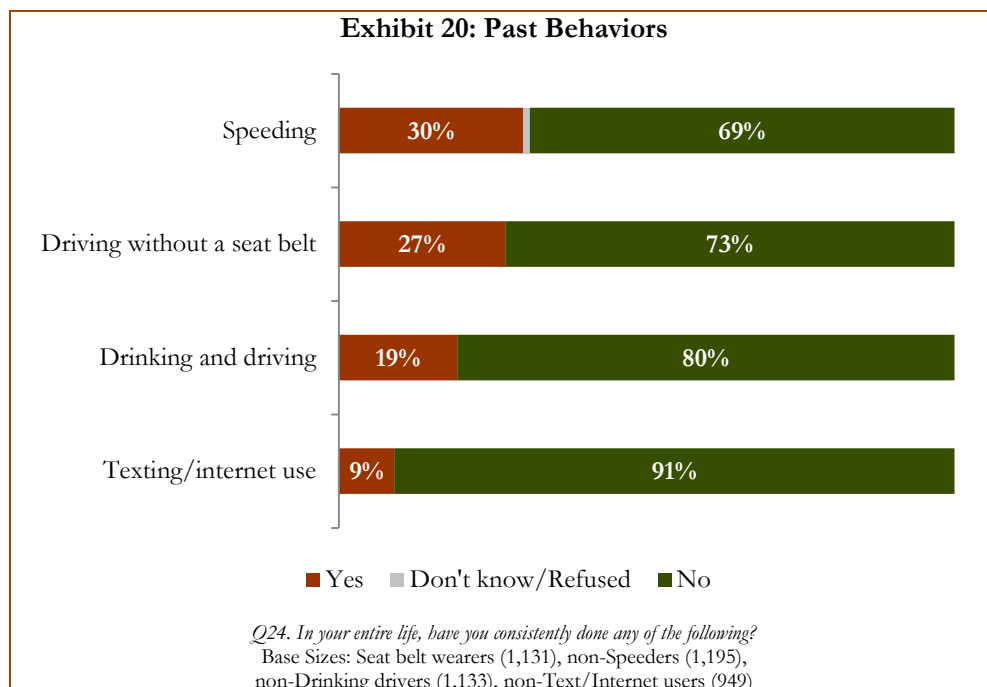
Exhibit 19c: Specific Fears by Detailed Behaviors
(top five)

	<i>TOTAL</i>	<i>NONE</i>	<i>DR</i>	<i>SB</i>	<i>SP</i>	<i>TX</i>	<i>DR-SB</i>	<i>DR-SP</i>	<i>DR-TX</i>	<i>SB-SP</i>	<i>SB-TX</i>	<i>SP-TX</i>	<i>3+</i>
<i>Unweighted Base</i>	<i>1570</i>	<i>500</i>	<i>208</i>	<i>37</i>	<i>22</i>	<i>149</i>	<i>48</i>	<i>29</i>	<i>75</i>	<i>100</i>	<i>143</i>	<i>131</i>	<i>128</i>
Injury to Self	39%	39%	41%	32%	48%	40%	47%	44%	39%	27%	39%	40%	31%
Injury or Death of Another Person	29%	28%	34%	29%	7%	34%	28%	22%	36%	33%	29%	25%	30%
Death (Self)	19%	19%	13%	23%	31%	18%	13%	10%	11%	20%	17%	21%	15%
Damage to Vehicle	2%	3%	2%	2%	3%	0%	-	-	5%	9%	2%	3%	6%
Repair Costs	2%	2%	1%	-	-	2%	-	10%	3%	1%	5%	5%	4%

Q22. What most worries you about being in a crash?

As was seen in *Exhibits 19a-b*, a vast majority of all of the behavior combinations examined said that their biggest worries were injuries or death of themselves or others. Those who exhibited three or more risky behaviors and those who both speed and who don't wear a seat belt were somewhat more likely to be worried about damage to vehicles or repairs costs than other groups, but it should be noted that the sample size for these findings is very low, and these differences are not statistically significant when compared to the total.

SPEEDERS HAVE HISTORICALLY BEEN THE MOST LIKELY TO CHANGE THEIR BEHAVIORS



This question was asked not to the groups who had exhibited the four risky behaviors, but instead to those who had not. Among those who said that they had not sped recently, nearly one-third (30 percent) said that they had been consistent speeders at some point in their lives. This indicates that speeders have historically been more likely to change their behaviors than those who exhibit other risky behaviors.

That said, one in four seat belt users (27 percent) said that they consistently didn't use a seat belt at some point in their lives as well, so changing seat belt behaviors has also been successful in the past. Among non-drinking drivers, one in five (19 percent) said that they consistently drank and drove in the past.

Finally, those who do not text/use the Internet while driving are the least likely to have done so in the past. While this may be an indicator that few text/Internet users have changed their behaviors, it is also important to note that texting is a relatively new technology, so it may simply be that there hasn't been as much time for behaviors to change when compared to the other three risky behaviors studied.

MOST WHO HAVE STARTED CONSISTENTLY WEARING A SEAT BELT DID SO BECAUSE OF THE RECENT CHANGE IN MINNESOTA'S PRIMARY SEAT BELT LAW



By far, the most common reason given by those who have changed their seat belt behavior is simply that the law in Minnesota changed recently. This would seem to indicate that the law change has had an impact at encouraging at least a portion of the population to change their behavior and to use seat belts.

ENFORCEMENT OF SPEEDING LAWS IS A COMMON REASON FOR CHANGING BEHAVIOR



As noted previously (see *Exhibit 17*), speeders tend to be much more concerned about getting a ticket than they are about being in a crash. It is not surprising, therefore, to see that getting tickets was a common reason cited by non-speeders for changing their behavior.

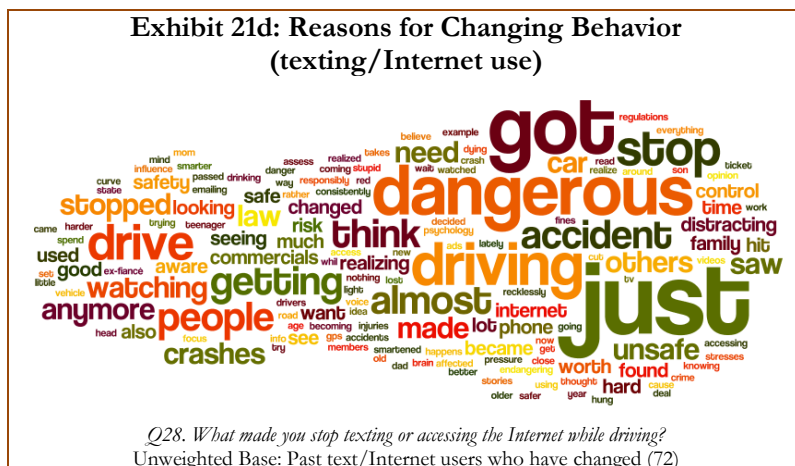
In addition to tickets, some felt that they simply “grew out of it” when it comes to speeding and that they changed their behavior largely due to the fact that they simply got older.

SIMILAR TO SPEEDING, ENFORCEMENT AND GETTING OLDER ARE COMMON REASONS FOR CHOOSING TO STOP DRIVING AFTER DRINKING



Among those who used to drink and drive, but do not anymore, many simply said that they got older and stopped drinking and driving as they aged. In addition, many respondents mentioned that enforcement in the form of DUIs and DWIs (either to themselves or simply awareness that enforcement was a strong possibility) were common reasons for quitting.

A PERCEPTION THAT TEXT/INTERNET USE WHILE DRIVING IS DANGEROUS IS A COMMON REASON FOR CHANGING BEHAVIOR



Compared to the other three risky behaviors, respondents who used to text/use the Internet while driving but do not anymore were very unlikely to mention any kind of enforcement efforts in their descriptions for why they changed. Instead, there is a clear perception that text/Internet use while driving is dangerous, and many mentioned that this understanding caused them to change their behavior.

APPENDIX A: SURVEY INSTRUMENT

SECTION 1 - SCREENING QUESTIONS

Hello, I'm _____ calling on behalf of the Minnesota Office of Traffic Safety. We are conducting a study of Minnesotans' driving habits and attitudes. The interview is voluntary and completely confidential. May I begin? [IF ASKED, THE SURVEY WILL TAKE NO MORE THAN 10 MINUTES DEPENDING ON YOUR ANSWERS.]

S1. [CELL ONLY] Before I continue, can you safely talk on your phone, specifically, are you currently driving? [INTERVIEWER NOTE: EVEN IF THE RESPONDENT IS OK WITH TAKING THE SURVEY WHILE DRIVING, WE CANNOT CONTINUE WITH THE SURVEY.]

- 1. Yes – safe/ not driving [CONTINUE]
- 2. No – not safe/driving [ARRANGE CALLBACK]

S2. [CELL ONLY] Are you in a place where you can speak freely? [INTERVIEWER NOTE: WE WANT TO ENSURE THEY CAN ANSWER HONESTLY ABOUT THESE TOPICS AND ARE NOT INFLUENCED BY OTHERS LISTENING.]

- 1. Yes – can speak freely [CONTINUE]
- 2. No – cannot speak freely [ARRANGE CALLBACK]

S3. Have you driven a vehicle in the past three months?

- 1. Yes [CONTINUE]
- 2. No [THANK AND TERMINATE]

- 1. In the past 30 days, have you personally done any of the following? You can just answer yes or no. All of your answers are confidential and will never be linked to you.. This is purely for research purposes. [RANDOMIZE.]

Yes No DK/Refused

- a. Driven at least one time without wearing your seat belt?
- b. Driven 10 miles per hour or faster than the posted speed limit more than half the time?
- c. Driven at least once after drinking two or more drinks?
 - c-i. [IF YES TO C] Driven at least once after drinking enough that you thought you could be in

trouble with the police if you were stopped?

- d. Texted or accessed the Internet at least once while driving?

[IF C=YES (DRINKING AND DRIVING) OR IF ANY TWO OR MORE RESPONSES = YES, COUNT TOWARD HIGH-RISK QUOTA. IF ONLY ONE OF A, B, OR D = YES, COUNT TOWARD MODERATE RISK QUOTA. IF NO RESPONSES = YES, COUNT TOWARD LOW-RISK QUOTA.]

[IF QUOTA IS FILLED, GO TO AGE AND GENDER QUESTIONS [Q30 AND 33], THEN TERMINATE.]

SOCIAL NORMING

- 2. Okay, now I'd like to ask you how many other drivers do the same behaviors I just asked you about. For each question, give me a guess about what percent of Minnesota drivers have done the following in the past thirty days. Give me your best guess between 0 and 100 percent even if you're not sure. [KEEP THE ORDER THE SAME AS THE ORDER IN Q1]

Percent (0-100) DK/Refused

- a. Percent of drivers who have driven at least one time without wearing their seat belt.
 - b. Percent of drivers who have driven 10 miles per hour or faster than the posted speed limit more than half the time.
 - c. Percent of drivers who have driven at least once after drinking enough that they could be in trouble with the police if they were stopped.
 - d. Percent of drivers who have texted or accessed the Internet at least once while driving.
 - e. Overall, what percent of drivers do you think are UNSAFE drivers?
- 3. [IF YES TO 1C – DRINKING QUESTION] How many drinks can the average person have and still be okay to drive within two hours of drinking? ____
 - 4. [IF YES TO 1C – DRINKING QUESTION] How many drinks can you have and still be okay to drive within two hours of drinking? ____ [DON'T KNOW IS AN ACCEPTABLE RESPONSE]
 - 5. Deleted

PERCEIVED RISK

6. On a scale of 1 to 5, where 1 is not dangerous and 5 is extremely dangerous, how dangerous do you think the following behaviors are for the typical driver? **[KEEP THE SAME ORDER AS Q1]**

Rating (1 to 5) DK/Refused

- a. Driving without wearing a seat belt.
- b. Driving 10 miles per hour or faster than the posted speed limit more than half the time.
- c. Driving after drinking enough to be in trouble with the police if stopped?
- d. Texting or accessing the Internet while driving.

STAGE OF CHANGE

7. **[IF YES TO 1A – SEAT BELTS]** You mentioned that you haven't always worn your seat belt in the past 30 days. Which of the following best describes your thoughts about wearing seat belts? **[RANDOMIZE RESPONSES]**

___ I should wear a seat belt all the time. I just don't.

___ I don't always need a seat belt.

8. **[IF YES TO 1A – SEAT BELTS]** What concerns you more when not wearing a seat belt? Is it... **[RANDOMIZE FIRST TWO RESPONSES]**

___ Getting a ticket

___ Being in a crash

___ Neither of these is a concern

9. **[IF YES TO 1b - SPEEDING]** You mentioned that you have driven 10 miles per hour or faster than the posted speed limit more than half the time in the past 30 days. Which of the following best describes your thoughts when doing this? **[RANDOMIZE RESPONSES]**

___ I shouldn't drive that fast, but I do.

___ I can handle driving that speed, so it's not a problem.

10. **[IF YES TO 1B - SPEEDING]** What concerns you more when driving 10 miles per hour or more than the posted speed limit? Is it ... **[RANDOMIZE FIRST TWO RESPONSES]**

___ Getting a ticket

___ Being in a crash

___ Neither of these is a concern

11. [IF YES TO 1c – DRINKING and NO to 1c-1] You mentioned that you have driven at least once in the past 30 days after having two or more drinks. Which of the following best describes your thoughts about driving after drinking alcohol? [RANDOMIZE RESPONSES]

___ I shouldn't drive after drinking, but I do.

___ I can handle driving home after drinking that amount, so I won't get into trouble.

- 11a. [IF YES TO 1c – DRINKING and YES to 1c-1] You mentioned that you have driven at least once in the past 30 days after having enough to drink that you could be in trouble if the police stopped you. Which of the following best describes your thoughts about driving after drinking alcohol? [RANDOMIZE RESPONSES]

___ I shouldn't drive after drinking, but I do.

___ I can handle driving home after drinking that amount, so I won't get into trouble.

12. [IF YES TO 1c - DRINKING] What concerns you more when you drive after drinking alcohol? Is it... [RANDOMIZE FIRST TWO RESPONSES]

___ Getting arrested

___ Being in a crash

___ Neither of these is a concern

13. [IF YES TO 1d - TEXTING] You mentioned that you have texted or accessed the Internet while driving at least once in the past 30 days. Which of the following best describes your thoughts about texting or accessing the Internet while driving? [RANDOMIZE RESPONSES]

___ I shouldn't text or access the Internet while driving, but I do.

___ I can handle texting and accessing the Internet while driving, so it's not a problem.

14. [IF YES TO 1d - TEXTING] What concerns you more when you're texting or accessing the Internet while driving? Is it... [RANDOMIZE FIRST TWO RESPONSES]

___ Getting a ticket

___ Being in a crash

___ Neither of these is a concern

ATTITUDES TOWARD DRIVING

15. Would you classify yourself as an above average, average, or below average driver in terms of

safety?

Above Average ____

Average ____

Below Average ____

Don't Know/Refused ____

16. How could you become a safer driver? _____

PERSONALITY

17. I'm going to read a list of words, and on a scale of 1 to 10, tell me how well they describe you. A 1 means that the word doesn't describe you well at all and a 10 means that it describes you very well.

[RANDOMIZE]

Number (1 to 10) DK/Refused

- a. Stubborn
- b. Thrillseeking
- c. Social
- d. Impatient
- e. Optimistic
- f. Competitive

DRIVING HABITS

Okay, now let's ask some driving questions.

18. How many crashes have you been in during the last three years? Count all crashes where you were driving and there was damage to any vehicle, regardless of whose fault it was. _____ [Code "Don't Remember" as -99]

19. How many moving violations have you received in the last three years? Don't count parking tickets. _____ [Code "Don't Remember" as -99]

20. Has your license ever been canceled, revoked, or suspended?

____ Yes

____ No

___ Don't Know/Refused

21. Do you think you are more likely, equally likely, or less likely than other drivers to have a crash?

___ More Likely

___ Equally Likely

___ Less Likely

___ Don't Know/Refused

22. What most worries you about being in a crash? [Open-ended, code first response]

___ damage to vehicle

___ injury to self

___ legal liability

___ death (self)

___ injury or death of another person

___ lose license

___ repair costs

___ nothing/can't think of anything

___ other _____

MEDIA

23. How many days per week do you do the following?

___ Watch TV

___ Go online (access the Internet)

___ Listen to AM/FM radio

___ Read newspapers

___ Read magazines

___ Go out to bars

___ Spend time with family members

PAST BEHAVIOR CHANGE

24. In your entire life, have you consistently done any of the following? You can just answer yes or no.
[KEEP SAME ORDER AS Q1]

Yes No DK/Refused

- a. [IF NO TO 1A – SEAT BELTS] Driven without wearing your seat belt?
- b. [IF NO TO 1B - SPEEDING] Driven 10 miles per hour or faster than the posted speed limit?
- c. [IF NO TO 1C - DRINKING] Driven after drinking enough that you thought you could be in trouble if you were stopped by police?
- d. [IF NO TO 1D - TEXTING] Texted or accessed the Internet while driving?

25. [If yes to 24a – SEAT BELTS] What made you start consistently wearing a seat belt?

26. [If yes to 24b - SPEEDING] What made you stop consistently driving 10 miles per hour above the speed limit? _____

27. [If yes to 24c - DRINKING] What made you stop driving after drinking? _____

28. [If yes to 24d - TEXTING] What made you stop texting or accessing the Internet while driving?

DEMOGRAPHICS

Almost done. We just have a few classification questions for our analysis purposes.

29. What is your employment status? Are you...

___ Working full-time

___ Working part-time

___ Unemployed and looking for work

___ Retired

___ Not working and not looking for work, such as a homemaker or student

30. In what year were you born? _____



31. What county do you live in? _____

32. Which of the following categories includes your total household income?

___\$0 to \$9,999

___\$10,000 to \$24,999

___\$25,000 to \$49,999

___\$50,000 to \$99,999

___\$100,000 to \$199,999

___\$200,000 or more

33. Record gender:

___Male

___Female

Thank you for your time!