

Attachment 5

Questionnaire Version A Question-By-Question Justification

The Young Driver Survey will be administered using two different questionnaires, Version A and Version B. There are core questions for each of the content areas (modules) addressed by the survey that appear on both questionnaires. Each questionnaire expands on the core questions for selected modules; i.e., adds questions unique to that questionnaire.

The Version A Questionnaire has expanded modules concerning vehicle use and associated rules, cell phone use and other distractions while driving, seat belt use, crash experience, and speed and racing.

The Version B Questionnaire has expanded modules on graduated driver licensing and driver education, police stops and enforcement, drinking and driving, other substance use and driving, and drowsy driving.

With this design, the survey obtains basic information from all respondents on all the key traffic safety areas that NHTSA wishes to address with the survey. The design also allows NHTSA to probe in greater depth for needed information in each of the content areas. Lastly, the common questions provide linkages between the two questionnaires that will assist in interpretation of data as certain core questions may be found to be associated with unique questions on both of the questionnaires.

Following are the question-by-question justifications for Questionnaire Version A.

Questionnaire Version A

Living Arrangements

This section has two main purposes. One is to identify if the respondent is in a living situation where he or she may be influenced by parents. Traffic safety professionals are very interested in how parents could promote safe driving practices by their children. The second is to determine if the respondent's living arrangements vary over the course of the year. Cognitive testing found this to be an issue with college students who live at school during part of the year and with their parents during the remainder of the year; their driving patterns differed by location and caused them to be uncertain as to how to respond to certain questions. The survey needs to provide clarification both so as not to confuse respondents as to how to respond, as well as for later interpretation of their responses.

- Q1 Starts the survey with a simple non-threatening question about type of residence while providing an indication of whether or not the respondent is in a group living situation (i.e., dormitory).
- Q2 Identifies if the respondent lives with parents, a guardian, others, or alone.
- Q3 Identifies whether or not the respondent has a single residence during the course of the year.
- Q4-5 Repeats Q1 and Q2 if the respondent lives somewhere else during the remainder of the year so as to obtain type of residence and presence of parents for that location.
- Q6 Asks respondents who live at more than one location during the course of the year to specify the location where they drive the most. Some of the later questions in the survey will ask respondents to base their response on the location where they drive the most.

Vehicle Use and Driving Restrictions

This module obtains information on driving activity by young drivers, the vehicles they drive, restrictions on their driving, and use of technology by parents to monitor their driving.

- Q7 This item obtains a basic measure of driving frequency for respondents. Some may report that they are non-drivers despite having a driver's license. A non-driver designation will be used by the survey to skip respondents past driving questions that would be inappropriate for them.
- Q9-10 Here, respondents are asked about the vehicle they drive most often. The type of vehicle (Q9) may relate to risky driving behaviors, perhaps from a sense of feeling better protected (e.g., greater non-use of seat belts in pickup trucks).

Vehicle ownership (Q10) may relate to behaviors and attitudes in a differential manner depending on who is responsible for the vehicle.

Q11-14 These items obtain additional measures of driving activity. Night driving (Q11) increases young driver risk, so the survey seeks to obtain a usual frequency during a typical week. Driving alone (Q12) means the absence of adult supervision, and would be particularly important to know for the youngest drivers. The presence of minors in the vehicle is another risk factor based on a body of research. The survey asks not just typical driving frequency of the respondent with minors as passengers in the motor vehicle (Q13), but also how often the respondent rides as a passenger with a driver under age 21 (Q14).

Q15-18 NHTSA is interested in learning if parents are setting driving rules for their children. The questions first drafted for the questionnaire were specific to parents. However, there was some confusion by subjects going through the cognitive testing as to whether the items were asking if the parents were establishing their own rules, or if the parents were making their children follow the established law. As a result, the questions were reformatted. Now, the series starts by asking if there are rules the young driver is supposed to follow regarding several specified types of restrictions (Q15). For each rule acknowledged, the respondent then indicates who is requiring the rule, with an ability to check multiple sources (Q16), the likelihood of being reprimanded by a parent for breaking the rule (Q17), and the likelihood of being punished by a parent for breaking the rule (Q18). The latter two items address perceived consequences for violations, with the separation of punishment and reprimand being suggested by comments during the cognitive testing.

Q19-21 Options are now becoming available to parents for using technology to monitor the driving of their children. These questions will identify the extent to which parents are engaging in this type of monitoring activity. Q19 asks the respondents if their parents are using technology to monitor their driving. If yes, Q20 asks what is being recorded. Lastly, Q21 asks the respondents about the acceptability of such monitoring, which provides an indication of how much resistance can be expected from encouraging this type of monitoring.

Driver License

Q22 Confirms data obtained from the State regarding the type of license held.

Q23 Confirms data obtained from the State that the respondent has a State-held license.

Distraction

While distraction of drivers has been present since the first vehicle hit the road, it is use of handheld technology while driving that has garnered substantial attention in recent

years as a threat to safe driving. Youth grew up with this technology and tend to have a high comfort level with it. But it would be a mistake to consider technological devices as the only source of major distractions for young drivers that affect their safety. For example, research has shown crash risk to increase among young drivers as the number of peers in the vehicle increases. This section collects information on how often young drivers engage in specific distractible behaviors, the risk they perceive associated with specific distractible behaviors, and in general how they tend to become distracted.

Q24-28 The vast majority of drivers now have a cell phone with them when they drive. This series of questions asks how they use the phone while driving, if at all. Q24 is an introductory question to the series that asks respondents if they usually have a cell phone with them while driving (Most will answer "Yes" and continue with the series). Q25 asks how often the phone is kept at arm's length (i.e., easily accessible) while driving. Q26 obtains the frequency of talking on the phone while driving. Q27 asks whether the phone is used hands-free or hand-held. State laws that prohibit cell phone use while driving have defined the violation as using the phone while holding it by hand, which is an action that can be observed by law enforcement. But using a hands-free phone while driving also reduces safety. If young drivers are talking on the phone while driving and disproportionately using hands-free phones, they may incorrectly believe that the absence of a prohibition against use of hands-free phones while driving means that it is a perfectly safe activity, which would call for an educational strategy. But if they know there is a decrement in driving while using the hands-free phone but persist in doing so, then an alternative strategy is needed. Lastly, Q28 asks what they do most often when the phone rings while they are driving. In sum, this series provides information on habit and personal policy regarding use of cell phones.

Q29-30 As technology evolved, distraction from talking on cell phones was followed by texting distractions as areas of concern. These items ask the frequency of reading (Q29) and sending (30) text messages while driving. Cognitive testing showed different patterns with reading and sending texts, making it appropriate to separate the two.

Q31 This question collects information on whether young drivers believe certain specific behaviors affect the quality of driving. It asks about technological distractions, consumption of food and beverages, talking to others, and operating entertainment systems. The results of the cognitive testing indicated that respondent's assessments of the impact of the factors on driving will not be absolute, but rather, relative (i.e., judging the items against each other).

Q33-34 Initially, NHTSA intended to ask questions only about specific distractions of particular concern or interest. However, a comment submitted to the NHTSA Docket expressed a desire to learn the ways in which distraction occurs. NHTSA decided to incorporate within the survey two questions from a previous NHTSA survey that directly address this. Distraction is a diversion from the driving task, which tends to involve taking one's eyes off the road while driving. Q33 gets at

the myriad causes of distraction by asking the usual reason why the respondent takes his or her eyes off the road for more than a few seconds. This is followed by a question (Q34) that has respondents identify the threshold beyond which taking one's eyes off the road becomes significantly more dangerous, which will indicate whether the respondents have a good grasp of what is safe and what is unsafe.

- Q35 This question continues a pattern across modules to obtain information from respondents on unsafe experiences they had as motor vehicle passengers. The results may point to a need for skills building strategies to help them avoid these situations. Here (Q35), respondents are asked how often in the past month they were concerned for their safety because the driver was not paying sufficient attention to his or her driving.

Seat Belt Use

Young drivers have a lower seat belt usage rate than older drivers. Seat belt use can vary by seating position. It can also vary depending on who else is in the vehicle. This section will collect information on characteristics of seat belt non-use, and reasons for non-use, to apply to development of strategic interventions.

Q36-39 The first of these questions (Q36) asks the frequency of seat belt use as a driver. Cognitive testing done almost two decades ago showed that many people did not interpret the question as requesting a strict objective measure. This was found through use of an immediate probe question, where a percentage of people who said they wore the seat belt all of the time when driving then said that they didn't wear the seat belt while driving during the past day or week. Q36 combined with the probe provided a highly accurate measure of driver belt use. Q37 is that probe. Remaining questions regarding the driver seating position ask who was in the vehicle with the respondent during the last time the respondent drove while not wearing a seat belt (Q38), and the reasons for the non-use (Q39). They provide situational information that can be valuable for targeting purposes.

Q40-42 This series asks questions similar to the above for the front passenger seating position, although it will limit itself to only the first question on frequency of seat belt usage (Q40) in order to limit the overall question burden on respondents. For this seating position, it is the identity of the driver (Q41) that is of interest to NHTSA during the most recent instance of non-use because that is the person who usually sets the tone within the vehicle. As to reasons for non-use (Q42), "it might insult the driver" has been added to the list of possible reasons given for the driver seating position in Q39.

Q43-45 This series asks questions similar to Q40-42 for the back seating position. As with the front passenger position, it asks only one frequency of use question (Q43), and seeks to identify the driver (Q44) during the last instance of non-use.

Additional reasons for non-use added to the list (Q45) are “I can’t find the seat belt” and “It’s not necessary to wear a seat belt in the back seat.”

- Q46 This question asks respondents how often their parents wear seat belts. A relationship between parent and young driver belt use would point to parents as effective role models for seat belt use.
- Q47 This question asks what the norm is for seat belt use that respondents perceive among their peers. It will identify if strategies are needed to address perceived norms of non-use.
- Q48 For many years, traffic safety professionals have encouraged drivers to encourage their passengers to buckle up. This question will ask the young drivers if they are doing so. “Yes” and “No” responses are broken out by different situations in the vehicle so that the context of asking or not asking passengers to buckle up can be assessed.

Police Stops/Enforcement

This abbreviated section collects basic information on police stops and ticketing. Evidence of multiple stops over a limited time period may be an indicator of risky driving patterns, and may be used with other information from the survey to build a composite sketch of the characteristics of risky drivers.

- Q49 This item asks the number of times the respondent has been stopped by police in the past 12 months while driving.
- Q50-51 If respondents have been stopped by police, these items ask the number of tickets received (Q50), and the nature of the violation(s) (Q51).
- Q52 Enforcement of traffic safety laws has been a central strategy in promoting and establishing traffic safety. But direct exposure to law enforcement officers is insufficient to communicate to broad swaths of the population that enforcement is occurring. Therefore, enforcement strategies have relied heavily on media communication of enforcement activity. But there is a question as to whether young drivers pay attention to messages in the media about police enforcement of traffic safety laws. This item will ask young drivers that question, with the results indicating whether the communication strategy needs to be rethought.

Crash Experience

Information on crash experience will be cross-tabulated against behaviors and attitudes on the questionnaire to identify factors related to crashes, which can then be assessed for strategic points for intervention.

- Q53-54 Young drivers will initially be asked if they have ever been in a crash as a driver (Q53), and if so, how many times this occurred (Q54). Number of crashes is a risk indicator.
- Q55-56 Q55 asks in how many crashes while driving were respondents wearing their seat belts, while Q56 asks in how many of the crashes they were injured. The data from the two questions will be used to assess for this population the difference in likelihood of injury between those wearing, and not wearing, a seat belt during a crash.
- Q57 This item asks how long ago was the respondent's last crash so that the percentages of (last) crashes can be sketched out by time for purposes of describing the magnitude of the problem (e.g., X% of young drivers were involved in a crash in the past year).
- Q58-62 This series of questions asks about crash experience as a passenger when the driver was under age 21. Crash risk has been shown to increase among young drivers when they are accompanied by young passengers. These questions explore this vulnerability, doing so from the passenger side. The questions parallel the Q53-57 driver series: have they been passengers in a crash where the driver was younger than 21 (Q58), how many times has this occurred (Q59), in how many of these crashes were they wearing a seat belt (Q60), in how many of these crashes were they injured (Q61), and how long ago was the most recent of these crashes (Q62)?
- Q63 Near misses is another risk indicator, with frequent near misses suggestive of riskier driving behavior. This question will obtain the number of near misses that the respondent has had as a driver in the past 30 days.

Alcohol/Substance Use

This abbreviated module will obtain basic measures of drinking and driving, and substance use and driving, in order to get measures of the frequency of behaviors and to cross-tabulate them with other behaviors and attitudes.

- Q64-66 These questions ask about drinking and driving in the past 30 days. The first item (Q64) will provide a frequency measure of driving after drinking, irrespective of whether or not there was alcohol-impaired driving (Q64). The second item asks about driving within 2 hours of consuming at least 5 drinks of alcohol (Q65). That amount is a common measure of binge drinking, has been linked to alcohol problems, and would be expected to place the individual above the legal limit for drinking and driving (driving under the influence). Yet while the question is asking about alcohol-impaired driving, it allows respondents to answer without there being explicit reference to impairment. Only with the third item are respondents asked to respond to an explicit statement about impairment, i.e., the number of times respondents drove while feeling buzzed from drinking alcohol (Q66).

- Q67-68 Here, respondents are asked the frequency in the past 30 days of their riding with a driver that they thought was buzzed from drinking alcohol (Q67), and the frequency over the same time period that they were concerned for their safety because of the amount of alcohol consumed by the driver (Q68). If these situations are found to occur with significant frequency, it could point to a need for programs that build skills in avoiding these circumstances. Moreover, if respondents report fewer instances of safety concerns than instances of riding with a driver buzzed from drinking alcohol, it would suggest that they do not adequately appreciate the danger of impaired driving, and are in need of information.
- Q69-70 These questions ask about recent experience with impaired driving stemming from a substance other than alcohol. Q69 asks the frequency with which the respondent drove while feeling the effects of a substance other than alcohol in order to obtain a measure of substance-impaired driving. Q70 will get a frequency measure of how often respondents ride with a substance-impaired driver.

Drowsy Driving

This abbreviated section collects basic information on drowsy driving. Drowsy driving was an area requested for inquiry in comments submitted to the NHTSA docket.

- Q71 This item asks respondents if they have ever fallen asleep or nodded off while driving.
- Q72. This item asks respondents what they do when they feel sleepy while driving. It will identify if young drivers are using effective or ineffective strategies to avert falling asleep while driving.

Speed/Racing

Speed is a significant factor in young driver crashes. Moreover, input for the survey provided by NHTSA Regional staff indicated concern over racing behavior that was occurring. This section will obtain information on speeding and racing behavior, which can then be related to other characteristics in the survey and lead to strategically developed countermeasures. Attitudes towards these behaviors will also be recorded, which will identify obstacles that countermeasure programs will face.

- Q73-74 Respondents' proclivity to speed will be measured by these items. The first question (Q73) will identify if respondents tend to drive faster than the prevailing traffic. The second question (Q74) will find out how often the respondents drive much faster than the prevailing traffic.

- Q75 This question addresses attitudes toward speed. The results will indicate what types of attitudinal barriers exist to encouraging reduction of speed by those who drive too fast. The question consists of four sub-items which ask if speeding is something they like doing (a), if other drivers frustrate them by driving slow (b), if they feel they benefit from speeding by becoming more alert (c), and if there is a utilitarian purpose to their speeding (d).
- Q76-77 Input for the survey revealed a concern about racing behavior, and a need to identify where it tends to occur. Q76 asks whether respondents have raced while driving in the past year, and poses several types of roadways to identify the type of location where drivers engage in that activity. Q77 obtains a frequency measure of racing as a driver.
- Q78 This item asks the number of people that rode in the vehicle as passengers when the respondent was racing while driving. It provides context information on the racing activity, and relates to Q79-80 below.
- Q79-80 These items ask about involvement in racing as a passenger, both in terms of where it occurs (79) and frequency (Q80). Along with Q78, they will indicate the extent to which racing occurs in a social context.
- Q81-82 These items collect information on basic attitudes regarding racing. As with the speed questions, they are to see if there are attitudinal barriers to addressing racing behavior. The questions explore whether respondents believe racing is dangerous (Q81) or exciting (Q82).

Demographics

Basic demographic information will be collected that will be used to identify any group differences in traffic safety behaviors and attitudes, and to help in developing targeted strategies. This includes identifying the extent to which high risk drivers may be reached through schools and businesses. The demographic variables are:

- Q83 Age.
- Q84 Sex.
- Q85 Hispanic or Latino.
- Q86 Race
- Q87 Full time or part time student
- Q88 Employed full time or part time.