

National Survey of Pedestrian and Bicyclist Attitudes and Behavior

Question-By-Question Justification

Cell Sample Screener

- SC1-SC1a These questions will be asked to make sure that anyone reached on a cell phone is not in a situation where there would be risk to that person's safety if an interview was conducted at that time.
- SC2 This question checks for age eligibility of the respondent (16 or older).
- SC3-SC4a These questions check for household phone status eligibility for the cell phone sample, i.e., that the respondent is either cell phone only or cell phone mostly.
- SC4b This question will obtain information on whether the respondent is cell phone mainly; i.e., unlikely to respond to a landline phone if it rings. It will be used for analyses of the sample.

Landline Sample Screener

- SL1a This question will identify the number of people in the household who meet the age-eligibility requirement (16 or older) to participate in the survey.
- SL 1b If there is only one age-eligible member in the household, then this question will be used to reach that person.
- SL1c If there are multiple age-eligible members in the household, this question will be used to randomly select one respondent from among them.
- SL1d If the household member selected to participate in the survey was not the first person who answered the phone but instead was called to the phone by the first responder, then the age-eligibility question is repeated to confirm that the survey respondent meets the age requirements.

Oversample Screener

- SO1-SO1d These questions serve the same purpose as SL1a-SL1d, but restrict the eligibility to ages 16 through 39 for the oversample.

Gender

- SA3 The interviewer at this point will record the gender of the respondent.

Recentness of Bicycle Use

- Q1 This question asks how long it has been since the respondent last rode a bicycle, and is used as a screener for later bicycle use questions.
- Q2-3 These questions ask if the respondent has access to a bicycle, and reasons for not recently riding a bicycle if the respondent has access to one. They will identify deterrents to bicycling.

Bicycle Use in Past 30 Days

A major objective of this survey is to collect exposure information regarding bicycling in order to assess risk, the context of that risk, and obstacles or impediments to bicycling. Another objective is to determine if the magnitude and nature of bicycling by the public has changed since the 2002 survey was conducted by comparing responses to exposure questions on the current survey to those obtained from identical questions administered 10 years ago. The survey will use a representative sample of bicycling trips taken over the course of a day to obtain the information to meet these objectives. Respondents will be directed to provide information for the most recent day they rode a bicycle. Those whose most recent bicycling trip was more than 30 days prior to the interview will skip the module.

- Q4 The number of days the respondent had ridden a bicycle in the past 30 days will serve both as a screener to enter the rest of the module as well as a contributor to calculating the number of bicycle trips made by the public in the past 30 days.
- Q5 This question will ask whether the respondent's most recent bicycling activity occurred during a weekday or the weekend. The amount and type of bicycling is expected to differ between these segments of the week.
- Q6-14 These questions will collect information on characteristics of each bicycle trip made by the respondent on the most recent day a bicycle was ridden. A trip is defined as going from a starting point to a destination without any stops along the way, so the day can have multiple trips. Respondents will be asked the number of trips, and for each trip taken will be asked the starting point, main purpose, and end point.
- Q15-20 These questions will ask the characteristics of the day's bicycle riding as a whole rather than on a trip-by-trip basis in order to limit the response burden on respondents. The respondents will be asked when during the day they rode their bicycle, the type of surface they rode on, whether they rode in the street, the direction in which they rode in the street in relation to the traffic, and whether they rode alone or with others.

Q21-23 These questions ask about the presence of threats to personal safety during the day's bicycle riding, and their nature. This will provide information on the extent to which bicyclists experience threats to personal safety, and identify potential targets for safety interventions.

Training on Bicycling Safety

Q24-26 Efforts to enhance bicycling safety include training and education. These questions explore the extent to which bicyclists have received training in bicycling safety, the source of that training, and where bicyclists would typically go to find information on the topic.

Conspicuity While Bicycling

Q27-29 Motorists have great difficulty seeing bicyclists at night unless the bicyclists take steps to increase their visibility. These questions ask respondents how much of their bicycle riding is done at night. If at least some of their riding occurs at night, they are then asked if they do anything to make themselves more visible to motorists, and if so, what do they do? The responses will indicate if bicyclists are taking adequate precautions when riding at night.

Using an Electronic Device While Riding a Bike

Q30 Distraction through use of electronic devices has been a major safety issue to emerge in the traffic safety field. This is a new question that will provide information on distraction and bicycling.

General Bicycling Habits

Q31 This question asks how often the respondent rides a bicycle during the summer months (which is the time of year when the survey is scheduled to be administered). The responses will be compared to information collected from an identical question in 2002 to determine if the general reported frequency of bicycling has changed in the past 10 years.

Q32 This question asks the average amount of time the respondent spends riding a bicycle on a typical day when engaging in this activity. Combined with the previous question, it provides a measure of usual exposure as a bicyclist experienced by the respondent.

Q33 This question asks respondents to compare their current bicycling frequency to their frequency of riding a bicycle a year ago. While other parts of this survey can only compare information collected from different samples of people to identify change in bicycling frequency (i.e., those who participated in the 2002 survey and those who will participate in the

2012 survey), this question allows us to look at reported change at the individual level.

Facilities Supporting Bicycling

Q34-36 These questions ask about the presence of bike paths in respondents' communities, their use, and reasons for non-use. They will provide information on how well community facilities match bicyclist needs.

Q37-39 These questions collect the same types of information as Q34-36, but are instead directed at bike lanes. The purpose is the same.

Structural Impediments to Bicycling

Q40 This question asks the frequency that bicyclists come upon obstacles that force them to change their routes. It provides an indication of the extent of physical impediments within communities to bicycling.

Injuries While Bicycling

Q41-43 These questions ask whether the respondents were injured while riding a bicycle in the past 2 years, and if so, how the injury occurred. This will provide a national measure of injury occurring while bicycling, and identify potential points of intervention.

Bicycle Helmets

Q44-47 A helmet is the single most effective way to prevent head injury resulting from a bicycle crash. Yet despite the fact that nearly 70 percent of all fatal bicycle crashes involve head injuries, only a minority of bicyclists wears bicycle helmets according to the last figures available. These survey questions will obtain information to help NHTSA and other safety organizations address the non-use problem by asking respondents about their use of bicycle helmets, their reasons for non-use, and their perceptions of the effectiveness of helmets in preventing head injuries among children and adults.

Assessment of Community Facilities for Bicyclists

Q48-50 These questions will obtain information on the public's overall assessment of their community facilities for bicyclists. Respondents will be asked their level of satisfaction with the local community design for safe bicycling, whether they would recommend changes for bicyclists, and if so, what those changes would be.

Bicycle Helmet Laws

- Q51-53 Legislation and enforcement often are key components of traffic safety programs. But the public must have some knowledge about the laws for them to have any effect. These questions will examine respondents' awareness of bicycle helmet laws in their localities, and towards whom they believe the laws apply.
- Q54 This question will be used to determine the level of public support for laws that require children to wear bicycle helmets, and laws that require adults to wear bicycle helmets.

Recentness of Walking

- Q55 This question asks how long it has been since the respondent last walked outside for 5 minutes or more, and is used as a screener for later questions about walking.

Walking in Past 30 Days

As with bicycling, this survey will collect exposure information regarding walking in order to assess risk, the context of that risk, obstacles or impediments to walking, and change in walking behavior as compared to data from the 2002 survey. Similar to the bicycling module, the survey will accomplish this by collecting information on a representative sample of walking trips taken by respondents over the course of a day. Respondents will be directed to provide information for the most recent day they walked outside for 5 minutes or more. Respondents whose most recent walking trip was more than 30 days prior to the interview will skip the module.

- Q56 The number of days the respondent had walked outside in the past 30 days will serve both as a screener to enter the rest of the module as well as a contributor to calculating the number of walking trips made by the public in the past 30 days.
- Q57 This question will ask whether the respondent's most recent outdoor walking activity occurred during a weekday or the weekend. The amount and type of walking is expected to differ between these segments of the week.
- Q58-66 These questions will collect information on characteristics of each walking trip made by the respondent on the most recent day s/he walked outside. A trip is defined as going from a starting point to a destination without any stops along the way, so the day can have multiple trips. Respondents will be asked the number of trips, and for each trip taken will be asked the starting point, main purpose, and end point.

- Q67-72 These questions will ask the characteristics of the day's walking trips as a whole rather than on a trip-by-trip basis in order to limit the response burden on respondents. The respondents will be asked when during the day they walked, the type of surface on which they walked, whether they walked in the street, the direction they walked in the street in relation to the traffic, and whether they walked alone or with others.
- Q73-75 These questions ask about the presence of threats to personal safety during the day's walking, and their nature. This will provide information on the extent to which pedestrians experience threats to personal safety, and identify potential targets for safety intervention.

Conspicuity While Walking

- Q76-78 Motorists have great difficulty seeing pedestrians at night unless the pedestrians take steps to increase their visibility. These questions ask respondents how much of their walking is done at night. If at least some of their walking outside occurs then, they are then asked if they do anything to make themselves more visible to motorists, and if so, what do they do? The responses will indicate if pedestrians are taking adequate precautions when walking at night.

Using an Electronic Device While Walking

- Q79 Distraction through use of electronic devices has been a major safety issue to emerge in the traffic safety field. This is a new question that will provide information on distraction and walking.

General Walking Habits

- Q80 This question asks how often the respondent walks outside during the summer months (which is the time of year when the survey is scheduled to be administered). The responses will be compared to information collected from an identical question in 2002 to determine if the general reported frequency of walking has changed in the past 10 years.
- Q81 This question asks respondents to compare their current walking frequency to their frequency of walking a year ago. While other parts of this survey can only compare information collected from different samples of people to identify change in walking frequency (i.e., those who participated in the 2002 survey and those who will participate in the 2012 survey), this question allows us to look at change at the individual level.

Availability and Use of Sidewalks

Q82-85 Safe walking is highly dependent on the presence of sidewalks that separate pedestrians from other types of traffic while providing a surface that pedestrians normally can easily traverse. These questions will ask about the presence, condition, and use of sidewalks in order to assess public perceptions of the adequacy of sidewalks in their communities.

Injuries While Walking

Q86-88 These questions ask whether the respondents were injured while walking in the past 2 years, and if so, how the injury occurred. This will provide a national measure of injury occurring while walking, and identify potential points of intervention.

Assessment of Community Facilities for Pedestrians

Q89-91 These questions will obtain information on the public's overall assessment of their community facilities for pedestrians. Respondents will be asked their level of satisfaction with the local community design for safe walking, whether they would recommend changes for pedestrians, and if so, what those changes would be.

Awareness of Rules of the Road

In a shared roadway environment it is important that different modes of users understand the rules and responsibilities that apply to each in order to avoid conflict and injury. These questions examine public awareness of some of these rules and responsibilities in order to determine if education is needed.

Q92 This question asks if bicyclists are supposed to follow the same rules as motor vehicle drivers when at traffic lights and stop signs.

Q93 This question asks what an approaching motorist is supposed to do when seeing flashing red lights on a school bus.

Q94 This question asks the distance a pedestrian needs to leave at night between himself/herself and an approaching vehicle for the driver to see the pedestrian.

Wanting To Walk or Bicycle More

Q95A/B These questions ask respondents their level of agreement with statements saying they would like to walk/bicycle more than they currently are doing. If respondents agree with either of the statements, they are asked:

Q96/97 the most important reason they do not walk/bicycle as much as they would like. This will identify potential factors to address in encouraging walking and bicycling in support of a healthy lifestyle.

Driver Practices at Crosswalks

Q95C Respondents will be asked their level of agreement with the statement that drivers in their community usually yield to pedestrians in crosswalks. This will be used to gauge general driver practices at crosswalks as they relate to pedestrians.

Perceived Rights of Bicyclists in Sharing the Road

Q95D This item will be used to assess the public's level of acceptance of bicyclists sharing the road with motorists.

Attitude about Pedestrian/Bicyclist Crash Avoidance Information in Driver Manuals

Q95E This item will identify if the public believes that driver manuals used to study for obtaining a driver's license should include information on how to avoid collisions with bicyclists and pedestrians.

Attitude about Enforcement of Pedestrian Right of Way at Crosswalks

Q95F This item will identify the extent to which the public believes that drivers not yielding to pedestrians crossing legally at crosswalks should be ticketed.

Perceived Safety of Walking and Bicycling

Q98-101 Respondents will be asked if it is safe or dangerous to walk in their neighborhood, and if it is safe or dangerous to bicycle in their neighborhood. If dangerous, they will be administered a follow up question that asks why they feel this way. This series of questions will identify key obstacles to walking and bicycling.

Children Walking/Bicycling

Q102 This question will ask what the youngest age should be for a child to be allowed to cross a low traffic volume/low speed neighborhood street alone. The results will be compared to the recommendations from safety professionals to see if they are consistent.

Q103 This question will ask the number of children in the household. It will be used both as a variable for demographic comparisons of data collected by other survey items as well as a screener for ensuing questions in this module.

- Q104 This question will obtain the age of the oldest child in the household. That child will be the referent for the following child bicycling questions, allowing those data to be analyzed by children's ages.
- Q105 This question will ask the number of days the child rides a bicycle during a typical week in the summer, providing a frequency measure of child bicycling behavior.
- Q106 This question will obtain the frequency that the respondent's oldest child wears a helmet when riding a bicycle to assess the prevalence of that safety behavior.

Characteristics of Residential Area

- Q107-108 These questions will ask the type of residence in which the respondent resides, and manner of land use close to the respondent's home, in order to assess how this relates to walking and bicycling behavior.

Demographics

The survey will obtain information on demographics commonly used to identify differences in attitudes and behaviors within the population:

- Q109-110 Age.
- Q111 Employment status.
- Q112 Education.
- Q113 Ethnicity (Hispanic or Latino origin).
- Q114-115 Race.
- Q116 Income.
- Q117 Gender.

Motor Vehicle Access

- Q118-119 These questions will ask respondents' frequency of driving and the number of motor vehicles available to household members in order to assess motor vehicle access and how it relates to the walking and bicycling issues investigated in the survey.

Physical Limitations on Walking

Q120-121 These questions will ask respondents if they have a physical condition that limits the amount of walking they can do, and if so, whether they use special equipment to help them walk or use a wheelchair or motorized chair. This information will help with the interpretation of other responses to the survey regarding mobility issues.

Overall Transportation Access

Q122-124 The first of these questions will ask how easy or difficult it is for respondents to travel to the places in their community that they want to go. If the respondents say it depends on where they are departing from, they will be asked what places they find it more difficult to travel from. If responses to either of those two questions indicate some difficulty traveling, then respondents will be asked the reasons why it is difficult to travel to where they want to go. A particular interest of this question series is to combine it with responses to Q120-121 to assess difficulties in transportation access among people with disabilities.

Zip Code

Q125 Zip code information will be needed for the cell phone sample in order to determine if the respondent lives in an urban, suburban, or rural area. Urbanicity is an important variable used for demographic comparisons of behavior and attitudes. Zip code information will also be collected for the landline samples in order to avoid errors that could occur in urban/suburban/rural determination due to forwarding of phone numbers.

Information Applied to Weighting the Database

Q126-132 Information on the number of phone numbers maintained by the household, the type of telephone household, and any interruption in phone service over the past year will be applied to weighting the data.

Visit to NHTSA Website

Q133 To alleviate concerns that potential respondents may have about the legitimacy of the survey, NHTSA plans to include a notice about the survey on its website to which respondents can be directed to confirm its authenticity. This question will provide an indication of how useful this action was in raising the response rate.

Address Information from Cell Phone Sample

C1 Because of the cost structure of cell phone billing currently in the United States, there may be a financial burden upon the respondent for an incoming research call – something that does not occur with a landline phone. This study will therefore offer a \$10 incentive to respondents

reached on their cell phones to account for limited calling plans. These respondents will be asked the address to which to send the payment.