

# NTSS Question-by-Question Justification

This attachment provides an overview of the questionnaire items to be used in this study and their relationship to study goals and traffic safety applications and countermeasures (CMs).

Question Item ID	Question Text	Source	Purpose
<b> Screener </b>			
SCR1	<b>Are you the adult (18 years old or older) in your household with the next upcoming birthday?</b> <i>Using the next birthday is a method of random selection and is important to make sure that the experiences of all types of people are represented.</i>	Adapted from NHTSA’s 2023 National Survey of Pedestrian and Bicyclist Attitudes, Knowledge, and Behaviors (NSPBAKB). <sup>1</sup>	This question serves as a screener for the rest of the survey.
<b>Module 0: Core Survey Questions</b>			
C1	<b>Thinking about the past 12 months, how often do you usually drive a car, motorcycle, or other motor vehicle?</b>	Adaptation of a question used on NHTSA’s 2022 National Survey of Speeding Attitudes and Behaviors (NSSAB). <sup>2</sup>	This question provides information on the frequency of respondent’s recent driving experience and is used as a screener for later questions.
C1a	<b>Have you ever driven before?</b>	Adaptation of a question used on AAA’s 2020 – 2021 American Driving Survey. <sup>3</sup>	For those individuals who have not driven in the past 12 months, this question provides additional information on lifetime driving experience and is used as a screener for later questions.
C2	<b>When driving a motor vehicle, how often do you wear your seat belt?</b>	Adaptation of a question used in NHTSA’s 2016 Motor Vehicle Occupant Safety Survey (MVOSS). <sup>4</sup> The scale was changed to go from "None of my trips" to "All trips".	This question provides information on the frequency of respondent seat belt usage in relation to their total trips.
C3	<b>Which of the following statements best describes your driving? I tend to pass other cars more often than other cars pass me; Other cars tend to pass me more often than I pass them; Both about equally</b>	This question was used in NHTSA’s 2022 NSSAB.	This question provides information to understand typical driver speeding behavior.
C4	<b>In the past 30 days, have you driven a motor vehicle with other <u>adult</u> passengers in the vehicle?</b>	New question to understand driving behaviors with passengers in the vehicle.	This question provides information on driving experiences with adult passengers in the front or rear seat of the vehicle.
C5	<b>In the past 30 days, have you driven a motor vehicle with <u>children</u> aged 12 or younger in the vehicle?</b>	New question to understand driving behaviors with child passengers in the vehicle.	This question provides information on driving experiences with child passengers in the front or rear seat of the vehicle.

<sup>1</sup> National Survey of Pedestrian and Bicyclist Attitudes, Knowledge, and Behaviors (NSPBAKB), OMB Control No. 2127-0684

<sup>2</sup> National Survey of Speeding Attitudes and Behaviors (NSSAB), OMB Control No. 2127-0613

<sup>3</sup> Tefft, B. C. (2022). American Driving Survey, 2020–2021 (Research Brief). AAA Foundation for Traffic Safety.

[https://aaafoundation.org/wp-content/uploads/2022/11/AAAFTS\\_Research-Brief\\_2022-American-Driving-Survey2020-2021.pdf](https://aaafoundation.org/wp-content/uploads/2022/11/AAAFTS_Research-Brief_2022-American-Driving-Survey2020-2021.pdf)

<sup>4</sup> Bailly, K., Martin, K. & Block, A. (2019, December). *2016 Motor vehicle occupant safety survey: Volume 1, Methodology report* (Report No. DOT HS 812 851). National Highway Traffic Safety Administration.

<https://rosap.nhtsa.gov/view/dot/43610>

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C5a	<b>When you are driving and children aged 12 or younger are riding with you, are they typically in a car seat, booster seat, seat belt, or do they ride without a seat belt? You may select more than one if answering about multiple children.</b> <i>Select all that apply.</i>	New question to understand child restraint usage when driving child passengers in the vehicle.	For those individuals who have driven children, this question provides information on the usage of different types of child restraints.
C6	<b>Not including driving to and from work, have you driven a vehicle as part of a job or business in the past 12 months?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information about whether or not respondents drive for their employment.
C6a	<b>How often have you driven a vehicle as part of a job or business?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	For those who have driven for work, this question provides additional information on the frequency of this behavior.
C6b	<b>Are you more likely, less likely, or just as likely to wear your seat belt when driving <u>on the job</u> as compared to when driving for personal use?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	For individuals who drive for work, this question provides information on differential seat belt practices between personal driving and driving for work.
C7	<b>In the past 12 months, how often have you driven a motor vehicle at night, after 9 pm?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the frequency of respondent recent driving experience at night.
C8	<b>When was the last time you did <u>not</u> wear your seat belt at any point while driving?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on recent seat belt non-use on a scale from "never" to "today".
C9	<b>When driving I tend to...</b>	This question was used in NHTSA's 2022 NSSAB.	This question provides information to understand typical driver speeding behavior.
C10	<b>How often do you <u>talk</u> on the phone while driving?</b> <i>For this question, consider all methods of talking on the phone, including holding the device to your ear, using speakerphone, or using any type of hands-free calling, such as a headset or in-vehicle system or app.</i>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information to understand typical phone usage behavior while driving. It allows respondents to report talking on the phone while driving in relation to their total trips (from "None of my trips" to "All trips") or to say they do not have a cell phone.
C11	<b>How often do you <u>send</u> texts, emails, or other messages while driving?</b> <i>For this question, consider all methods of sending messages, including typing directly on the device or screen, using speech-to-text while holding the device, or using any type of hands-free voice commands, such as with a headset or in-vehicle system or app.</i>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information to understand typical phone usage behavior while driving. It allows respondents to report sending phone messages while driving in relation to their total trips (from "None of my trips" to "All trips") or to say they do not have a cell phone.

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C12	<b>How often do you read texts, emails, or other messages while driving?</b> <i>For this question, consider all methods of reading and listening to messages, including while holding the device, looking directly at a screen, or using any type of hands-free voice commands to have messages read aloud, such as with a headset or in-vehicle system or app.</i>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information to understand typical phone usage behavior while driving. It allows respondents to report reading phone messages while driving in relation to their total trips (from "None of my trips" to "All trips") or to say they do not have a cell phone.
C13	<b>In the past 30 days, how many times have you fallen asleep or nodded off, even for a moment, while driving?</b>	Adaptation of a question used on the NHTSA's National Survey of Drowsy Driving Knowledge, Attitudes, and Behaviors (NSDDKAB). <sup>5</sup>	This question provides information on the frequency of respondent recent drowsy driving experiences.
C14	<b>In the past 12 months, how often have you typically had a drink containing alcohol?</b>	Adaptation of a question used on the Alcohol Use Disorders Identification Test-Concise (AUDIT-C) survey. <sup>6</sup>	This question provides information on the frequency of respondent alcohol use and is used as a screener for later questions in this section.
C14a	<b>In the past 12 months, how often have you driven a motor vehicle within two hours of drinking alcoholic beverages?</b>	Adaptation of a question from the results of a 2010 working group on public awareness survey recommendations. <sup>7</sup>	For those individuals who drink alcohol, this question provides information on the frequency of alcohol impaired driving.
C15	<b>Cannabis (or marijuana) is available in both recreational and medicinal forms and may be known by many other names (such as weed or pot). Cannabis is often smoked, vaped, or ingested through edibles (such as gummies). In the past 12 months, how often have you typically used cannabis?</b> <i>For this question, we are not interested in CBD oil.</i>	New question adapted to use the same format as the alcohol frequency question to get information on cannabis use frequency.	This question provides information on the frequency of respondent cannabis use and is used as a screener for later questions in this section.
C15a	<b>In the past 12 months, how often have you driven a motor vehicle within four hours of using cannabis?</b>	New question developed to collect information on frequency of cannabis use while driving.	For those individuals who use cannabis, this question provides information on the frequency of cannabis impaired driving.
C16	<b>In the past 12 months, have you driven a motor vehicle under the influence of...?</b> <i>Select all that apply.</i>	New question developed to collect information on polydrug impaired driving.	This question provides information on the use of different substances while driving, including alcohol, cannabis, illegal drugs, OTC and/or prescription drugs, and combinations of these drugs (more than one type of drug at the same time).

<sup>5</sup> National Survey of Drowsy Driving Knowledge, Attitudes, and Behaviors (NSDDKAB), OMB Control No. 2127-0752

<sup>6</sup> Bush, K., Kivlahan, D. R., McDonnell, M. B., et al. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. *Archives of Internal Medicine*, 158, 1789 - 95.

<sup>7</sup> Hedlund, J., Cassanova, T., & Chaudhary, N. (2011). *Public awareness survey recommendations of the NHTSA-GHSA working group* (Report No. DOT HS 811 511). National Highway Traffic Safety Administration.

<https://rosap.nhtsa.gov/view/dot/1930>

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Question Item ID	Question Text	Source	Purpose
C17	<b>Counting cars, vans, minivans, SUVs, pickup trucks, and motorcycles, how many vehicles do you own, lease, or are otherwise available regularly for your use?</b>	Adaptation of a question used on the AAA’s 2020 – 2021 American Driving Survey.	In order to understand respondent background information regarding driving experiences, this question provides information on access to vehicles.
C18	<b>Which of the following best describes the vehicle that you drive most often?</b> <i>If you drive more than one vehicle about the same amount and can't decide which of them you drive most often, then answer for which of those vehicles you drove last.</i>	New question developed to understand and categorize if respondents drive a personal vehicle owned/leased by them or someone in their household, a borrowed vehicle, a vehicle provided by their employer, a rental car, or other.	In order to understand respondent background information regarding driving experiences, this question provides information on if their primary vehicle is a personal, borrowed, employer, or rental car.
C19	<b>Thinking about the vehicle that you drive most often, is it a...</b>	Adaptation of questions used on the NHTSA’s 2015 National Survey on Distracted Driving Attitudes and Behaviors (NSDDAB) <sup>8</sup> and 2016 MVOSS.	To understand respondent background information about driving experiences, this question provides information on the primary vehicle type (car, van, SUV, pickup truck, etc.). In subsequent questions in other sections, respondents are asked to think about features in their primary vehicle; this item is used as a screener for certain questions.
C19a	<b>Please select the year, make, and model of the vehicle you just told us is the one you drive most often. Throughout this survey, we will refer to this vehicle as your primary vehicle.</b>	New question developed to collect information on year, make, and model of the respondent primary vehicle.	For those individuals whose primary vehicle is a car/station wagon, van/minivan, SUV, or pickup truck, this question collects details on the year, make, and model of their primary vehicle. This information is collected to ensure the respondent is thinking about a specific vehicle in subsequent questions when they are asked to recall information about their primary vehicle. Specifically, this is important for those questions on module 3 (new vehicle technology). Age of vehicle is relevant to overall safety features that come standard and make and model information will allow us to confirm what features the vehicle likely has or does not have to gauge respondent awareness and familiarity with their vehicle features.

<sup>8</sup> Schroeder, P., Wilbur, M., & Peña, R. (2018, March). *National survey on distracted driving attitudes and behaviors - 2015* (Report No. DOT HS 812 461). National Highway Traffic Safety Administration.  
[https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/13123-2015\\_natl\\_survey\\_distracted\\_driving\\_031418\\_v5\\_tag.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/13123-2015_natl_survey_distracted_driving_031418_v5_tag.pdf)

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C20	<b>For how long have you driven this vehicle?</b>	New question developed to collect information on length of time the respondent has been driving their primary vehicle	This question provides information on how long the respondent has been driving their primary vehicle. In addition to general background information on driving experiences, this information can be used in conjunction with questions on module 3 (new vehicle technology) to better understand familiarity with vehicle features.
C21	<b>Have you been involved in a crash or near-crash as a driver in the past 12 months?</b> <i>By "near-crash" we mean a time that you would have almost certainly gotten into a crash if you or another driver had not swerved, slammed on your brakes, or done something else out of the ordinary when driving to avoid the crash.</i>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question provides background information on driver experiences with crashes and near-crashes. It is important for interpretation for questions on other modules (such as distracted driving behavior; overall traffic safety attitudes) and will be used to categorize those respondents who have or have not had crash experiences.
C22	<b>Which of the following best describes the type of license, if any, you have for driving?</b>	Question developed using recommendations from NHTSA to classify drivers based on licensure.	This question allows respondents to select from a list of driver's license types (e.g., regular driver's license, commercial, learner permit, none) as background information for use in categorizing different types of drivers.
C23	<b>What is your primary mode of transportation?</b> <i>By primary, we mean the way you get around most often.</i>	Question developed using an adaptation of the categories used in FHWA's 2009 National Household Travel Survey <sup>9</sup> for types of transportation.	This question provides information on the way respondents typically get around, including driving a vehicle, being a passenger, bus, train, bicycle, walking, or other.
C24	<b>How often do you use taxis, Uber, Lyft, or other rideshare services?</b>	New question developed to collect information on frequency of rideshare use.	This question provides information on the frequency of respondent rideshare service usage.
C25	<b>How old are you?</b>	Collecting age using the same question format as in NHTSA's 2022 NSSAB.	Age collected as part of the demographics section to categorize respondents for analytic purposes.

<sup>9</sup> Santos, A., McGuckin, N., Nakamoto, H. Y., Gray, D., & Liss, S. (2011). *Summary of Travel Trends: 2009 National Household Travel Survey* (Report No. FHWA-PL-11-022). Federal Highway Administration.

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C26	<b>Are you:</b> <i>Select all that apply.</i> [List includes: Female / Male / Transgender, non-binary, or another gender]	Collecting gender using the question format suggested by the Office of the Chief Statistician of the United States pursuant to Pursuant to the June 2022 Executive Order 14075 on Advancing Equality for Lesbian, Gay, Bisexual, Transgender, Queer, and Intersex Individuals. <sup>10</sup>	Gender collected as part of the demographics section to categorize respondents for analytic purposes.
C27	<b>In order to better understand driver and rider characteristics, we'd like to ask you about your height and weight. About how tall are you without shoes?</b>	Collecting height using the same question format as used previously on NHTSA's 2016 MVOSS. This information is needed in order to better understand driver and rider characteristics.	Height collected as part of the demographics section to categorize respondents for analytic purposes. Respondent physical size is an important characteristic in understanding driver/rider behavior.
C28	<b>What is your weight?</b>	Collecting weight using the same question format as used previously on NHTSA's 2016 MVOSS. This information is needed in order to better understand driver and rider characteristics.	Weight collected as part of the demographics section to categorize respondents for analytic purposes. Respondent physical size is an important characteristic in understanding driver/rider behavior.
C29	<b>What is your race and/or ethnicity?</b> <i>Select all that apply.</i> [List includes: American Indian or Alaska Native; Asian; Black or African American; Hispanic or Latino; Middle Eastern or North African; Native Hawaiian or Pacific Islander; White]	Collecting race using the minimum reporting categories described in OMB's Statistical Policy Directive No. 15; <sup>11</sup> request for exception to use minimum reporting categories described in Part A.	Race collected as part of the demographics section to categorize respondents for analytic purposes.
C30	<b>Are you currently married, widowed, divorced, separated, or have you never been married?</b>	Collecting marital status using a question format adapted from NHTSA's 2022 NSSAB.	Marital status collected as part of the demographics section to categorize respondents for analytic purposes.
C31	<b>Do you own or rent your home?</b>	Collecting home ownership using the same question format as used in NHTSA's 2022 NSSAB.	Home ownership collected as part of the demographics section to categorize respondents for analytic purposes.
C32	<b>What is the highest degree or level of school you have completed?</b>	Collecting level of education using a question format adapted from NHTSA's 2022 NSSAB and the Census American Community Survey. <sup>12</sup>	Level of education collected as part of the demographics section to categorize respondents for analytic purposes.

<sup>10</sup> Office of the Chief Statistician of the United States. (2023). *Recommendations on the Best Practices for the Collection of Sexual Orientation and Gender Identity Data on Federal Statistical Surveys.*

<https://www.whitehouse.gov/wp-content/uploads/2023/01/SOGI-Best-Practices.pdf>

<sup>11</sup> Office of Management and Budget. (2024). *Revisions to OMB's Statistical Policy Directive no. 15: Standards for maintaining, collecting, and presenting federal data on race and ethnicity.*

<https://www.federalregister.gov/documents/2024/03/29/2024-06469/revisions-to-ombs-statistical-policy-directive-no-15-standards-for-maintaining-collecting-and>

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C33	<b>Which of the following categories best describes your total household income before taxes in [year]? Your best estimate is fine.</b>	Collecting household income using the same question format as used NHTSA’s 2022 NSSAB.	Household income collected as part of the demographics section to categorize respondents for analytic purposes.
C34	<b>Including yourself, how many adults aged 18 and older live in your household?</b>	Collecting information on adults in household using a question format adapted from NHTSA’s 2022 NSSAB.	Household size collected as part of the demographics section to categorize respondents for analytic purposes.
C35	<b>Which, if any, of the following aged children live in your household? Select all that apply.</b>	New question developed to collect information about children in the household in different age categories (from under 1 year old through age 12; no children aged 12 or younger in household).	Children in household collected as part of the demographics section to categorize respondents for analytic purposes. Ages of children are important in relation to other traffic safety attitudes and behaviors and relevant to the types of child restraints typically used at those ages.
C36	<b>What is your current employment status?</b>	Collecting employment status using a question format adapted from the 2022 AmeriSpeak Core Adult Profile Survey employment status question. <sup>13</sup>	Employment status collected as part of the demographics section to categorize respondents for analytic purposes.
<b>Module 1: Seat Belts</b>			
S1	<b>Do the seat belts in the front seat of your primary vehicle go across both your shoulder and lap or across your lap only?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides information on the exact type of seat belts installed in the respondent's primary vehicle.
S1a	<b>Are the shoulder and lap belt one piece or are they two separate belts?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides additional information on the exact type of seat belts installed in the respondent's primary vehicle.
S1b	<b>Shoulder belts are usually attached to the frame behind the driver's left shoulder. In some vehicles, this attachment can be moved up or down to adjust the shoulder belt. Is this attachment adjustable in your vehicle?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides additional information on the exact type of seat belts installed in the respondent's primary vehicle.
S2	<b>Are you more likely, less likely, or just as likely to wear your seat belt when driving <u>at night</u> compared to when driving during the day?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides information on differential seat belt habits between day driving and night driving.

<sup>12</sup> United States Census Bureau. (n.d.) *Why we ask questions about... Educational attainment, undergraduate field of degree.*  
<https://www.census.gov/acs/www/about/why-we-ask-each-question/education/>

<sup>13</sup> NORC at the University of Chicago. (2022). *AmeriSpeak Core Adult Profile 2022 Survey.*  
[https://amerispeak.norc.org/content/dam/amerispeak/supporting-documents/AmeriSpeak\\_Introductory\\_Survey\\_ClientReady\\_102518.pdf](https://amerispeak.norc.org/content/dam/amerispeak/supporting-documents/AmeriSpeak_Introductory_Survey_ClientReady_102518.pdf)

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S3	<b>When driving, suppose you notice that a passenger in the vehicle is not wearing their seat belt. How likely or unlikely are you to tell them to put it on?</b>	New question developed to collect information on the tendency for people to notice and ask others to wear a seat belt when they are driving them if they do not have it on already.	This question provides information on the driver's concern and/or diligence regarding the seat belt usage of passengers when they are driving based on their likelihood to speak up if they notice a passenger is not wearing one.
S4	<b>Assume that you regularly do <u>not</u> wear your seat belt while driving over the next six months. How likely or unlikely do you think you will be to receive a ticket for not wearing a seat belt?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's opinion about the probability of receiving a ticket for not wearing a seat belt if they were not wearing it regularly while driving for the next 6 months.
S5a-S5f	<b>The next few statements are about driving and seat belts. Please tell us how much you agree or disagree with each one.</b> <b>a. Seat belts are just as likely to harm as help you.;</b> <b>b. If I were in a crash, I would want to have my seat belt on.;</b> <b>c. Putting on a seat belt makes me worry more about being in a crash ;</b> <b>d. If it is your time to die, you'll die, so it doesn't matter whether you wear your seat belt.;</b> <b>e. There is no excuse for not wearing your seat belt.</b>	Adaptation of questions used in NHTSA's 2022 NSSAB and 2016 MVOSS.	This question provides information on the respondent's agreement/disagreement with various beliefs about the value of seat belts, rule-following behavior in regards to seat belts, risk-taking behavior as a driver, and belief about fatalism.
S6	<b>How often do you ride as a passenger in any kind of car, van, SUV, or truck?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on how often the respondent rides as a passenger in a vehicle, from "every day, or almost every day" to "never"
S6a	<b>When you are a passenger, do you usually ride in the front seat or the back seat?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on respondent's seating preference or typically experience when riding as a passenger in a vehicle.
S6b	<b>When riding as a passenger in the front seat, how often do you wear your seat belt?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's seat belt usage when riding as a passenger in the front seat of a vehicle in relation to their total trips ("all trips" to "none of the trips").
S6c	<b>When riding as a passenger in the back seat, how often do you wear your seat belt?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's seat belt usage when riding as a passenger in the back seat of a vehicle in relation to their total trips ("all trips" to "none of the trips").



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S7	<b>Thinking about drivers in the US, about how many do you believe wear their seat belt <u>every</u> time they drive?</b>	New question developed to collect information on norms regarding what people believe others do regarding seat belt usage.	This question provides information on the respondent's perception of other drivers' seat belt usage to understand norms. The question is asked on a scale that goes from "None or nearly no drivers" to "All or nearly all drivers" to understand what individuals believe other people tend to do.
S8	<b>Thinking about adults in the US, about how many do you believe have <u>not</u> worn a seat belt at any point while riding as a passenger in the past 12 months?</b>	New question developed to collect information on norms regarding what people believe others do regarding seat belt usage.	This question provides information on the respondent's perception of seat belt usage among adult passengers to understand norms. The question is asked on a scale that goes from "None or nearly no drivers" to "All or nearly all drivers" to understand what individuals believe other people tend to do.
S9	<b>Which, if any, of the following describe reasons why you wear your seat belt? <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's justifications for seat belt use. Some examples of possible responses are "I don't want to get a ticket", "I want to avoid serious injury", and "The people I'm with are wearing seat belts".
S10	<b>Which, if any, of the following describe reasons why you have <u>not</u> worn your seat belt during past occasions? <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's justifications for not wearing a seat belt in either the front seat or the back seat. Some examples of possible responses are "I'm only going a short distance", "I'm riding on low-speed roadways", and "The seat belt is uncomfortable".
S11	<b>Is there anything that you particularly dislike or find annoying about wearing your seat belt?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on whether the respondent has negative feelings about wearing seat belts, inability or difficulty wearing a seat belt.
S11a	<b>What is it that you dislike or find annoying? Is it because... <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's dislikes about seat belts. Some examples of possible responses are "I feel too restricted or confined by seat belts", "Seat belts wrinkle my clothes", and "Seat belts irritate or chafe my skin".

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S12	<p><b>Which, if any, of the following would encourage you to wear (or continue wearing) your seat belt?</b>  <i>Select all that apply. We are interested in your responses even if you already wear your seat belt.</i></p>	<p>New question developed to collect information on reasons people might wear a seat belt and factors that would influence them to wear it more often.</p>	<p>This question provides information on what may encourage the respondent to wear a seat belt. Some examples of possible responses are "Being in a crash", "Discounts from my auto insurance company for seat belt behavior", and "New laws regarding seat belt use".</p>
S13	<p><b>In a crash, would you say that seat belts are most helpful to adults in the front seat, in the back seat, or is it about the same?</b></p>	<p>New question developed to collect information on opinions on benefits of seat belts in the front versus the back seat of a vehicle during a crash.</p>	<p>This question provides information on the respondent's opinion about the equivalency of seat belts in the front and back seat of a vehicle during a crash.</p>
S14	<p><b>Thinking about drivers in the US, about how many do you believe would agree to the following statement:  Wearing a seat belt while driving is a worthwhile precaution.</b></p>	<p>New question developed to collect information on norms regarding what people believe others think about seat belt usage.</p>	<p>This question provides information on the respondent's opinion about the proportion of people that share the opinion that wearing a seat belt while driving is a worthwhile precaution to understand norms. The question is asked on a scale that goes from "None or nearly no drivers" to "All or nearly all drivers" to understand what individuals believe other people tend to think or believe.</p>
S15	<p><b>Thinking about adults in the US, about how many do you believe would agree to the following statement:  It's okay to sometimes not buckle up when riding as a passenger.</b></p>	<p>New question developed to collect information on norms regarding what people believe others think about seat belt usage.</p>	<p>This question provides information on the respondent's opinion about the proportion of people that share the opinion that it is sometimes ok to not buckle up when riding as a passenger to understand norms. The question is asked on a scale that goes from "None or nearly no adults" to "All or nearly all adults" to understand what individuals believe other people tend to think or believe.</p>
S16	<p><b>Assume that you regularly do <u>not</u> wear your seat belt while riding in the back seat of a vehicle over the next six months. How likely or unlikely do you think you will be to receive a ticket for not wearing a seat belt?</b></p>	<p>Question developed using a similar format to model the one above from NHTSA's 2016 MVOSS.</p>	<p>This question provides information on the respondent's opinion about the probability of receiving a ticket for not wearing a seat belt if they were not wearing it regularly while riding as a back seat passenger for the next 6 months.</p>

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
S17	<b>Assume that you were stopped and fined for not wearing a seat belt. After receiving the ticket, do you think you would...?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's opinion about the reaction of a hypothetical non-seat-belt-wearing adult to a fine for not wearing a seat belt. It gauges their belief about whether or not a fine would change their behavior. Response options go from "wear their seat belt more often as a permanent change" to "make no change".
S18	<b>To what extent do you agree or disagree with the following statement? Police in my community generally do not bother to write tickets for seat belt violations.</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's agreement/disagreement about whether police in their community generally do not bother to write tickets for seat belt violations. This is related to the respondent's belief about the likelihood of getting a ticket for this behavior.
S19	<b>To what extent do you favor or oppose laws that require <u>drivers and front seat passengers</u> to wear seat belts?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's support for, or opposition to, laws requiring drivers and front seat passengers to wear seat belts.
S20	<b>To what extent do you favor or oppose fines for drivers who do not wear seat belts?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on the respondent's support for, or opposition to, fines for drivers who do not wear seat belts.
S21	<b>To what extent do you favor or oppose laws that require <u>back seat adult</u> passengers to wear seat belts?</b>	Question developed using a similar format to model the one above from NHTSA's 2016 MVOSS.	This question provides information on the respondent's support for, or opposition to, laws requiring adult passengers, riding in the back seat, to wear seat belts.
S22	<b>Have you read, seen, or heard anything regarding the importance of seat belts from people or groups in your community? This could be public service announcements on TV, signs on the road, news stories, on social media, through an organization, or something else.</b>	Question developed using a similar format to model the one above from the results of a 2010 working group on public awareness survey recommendations.	This question provides information on whether the respondent has read, seen, or heard anything about the importance of seat belt safety from people or groups in their community in the past 12 months, in order to gauge exposure to seat belt programs.
S23	<b>The next questions are about seat belt laws in your state. Does your state have a law requiring seat belt use?</b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	This question provides information on whether or not the respondent is aware of seat belt laws in their state.
S23a	<b>To the best of your knowledge, who is required to wear seat belts according to your state law? <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2016 MVOSS.	If respondents say their state has a seat belt law in place, this question provides information on whether or not the respondent is aware of who is regulated by seat belt laws in their state.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
S23b	<b>To the best of your knowledge in your state, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	If respondents say their state has a seat belt law in place, this question provides information on whether or not the respondent is aware of the bounds of police discretion regarding traffic stops due to seat belt violations, specifically regarding primary seat belt enforcement.
S24	<b>In your opinion, <u>should</u> police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides information on the respondent's opinions related to whether or not police should be allowed to stop vehicles solely for seat belt violations. This gauges their attitudes toward primary enforcement of seat belt laws.
S25	<b>To what extent do you agree or disagree with the following statement? It is at least as important for police to enforce seat belt laws as it is for police to enforce other traffic laws.</b>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question provides information on the respondent's agreement or disagreement that seat belt laws are at least equivalently important to other traffic laws. This gauges their attitudes toward primary enforcement of seat belt laws.
S26	<b>Have you read, seen, or heard anything about seat belt law enforcement by police?</b>	Adaptation of a question from the results of a 2010 working group on public awareness survey recommendations.	This question provides information on whether the respondent has read, seen, or heard anything about seat belt law enforcement by police in the past 30 days to gauge exposure to seat belt messaging.
<b>Module 2: Distracted Driving</b>			
D1a-D1e	<b>While driving your primary vehicle, how often do you use each of the following built-in features? Features may be used for activities such as calling/texting, navigation, music, or other activities. Please respond how often (from all to none of your trips) if your primary vehicle has that feature. If not, please select ‘My primary vehicle does not have this feature.</b> <b>a. Built-in hands-free Bluetooth capability for connecting a phone;</b> <b>b. A navigation system built into the vehicle;</b> <b>c. Apple CarPlay or Android Auto for viewing smartphone apps on your car display;</b> <b>d. Built-in car radio;</b> <b>e. CD or tape player</b>	Modeled to mirror above item/heavily modified from NHTSA’s 2015 NSDDAB.	This question collects information on the frequency with which the respondent uses hands-free Bluetooth, onboard navigation system, Apple CarPlay/Android Auto, built-in car radio, and/or a CD/tape player in their vehicle if their vehicle is equipped with these built-in features in relation to their total trips, from "All trips" to "None of my trips". It also collects information on whether the primary vehicle has this feature since one option is "My primary vehicle does not have this feature" which is used as a screener on subsequent items. Use of these types of features while driving can lead to distracted driving.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
D2a-D2e	<p>Listed below are different types of portable electronic devices. For each one, we are interested in how often you use the device while driving. <i>Please respond how often (from all to none of your trips) if you own that kind of device. If not, please select 'I don't own this device'.</i></p> <p><b>While driving, how often do you use a...</b></p> <ul style="list-style-type: none"> <li><b>a. Smartphone (with internet connectivity, such as an Android or iPhone);</b></li> <li><b>b. Cell phone without internet (flip-phone or other simple style);</b></li> <li><b>c. Tablet or e-reader, such as an iPad, Fire, or Kindle;</b></li> <li><b>d. Smartwatch, such as an Apple Watch or Fitbit;</b></li> <li><b>e. Bluetooth headset, headphones/earbuds, or other hands-free device for your phone (not built into the vehicle)</b></li> </ul>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the frequency with which the respondent uses a cell phone, smartphone, tablet/e-reader, smartwatch, portable music player, and/or a Bluetooth headset while driving in relation to their total trips, from "All trips" to "None of my trips". It also collects information on ownership of each type of device since one option is "I don't own this device" which is used as a screener on subsequent items. Use of these types of devices while driving can lead to distracted driving.
D3a-D3e	<p>Please consider any time you've used your cell phone while driving including making/receiving calls, texting or emailing, using smartphone apps, etc. In the past 30 days, have you done any of the following with your phone while driving?</p> <ul style="list-style-type: none"> <li><b>a. Touched or picked up the phone;</b></li> <li><b>b. Looked down in your lap, to passenger seat, or cup holder to view phone screen;</b></li> <li><b>c. Unlocked phone using fingerprint, face, or passcode;</b></li> <li><b>d. Typed on car display to interact with a paired phone;</b></li> <li><b>e. Viewed information from a paired phone on car display for more than a moment]</b></li> </ul>	New question developed to collect information about how respondent has engaged with various devices/interfaces.	This question collects information on how drivers have interacted with various devices/interfaces while driving in the past 30 days.
D4	<p><b>Other than navigation apps, which types of smartphone apps do you typically use while driving?</b> <i>Select all that apply. Include all apps used whether it is directly on your smartphone or with a feature such as Apple CarPlay or Android Auto to view the app on your car display.</i></p>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the non-navigation smartphone apps the respondent typically uses while driving. Some examples include social media, YouTube, shopping apps such as Amazon, and the camera app. Use of these types of apps while driving can lead to distracted driving.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
D4a	<b>Other than navigation apps, how often do you use smartphone apps while driving?</b>	New question developed to collect information about frequency of smartphone app use, based on other frequency questions.	For those people who use non-navigation smartphone apps while driving, this question collects information on the frequency with which they use them while driving in relation to their total trips, from "All trips" to "Fewer than half of my trips". Use of these types of apps while driving can lead to distracted driving.
D5	<b>How often do you have navigation apps through (or connected to) a smartphone turned on or in use while driving?</b>	New question developed to collect information about frequency of navigation apps use through a smartphone, based on other frequency questions.	This question collects information on the frequency with which the respondent uses navigation apps through a smartphone while driving.
D5a	<b>When you interact with a navigation app through (or connected to) a smartphone while driving, such as to make changes to your route or destination, do you <u>most often</u>...</b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the respondent's behavior while engaging with smartphone navigation apps while driving.
D6	<b>When you <u>write</u> texts, e-mails, or other messages while driving, do you <u>most often</u>...</b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the respondent's behavior when writing emails or text messages while driving.
D7	<b>When you <u>make or receive</u> calls while driving, do you <u>most often</u>...</b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the respondent's behavior when making or receiving calls while driving.
D8	<b>In which, if any, of the following situations would you <u>never touch or pick up your phone while driving</u>? This includes making/receiving calls, texting or e-mailing, using smartphone apps, etc. <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on times when a driver would never touch or pick up a phone while driving.
D9	<b>Which, if any, of the following describe reasons that you are more likely to use your phone while driving? This includes making/receiving calls, texting or emailing, using smartphone apps, etc. <i>Select all that apply.</i></b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This question collects information on the reasons a respondent is most likely to use their phone while driving.
D10	<b>Would you ever use an app or enable a feature on your cell phone to block phone calls and text messaging while driving?</b>	Adaptation of a question used in NHTSA's 2015 NSDDAB.	This information collects information on whether the respondent reports they would ever use an app or enable features on their phone to block calls and text messages while driving.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
D11	<p><b>How, if at all, would you say your driving behavior is different when you are interacting with your phone? This includes making/receiving calls, texting or emailing, using smartphone apps, etc.</b> <i>For this question, consider all methods of interacting with the phone, including while holding the device, using a speakerphone, or using any type of hands-free voice commands, such as a headset or in-vehicle system or app.</i></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on how the respondent reports changing their driving behavior when they are engaging in a behavior on their phone that requires them to hold, touch, or pick it up.
D12	<p><b>Which, if any, of the following do you think would cause you to use your cell phone less often while driving?</b> <i>Select all that apply.</i></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB (with heavy modifications).	This question collects information on what circumstances would cause the respondent to use their cell phone less often while driving.
D13a- D13e	<p><b>Below is a list of common activities people do while driving. For each activity, we are interested in how often you do each while driving. How often do you...</b></p> <ul style="list-style-type: none"> <li><b>a. Talk or interact with passengers in the vehicle</b></li> <li><b>b. Eat or drink</b></li> <li><b>c. Reach for items elsewhere in the vehicle (passenger side or back seat)</b></li> <li><b>d. Adjust settings on the vehicle dash or radio</b></li> <li><b>e. Do personal grooming (comb hair or apply makeup)</b></li> </ul>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on how frequently the respondent engages in “common activities” while driving.
D14a- D14d	<p><b>How dangerous do you feel the following driving behaviors are?</b> <i>We are interested in your responses even if you do not engage in these activities.</i></p> <ul style="list-style-type: none"> <li><b>a. Holding and talking on a phone while driving</b></li> <li><b>b. Holding and texting, e-mailing, or using apps on a phone while driving</b></li> <li><b>c. Talking on a phone using hands-free technology (Bluetooth, CarPlay, Android Auto, etc.) while driving</b></li> <li><b>d. Texting, e-mailing, or using apps on a phone using hands-free technology (Bluetooth, CarPlay, Android Auto, etc.) while driving</b></li> </ul>	Adaptation of question from AAA’s 2021 Traffic Safety Culture Index. <sup>14</sup>	This question collects information on how dangerous the respondent believes various driving behaviors are.

<sup>14</sup> AAA Foundation for Traffic Safety. (2022). *2021 Traffic Safety Culture Index* (Technical Report). AAA Foundation for Traffic Safety. <https://aaafoundation.org/wp-content/uploads/2022/11/2021-TSCI-Full-Report.pdf>

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
D15a- D15f	<p><b>How safe or unsafe would you feel if you were a passenger riding in a car while your driver was doing each of the following?</b></p> <p><b>a. Talking or interacting with other passengers in the vehicle</b></p> <p><b>b. Eating or drinking</b></p> <p><b>c. Talking on a phone while holding the phone</b></p> <p><b>d. Reading text or e-mail messages</b></p> <p><b>e. Interacting with a navigation system for driving directions</b></p> <p><b>f. Using smartphone apps through a built-in system such as CarPlay or Android Auto</b></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on how safe or unsafe the respondent believes they would feel if riding as a passenger in a vehicle in which the driver was engaging in various behaviors.
D16	<p><b>How likely or unlikely are you to say something to your driver if they appear distracted by their smartphone while driving?</b></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on how likely or unlikely the respondent believes they are to say or do something to a driver if they appear distracted by their smartphone while driving.
D17	<p><b>Thinking about drivers in the US, about how many do you believe at least occasionally use their phone while driving? This could include making/receiving calls, texting or e-mailing, using smartphone apps, etc.</b></p>	New question.	This question collects information on the proportion of drivers in the US that the respondent believes occasionally talk on a cell phone while driving.
D18	<p><b>Assume that you were stopped and fined for using your phone while driving. After receiving the ticket, do you think you would...?</b></p>	Adaptation of a question used in NHTSA’s 2016 MVOSS.	This question collects information on how the respondent believes an individual who uses their cell phone while driving would respond to being stopped and fined for distracted driving.
D19	<p><b>To what extent do you agree or disagree with the following statement? Police in my community generally do not bother to write tickets for distracted driving violations, such as using a cell phone while driving.</b></p>	Modeled on a question used in NHTSA’s 2016 MVOSS.	This question collects information on the extent to which the respondent agrees or disagrees that police in their community do not prioritize distracted driving violations.
D20	<p><b>Does your state have a law that makes it illegal to text while driving?</b></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on whether the respondent knows if their state has a law prohibiting texting while driving.
D21	<p><b>Does your state have a law that makes it illegal to use a handheld cell phone while driving?</b></p>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on whether the respondent knows if their state has a law prohibiting handheld cell phone use while driving.



## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
D22	<b>To what extent do you favor or oppose laws that make it illegal to text while driving?</b>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on whether the respondent supports laws prohibiting texting, e-mailing, or smartphone app use while driving.
D23	<b>To what extent do you favor or oppose laws that make it illegal to use a handheld cell phone while driving?</b>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on whether the respondent supports laws prohibiting handheld phone use while driving.
D24	<b>To what extent do you agree or disagree with the following statement? It is at least as important for police to enforce distracted driving laws as it is for police to enforce other traffic laws.</b>	Modeled on a question used in NHTSA’s 2016 MVOSS.	This question collects information on the extent to which the respondent agrees or disagrees that police in their community should prioritize distracted driving violations at least as much as other traffic laws.
D25	<b>Have you read, seen, or heard any messages that encourage people not to talk on phones, send text or e-mails, or use smartphone apps while driving? This could be public service announcements on TV, signs on the road, news stories, on social media, or something else.</b>	Adaptation of a question used in NHTSA’s 2015 NSDDAB.	This question collects information on whether the respondent has seen or heard any messages that encourage people not to talk on phones, send text or e-mails, or use smartphone apps while driving in the past 30 days.
D26	<b>There are phone apps or features available to block phone calls and text messaging while driving. Before this survey, had you ever heard of this?</b>	New question.	This question collects information on whether or not the respondent was aware of apps with features that block phone calls and messages while driving prior to taking the survey.
<b>Module 3: New Vehicle Technology</b>			
T1	<b><i>Blind Spot Warning</i> is a feature that uses a light or sound to alert a driver that there is a vehicle in their blind spot. Have you ever...</b>	New question developed using descriptions of technology from NHTSA’s website. <sup>15</sup>	This question collects information on the respondent’s personal experiences with Blind Spot Warning technology. Response options range from having driven a vehicle with this technology to never having heard of this technology before.
T2	<b>Is your <i>primary vehicle</i> equipped with <i>Blind Spot Warning</i> technology?</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.” <sup>16</sup>	This question collects information about whether the respondent is aware of their primary vehicle being equipped with blind spot warning technology.

<sup>15</sup> National Highway Traffic Safety Administration. (n. d.) *Driver Assistance Technologies*. <https://www.nhtsa.gov/vehicle-safety/driver-assistance-technologies>

<sup>16</sup> McDonald, A., Carney, C. & McGehee, D. V. (2018). Vehicle owners’ experiences with and reactions to advanced driver assistance systems (Technical Report). AAA Foundation for Traffic Safety. [https://aaafoundation.org/wp-content/uploads/2018/09/VehicleOwnersExperiencesWithADAS\\_TechnicalReport.pdf](https://aaafoundation.org/wp-content/uploads/2018/09/VehicleOwnersExperiencesWithADAS_TechnicalReport.pdf)

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T2a	<b>In general, do you have your <i>Blind Spot Warning</i> feature enabled or disabled? That is, do you keep the feature turned on and able to make alerts, or do you turn it off?</b>	New question.	For drivers with blind spot warning technology, this question collects information on whether or not the respondent generally has it turned on or off.
T2b	<b>Have you ever had an experience in which your <i>Blind Spot Warning</i> helped you? That is, it alerted you at an appropriate time about the driving situation.</b>	New question.	For respondents reporting blind spot warning technology in their primary vehicle, this question collects whether or not they have had an experience where the warning triggered at an appropriate time to alert them while driving.
T2c	<b>Which, if any, of the following have you experienced with your <i>Blind Spot Warning</i> technology? Select all that apply.</b>	New question.	For respondents reporting blind spot warning technology in their primary vehicle, this question collects whether they have had any problems that occurred with the warning while driving, such as alerting at an inappropriate time or failing to alert at an appropriate time.
T3	<b>To what extent do you understand how a driver uses (or what they can expect when using) <i>Blind Spot Warning</i> technology?</b>	New question.	This question collections information on the extent to which a respondent understands how a driver uses blind spot warning technology.
T4a-T4f	<b>Please think about <i>Blind Spot Warning</i> technology based on your experience or general beliefs about this feature. For each of the following statements, to what extent do you agree or disagree?</b> <b>a. I trust and feel safe with this technology</b> <b>b. I find this technology annoying or distracting</b> <b>c. I think this technology reduces stress while driving</b> <b>d. I think this technology increases the risk of a crash</b> <b>e. I think this technology is easy to learn and explain</b> <b>f. I would recommend this technology to other drivers</b>	Modified from AAA's 2018 survey on "vehicle owners' experiences with and reactions to advanced driver assistance systems."	For respondents who report awareness of blind spot warning technology, this item collects the level of agreement or disagreement with statements about the technology's safety and level of risk.
T5	<b><i>Forward Collision Warning</i> is a feature that uses a light or sound to alert a driver of a potential collision with a vehicle ahead. Have you ever...</b>	New question developed using descriptions of technology from NHTSA's website.	This question collects information on the respondent's personal experiences with forward collision warning technology. Response options range from having driven a vehicle with this technology to never having heard of this technology before.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T6	<b>Is your <i>primary vehicle</i> equipped with <i>Forward Collision Warning</i> technology?</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	This question collects information about whether the respondent is aware of their primary vehicle being equipped with forward collision warning technology.
T6a	<b>In general, do you have your <i>Forward Collision Warning</i> feature enabled or disabled? That is, do you keep the feature turned on and able to make alerts, or do you turn it off?</b>	New question.	For drivers with forward collision warning technology, this question collects information on whether or not the respondent generally has it turned on or off.
T6b	<b>Have you ever had an experience in which your <i>Forward Collision Warning</i> helped you? That is, it alerted you at an appropriate time about the driving situation.</b>	New question.	For respondents reporting forward collision warning technology in their primary vehicle, this question collects information about whether they have had an experience where the warning triggered at an appropriate time to alert them while driving.
T6c	<b>Which, if any, of the following have you experienced with your <i>Forward Collision Warning</i> technology? <i>Select all that apply.</i></b>	New question.	For respondents reporting forward collision warning technology in their primary vehicle, this question collects information about whether or not they have had any problems that occurred with the warning while driving, such as alerting at an inappropriate time or failing to alert at an appropriate time.
T7	<b>To what extent do you understand how a driver uses (or what they can expect when using) <i>Forward Collision Warning</i> technology?</b>	New question.	This question collects information on the extent to which a respondent understands how a driver uses forward collision warning technology.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T8a-T8f	<p><b>Please think about <i>Forward Collision Warning</i> technology based on your experience or general beliefs about this feature. For each of the following statements, to what extent do you agree or disagree?</b></p> <p><b>a. I trust and feel safe with this technology</b>  <b>b. I find this technology annoying or distracting</b>  <b>c. I think this technology reduces stress while driving</b>  <b>d. I think this technology increases the risk of a crash</b>  <b>e. I think this technology is easy to learn and explain</b>  <b>f. I would recommend this technology to other drivers</b></p>	Modified from AAA’s 2018 survey on "vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	For respondents who report awareness of forward collision warning technology, this item collects the level of agreement or disagreement with statements about the technology's safety and level of risk.
T9	<p><b><i>Lane Departure Warning</i> is a feature that uses a light or sound to alert a driver if their vehicle approaches or crosses lane markers. Have you ever...</b></p>	New question developed using descriptions of technology from NHTSA’s website.	This question collects information on the respondent’s personal experiences with lane departure warning technology. Response options range from having driven a vehicle with this technology to never having heard of this technology before.
T10	<p><b>Is your <i>primary vehicle</i> equipped with <i>Lane Departure Warning</i> technology?</b></p>	Modified from AAA’s 2018 survey on "vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	This question collects information about whether the respondent is aware of their primary vehicle being equipped with lane departure warning technology.
T10a	<p><b>In general, do you have your <i>Lane Departure Warning</i> feature enabled or disabled? That is, do you keep the feature turned on and able to make alerts, or do you turn it off?</b></p>	New question.	For drivers with lane departure warning technology, this question collects information on whether the respondent generally has it turned on or off.
T10b	<p><b>Have you ever had an experience in which your <i>Lane Departure Warning</i> helped you? That is, it alerted you at an appropriate time about the driving situation.</b></p>	New question.	For respondents reporting lane departure warning technology in their primary vehicle, this question collects information about whether they have had an experience where the warning triggered at an appropriate time to alert them while driving.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T10c	<b>Which, if any, of the following have you experienced with your Lane Departure Warning technology? Select all that apply.</b>	New question.	For respondents reporting lane departure warning technology in their primary vehicle, this question collects information about whether they have had any problems that occurred with the warning while driving, such as alerting at an inappropriate time or failing to alert at an appropriate time.
T11	<b>To what extent do you understand how a driver uses (or what they can expect when using) Lane Departure Warning technology?</b>	New question.	This question collections information on the extent to which a respondent understands how a driver uses lane departure warning technology.
T12a-T12f	<b>Please think about Lane Departure Warning technology based on your experience or general beliefs about this feature. For each of the following statements, to what extent do you agree or disagree?</b> <b>a. I trust and feel safe with this technology</b> <b>b. I find this technology annoying or distracting</b> <b>c. I think this technology reduces stress while driving</b> <b>d. I think this technology increases the risk of a crash</b> <b>e. I think this technology is easy to learn and explain</b> <b>f. I would recommend this technology to other drivers</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	For respondents who report awareness of lane departure warning technology, this item collects the level of agreement or disagreement with statements about the technology’s safety and level of risk.
T13	<b>Backup or Rearview Camera is a feature that uses a screen to display the area behind the vehicle when in reverse gear. Have you ever...</b>	New question developed using description of technology from NHTSA’s website.	This question collects information on the respondent’s personal experiences with backup or rearview cameras. Response options range from having driven a vehicle with this technology to never having heard of this technology before.
T14	<b>Is your primary vehicle equipped with a Backup or Rearview Camera?</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	This question collects information about whether the respondent is aware of their primary vehicle being equipped with backup or rearview camera technology.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T14a	<b>How often do you use your <i>Backup or Rearview Camera</i>?</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	For drivers with backup or rearview camera technology, this question collects information on whether the respondent generally uses their backup camera, ranging from “All trips” to “None of my trips.”
T14b	<b>Have you ever had an experience in which your <i>Backup or Rearview Camera</i> helped you? That is, it enabled you to see a vehicle, pedestrian, or other object behind you that you did not otherwise see.</b>	New question.	For respondents reporting backup or rearview camera technology in their primary vehicle, this question collects information about whether they have had an experience where the camera enabled them to see an obstacle they otherwise would not have.
T14c	<b>Which, if any, of the following have you experienced with your <i>Backup or Rearview Camera</i>? Select all that apply.</b>	New question.	For respondents reporting backup or rearview camera technology in their primary vehicle, this question collects information about problems that have occurred with the camera while driving.
T15	<b>To what extent do you understand how a driver uses (or what they can expect when using) <i>Backup or Rearview Camera</i> technology?</b>	New question.	This question collects information on the extent to which a respondent understands how a driver uses backup or rearview camera technology.
T16a- T16f	<b>Please think about <i>Backup or Rearview Camera</i> technology based on your experience or general beliefs about this feature. For each of the following statements, to what extent do you agree or disagree?</b> <b>a. I trust and feel safe with this technology</b> <b>b. I find this technology annoying or distracting</b> <b>c. I think this technology reduces stress while driving</b> <b>d. I think this technology increases the risk of a crash</b> <b>e. I think this technology is easy to learn and explain</b> <b>f. I would recommend this technology to other drivers</b>	Modified from AAA’s 2018 survey on “vehicle owners’ experiences with and reactions to advanced driver assistance systems.”	For respondents who report awareness of backup or rearview camera technology, this item collects information about the level of agreement or disagreement with statements about the technology's safety and level of risk.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
T17	<b>Think about your driving behavior when you are in a vehicle with features that use a light or sound to alert the driver about something, such as Blind Spot Warning, Forward Collision Warning, or Lane Departure Warning. How, if at all, would you say your driving behavior is different compared to when you are in a vehicle without these features? <i>Select all that apply.</i></b>	Modified from NHTSA's 2015 NSDDAB.	This question collects information about what aspects of driving behavior the respondent believes are different while operating a vehicle with the listed driver assistance technologies compared to without them.
T18	<b>Which, if any, of the following have you used to get information about new vehicle technologies that you may be unfamiliar with? For example, how it works, how to use it, or what to expect when using the feature. <i>Select all that apply.</i></b>	Modified from AAA's 2018 survey on "vehicle owners' experiences with and reactions to advanced driver assistance systems."	This question collects information about the resources the respondent has used to learn about new vehicle technologies.
T19	<b>Generally speaking, how useful do you think driver assistance technologies, like those described in this survey, are in preventing vehicle crashes?</b>	New question.	This question collects information on how useful the respondent believes driver assistance technologies are in preventing vehicle crashes.
T20	<b>To what extent are you concerned, if at all, that drivers using driver assistance technologies may engage in increased distracted driving behavior (such as cell phone use, taking their eyes off the road, or hands off the steering wheel)?</b>	New question.	This question collects the respondent's reported level of concern that drivers using advanced driver safety features may engage in increased distracted driving behavior.
T21a-T21d	<b>Next time you buy or lease a vehicle, will you want it to have each of the following types of driver assistance technologies? a. Blind Spot Warning b. Forward Collision Warning c. Lane Departure Warning d. Backup or Rearview Camera</b>	Modified from AAA's 2018 survey on "vehicle owners' experiences with and reactions to advanced driver assistance systems."	This question collects information about the likelihood the respondent will desire new vehicle technologies in the next vehicle they purchase or lease.
<b>Module 4: Driver Attitudes</b>			
A1	<b>Have you <u>ever</u> been stopped by police for any of the following traffic safety reasons while driving? <i>Select all that apply.</i></b>	Modified from the Bureau of Justice Statistics' 2020 Police-Public Contact Survey. <sup>17</sup>	This question collects information about whether the respondent has ever been stopped by police due to various traffic law infractions.
A1a	<b>In the past 12 months, how many times have you been stopped by police for a traffic safety reason while driving?</b>	New question.	This question collects information about how many times the respondent has been stopped by police for traffic safety reasons in the past 12 months.

<sup>17</sup> Bureau of Justice Statistics. (n. d.) *Police-public contact survey (PPCS)*. <https://bjs.ojp.gov/data-collection/police-public-contact-survey-ppcs>

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
A1b	<b>When you were stopped by police in the past 12 months, did you receive a ticket for any traffic safety violation?</b>	Modified from NHTSA's 2016 MVOSS.	For individuals who have been stopped by law enforcement for traffic safety reasons in the past 12 months, this question collects whether or not the respondent received a ticket.
A1c	<b>How many?</b>	New question.	This question collects the number of tickets a respondent has received among individuals who have been stopped by law enforcement for traffic safety reasons in the past 12 months, and report receiving a ticket.
A2	<b>In the past 12 months, have you received a ticket in the mail for any traffic safety violation identified by camera (such as an automated speed camera or red light camera)?</b>	Modified from NHTSA's 2022 NSSAB.	This question collects information about whether the respondent has received a citation by mail for a traffic safety violation that was identified by a camera.
A2a	<b>How many?</b>	New question.	This question collects how many times the respondent has received a citation by mail for a traffic safety violation that was identified by a camera among individuals who have received at least one in the past 12 months.
A3a-A3f	<b>At each of the following times, do you believe you are more likely, less likely, or just as likely to get a ticket for a traffic safety violation?</b> <b>a. On or around holidays</b> <b>b. During large events, such as sporting events or concerts</b> <b>c. At night</b> <b>d. Early in the morning</b> <b>e. During rush hour</b> <b>f. During bad weather, such as rain or snow</b>	New question.	This question collects information about the respondent's perceived likelihood of receiving a ticket or citation for a traffic safety violation at specified time periods.
A4	<b>Assume that you were stopped and fined for speeding. After receiving the ticket, do you think you would...?</b>	Modeled after item in NHTSA's 2016 MVOSS.	This question collects information about the respondent's perceived likelihood of speeding more or less often following the hypothetical receipt of a speeding ticket
A5	<b>Compared to before the COVID-19 pandemic (March 2020), do you think you are more likely to be stopped by law enforcement, less likely to be stopped by law enforcement, or is it about the same? Please be thinking about your likelihood of being stopped on any given day that you drive.</b>	New question.	This question collects information about the respondent's perceived likelihood of being stopped by law enforcement compared to before the COVID-19 pandemic, when there may have been changes in levels of enforcement.



## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
A6	<b>Thinking about drivers in the US, about how many do you believe have ever been stopped by the police for a traffic safety reason while driving?</b>	New question.	This question collects information about the proportion of US drivers that the respondent believes have ever been stopped by the police for a traffic safety reason while driving.
A7	<b>Thinking about drivers in the US, about how many do you believe at least occasionally drive more than 10 mph over the speed limit?</b>	New question.	This question collects information about the proportion of US drivers that the respondent believes at least occasionally drive more than 10 mph over the speed limit.
A8	<b>Thinking about drivers in the US, about how many do you believe at least occasionally drive a vehicle when they think they've consumed too much alcohol to drive safely?</b>	Adapted from NHTSA's 2022 NSSAB.	This question collects information about the proportion of US drivers that the respondent believes at least occasionally drive a vehicle when they think they've consumed too much alcohol to drive safely.
A9	<b>Thinking about drivers in the US, about how many do you believe would agree to the following statement: Everyone should obey the speed limit, because it's the law.</b>	Adapted from NHTSA's 2022 NSSAB.	This question collects information about the proportion of US drivers that the respondent believes would agree that everyone should obey the speed limit because it is the law.
A10	<b>Thinking about drivers in the US, about how many do you believe would agree to the following statement: Driving over the speed limit is not dangerous for skilled drivers.</b>	Adapted from NHTSA's 2022 NSSAB.	This question collects information about the proportion of US drivers that the respondent believes would agree that driving over the speed limit is not dangerous for skilled drivers.
A11	<b>Thinking about drivers in the US, about how many do you believe would agree to the following statement: There is no excuse for driving while impaired by alcohol.</b>	Adapted from NHTSA's 2022 NSSAB.	This question collects information about the proportion of US drivers that the respondent believes would agree that there is no excuse for driving while impaired by alcohol.
A12	<b>Thinking about drivers in the US, about how many do you believe would agree to the following statement: It's okay to drive after a drink or two if you do not feel intoxicated.</b>	New question.	This question collects information about the proportion of US drivers that the respondent believes would agree that it's ok to drive after a drink or two if you do not feel intoxicated.
A13	<b>To what extent do you agree or disagree with the following statement? All drivers, regardless of demographic or personal characteristics, are equally likely to be stopped by law enforcement if they commit the same traffic safety violation.</b>	New question.	This question collects information about how much the respondent agrees or disagrees that all drivers are equally likely to be stopped by law enforcement if they commit the same traffic violation.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
A14a- A14j	<p><b>How dangerous do you feel the following driving behaviors are?</b>  <i>We are interested in your responses even if you do not engage in these activities.</i></p> <p><b>a. Speeding 15 mph over the speed limit on interstates, freeways, or other highways</b></p> <p><b>b. Speeding 10 mph over the speed limit on residential streets (neighborhood)</b></p> <p><b>c. Driving through a light that had just turned red if I could have stopped safely</b></p> <p><b>d. Driving aggressively (switching lanes quickly, driving very closely behind another car)</b></p> <p><b>e. Driving if I am so tired that I have a hard time keeping my eyes open</b></p> <p><b>f. Driving after drinking enough alcohol that I may be over the legal limit</b></p> <p><b>g. Riding in a car driven by someone who has had too much alcohol</b></p> <p><b>h. Driving when impaired by marijuana</b></p> <p><b>i. Driving while texting, e-mailing, or using apps on a handheld phone</b></p> <p><b>j. Driving without wearing a seat belt</b></p>	Adaptation of question from AAA’s 2021 Traffic Safety Culture Index.	This question collects information about how dangerous the respondent believes specific risky/unsafe, or illegal driving behaviors to be.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
A15a- A15h	<p>How much do you believe people who are important to you, such as friends or family members, would approve or disapprove of each of the following behaviors?</p> <p>a. Driving without wearing a seat belt</p> <p>b. Driving while texting, e-mailing, or using apps on a handheld phone</p> <p>c. Speeding 15 mph over the speed limit on interstates, freeways, or other highways</p> <p>d. Speeding 10 mph over the speed limit on residential streets (neighborhood)</p> <p>e. Driving aggressively (switching lanes quickly, driving very closely behind another car)</p> <p>f. Driving after drinking enough alcohol that I may be over the legal limit</p> <p>g. Riding in a car driven by someone who has had too much alcohol</p> <p>h. Driving when impaired by marijuana</p>	Adaptation of question from AAA’s 2021 Traffic Safety Culture Index.	This question collects information about the level of approval or disapproval the respondent believes that people important to them would express about specified risky/unsafe, or illegal driving behaviors.
A16a- A16g	<p>Assume that you regularly engage in each of the following behaviors over the next six months. For each one, how likely or unlikely do you think you will be to receive a ticket or be stopped by the police?</p> <p>a. Driving without wearing a seat belt</p> <p>b. Driving while texting, e-mailing, or using apps on a handheld phone</p> <p>c. Speeding 15 mph over the speed limit on interstates, freeways, or other highways</p> <p>d. Speeding 10 mph over the speed limit on residential streets (neighborhood)</p> <p>e. Driving aggressively (switching lanes quickly, driving very closely behind another car)</p> <p>f. Driving after drinking enough alcohol that I may be over the legal limit</p> <p>g. Driving when impaired by marijuana</p>	Adapted from question in NHTSA’s 2016 MVOSS.	This question collects information about respondents’ perceived likelihood of enforcement for several risky driving behaviors.

## NTSS Question-by-Question Justification

Question Item ID	Question Text	Source	Purpose
A17	<p><b>How would you feel about using the following measures in your community...</b></p> <ul style="list-style-type: none"> <li><b>a. Roadside checkpoints for drunk or impaired drivers</b></li> <li><b>b. Increased use of red light cameras at intersections</b></li> <li><b>c. Road design changes, like speed humps and traffic circles, to slow down traffic</b></li> <li><b>d. Electronic signs by the road that display the speed of the driver</b></li> <li><b>e. Increased use of automated speed cameras</b></li> <li><b>f. Digital speed signs that change the speed limit on a section of road based on traffic or weather conditions</b></li> </ul>	<p>Modified from NHTSA's 2022 NSSAB; incorporates some items from AAA's 2021 Traffic Safety Culture Index.</p>	<p>This question collects information about the extent to which the respondent feels specific measures of non-traditional traffic enforcement are good or bad for their community.</p>







