

# U.S. Department of Transportation National Highway Traffic Safety Administration



Mr. Scott Schmidt Senior Director, Safety Alliance for Automotive Innovation 1050 K Street, NW Suite 650 Washington, D.C. 20001

Dear Mr. Schmidt:

The National Highway Traffic Safety Administration (NHTSA) is currently planning two key consumer information activities for model year (MY) 2021. The first is the selection of MY 2021 and early introduction MY 2022 vehicles to be tested in NHTSA's New Car Assessment Program (NCAP). The second is the preparation of the brochure, "Purchasing with Safety in Mind: What to Look For When Buying a Vehicle."

As we have for many years through NCAP, we seek your help in providing consumers with valuable safety information about new vehicles. Much of this vehicle information will be published on NHTSA's website. The requested information will also be used by the agency to notify you of vehicles that are determined to be carryover vehicles and therefore must have previously established safety ratings posted on their Monroney labels as required by Section 302 of 49 CFR Part 575, "Consumer information." In addition to this letter, you will receive an email containing a customized Microsoft Excel spreadsheet to provide us with the requested information. Please provide vehicle information for your MY 2021 and early introduction MY 2022 vehicles that have gross vehicle weight ratings (GVWR) of 4,536 kg (10,000 lbs.) or less.

To alleviate test burden and to cover a broad spectrum of vehicles, we have developed the vehicle testing and rating practice outlined in Attachment A. Our experience indicates that in the vast majority of cases, our frontal, side, and rollover ratings apply to all trim lines of a given vehicle model. However, if you believe you have vehicles that do not reflect the practices outlined in Attachment A or the performance of certain trim lines of a particular model differ from the performance of the vehicle's other trim lines, we ask that you list each trim line that you believe is different on a separate row of the Excel spreadsheet provided. Supporting data should also be furnished. We will use this information to make an engineering judgment, before a vehicle is selected, tested, and rated, as to the trim lines and body styles to which NCAP ratings will apply. We consider hybrids and electric vehicles to be separate models. Thus, they should be listed separately on the spreadsheet.

We are again asking you to indicate whether or not your vehicles are equipped with certain advanced driver assistance (ADAS) technologies, specifically Forward Collision Warning (FCW), Lane Departure Warning (LDW), Crash Imminent Braking (CIB), and Dynamic Brake Support (DBS), that conform to NCAP's crash avoidance test procedures. Any vehicle that

offers one or more of the four technologies above and meets the performance criteria in the relevant NCAP test procedure, as indicated by supporting data provided in the Excel spreadsheet you return to us, will be recommended on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. Information such as whether or not the vehicle is equipped with the technology (or technologies) as standard or optional equipment will also be indicated on the website. This approach ensures that consumers will know the specific makes and models that offer the technology (or technologies) and meet NCAP's performance criteria. The information you provide about advanced safety technologies available on your vehicles will play an important role in raising consumer awareness of this critical, emerging area of vehicle safety.

Unlike the approach NCAP takes with frontal, side, and rollover ratings, NCAP does not assume that a technology available on one vehicle is necessarily available on a twin of that vehicle or, for that matter, on all trim lines of the same make and model. Therefore, in situations where (1) only certain trim lines or twins are equipped with a technology offered on a given make and model or (2) the technologies or sensor systems offered on certain trim lines and/or twins differ from one another, we ask that you clarify in your submission.

A listing of the vehicles selected for MY 2021 NCAP tests will be sent to manufacturers of the selected vehicles. A preliminary copy of the following: "MY2021 Vehicle Setup Information – NCAP Frontal, Side Barrier, and Side Pole Tests" and "MY2021 Vehicle Setup Information – 305 for Electric and Hybrid Vehicles" for NCAP crashworthiness testing as well as "MY2021 Vehicle Setup Information" for FCW, LDW, CIB, and DBS tests are included with this letter. These documents are **critical** as they are used during test setup. Thus, we ask that you only provide supplementary information for clarification purposes. We also request this information to be provided **at least three weeks prior to test day** for any vehicle(s) selected. Please note that the documents may be updated during the test year if the need arises.

## THE EXCEL SPREADSHEET

The material below describes the information that is requested in the Microsoft Excel spreadsheet and provides information on how to fill out the spreadsheet.

The columns in the "Information Sheet CW" and "Information Sheet CA" worksheet tabs are labeled using the following format – Q8.1, Q8.2, etc. When multiple columns have the same starting characters, this indicates that information requested in those columns relates to the same general subject, which is noted in the second row of the spreadsheet in an area that spans all of the columns relating to that subject. Each column is in turn numbered with an extension, which is the identifier for the particular information requested in the column involved. In a very small number of cases, there is only one column dealing with a subject, in which case the subject and particular information being requested are both described using the same or very similar language.

Much of the information requested in the Excel spreadsheet is relatively self-explanatory. Basic instructions for each of the cells in a particular column are nonetheless provided below. Detailed explanations are provided in cases where it is warranted. Many of the cells in the Excel spreadsheet have drop down menus containing the options for filling in the cells involved. In the

listing of spreadsheet columns below, the phrase "Drop Down Menu choices" is used to indicate those columns in which a drop down menu should be used to fill in cells in the column. Unless the list of options in the drop down menu is very long, the options contained in said menu will also be indicated. To fill in these cells, please select only from the options available in the drop down menus. When cells do not have a drop down menu, the information should be entered into the cell as free text. Please provide additional explanation in the column reserved for comments (if such a column is provided).

## **INFORMATION SHEET CW (1st Tab)**

## A. Vehicle Information

## Q1 to Q2 – Basic Vehicle Identifying Information

- Q1.1 MANUFACTURER Drop Down Menu: *multiple options to choose from*.
- Q1.2 MAKE <u>Drop Down Menu</u>: *multiple options to choose from*.
- Q1.3 MODEL *Enter the name of a vehicle model.*
- Q2 BODY STYLE <u>Drop Down Menu</u>: *multiple options to choose from*.

## Q3 – Electric Vehicle Information (if electric vehicle)

- Q3.1 TYPE OF ELECTRIC VEHICLE Drop Down Menu: *PHEV*, *MHEV*, *HEV*, *BEV*.
  - o (PHEV = plug-in hybrid electric vehicle, MHEV = mild hybrid electric vehicle, HEV = hybrid electric vehicle, BEV = battery electric vehicle).
  - o If a vehicle has a 48 V MHEV electric system that is subject to FMVSS No. 305 requirements, please choose "MHEV." Otherwise, no selection is necessary.
- Q3.2 OPERATING VOLTAGE SYSTEM (IN VOLTS) Enter the vehicle's operating voltage.
- Q3.3 BATTERY TYPE USED <u>Drop Down Menu</u>: *Li-Ion, NiMH, Other*.
  - o (Li-Ion = Lithium-Ion, NiMH = Nickel Metal Hydride).

## Q4 to Q5 – Type & Uni-body or Frame

- Q4 VEHICLE TYPE CERTIFIED <u>Drop Down Menu</u>: *PC, MPV, Truck*.
- Q5 Is the vehicle uni-body or frame-based? <u>Drop Down Menu</u>: *Uni-body, Frame-based*.

#### Q6 – Performance of Corporate Twins in NCAP Tests

- Q6.1 to Q6.4 Enter the make(s) and model(s) of vehicle(s) that are corporate twins of the vehicle identified at the beginning of the row and would perform the same in each of the NCAP test areas indicated (frontal, side MDB, side pole, and rollover [SSF and dynamic rollover]). Corporate twins are models that are sold under different names by the same or another manufacturer but are identical in performance with respect to one or more of NCAP frontal, side MDB, side pole, and/or rollover attributes.
- Q6.5 CORPORATE TWIN COMMENTS Enter any comments relating to any of the information presented in Q6.1 to Q6.4.

#### Q7 – Seating Position Information

- Q7.1 NUMBER OF SEATING POSITIONS Enter the number of designated seating positions in the vehicle.
- Q7.2 SEATING POSITIONS Enter seating position numbers.

Please use the following seating position designations:

- $\circ$  Front row: 1 left outboard, 2 center, 3 right outboard;
- Second row: 4 left outboard, 5 center, 6 right outboard;
- $\circ$  Third row: 7 left outboard, 8 center, 9 right outboard.
- Larger passenger vans may require use of numbers 10 through 15 for additional seating positions.
- Q7.3 SEATING POSITIONS COMMENTS Enter any comments relating to seating positions.

## Q8 – Drive Type/Wheelbase

- Q8.1 WHAT ARE THE AVAILABLE DRIVE SYSTEM TYPES? <u>Insert Comma Separated Text</u>: *FWD*, *RWD*, *2WD*, *4WD*, *AWD* (you may choose more than one drive system type if the make and model offers more than one option).
- Q8.2 What are the available wheelbase options? Enter wheelbase options.

## Q9 to Q10 – Gross Vehicle Weight Rating (GVWR)

- Q 9 MINIMUM GROSS VEHICLE WEIGHT RATING (LBS) Enter number for minimum GVWR.
- Q10 MAXIMUM GROSS VEHICLE WEIGHT RATING (LBS) Enter number for maximum GVWR.

## Q11 – Body Styles with Different NCAP Safety Ratings

• Q11.1 to Q11.4 – Enter the body styles of any make and model whose safety performance would differ from the basic make and model in the NCAP test areas indicated (Frontal NCAP, Side MDB NCAP, Side Pole NCAP, and Rollover NCAP) if there are any such cases. Please also refer to the guidelines in Attachment A.

## Q12 to Q13 – Availability/Sales

- Q12 AVAILABILITY DATE AT DEALERS Enter date the make and model is projected to be available for sale at dealerships.
- Q13 PROJECTED SALES VOLUME Enter number of units for this make and model your company anticipates selling in the 2021 model year.

#### Q14 – NCAP Results that Carry Over

- Q14.1, Q14.3, Q14.5, and Q14.7 Enter the model year of the vehicle that was <u>last tested</u> and rated by NCAP and whose rating carries over to the current model year vehicle.
- Q14.2, Q14.4, Q14.6, and Q14.8 If the make and model has been tested and rated but the rating does not carry over to the current model year, briefly describe the difference(s) in the current make and model as compared to the previously rated version of the make and model and state specific reasons for the difference(s).

#### **B.** Crashworthiness Information

#### Q15 – Adjustable Upper Shoulder Belt Anchorages

- Q15.1 ADJUSTABLE UPPER SHOULDER BELT ANCHORAGES <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q15.2 ADJUSTABLE UPPER SHOULDER BELT ANCHORAGES SEATING POSITIONS Enter seating position numbers that apply (See Q7 Seating Position Information for numbers).

## Q16 – Seat Belt Pretensioners

- Q16.1 SEAT BELT PRETENSIONERS <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q16.2 SEAT BELT PRETENSIONERS SEATING POSITIONS Enter numbers to indicate seating positions that apply (See Q7 Seating Position Information for numbers).
- Q16.3 SEAT BELT PRETENSIONERS TYPE <u>Insert Comma Separated Text</u>: *Buckle, Anchor, Retractor*.
- Q16.4 SEAT BELT PRETENSIONERS NUMBER OF LEVELS Enter number of levels that apply.
- Q16.5 Are they activated in side MDB, side pole, and/or rollover crashes? Drop Down Menu: Yes, No, N/A (not applicable).
- Q16.6 SEAT BELT PRETENSIONER COMMENTS Enter any comments relating to seat belt pretensioners.

## Q17 – Seat Belt Load Limiter/ Energy Management System (EMS)

- Q17.1 SEAT BELT LOAD LIMITERS OR OTHER EMS <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q17.2 SEAT BELT LOAD LIMITER OR OTHER EMS SEATING POSITIONS Enter numbers to indicate seating positions that apply (See Q7 Seating Position Information for numbers).
- Q17.3 SEAT BELT LOAD LIMITERS OR OTHER EMS TYPE Indicate the type of load limiters or EMS that applies.
- Q17.4 SEAT BELT LOAD LIMITERS OR OTHER EMS NUMBER OF LEVELS Enter number of levels that apply.
- Q17.5 SEAT BELT LOAD LIMITER OR OTHER EMS COMMENTS Enter any comments relating to seat belt load limiters or EMS.

#### Q18 – Seat Belt Reminders (Driver, Front Passenger, Rear)

- Q18.1 SEAT BELT REMINDER INDICATOR SEATING POSITIONS Enter numbers to indicate seating positions that have seat belt reminders (See Q7 Seating Position Information for numbers).
- Q18.2 Driver seat belt reminder indicator that goes beyond what is required by FMVSS No. 208 Drop Down Menu: *Yes*, *No*, *N/A*.
- Q18.3, Q18.5, and Q18.8 For the driver, front passenger, and rear seat, respectively, indicate whether the seat belt reminder indicator is visual, audible, or both <u>Drop Down Menu</u>: *Visual, Audible, Both*.
- Q18.4, Q18.6, and Q18.9 For the driver, front passenger, and rear seat, respectively, enter number(s) to indicate number of seconds/minutes each indicator (visual, audible, or both) remains active. If unlimited, enter "Unlimited."
- Q18.7 Front passenger belt Indicate if the visual reminder is separate from that used for the driver Enter response.

• Q18.10 – REAR SEAT BELT – INDICATE WHETHER OCCUPANT DETECTION IS USED – Does the rear seat belt reminder system use any occupant sensing technology to determine whether or not there is an occupant or occupants in the rear seat? Enter "Yes" or "No" and any clarifying information.

#### Q19 – LATCH

• Q19 – FULL LOWER ANCHOR AND TOP TETHER REAR SEATING POSITIONS – Enter numbers to indicate seating positions where there are complete sets of lower anchors and top tether anchors (See Q7 – Seating Position Information for numbers.)

## Q20 – Side Air Bags (Head, Torso, Pelvis)

- Q20.1, 7, 13 For each side air bag type (head, torso, pelvis) <u>Drop Down Menu</u>: *Standard, Optional, None*.
- Q20.2, 8, 14 Each column has a drop down menu specific to the type of protection the side air bag is intended to provide (head, torso, pelvis). See separately listed items immediately below.
  - O Q20.2 HEAD PROTECTION SIDE AIR BAG TYPE <u>Drop Down Menu</u>: *Curtain, Head/Torso, Head, Tube, None, Other (Head).*
  - O Q20.8 TORSO PROTECTION SIDE AIR BAG TYPE <u>Drop Down Menu</u>: *Torso, Torso/Pelvis, None, Other (Torso)*.
  - O Q20.14 PELVIS PROTECTION SIDE AIR BAG TYPE <u>Drop Down Menu</u>: *Pelvis, Torso/Pelvis, None, Other (Pelvis)*.
- Q20.3, 9, 15 If the side air bag (head, torso, pelvis) is optional, enter the number that represents the percentage of the make and model you expect will be sold with the particular air bag type (head, torso, pelvis).
- Q20.4, 10, 16 Enter numbers to indicate seating positions where each side air bag (head, torso, pelvis) is installed. (See Q7 Seating Position Information for numbers.)
- Q20.5, 11, 17 Indicate the side air bag mount location for each side air bag type (head, torso, pelvis) <u>Drop Down Menu</u>: *Door, Roof, Seat, Sill, N/A (not applicable), See Comment.*
- Q20.6, 12, 18 Enter any comments relating to any side air bag. Please be sure to comment for any side air bag type you answered "See Comment" in columns Q20.5, 11, or 17.

## Q21 – Curtain Air Bag Performance

- Q21.1 IF VEHICLE HAS CURTAIN AIR BAGS, ARE THEY DEPLOYABLE IN A ROLLOVER? Drop Down Menu: Yes, No, N/A (not applicable).
- Q21.2 WHAT IS THE DURATION OF AIR BAG INFLATION? Indicate the length of time curtain air bag remains inflated.

#### Q22 – Side Air Bag Out-of-Position (SAB OOP)

• Q22 – SIDE AIR BAGS MEET OOP TWG CRITERIA? – Specify whether side air bags meet the injury reference values of the July 2003 recommendations of The Side Air Bag Out-

of-Position Injury Technical Working Group (OOP TWG). Please provide supporting test data in the OOP TWG tab of the Excel spreadsheet. NHTSA will conduct tests to randomly check data submitted. Side air bags with supporting data will be noted on NHTSA's website as meeting the OOP TWG criteria. If side air bags meet the criteria and confidentiality is desired, please provide documentation to the Office of Chief Counsel; otherwise, the data can be submitted with your response. Drop Down Menu: Yes, No, N/A (not applicable). Enter "No" if a vehicle (or twin) was previously tested by NCAP, found not to meet the performance criteria, and the vehicle remains unchanged.

## Q23 – Inflatable Knee Bolsters

- Q23.1 INFLATABLE KNEE BOLSTERS <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q23.2 INDICATE SEATING POSITION(S) Enter number(s) to indicate seating position(s) equipped with inflatable knee bolsters. (See Q7 Seating Position Information for numbers.) If the make and model does not have knee bolsters, enter "N/A" (not applicable).
- Q23.3 INDICATE INSTALLATION RATE IF OPTIONAL If knee bolsters are optional, indicate the percentage of the make and model you predict will be sold with knee bolsters. If the make and model does not have knee bolsters, enter "N/A" (not applicable).

## Q24 – Other Air Bags

- Q24.1 OTHER AIR BAG <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q24.2 OTHER AIR BAG TYPE <u>Drop Down Menu</u>: Seat Pan Air Bag, Inflatable Seat Belt Air Bag, Front Center Air Bag, Rear Window Air Bag, Other Type.
- Q24.3 INDICATE INSTALLATION RATE IF OPTIONAL If the other air bag is optional, enter the number that represents the percentage of the make and model you expect will be sold with the air bag.
- Q24.4 OTHER AIR BAG TYPE SEATING POSITIONS Enter numbers to indicate seating positions where each other air bag is installed. (See Q7 Seating Position Information for numbers.)
- Q24.5 OTHER AIR BAG TYPE MOUNT LOCATION Enter the mount location for the other air bag(s).
- Q24.6 OTHER AIR BAG TYPE COMMENTS Enter any comments relating to the other air bag type(s).

#### Q25 – Head Restraints

• Q25.1 – HEAD RESTRAINTS, INDICATE SEATING POSITIONS? – If the vehicle comes equipped with head restraints, enter numbers to indicate seating positions where they are located. (See Q7 – Seating Position Information for numbers.) If not, enter "N/A" (not applicable).

<sup>&</sup>lt;sup>1</sup> https://www.regulations.gov/document?D=NHTSA-1999-5098-0037.

• Q25.2 – DYNAMIC HEAD RESTRAINTS, INDICATE SEATING POSITIONS? – When a vehicle is struck from the rear, a dynamic/active head restraint moves into a position that reduces the gap between the occupant's head and the head restraint in an effort to mitigate whiplash injury. If the vehicle comes equipped with dynamic head restraints, enter numbers to indicate seating positions where they are located. (See Q7 – Seating Position Information for numbers.) If not, enter "N/A" (not applicable).

## C. Other Technologies

## Q26 – Automatic Crash Notification (ACN) or Advanced Automatic Crash Notification (AACN)

- Q26.1 AUTOMATIC CRASH NOTIFICATION (ACN) OR ADVANCED AUTOMATIC CRASH NOTIFICATION (AACN) Drop Down Menu: *Standard, Optional, None.*
- Q26.2 IF ACN/AACN IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE Enter number that represents the percentage of the make and model you predict will be sold with ACN or AACN.
- Q26.3 AUTOMATIC CRASH NOTIFICATION TRIGGER Enter what causes ACN or AACN to activate.
- Q26.4 For AACN, WHAT TYPE OF DATA IS TRANSMITTED? Enter your response.
- Q26.5 Is A SUBSCRIPTION SERVICE REQUIRED? AT WHAT TIME DOES IT EXPIRE? Enter responses to questions.
- Q26.6 DOES THE SYSTEM RELY ON A MOBILE PHONE? <u>Drop Down Menu</u>: Yes, No, N/A.
- Q26.7 ACN/AACN COMMENTS Enter any comments relating to either ACN or AACN.

#### Q27 – Event Data Recorder (EDR)

- Q27.1 EVENT DATA RECORDER (EDR) <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q27.2 If EDR is optional, indicate estimated penetration rate Enter number that represents the percentage of the make and model you predict will be sold with EDR.
- Q27.3 EDR TRIGGER Enter what causes EDR to activate.
- Q27.4 How many seconds of precrash data does the EDR record? Enter number.
- Q27.5 EVENT DATA RECORDER COMMENTS Enter any comments relating to EDR.

#### Q28 – Combined Lateral and Longitudinal Control

- Q28.1 DOES THE VEHICLE HAVE A SYSTEM CAPABLE OF SUSTAINED, SIMULTANEOUS CONTROL OVER THE LATERAL AND LONGITUDINAL VEHICLE MOTION CONTROL SUBTASKS IN CERTAIN CIRCUMSTANCES? If only some of the trim lines of a make and model are equipped with this system, then the feature is optional. The feature should still be considered optional even if one or more of the make and model's trim lines have this system on all vehicles in the trim line. Drop Down Menu: *Standard, Optional, or No.*
- Q28.2 PENETRATION RATE If this system is optional, indicate estimated penetration rate.
- Q28.3 TECHNOLOGY NAME Indicate the name this system is publicly referred to by/marketed as.

- Q28.4 MINIMUM SPEED Enter the minimum effective operating speed of this system (MPH). If this system functions at both lower speeds (e.g., stop and go traffic) and higher speeds (e.g., highway driving), please indicate the minimum functional speed for both functions.
- Q28.5 MAXIMUM SPEED Enter the maximum effective operating speed of this system (MPH). If this system functions at both lower speeds (e.g., stop and go traffic) and higher speeds (e.g., highway driving), please indicate the maximum functional speed for both functions.

## **INFORMATION SHEET CA (2<sup>nd</sup> Tab)**

#### A. Vehicle Information

This is the same information as is requested in the same columns of the "Information Sheet CW." Instructions for these cells are repeated here for your convenience.

#### Q1 to Q2 – Basic Vehicle Identifying Information

- Q1.1 MANUFACTURER <u>Drop Down Menu</u>: *multiple options to choose from*.
- Q1.2 MAKE <u>Drop Down Menu</u>: *multiple options to choose from*.
- Q1.3 MODEL Enter name of vehicle model.
- Q2 BODY STYLE Drop Down Menu: *multiple options to choose from*.

## Q12 to Q13 – Availability/Sales

- Q12 AVAILABILITY DATE AT DEALERS Enter date the make and model is projected to be available for sale at dealerships.
- Q13 PROJECTED SALES VOLUME Enter the number of units of this make and model vehicle your company anticipates selling in the 2021 model year.

#### D. Crash Avoidance Systems

The first four technologies in this section – Forward Collision Warning (FCW), Lane Departure Warning (LDW), Crash Imminent Braking (CIB), and Dynamic Brake Support (DBS) – are recommended to consumers on the NHTSA website, <a href="www.nhtsa.gov">www.nhtsa.gov</a>, if the version(s) of these technologies on a specific make and model meet the performance criteria outlined in the respective NCAP test procedure for the technology. The test procedures for these technologies can be found at the following links:

- FCW https://www.regulations.gov/document?D=NHTSA-2006-26555-0134.
- LDW https://www.regulations.gov/document?D=NHTSA-2006-26555-0135.
- CIB https://www.regulations.gov/document?D=NHTSA-2015-0006-0025.
- DBS https://www.regulations.gov/document?D=NHTSA-2015-0006-0026.

Technology recommendations appear in the specific listings for vehicles that contain the NCAP safety ratings and other vehicle safety-related information. For a vehicle's technology to receive NCAP's recommendation, the vehicle must be specifically listed in the "Information Sheet CA"

tab of the Excel spreadsheet. If a vehicle has two system options for the same technology (such as a low-speed and high-speed CIB system) please list both systems on the <u>same</u> row in the "Information Sheet CA" tab. Please see "Sample CA Worksheet" for an example of how to list vehicles with multiple systems.

We will not recommend a technology for a vehicle based solely on an indication that the vehicle meets NCAP performance criteria for the technology ("Information Sheet CA" Q29.5, 30.5, 31.7, or 32.7). For a vehicle to receive a recommendation from NCAP on www.nhtsa.gov for a given technology, appropriate supporting test data must be provided in the adjacent "CA Data" tab of the Excel sheet to show that the vehicle complies with NCAP test procedure and meets the NCAP performance criteria applicable for that technology. NHTSA will conduct tests to randomly check data submitted. The data must be provided for each make and model and for each technology clone included in the submission. A technology clone is a vehicle that shares not only specific test data with another vehicle in the submission, but also "recommended" status with the other vehicle(s). Thus, if NHTSA selects a vehicle with a recommended technology to verify performance and the vehicle does not meet the NCAP performance requirements, we will remove the "recommended" status not only for that vehicle, but also for all applicable technology clones from our website. The best way to show technology clone data is to list each technology clone and test data that applies to it separately in the "CA Data" tab. If a vehicle has two system options for the same technology (such as a low-speed and high-speed CIB system), please also list those on separate rows in the "CA Data" tab. Vehicles that are indicated as having a technology but do not have supporting test data, will not be credited with having the technology on the NHTSA website (i.e., the vehicle will not receive a recommendation from NCAP for that technology).

Previous model year data may be used if it still applies. For the data to still apply, the hardware and/or software MUST NOT have changed so as to <u>measurably</u> affect the performance of the technology when compared to the previous vehicle model year from which the data is derived.<sup>2</sup> If this is the first time submitting self-reported data for a vehicle make and model, enter test data for the current model year's system in the "CA Data" tab. <u>Note</u>: *Units of measurement must be included with the data or the data will be considered invalid.* 

IMPORTANT NOTE: CAN bus data will not be accepted as the basis for a vehicle's FCW, LDW, CIB, or DBS system being recommended on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. Also, starting with MY 2022 vehicles, the agency will not recommend a vehicle's CIB or DBS system on <a href="www.nhtsa.gov">www.nhtsa.gov</a> unless the target specified in the associated NCAP test procedures (currently the Surrogate Subject Vehicle (SSV)) is used during the manufacturer's validation testing.

## Q29 – Forward Collision Warning (FCW)

Q29.1 – NAME FOR FCW SYSTEM(s) – If the vehicle offers an FCW system, even if it
does not meet NCAP performance criteria, indicate what your company calls the FCW
system(s).

<sup>&</sup>lt;sup>2</sup> NHTSA, in its engineering judgement, may not accept manufacturer self-reported data that is no longer considered relevant to the version of the vehicle and technology clones for which it is submitted.

- Q29.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with an FCW system, then the FCW system is optional.
- Q29.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the FCW system(s) belong(s) to. If FCW comes 'Standard', enter "N/A".
- Q29.4 IF FCW IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with FCW for each FCW system.
- Q29.5 Does the FCW system meet NCAP performance criteria? Specify which system(s)/sensor(s) meet or do not meet. Provide test data for each system/sensor type (if Applicable) in the CA Data tab Indicate whether the FCW system complies with NCAP performance criteria. If one system/sensor type complies with NCAP performance criteria while another system/sensor type does not, please specify in the cell which one does and which one does not meet the criteria. Supporting data must be provided for whichever system/sensor type complies with NCAP performance criteria on the "CA Data" tab. Multiple lines of data may be provided for one vehicle on the "CA Data" tab. Enter "No" if a vehicle (or technology clone) was previously tested by NCAP, found not to meet the performance criteria, and the vehicle/system remains unchanged.
  - O As stated above under "D. Crash Avoidance Systems," if you indicate that an FCW system complies with NCAP performance criteria, test data for the system must also be provided in the "CA Data" tab for NCAP to recommend the technology for the make and model to consumers on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. For a given make and model, provide test data as a separate row on the "CA Data" tab for each FCW system meeting NCAP performance criteria.
- Q29.6(a) IF FCW SYSTEM(S) CARRYOVER, INDICATE EARLIEST MODEL YEAR THAT CARRIES OVER FOR EACH SYSTEM Enter the model year of the vehicle that was tested by your company to self-report FCW performance and whose performance carries over to the current model year vehicle.
- Q29.6(b) IF FCW SYSTEM(S) CARRYOVER, INDICATE IF VEHICLE WAS TESTED BY NCAP AND SPECIFY WHICH MODEL YEAR AND SYSTEM If the vehicle was tested by NCAP, and the technology is a carryover from that model year, please indicate "Yes" and specify which model year was tested. Additionally, if the vehicle was never tested by NCAP, or if it was not tested since the last FCW system change, please indicate this by also entering "Not Tested by NCAP".
- Q29.7 IF FCW SYSTEM(S) DO NOT CARRYOVER, STATE THE REASON FOR THE DIFFERENCE

   If the make and model's FCW performance does not carry over from a previous model year, describe any hardware and/or software difference(s) made for the current model year.
- Q29.8 FCW NCAP TECHNOLOGY CLONES Enter the make(s) and model(s) of vehicles that are FCW technology clones of the vehicle identified at the beginning of the row. A technology clone is a vehicle that shares not only specific FCW test data with another vehicle, but also "recommended" status with the other vehicle(s).

• Q29.9 – ANY ADDITIONAL COMMENTS FOR THE FCW SYSTEM(S) – Provide any other comments relating to FCW.

## Q30 – Lane Departure Warning (LDW)

- Q30.1 NAME FOR LDW SYSTEM(S) If the vehicle offers an LDW system, even if it does not meet NCAP performance criteria, indicate what your company calls the LDW system(s).
- Q30.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with an LDW system, then the LDW system is optional.
- Q30.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the LDW system(s) belong(s) to. If LDW comes 'Standard', enter "N/A".
- Q30.4 IF LDW IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with LDW for each LDW system.
- Q30.5 Does the LDW system meet NCAP performance criteria? specify which system(s)/sensor(s) meet or do not meet. Provide test data for each system/sensor type (if applicable) in the CA Data tab Indicate whether the LDW system complies with NCAP performance criteria. If one system/sensor type complies with NCAP performance criteria while another system/sensor type does not, please specify in the cell which one does and which one does not meet the criteria. Supporting data must be provided for whichever system/sensor type complies with NCAP performance criteria on the "CA Data" tab. Multiple lines of data may be provided for one vehicle on the "CA Data" tab. Enter "No" if a vehicle (or technology clone) was previously tested by NCAP, found not to meet the performance criteria, and the vehicle/system remains unchanged.
  - O As stated above under "D. Crash Avoidance Systems," if you indicate that an LDW system complies with NCAP performance criteria, test data for the system must also be provided in the "CA Data" tab for NCAP to recommend the technology for the make and model to consumers on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. For a given make and model, provide test data as a separate row on the "CA Data" tab for each LDW system meeting NCAP performance criteria.
- Q30.6(a) If LDW SYSTEM(S) CARRYOVER, INDICATE EARLIEST MODEL YEAR THAT CARRIES OVER FOR EACH SYSTEM Enter the model year of the vehicle that was tested by your company to self-report LDW performance and whose performance carries over to the current model year vehicle.
- Q30.6(b) IF LDW SYSTEM(S) CARRYOVER, INDICATE IF VEHICLE WAS TESTED BY NCAP AND SPECIFY WHICH MODEL YEAR AND SYSTEM If the vehicle was tested by NCAP, and the technology is a carryover from that model year, please indicate "Yes" and specify which model year was tested. Additionally, if the vehicle was never tested by NCAP, or if it was not tested since the last LDW system change, please indicate this by also entering "Not Tested by NCAP".
- Q30.7 If LDW SYSTEM(S) DO NOT CARRYOVER, STATE THE REASON FOR THE DIFFERENCE If the make and model's LDW performance does not carry over from a previous model

- year, describe any hardware and/or software difference(s) made for the current model year.
- Q30.8 LDW NCAP TECHNOLOGY CLONES Enter the make(s) and model(s) of vehicles that are LDW technology clones of the vehicle identified at the beginning of the row. A technology clone is a vehicle that shares not only specific LDW test data with another vehicle, but also "recommended" status with the other vehicle(s).
- Q30.9 ANY ADDITIONAL COMMENTS FOR THE LDW SYSTEM(S) Provide any other comments relating to LDW.

## Q31 – Crash Imminent Braking (CIB)

- Q31.1 NAME FOR CIB SYSTEM(S) If the vehicle offers a CIB system, even if it does not meet NCAP performance criteria, indicate what your company calls the CIB system(s).
- Q31.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with a CIB system, then the CIB system is optional.
- Q31.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the CIB system(s) belong(s) to. If CIB comes 'Standard', enter "N/A".
- Q31.4 If CIB IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with CIB FOR EACH CIB SYSTEM.
- Q31.5 WHAT ARE THE CIB TECHNOLOGY MINIMUM OPERATING SPEEDS? SPECIFY IF THERE ARE MULTIPLE SYSTEMS/SENSOR TYPES Enter the minimum speed (in mph) at which CIB effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q31.6 WHAT ARE THE CIB TECHNOLOGY MAXIMUM OPERATING SPEEDS? SPECIFY IF THERE ARE MULTIPLE SYSTEMS/SENSOR TYPES Enter the maximum speed (in mph) at which CIB effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q31.7 Does the CIB system meet NCAP performance criteria? Specify which system(s)/sensor(s) meet or do not meet. Provide test data for each system/sensor type (if applicable) in the CA Data tab Indicate whether the CIB system complies with NCAP performance criteria. If one system/sensor type complies with NCAP performance criteria while another system/sensor type does not, please specify in the cell which one does and which one does not meet the criteria. Supporting data must be provided for whichever system/sensor type complies with NCAP performance criteria on the "CA Data" tab. Multiple lines of data may be provided for one vehicle on the "CA Data" tab. Enter "No" if a vehicle (or technology clone) was previously tested by NCAP, found not to meet the performance criteria, and the vehicle/system remains unchanged.
  - As stated above under "D. Crash Avoidance Systems," if you indicate that a CIB system complies with NCAP performance criteria, test data for the system must

also be provided in the "CA Data" tab for NCAP to recommend the technology for the make and model to consumers on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. For a given make and model, provide test data as a separate row on the "CA Data" tab for each CIB system meeting NCAP performance criteria.

- Q31.8(a) IF CIB SYSTEM(S) CARRYOVER, INDICATE EARLIEST MODEL YEAR THAT CARRIES OVERFOR EACH SYSTEM— Enter the model year of the vehicle that was tested by your company to self-report CIB performance and whose performance carries over to the current model year vehicle.
- Q31.8(b) IF CIB SYSTEM(S) CARRYOVER, INDICATE IF VEHICLE WAS TESTED BY NCAP AND SPECIFY WHICH MODEL YEAR AND SYSTEM If the vehicle was tested by NCAP, and the technology is a carryover from that model year, please indicate "Yes" and specify which model year was tested. Additionally, if the vehicle was never tested by NCAP, or if it was not tested since the last CIB system change, please indicate this by also entering "Not Tested by NCAP".
- Q31.9 If CIB SYSTEM(S) DO NOT CARRYOVER, STATE THE REASON FOR THE DIFFERENCE
   — If the make and model's CIB performance does not carry over from a previous model
   year, describe any hardware and/or software difference(s) made for the current model
   year.
- Q31.10 CIB NCAP TECHNOLOGY CLONES Enter the make(s) and model(s) of vehicles that are CIB technology clones of the vehicle identified at the beginning of the row. A technology clone is a vehicle that shares not only specific CIB test data with another vehicle, but also "recommended" status with the other vehicle(s).
- Q31.11 ANY ADDITIONAL COMMENTS FOR THE CIB SYSTEM(S) Provide any other comments relating to CIB.

#### Q32 – Dynamic Brake Support (DBS)

- Q32.1 NAME FOR DBS SYSTEM(S) If the vehicle offers a DBS system, even if it does not meet NCAP performance criteria, indicate what your company calls the DBS system.
- Q32.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with a DBS system, then the DBS system is optional.
- Q32.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package the DBS system(s) belong(s) to. If DBS comes 'Standard', enter "N/A".
- Q32.4 If DBS is optional, indicate estimated penetration rate for each system Enter number that represents the percentage of the make and model your company predicts will be sold with DBS for each DBS system.
- Q32.5 What are the DBS technology minimum operating speeds? Specify if there are multiple systems/sensor types Enter the minimum speed (in mph) at which DBS effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q32.6 What are the DBS technology maximum operating speeds? Specify if there are multiple systems/sensor types Enter the maximum speed (in mph) at which DBS effectively operates. If there are multiple systems/sensor types that are

- associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q32.7 Does the DBS system meet NCAP performance criteria? specify which system(s)/sensor(s) meet or do not meet. Provide test data for each system/sensor type (if applicable) in the CA Data tab Indicate whether the DBS system complies with NCAP performance criteria. If one system/sensor type complies with NCAP performance criteria while another system/sensor type does not, please specify in the cell which one does and which one does not meet the criteria. Supporting data must be provided for whichever system/sensor type complies with NCAP performance criteria on the "CA Data" tab. Multiple lines of data may be provided for one vehicle on the "CA Data" tab. Enter "No" if a vehicle (or technology clone) was previously tested by NCAP, found not to meet the performance criteria, and the vehicle/system remains unchanged.
  - O As stated above under "D. Crash Avoidance Systems," if you indicate that a DBS system complies with NCAP performance criteria, test data for the system must also be provided in the "CA Data" tab for NCAP to recommend the technology for the make and model to consumers on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. For a given make and model, provide test data as a separate row on the "CA Data" tab for each DBS system meeting NCAP performance criteria.
- Q32.8(a) IF DBS SYSTEM(S) CARRYOVER, INDICATE EARLIEST MODEL YEAR THAT CARRIES OVER for each system Enter the model year of the vehicle that was tested by your company to self-report DBS performance and whose performance carries over to the current model year vehicle.
- Q32.8(b) IF DBS SYSTEM(S) CARRYOVER, INDICATE IF VEHICLE WAS TESTED BY NCAP AND SPECIFY WHICH MODEL YEAR AND SYSTEM If the vehicle was tested by NCAP, and the technology is a carryover from that model year, please indicate "Yes" and specify which model year was tested. Additionally, if the vehicle was never tested by NCAP, or if it was not tested since the last DBS system change, please indicate this by also entering "Not Tested by NCAP".
- Q32.9 IF DBS SYSTEM(S) DO NOT CARRYOVER, STATE THE REASON FOR THE DIFFERENCE If the make and model's DBS performance does not carry over from a previous model year, describe any hardware and/or software difference(s) made for the current model year.
- Q32.10 DBS NCAP TECHNOLOGY CLONES Enter the make(s) and model(s) of vehicles that are DBS technology clones of the vehicle identified at the beginning of the row. A technology clone is a vehicle that shares not only specific DBS test data with another vehicle, but also "recommended" status with the other vehicle(s).
- Q32.11 ANY ADDITIONAL COMMENTS FOR THE DBS SYSTEM(S) Provide any other comments relating to DBS.

#### Q33 – Pedestrian Automatic Emergency Braking (PAEB)

- Q33.1 NAME FOR PAEB SYSTEM(S) If the vehicle offers a PAEB system, indicate what your company calls the PAEB system(s).
- Q33.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with a PAEB system, then the PAEB system is optional.

- Q33.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the PAEB system(s) belong(s) to. If PAEB comes 'Standard', enter "N/A".
- Q33.4 IF PAEB IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with PAEB for each PAEB system.
- Q33.5 Is PAEB DIRECTED AT FORWARD COLLISIONS, REARWARD COLLISIONS, OR BOTH? Drop Down Menu: *Forward, Rearward, Both, or N/A (not applicable).*
- Q33.6 What are the PAEB technology minimum operating speeds? Enter the minimum speed (in mph) at which PAEB effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q33.7 What are the PAEB technology maximum operating speeds? Enter the maximum speed (in mph) at which PAEB effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q33.8 ANY ADDITIONAL COMMENTS FOR THE PAEB SYSTEM(S) Provide any other comments relating to PAEB.

## Q34 – Lane Keeping Support (LKS)

- Q34.1 NAME FOR LKS SYSTEM(S) If the vehicle offers an LKS system, indicate what your company calls the LKS system(s).
- Q34.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with an LKS system, then the LKS system is optional.
- Q34.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the LKS system(s) belong(s) to. If LKS come 'Standard', enter "N/A".
- Q34.4 IF LKS IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM
   Enter number that represents the percentage of the make and model your company predicts will be sold with LKS for each LKS system.
- Q34.5 If Vehicle is equipped with LKS, how does the vehicle intervene? <u>Drop Down Menu</u>: *Steering Torque, Brake Jerk, Other See Comments*.
- Q34.6 What are the LKS technology minimum operating speeds? Enter the minimum speed (mph) at which LKS effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q34.7 What are the LKS technology maximum operating speeds? Enter the maximum speed (mph) at which LKS effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).

- Q34.8 Does the system respond to road edges if there are no lane markings? Drop Down Menu: *Yes*, *No*.
- Q34.9 ANY ADDITIONAL COMMENTS FOR THE LKS SYSTEM(S) Provide any other comments relating to LKS.

## Q35 – Blind Spot Detection (BSD)

- Q35.1 NAME FOR BSD SYSTEM(s) If the vehicle offers a BSD system, indicate what your company calls the BSD system(s).
- Q35.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with a BSD system, then the BSD system is optional.
- Q35.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the BSD system(s) belong(s) to. If BSD comes 'Standard', enter "N/A".
- Q35.4 IF BSD IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with BSD for each BSD system.
- Q35.5 ANY ADDITIONAL COMMENTS FOR THE BSD SYSTEM(S), INCLUDING WHETHER YOUR SYSTEM DETECTS MOTORCYCLES AND PEDALCYCLES Provide any other comments relating to BSD, such as whether or not the system can detect motorcycles and cyclists.

## Q36 – Blind Spot Intervention (BSI)

- Q36.1 NAME FOR BSI SYSTEM(S) If the vehicle offers a BSI system, indicate what your company calls the BSI system(s).
- Q36.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with a BSI system, then the BSI system is optional.
- Q36.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the BSI system(s) belong(s) to. If BSD comes 'Standard', enter "N/A".
- Q36.4 IF BSI IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM
   Enter number that represents the percentage of the make and model your company predicts will be sold with BSI for each BSI system.
- Q36.5 If Vehicle is equipped with BSI, how does the Vehicle intervene? <u>Drop</u> Down Menu: *Steering Torque, Brake Jerk, Other See Comments*.
- Q36.6 What are the BSI technology minimum operating speeds? Enter the minimum speed (mph) at which BSI effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q36.7 What are the BSI technology maximum operating speeds? Enter the maximum speed (mph) at which BSI effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).

• Q36.8 – ANY ADDITIONAL COMMENTS FOR THE BSI SYSTEM(S) – Provide any other comments relating to BSI.

## Q37 – Intersection Safety Assist (ISA)

- Q37.1 NAME FOR ISA SYSTEM(S) If the vehicle offers an ISA system, indicate what your company calls the ISA system(s).
- Q37.2 STANDARD OR OPTIONAL Please specify which system(s)/sensor(s) is 'Standard' or 'Optional'. If only some of the trim lines of a make and model are equipped with an ISA system, then the ISA system is optional.
- Q37.3 PACKAGE NAME(S) OR TRIM LINE(S) (IF APPLICABLE) Please indicate which package(s) or trim line(s) the ISA system(s) belong(s) to. If ISA comes 'Standard', enter "N/A".
- Q37.4 IF ISA IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE FOR EACH SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with ISA for each ISA system.
- Q37.5 If Vehicle is equipped with ISA, how does the vehicle intervene? <u>Drop Down Menu</u>: *Steering Torque, Brake Jerk, Other See Comments*.
- Q37.6 What are the ISA technology minimum operating speeds? Enter the minimum speed (mph) at which ISA effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the minimum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q37.7 What are the ISA technology maximum operating speeds? Enter the maximum speed (mph) at which ISA effectively operates. If there are multiple systems/sensor types that are associated with a vehicle, please provide the maximum operating speeds for all systems/sensor types (e.g., Fusion sensor, Mono Camera Sensor, etc.).
- Q37.8 ANY ADDITIONAL COMMENTS FOR THE ISA SYSTEM(S) Provide any other comments relating to ISA.

## Q38 – Lighting and Visibility

- Q38.1 LOWER BEAM HEADLAMP LIGHT SOURCE <u>Insert Comma Separated Text</u>: *Halogen, HID, LED, Other* You may select more than one of the options available.
- Q38.2 Indicate estimated penetration rate of Lower Beam Headlamp Light Source Enter percentage for each type of headlamp light source selected in Q38.1 in the order of the drop down menu and separated by a comma (example: 10%, 25%, 65%).
- Q38.3 REAR TURN SIGNAL LAMP COLOR? Drop Down Menu: *Red, Amber.*
- Q37.4 SEMIAUTOMATIC HEADLAMP BEAM SWITCHING SYSTEM? <u>Drop Down Menu</u>: *Standard, Optional, None*.
- Q38.5 IF BEAM SWITCHING SYSTEM IS OPTIONAL, INDICATE ESTIMATED PENETRATION RATE Enter number that represents the percentage of the make and model your company predicts will be sold with beam switching.
- Q38.6 AUTOMATIC HEADLAMP LEVELING SYSTEM? <u>Insert Comma Separated Text</u>: *Static, Dynamic, None.*

- Q38.7 INDICATE ESTIMATED PENETRATION RATE OF LEVELING SYSTEM Enter number that represents the percentage of the make and model your company predicts will be sold with an automatic headlamp leveling system.
- Q38.8 LIGHTING OR VISIBILITY COMMENTS Enter any comments relating to lighting or visibility.

#### E. Other Features

## Q39 – Keyless Ignition

- Q39.1 KEYLESS IGNITION? <u>Drop Down Menu</u>: *Standard, Optional, None.*
- Q39.2 If Keyless ignition is optional, indicate estimated penetration rate –
  Enter number that represents the percentage of the make and model your company
  predicts will be sold with keyless ignition.
- Q39.3 If there is an automatic engine shut-off feature associated with the Keyless ignition system, what is the time duration for an idle vehicle engine to shut off? Enter a number that reflects the time (in minutes) before the idle vehicle engine started by keyless ignition will shut off.
- Q39.4 KEYLESS IGNITION COMMENTS Enter any comments relating to keyless ignition.

#### Q40 – Power Windows/Sunroofs Automatic Reversal

- Q40.1 Are the windows and sunroofs with one-touch closing equipped with an automatic reversal system (ARS)? Answer only if the ARS meets the ARS performance specified in ECE R21 and/or S5 of FMVSS No. 118. <u>Drop Down Menu</u>: *Standard, Optional, None*.
- Q40.2 Positions of Auto-Reverse system (ARS) that are certified to the REQUIREMENTS OF FMVSS No. 118 AND/OR ECE 21. Enter numbers for the seating positions that apply (See Q7 Seating Position Information for numbers).

## Q41 – Distraction Lockout

- Q41.1 DISTRACTION LOCKOUT? <u>Drop Down Menu</u>: *Yes, No*.
- Q41.2 DOES THE SYSTEM MEET NHTSA'S GUIDELINES? NHTSA published the Phase 1 Distraction Guidelines on April 26, 2013, Distraction Guidelines for Reducing Visual-Manual Driver Distraction during Interactions with Integrated, In-Vehicle, Electronic Devices. The Phase 2 Distraction Guidelines were published on December 5, 2016, Distraction Guidelines for Portable and Aftermarket Devices. Drop Down Menu: Phase 1, Phase 2, Phases 1 & 2, None, non-NHTSA Guidelines.
- Q41.3 INDICATE ESTIMATED PENETRATION RATE FOR SYSTEMS THAT MEET NHTSA'S GUIDELINES Enter the number that indicates the percentage of the make and model you expect will be sold meeting NHTSA's Distractions Guidelines.

We are providing a customized Microsoft Excel spreadsheet via email to gather this information. Receiving this information in varying formats requires considerable time to reformat. Please use, but **do not modify**, the provided Microsoft Excel spreadsheet to submit your information. **In particular, please do not merge cells, rows, or columns**. For each feature, use the

appropriate column(s) to supply information. In most cases, comment fields are provided to explain any additional information related to each feature.

The separate "CA Data" tab is provided in the Excel spreadsheet for manufacturer self-reported ADAS data. Requested data **must** be provided in this tab for the agency to recommend the technology to consumers. Therefore, as previously indicated, unless (1) a vehicle is specifically listed as having an ADAS technology in the "Information Sheet CA" tab of the Excel spreadsheet, and (2) test data to show that the vehicle meets the related NCAP performance criteria is specifically provided for the vehicle in the "CA Data" tab, it will not be accredited as having that technology in the "Purchasing with Safety in Mind: What to Look For When Buying A Vehicle" brochure or on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. We will not assume that a vehicle listed as a twin in other areas of the Excel spreadsheet is an ADAS technology clone. All vehicles, including clones, should be listed separately in the "CA Data" tab as having a technology. For vehicles whose ADAS technology performs the same as a previous version of the vehicle, as evidenced by manufacturer self-reported data, the previously submitted data may serve as manufacturer self-reported data for the current model year vehicle. However, the self-reported data must again be provided in the "CA Data" tab for the recommendation on <a href="www.nhtsa.gov">www.nhtsa.gov</a> to apply to the current model year.

As in the past, NCAP is requesting that detailed side air bag out-of-position (SAB OOP) test data continue to be submitted via the Microsoft Excel spreadsheet. Similar to the policy in place for the "CA Data" tab, unless a vehicle is specifically listed as meeting SAB OOP requirements and supporting test data is provided in the "OOP TWG" tab of the Excel spreadsheet, it will not receive a "Yes" for "Meets Side Air Bag Out-of-Position Testing" on <a href="www.nhtsa.gov">www.nhtsa.gov</a>. Please list each vehicle model separately. For ease of compiling information, please report only the numeric values in the appropriate cells; **do not include units**. Units are provided at the top of each column where applicable. Also, as with the other Excel sheets, **please do not merge cells, rows, or columns**. Note that, for vehicle models that have second-row or third-row seatmounted SABs, the applicable section must be completed for the vehicle model to receive a "Yes."

Please submit the requested information electronically to Ms. Johanna Lowrie of the New Car Assessment Program by **June 19, 2020**. Her email address is johanna.lowrie@dot.gov.

If your response contains confidential business information that you do not want to be subject to public release, you must submit a written request for confidential treatment addressed to Chief Counsel, Office of Chief Counsel (NCC-010), NHTSA, 1200 New Jersey Ave. S.E., Washington, D.C. 20590.

The regulations governing requests for confidential treatment are found in the agency's regulations concerning confidential business information, 49 CFR Part 512. Submitters must provide copies of the materials containing confidential information and a copy with the confidential information removed. Generally, this requirement is met by providing two

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<sup>&</sup>lt;sup>3</sup> See footnote 2 earlier in this letter.

confidential copies and a "public" copy with the confidential information removed. *See* 49 CFR 512.5.

All materials for which confidential treatment is claimed must be clearly marked and identified as confidential. Information provided on a CD/DVD/flash drive, as well as the disk/drive itself, must also be clearly marked. If entire pages are claimed as confidential, they should be marked as "Entire Page Confidential", or the equivalent. Portions of individual pages that are claimed as confidential should be marked with brackets or similar markings that clearly delineate the information at issue. Individual pages of confidential materials should have unique identifiers, such as numbered pages or Bates numbers, to allow the positive identification of pages or sections for which confidential treatment is either granted or denied. See 49 CFR 512.6.

Section 512.4(b) of 49 CFR Part 512 requires that all requests for confidential treatment be accompanied by a certification conforming to the example provided in Appendix A to Part 512. Any request for confidential treatment that is not accompanied with this certification will be denied. Materials or data generated by, or under the control of, parties other than the submitter must be accompanied by a certification from that entity. *See* 49 CFR 512.9.

Submitters must describe the information for which confidential treatment is being requested, identify the confidentiality standard(s) under which their request should be evaluated and justify the basis for any claim of confidentiality. See 49 CFR § 512.8(a), (b), and (c).

If you have any questions concerning your claim for confidential treatment, please contact the NHTSA Office of Chief Counsel, at (202) 366-2992. For questions concerning this letter, please contact Ms. Johanna Lowrie at (202) 366-5269 or johanna.lowrie@dot.gov.

In closing, I would like to thank you in advance for your efforts in helping us develop and disseminate this information to consumers. The brochures and the vehicle safety information posted on the agency's website provide valuable information to the American public, and neither would be possible without your assistance.

Sincerely,

Jennifer N. Dang, Division Chief New Car Assessment Program

#### Attachments:

MY2021 BSC Spreadsheet

MY2021 BSC Updates

MY2021 Attachment A – NCAP Vehicle Rating Practice

MY2021 Sample CA Worksheet

MY2021 Vehicle Setup Information – NCAP Frontal, Side Barrier, and Side Pole Tests

MY2021 Vehicle Setup Information – NCAP Forward Collision Warning Test

MY2021 Vehicle Setup Information – NCAP Lane Departure Warning Test

MY2021 Vehicle Setup Information – NCAP Automatic Emergency Braking (CIB-DBS)

MY2021 Vehicle Setup Information – 305 for Electric and Hybrid Vehicles