Toyota's Response to EA 19-001

1. State, by model and model year, the number of subject vehicles Toyota has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Toyota, state the following:

   a. Make;
   b. Model;
   c. Model Year;
   d. The part number(s) (service and engineering) of the subject component.

   Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA."

Response 1

The number of the subject vehicles manufactured for sale or lease in the United States and federalized territories by model year is as follows:

Make	Model	Model Year	Number of Vehicles Manufactured
Toyota	Avalon	2012 to 2018	258,358
Toyota	Avalon Hybrid	2013 to 2018	63,785
Toyota	Corolla	2011 to 2019	2,576,026
Toyota	Corolla Matrix	2011 to 2013	10,238
Toyota	Sequoia	2012 to 2017	77,887
Toyota	Tacoma	2012 to 2019	1,515,546
Toyota	Tundra	2012 to 2017	676,014
Total			5,177,854

Table 1: Number of subject vehicles manufactured for sale or lease

In addition, the detailed information responsive to "a" through "d" is provided electronically on a removable flash drive in Microsoft Excel format entitled "Attachment-Response 1" stored in the folder "Attachment-Response 1." Toyota has provided the information in Microsoft Excel as it was determined that this format allows for an easier understanding of the information requested.

The total number of Corolla vehicles noted above includes 41,568 vehicles manufactured from July 2011 to September 2011 with airbag control units from a supplier other than ZF-TRW and containing the part number 89170-12A80. This was due to a supply disruption as a result of the Japan earthquake in 2011.

2. State, by model and model year the number of each of the following, received by Toyota, or of which Toyota is otherwise aware, which relate to, or may relate to, the alleged defect in in the subject vehicles:

   a. Consumer complaints, including those from fleet operators;
   b. Field reports, including dealer field reports;
   c. Reports for ACUs returned from the field or from test vehicles;
   d. Reports involving a crash, injury, or fatality;
   e. Property damage claims; and
   f. Third-party arbitration proceedings where Toyota is or was a party to the arbitration; and
   g. Lawsuits, both pending and closed, in which Toyota is or was a defendant or codefendant.

   For subparts "a" through "g," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

   In addition, for items "d" through "g," provide a summary description of the alleged problem and causal and contributing factors and Toyota's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "f" and "g," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Response 2

The number of the items requested in subparts a. through g. which relate to, or may relate to, the Alleged Defect in the Subject Vehicles are provided electronically on a removable flash drive in PDF format entitled "Attachment-Response 2-1.pdf" stored in the folder "Attachment-Response 2." For all reports being provided, multiple incidents involving the same vehicle are counted separately, and multiple reports of the same incident are also counted separately. For items "d" through "g," the additional requested information, where available, is also provided electronically on a removable flash drive in PDF format entitled "Attachment-Response 2-2.pdf" stored in the folder "Attachment-Response 2."

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

   a. Toyota's file number or other identifier used;
   b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
   c. Vehicle owner or fleet name (and fleet contact person), street address, email address, and telephone number;
   d. Vehicle's VIN;
   e. Vehicle's make, model and model year;
   f. Vehicle's mileage at time of incident;
   g. Incident date;
   h. Report or claim date;
   i. Whether a crash is alleged.
   j. Whether property damage is alleged;
   k. Number of alleged injuries, if any;
      i) The AIS score of the injuries; and
      ii) Description of injury and location.
   l. Number of alleged fatalities, if any; and
   m. All applicable indicators for the Alleged Defect (items A through H, as identified above).

   Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

Response 3

The information "a" through "m" for each item (complaint, report, etc.), where available, is provided electronically on a removable flash drive in in Microsoft Excel format entitled "Attachment-Response 3" stored in the folder "Attachment-Response 3." Toyota has provided the information in Microsoft Excel as it was determined that this format allows for an easier understanding of the information requested.

As it is possible that a unique VIN could have information contained in multiple sources (i.e., a field report and a consumer complaint), Toyota is reporting the information associated with each individual item in response to the request. Concerning subpart k. i.), Toyota is providing available injury information, but is not trained in the use of the Abbreviated Injury Scale and is not assigning a score.

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Toyota used for organizing the documents. Describe in detail the search methods and search criteria used by Toyota to identify the items in response to Request No. 2.

Response 4

Records of consumer complaints and related documents, copies of Toyota field reports and related documents, and documents related to the claims and notices, where available, are all provided electronically on a removable flash drive in PDF format stored in the folder "Attachment-Response 4." The records of consumer complaints and related documents are stored in the sub-folder "Consumer Complaints." Copies of Toyota field reports and related documents are stored in sub-folder "Field Reports (Conf Bus Info)." Copies of claims and notices and related documents are stored in the sub-folder "Claims and Notices."

The search methods and search criteria used by Toyota to identify the items listed in Request No. 2 are as follows:

Toyota searched the customer complaints databases, as well as databases that contained customer survey information, for the Subject Vehicles. Keywords listed in the endnote to this response relating to the Alleged Defect were searched, and each complaint was reviewed to determine whether it was responsive to the request. The field report databases were searched for any Toyota field reports and dealer field reports, including dealer Technical Assistance System (TAS) cases, for the Subject Vehicles containing the keywords listed in the endnote. The results were reviewed to determine whether they were judged to be responsive to the request. Lawsuits, legal claims, and third-party arbitration files were searched for any proceedings for the Subject Vehicles where airbag non-deployment allegations were made that also involved a crash and alleged an injury or a fatality. The results were then reviewed to determine whether they were judged to be related to, or may be related to the Alleged Defect, as defined.

5. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Toyota. For each such action, provide the following information:

   a. Action title or identifier;
   b. The actual or planned start date;
   c. The actual or expected end date;
   d. Brief summary of the subject and objective of the action;
   e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
   f. Brief summary of the findings and/or conclusions resulting from the action.

   For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Response 5

The actions responsive to this request are summarized in a table entitled "Attachment-Response 5 (Conf Bus Info).pdf" and is provided electronically on a removable flash drive in PDF format stored in the folder "Attachment-Response 5 (Conf Bus Info)." In addition, the documents provided represent assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to the Alleged Defect in the Subject Vehicles that have been conducted.

As discussed with the Office of Defects Investigation on August 22, 2019, some of the documents to be provided require translation from Japanese to English. These Japanese documents and their translations will be provided at a later time.

Please note that information provided in this response is confidential, and a request for confidential treatment has been submitted to the Office of Chief Counsel. Please see the documents submitted to the Office of Chief Counsel for the confidential versions of these documents.

6. Testing by multiple parties indicates that negative voltage transients, with respect to chassis ground, on the satellite sensor signal wires are capable of producing the EOS damage to the DS84 ASIC which leads to resets and/or shutdown of the ACU during crash events. Separately from Response 5, describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect which evaluates performance of the Subject Component ACU designs and/or peer ACU designs, from any ACU supplier including ZF, for transient voltage susceptibility on the satellite crash sensor, battery power, or ground wires, that have been conducted, are being conducted, are planned, or are being planned by, or for, Toyota. For each such action, provide the following information:

   a. Action title or identifier (can be cross referenced to actions provided in Response 5;
   b. The actual or planned start date;
   c. The actual or expected end date;
   d. Brief summary of the subject and objective of the action;
   e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
   f. Copies of all procedures used to conduct the tests, along with a list of test equipment utilized for the tests; and
   g. A summary of the findings and/or conclusions resulting from the action.

   For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Response 6

Work on this matter is ongoing, so Toyota cannot confirm that there is a direct relationship between EOS damage to the DS84 ASIC from negative voltage transients during a real-world crash event and an air bag non-deployment.

The actions responsive to this request as part of the overall ongoing investigation into this matter are contained in a table entitled "Attachment-Response 5 (Conf Bus Info).pdf" and is provided electronically on a removable flash drive in PDF format stored in the folder "Attachment-Response 5 (Conf Bus Info)." In addition, the documents provided represent assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to the Alleged Defect in the Subject Vehicles.

As discussed with the Office of Defects Investigation on August 22, 2019, some of the documents to be provided require translation from Japanese to English. These Japanese documents and their translations will be provided at a later time.

Please note that information provided in this response is confidential, and a request for confidential treatment has been submitted to the Office of Chief Counsel. Please see the documents submitted to the Office of Chief Counsel for the confidential versions of these documents.

7. For every Subject Component ACU design which shares a similar satellite sensor protection design (i.e. equivalent circuit protection devices providing similar levels of negative transient protection), provide the following:

    a. A simplified ACU circuit showing the protection devices for each satellite sensor line along with any current limiting devices incorporated into the ACU power circuitry separate from the satellite sensor communication lines. Additionally, the data sheet for each device shown in the circuit diagram shall be included with this submission.

    b. The level of negative transient protection specified, in both voltage level and duration at that voltage level. If available, include a voltage versus duration curve (i.e. the envelope) depicting the protection capability. If the negative transient protection has been evaluated using a different electrical measurement/metric (i.e. current, power, or other parameter), provide a detailed explanation of the parameter used and provide duration and parameter versus duration information as requested above for voltage.

    c. All actions identified in Response 6(a) which apply to each particular ACU design.

Response 7

As discussed with the Office of Defects Investigation on August 22, 2019, Toyota requested and was granted an extension until September 13, 2019 to respond to this Request with available information.

8. Provide the following information for each unique part number identified in response 1(e):

   a. Original design specification sent to supplier;
   b. All modifications or changes made by, or on behalf of, Toyota in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles;
   c. The date or approximate date on which the modification or change was incorporated into vehicle production;
   d. A detailed description of the modification or change;
   e. Whether the modified component can be interchanged with earlier production components; and
   f. The applicable simplified circuit identified in Response 7.

   Also, provide the above information for any modification or change that Toyota is aware of which may be incorporated into vehicle production within the next 120 days.

Response 8

The information requested in subpart a. is provided in the folder entitled "Attachment-Response 8-1 (Conf Bus Info)" and is provided electronically on a removable flash drive in Microsoft Word format stored in the folder "Attachment-Response 8 (Conf Bus Info)."

In addition, Toyota has summarized the modifications or changes, made by or on behalf of Toyota, in the design, material composition, manufacture, quality control, supply, or installation of the Subject Component about which it is aware without regard to whether they relate to, or may relate to, the Alleged Defect in the Subject Vehicles, because such relationship is not known. The response provided is based in part on information provided by the supplier of the Subject Components. That supplier may have other information not made available to Toyota. We are providing this information electronically on a removable flash drive in PDF format entitled "Attachment-Response 8-2 (Conf Bus Info).pdf" stored in the folder "Attachment-Response 8 (Conf Bus Info)."

Toyota is not aware of any change that may be incorporated into vehicle production within the next 120 days.

As discussed with the Office of Defects Investigation on August 22, 2019, Toyota requested and was granted an extension until September 13, 2019 to respond to Request 7. Toyota will provide available information for subpart 8.f. at the time of the response to Request 7.

Please note that information provided in this response is confidential, and a request for confidential treatment has been submitted to the Office of Chief Counsel. Please see the documents submitted to the Office of Chief Counsel for the confidential versions of these documents.

9. For the subject vehicles, provide for each model and model year, a list of all possible fault codes and/or diagnostic trouble codes stored in the ACU or other modules located anywhere on the vehicle which could be associated with the alleged defect. For each fault code provide:
   a. The identifier for the code;
   b. The module or other hardware which contains the code;
   c. A description of the code;
   d. The conditions which result in the code being set; and
   e. The tools, software, and procedures required to download the code.

Response 9

As discussed with the Office of Defects Investigation on August 22, 2019, Toyota requested and was granted an extension until September 13, 2019 to respond to this Request with available information.

10. Produce engineering drawings, photos, and/or documents for each unique design version of the Subject Vehicles related to the electrical wiring configurations forward of the firewall:
    a. Original design specification;
    b. Modified design specification
    c. Location(s) of the front impact sensors; and
    d. Description of every unique bundle cross-section including:
       i) Descriptions of each wire in the bundle cross section;
       ii) Indicate whether the wire is connected to the ACU and whether the wire also connects to a DS84 ASIC
       iii) The voltage and current load specifications for each wire;
       iv) Description of any electrical shielding techniques applied to a wire or a sub-group of wires (twisted pair, foil shielding, etc.)

    Also, provide the above information for any modification or change that Toyota is aware of which may be incorporated into vehicle production within the next 120 days.

Response 10

As discussed with the Office of Defects Investigation on August 22, 2019, Toyota requested and was granted an extension until September 20, 2019 to respond to this Request with available information.

11. Furnish Toyota's assessment of the alleged defect in the subject vehicle, including:

    a. The causal or contributory factor(s);
    b. The failure mechanism(s);
    c. The failure mode(s);
    d. Any prior safety recalls Toyota has conducted to address EOS related failures of the subject ACU, the remedy that was utilized in that recall action, and how, in Toyota's assessment, that action addresses any residual risk of an EOS failure of the DS84 ASIC;
    e. The risk to motor vehicle safety that it poses;
    f. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning.

Response 11

Toyota currently has an active investigation underway that is focused on assessing the Alleged Defect in the Subject Vehicles. As such, it is only possible to provide a preliminary assessment in response to this Request. Evaluation to date by Toyota has not confirmed that there is a direct relationship between EOS damage to the DS84 ASIC from negative voltage transients during a real-world crash event and an air bag non-deployment.

Design of the Subject Component

The Air bag Control Units (ACU) in the Subject Vehicles was developed and designed by ZF-TRW (or its predecessor entities), a Tier 1 supplier to Toyota, using its own proprietary technologies. For the Subject Vehicles, Toyota provided ZF-TRW with information about the characteristics of each unique model in relation to their air bag systems. The information was principally focused on crash sensing and airbag deployment timing so that the supplier could provide Toyota with a fully functioning component that would control the "no fire" and "must fire" thresholds for each airbag in each model as specified by Toyota. Toyota provided various general specifications for electrical performance, but did not specify a value for the resistance of the ACU to negative voltage transients. The details of the internal design and the electronics used to accomplish the air bag function specified by Toyota were left to ZF-TRW. Toyota expected the supplier to design and develop the ACU to perform appropriately given its proprietary technologies.

ZF-TRW equipped its ACUs with a particular Application Specific Integrated Circuit (ASIC) as part of the internal control technology known as the DS84 ASIC. All of the Subject Vehicles (except certain Corollas as noted in response to Request No. 1) contain the DS84 in their ACU's; the ACU with the DS84 is designated by the supplier as either a GEN 6.7 and 6.8 ACU. We are advised by ZF-TRW that this ACU has features to mitigate the effects of negative voltage transients that may occur.

On-going Investigation

As described in Response to Request No. 5 and its attachments, Toyota's current investigation has focused on three main areas: recovery of field parts for further investigation, strength testing of the DS84 ASIC, and stress testing of this ASIC. This aspect of the investigation evaluates the performance of the DS84 ASIC when exposed to different levels of potential negative transients in different model vehicles.

To date, over 200 ACUs of various models and model years have been recovered from the field, and more than 50 new ACUs have also been obtained for analysis. With regard to strength testing, more than 185 ACUs have been bench tested to understand the possible conditions under which an ACU reset may occur by exposing it to various voltages with various time periods through the air bag sensor line. Toyota has not observed any pattern among the various production years of the tested ACUs. Certain diodes in the production ACUs provided resistance to negative transients when compared to ACUs which were modified to remove these diodes. The strength of the ACU under different timing conditions up to 200 microseconds did not appear to create a noticeable difference in strength values. However, due to the method used to conduct the bench testing, it is believed that the bench test condition is *more* severe than what might be experienced under actual vehicle conditions.

With regard to stress testing performed on the ACUs, this is done using a vehicle environment, but in a static manner. The method attempts to measure potential induced transient noise from other electrical components in the engine compartment of vehicles which have wire harness routing in parallel with the front air bag sensor wire harness. This would include electrical components such as the radiator fan, headlamps, horn, outside temperature sensor, among others. In addition to assessing potential induced electrical noise from other vehicle systems, the effect of negative transient surge from short circuiting of these systems is also being investigated. The testing includes a grounding potential test, which evaluates whether there is an electrical potential difference of the engine compartment ground versus the vehicle cabin ground.

To date, testing has been completed on one model and plans are in place to evaluate the different wiring architecture and systems in the Subject Vehicles. Preliminary results indicate that the influence of induction noise is extremely small, and it is unlikely to cause damage to the ACU. For the electrical grounding potential, Toyota's assessment is that the grounding path is unlikely to significantly contribute to the flow of transients within the vehicle's electrical system.

Induced noise testing was also performed under various conditions to investigate the effect of induced electrical noise on the satellite crash sensor wire harness when the power supply lines of various vehicle system components were short circuited to ground. The influence of induction noise was found to be extremely small, with damage to the ACU unlikely.

Negative surge testing was also performed to investigate the effect of electrical surge on the satellite sensor wire harness when the satellite sensor is short circuited to ground. Preliminary results indicate that the noise level from a ground short is unlikely to cause damage to the ACU. Negative surge

testing was also performed to investigate the effect of electrical surge when both the satellite sensor wire harness and other component electrical supply is interrupted. In only one instance was the ACU affected, but that involved a continuously operating horn. Based on the test protocol and the horn's electrical signal during continuous operation, this tested mode is unlikely in real world crash events due to the specific sequence and timing necessary to generate an ACU reset.

As part of this on-going assessment, Toyota continues to investigate whether the strength testing data from the bench testing can be compared to the static vehicle stress testing. In addition, whether a potential ACU reset can affect the deployment of the air bags in different crash scenarios has not been determined. An assessment of the possibility of random and unique DS84 malfunctions or damage existing prior to a crash event and causing air bag mis-operation must also be made.

Future Activities

As described in Response to Request No. 5 and its attachments, Toyota continues to move forward with its evaluation activities. It will continue strength and stress testing on additional models of the Subject Vehicles. It has also obtained various models of the Subject Vehicles and is planning to undertake vehicle crash testing as part of its assessment process.

ZF-TRW conducted a series of static transient tests and crash tests on selected vehicles as part of its evaluation of the ACU it supplied to Toyota. Toyota has not completed its analysis of the test data it was provided to allow it to understand the test methodology and to determine if relevant conclusions can be drawn from it.

Prior Recalls on Subject Component

Concerning Request 11d., Toyota has not conducted any safety recalls to address EOS related failures of the Subject ACU.

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Data provided in this document is current as of the following dates:

Response		Dates
Response 1	Production Data	07/16/2019
Response 2-4	Consumer complaints	07/16/2019
	Surveys (PQS / DPQS)	07/12/2019
	Surveys (PLS / VSS)	07/17/2019
	Surveys (Ad Hoc)	07/16/2019
	Field Reports	07/16/2019
	Dealer Field Reports (including TAS)	07/16/2019
	Property damage claims	07/16/2019
	Third Party Arbitration	07/22/2019
	Claims and Notices	07/16/2019
	Lawsuits including Lemon Law	07/16/2019
Response 5	Actions	07/16/2019
Response 6	Actions for Subject or Peer ACU	07/16/2019
Response 8	Modifications/Changes	7/29/2019

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In responding to this Information Request, Toyota interpreted the definition of Alleged Defect to include only those failures of the ACU to maintain full operational function during a crash event. For this reason, Toyota did not search for incidents that did not involve a crash event. However, in the course of collecting information for this response, Toyota identified information about two incidents of apparent EOS to a DS84 ASIC that are not associated with a crash event. Toyota is noting these incidents here, even though not related to the Alleged Defect, because it believes that they may be of interest to NHTSA. Information related to these incidents is provided electronically on a removable flash drive in PDF format stored in the folder "Attachment-Response Endnote (Conf Bus Info)."

Toyota searched for the information that could potentially relate to the Alleged Defect in its databases and systems using keywords. The keywords used in that search are as follows; "SRS," "airbag," "airbags," "bag," "bags," "deploy," "deployed," "deployment," "non-deploy," "non-deployed," "non-deployment," "collision," "crash," "crashed," "wreck," "wrecked," "wrecks," "accident," "accidentally," "impact," "impacted," "impacts," "rolled," "rollover," "roll-over," "t-bone," "t-boned," "boned," "bone," "flips," "flip," "flipped," "hit," and "hitting." Searches were also made of matters involving crash events considering "indications" A. through H. as noted in the definition of Alleged Defect (Toyota is not aware of any other "indications" not noted). The information was then reviewed to determine if the information was, in fact, responsive to this request.

Matters found when searching for information responsive to Request 2 involving assertions or questions about the non-deployment of an airbag during a crash event without any "indications" or other information as specified in the definition of the Alleged Defect are not included in this response, because there was no information to suggest that they are related to, or may be related to, the Alleged Defect in the Subject Vehicles. Also, with regard to an Electronic Data Recorder (EDR) where no crash event was found, other information was assessed to determine if such lack of data was consistent and expected given the incident; such incidents are not considered to be related to, or may be related to, the Alleged Defect.

In the foregoing responses to this IR, information has been obtained from those departments and employees knowledgeable about the subject matter of this inquiry most likely to have such information in the regular and ordinary course of business. When a particular Request seeks "documents" as defined in the IR, reasonable, good faith searches have been made of corporate records where such documents would ordinarily be expected to be found and to which Toyota would ordinarily refer when looking for such information.

The definitions of "documents" and "Toyota," however, are unreasonably broad, vague, and ambiguous, and Toyota objects to such definitions, because they exceed a reasonable understanding of such terms. For example, "calendars," "travel reports," "contracts" and "personnel records," to name a few, would not normally contain responsive information pertaining to the Alleged Defect subject of this inquiry. Toyota has also not provided information from electronic files that require extraordinary or expert means to retrieve that are generally unavailable to the computer user.

In addition, Toyota has not, except as otherwise noted, provided information from persons or entities over which it does not ordinarily exercise control, such as independent suppliers and contractors. In connection with Requests 7, 8, and 9, much of the requested information is possessed by the independent supplier, ZF-TRW. Toyota made good faith requests to obtain responses from ZF-TRW but was not supplied such information. To the extent that responses to these questions have been provided above, these responses are based on more limited information previously obtained from ZF-TRW, but Toyota cannot independently confirm the accuracy or completeness of the responses.

Toyota also objects to the definition of "Toyota" to the extent it purports to include outside counsel. It would be unduly burdensome to require Toyota to request that outside counsel search files for responsive documents. Moreover, it is highly unlikely that outside counsel would possess any non-privileged documents responsive to this IR that are not already being produced by Toyota. In light of the significant burden and cost associated with canvassing outside counsel for potentially responsive documents and the very low probability of identifying any non-privileged document not already being produced, Toyota has not asked its outside counsel to search for responsive documents.

Toyota understands this IR to seek information on vehicles manufactured for sale in the United States and its territories from the start of production of each model year to the dates noted above for each category. Also, we understand documents specifically related to the preparation of the responses are not sought.

The source of information used as a basis for the data in each Attachment, including the date the data were updated and retrieved, is identified above as applicable. If a document itself is the source for the requested information and it is provided, no further source identification is provided. If a document, drawing or component is requested, or if no responsive information is available, we assume no further source identification is called for.

Toyota is not providing privileged documents that may be responsive to this Information Request. With regard to claims of privilege, Toyota understands that it is acceptable to the Agency for Toyota to identify specific categories of privileged documents rather than any specific document within those categories. These categories include: (a) communications between outside counsel and employees of Toyota's Legal Department, other Toyota employees, or employees of parties represented by Toyota in litigation and claims; (b) communications between employees of Toyota's Legal Department and other Toyota employees, or employees of parties represented by Toyota in litigation and claims; (c) notes and other work product of outside counsel or of employees of Toyota's Legal Department, including work product of employees or consultants done for or at the request of outside counsel or Toyota's Legal Department. Toyota is not claiming a legal privilege for any documents provided with this response; however, Toyota does not waive the legal privilege or work-product protection with respect to other documents that may have been prepared in connection with a specific litigation or claim. In addition, Toyota may assert the attorney-client privilege or claim protection under the work-product protection for analyses or other documents that may be prepared in connection with litigation or claims in the future. Toyota is currently reviewing certain documents for privileged

information and will supplement these responses if these documents, or portions thereof, a found not to contain privileged information.

Toyota understands that NHTSA will protect any private information about persons that is contained in the Attachments to this response, based on privacy considerations. Such private information includes data such as names, addresses, phone or fax numbers, email addresses, license plate numbers, driver's license numbers and the last 6 digits of a vehicle's VIN.