

**PERMISSION FORM FOR PARENTS OF MINOR PARTICIPANTS – VARIABLE
ENROLLMENT PERIOD (8-24 MONTHS)**

IN-VEHICLE DRIVING BEHAVIOR AND CRASH RISK STUDY
(*“The SHRP 2 Naturalistic Driving Study”*)

SPONSORS: National Academies of Science, Transportation Research Board,
SHRP 2 Program

The United States Department of Transportation

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WHAT IS THE PURPOSE OF THIS RESEARCH?

The Naturalistic Driving Study is a large research effort directed at improving Highway Safety in the United States where more than 30,000 people are killed and 2 million are injured every year in highway-related accidents. The study will help researchers gain a deeper understanding of the interaction between the driver, vehicle and roadway and lead to safer roadways, vehicles, and driver training programs. The SHRP 2 Naturalistic Driving Study will look at how people normally drive by installing cameras and sensors in people’s own vehicles. The study is being conducted at six locations across the United States with up to 3,100 participants. Length of enrollment varies from eight months to two years. About 340 participants will be minors.

**WHAT SHOULD I KNOW BEFORE DECIDING TO HAVE MY CHILD
PARTICIPATE?**

1. You are providing permission for us to collect data (including video) whenever your child’s study vehicle is used or whenever your child happens to drive another vehicle that is part of the study (for example, a vehicle owned by a friend who also happens to be in the study). If there are drivers of your child’s study vehicle who have not signed consent forms, we delete their data from every trip in which they drove the vehicle. If neither you nor your child owns or leases the study vehicle, you will have to obtain the owner’s written permission to use the vehicle before your child enrolls in the study.
2. There will be video of your child’s face and portions of your child’s body and the roadway. Audio will not be recorded unless your child presses a red incident button. The video, audio, and other data that personally identifies your child, or could be used to personally identify your child, will be held under a high level of security at one or more data repositories. Your child’s data will be identified with a code rather than your child’s name. Finally, only

qualified researchers will be authorized to have access to data that personally identifies your child, or can be used to personally identify your child, and the level to which they have access will be based on their level of authorization.

3. No identifying information will be collected on passengers.
4. For the duration of the project you and/or your child or the owner of the vehicle used in the study will be responsible for insurance coverage. If your child is in a crash, we ask that he/she please contact emergency services as he/she normally would. We will then ask for more information, as detailed below.
5. Your child may withdraw from the study at any time. If your child does withdraw from the study before the scheduled end date, you and your child must agree to allow us to retrieve the data collection system from the vehicle as soon as is feasible.

WHAT WILL MY CHILD HAVE TO DO IF I CHOOSE TO ALLOW HIM/HER TO PARTICIPATE?

The study involves a _____ month data collection effort in which a data collection system containing sensors and cameras will be installed in the vehicle to record a variety of driving measures. As a participant, your child will complete the following activities:

1. Have the vehicle equipped (see the section below: “What will my child have to do to get the vehicle equipped for the study?”).
2. Drive as he/she normally would.
3. We will ask your child to provide us with contact information for all other adult drivers (over the age of 18) who drive the vehicle at least once a week. We would like to contact him/her to get permission to use data collected any time he/she happens to be driving the vehicle. We will also ask him/her to fill out two brief questionnaires.
4. We will make an appointment with your child for us to collect the driving data from the vehicle about once every 3 to 6 months. Each appointment could take up to one hour and will be scheduled to take place at a location that is convenient for your child such as his/her home, work, school, or at a local shopping mall. Your child will not need to do anything at these appointments apart from providing access to the trunk or interior of the vehicle; a trained technician will handle everything else.
5. If your child is enrolled in the study at the time of his/her 18th birthday, we will contact him/her to change from an informed assent form to an informed consent form.
6. While your child is in the study, we ask that he/she not drive the vehicle into any areas where cameras are not allowed, including any international border crossings, military bases, or similar facilities.

7. Advise other drivers of the video and audio equipment installed in the vehicle and ask them not to drive into areas where cameras are not allowed. Let these other drivers know that data will be collected when they drive the vehicle but will only be retained and analyzed if they sign a consent form. If they do not sign a consent form, then the data will be deleted for every trip in which they drove the vehicle.

What Will My Child Have To Do To Get The Vehicle Equipped For The Study?

1. If you or your child do not own or lease the study vehicle, you must first obtain the written permission of the vehicle owner. This can be provided on the day your child enrolls in the study by one of two methods: 1) the owner attends and signs the form in person, or 2) via a telephone call in which a third person at the study site will witness and sign the owner's permission form on behalf of the owner. We cannot accept pre-signed owner permission forms in which we have not had personal or telephone contact with the vehicle owner.
2. Bring the vehicle to CUBRC at the scheduled day and time to have the data collection system installed. The technicians will strive to complete each vehicle in less than four (4) hours, but it may take longer in rare cases. The system will require a connection to the vehicle power and the vehicle network box. These connections will provide additional data as well as power for the system; by agreeing to have your child participate, you are providing us permission to get information from the vehicle network as well as to install new sensors. Before we begin installation, we will show your child where we will place the system and also show your child pictures of what the completed installation will look like. The vehicle will be returned to its original state when his/her participation is concluded.
3. While the system is being installed on the vehicle, he/she will be provided a comfortable area in which to complete the consent process and testing at CUBRC, which should take about 2 - 3 hours. Specifically, your child will be asked to:
 - a. Provide us with proof of a valid U.S. driver's license, proof of vehicle insurance, and proof of ownership (vehicle registration showing the name of the owner or lessee of the vehicle so that we may confirm that we have correctly obtained the permission of the vehicle's owner).
 - b. Review and sign an informed assent form with the same information provided in this consent form.
 - c. Undergo about 20 minutes of non-invasive vision tests, performed on a computer monitor and a machine that your child will look into but that will not touch or blow air into his/her eyes.
 - d. Take about 30 minutes of computer tests that will assess your child's memory, decision making, and attention skills, none of which require previous computer skill or knowledge.
 - e. Take a 2 minute memory and attention test using pencil and paper and the following two tests of your child's body movements and strength.

- i. Your child will be asked to walk as fast as he/she can without falling or tripping to a point 10 feet away, and then to return to the starting point. This should take about one minute.
 - ii. Your child will be asked to sit down and squeeze a device that measures grip strength. This should also take about two minutes.
 - f. Fill out nine (9) questionnaires on a computer (some may be completed online from home later, if your child prefers). The questionnaires vary in length and take between 5 and 15 minutes each to complete. They contain questions about: your child's health history and health status; driving behavior, history and knowledge. Your child will be asked to fill out one or more final questionnaires after completing his/her participation in the study.
 - g. Take home and give copies of an Informed Consent form and questionnaires to any adult drivers who drive the vehicle at least once a week.
4. Allow our technicians to drive the vehicle as needed during the installation and testing process.
 5. When the vehicle is ready, we will show your child the data collection system and provide him/her with information about who to contact if he/she has any vehicle problems that could be related to the data collection system, or if he/she notices any maintenance issues with the system (for example, a camera or device that comes loose).
 6. We will take some reference pictures of your child in the vehicle so that software can be used to identify him/her as the driver. To simulate driving at night, we may take some of these pictures with a blanket of material draped over the vehicle while your child is sitting in the driver's seat.

What Does My Child Do After The Vehicle Is Equipped For The Study?

1. After your child returns home, he/she will be asked to complete any questionnaires he/she did not have time to complete during installation of the data collection system into the vehicle. Once your child has completed all of the online questionnaires, he/she will receive his/her first payment of \$100 via a mailed check.
2. Drive as he/she normally would for the duration of his/her enrollment.
3. If your child is in a crash while in the study, we ask that your child do five things (in the following order):
 - a. Seek emergency help the way that he/she normally would.
 - b. If possible, press an incident button that is located near the rear view mirror to describe the incident. The system will then record your child's brief description. He/she will know the button is working if the red light comes on when he/she presses it.
 - c. Call us at (716) 204-5138 or (716) 204-5177 to notify us as soon as it is safe to do so.

- d. Allow a member of the research team to interview him/her about the crash if we decide that your child's crash should be investigated in more detail. This interview would ideally take place soon after the crash, but only when your child is comfortable and able to do so.
 - e. Allow us to have access to the police accident report, if any, which results from the crash.
4. We will make an appointment with your child to collect the driving data from the vehicle about once every 3 to 6 months. These appointments will typically take about 15 minutes, but could take up to one hour depending on what needs to be done. They will be scheduled to take place at a location that is convenient for your child such as his/her home, work, school, or at a local shopping mall. Your child will not need to be in the vehicle when the data are collected, but he/she will need to provide us with access to the trunk or interior of the vehicle. As mentioned above, we also will collect data from the vehicle after a crash, either at a place of your child's choosing or where the vehicle was towed.
 5. If your child is enrolled in the study at the time of his/her 18th birthday, we will contact him/her to change from an informed assent form to an informed consent form.
 6. Let us know if you or your child notices any unusual warning light activity, for example, warning lights that go on or off.
 7. While your child is in the study, we ask that he/she not drive the vehicle into any areas where cameras are not allowed, including any international border crossings.
 8. If we notice a new person driving the vehicle, we may contact your child to find out if your child has already asked them about participating in the study.

What Happens When The Study Is Over?

1. After _____ months, your child will be asked to return to CUBRC so that we may remove the system from the vehicle. While the vehicle is being worked on, we will ask him/her to fill out some final questionnaires. This process is expected to take about two hours. After this session is complete, your child will receive his/her final payment via check or direct deposit.
2. If your child is 18 years or older when he/she leaves the study, we may ask him/her whether we can keep his/her contact information to contact him/her for participation in future follow-up studies. This will be optional, and if your child does not agree, we will delete his/her contact information one year after data collection is complete at CUBRC.
3. Once we have all the data, we will begin data analysis and reporting. It is likely that you and your child will see references to the results of the study in the news or elsewhere. However, these reports will not identify participants by name, nor will personally identifying video be shown.

WHAT ARE THE RISKS OF PARTICIPATING IN THIS STUDY?

The operation or drivability of the vehicle should not be affected by the instrumentation, and thus carries a similar risk as when your child operates the vehicle normally. However, if your child violates state or local driving laws (such as driving under the influence, exceeding posted speed limits, or driving while distracted), the instrumentation could record evidence of these violations. This has the potential to pose greater than minimal risk of legal harm. A variety of strategies and procedures have been developed to reduce the potential for legal or economic harms. These strategies include encrypting the data obtained by sensors and cameras, using a code number to identify your child with the code key maintained in a secure location, and obtaining a Certificate of Confidentiality. More details on these strategies are provided below.

All data collection equipment is mounted such that, to the greatest extent possible, it does not pose a hazard or problem for your child when he/she drives. None of the data collection equipment should get in the way of your child's normal field of view. Your child is not being asked to change the way he/she drives or where he/she drives, except for his/her visits to CUBRC at the beginning and end of the study.

In the vast majority of cases, placing the data collection system in the vehicle will not affect the operating or handling characteristics of the vehicle. In some rare cases, the electromagnetic signals generated by the data collection system may cause interference with the vehicle's radio, keyless entry key fob, or other electronic components or sensors, such as the tire pressure monitoring system. If this happens in your child's vehicle, CUBRC will use engineering countermeasures to attempt to minimize the interference to an unnoticeable level. If your child experiences persistent tire pressure monitoring system problems, your child will be asked to leave the study, while for other problems, your child will be given the option to continue participation with the problem unresolved or to leave the study. If your child likes, CUBRC personnel can provide information on our latest experience (a rough likelihood) of this problem occurring with your child's particular vehicle make, model, year, and equipment package.

Your child may opt out of the "blanket" process to record simulated nighttime images if your child is claustrophobic or if the process otherwise makes your child uncomfortable.

There are non-driving risks resulting from participation. Five cameras will be placed in the vehicle. If he/she drives into an area where cameras are not allowed, including international border crossings, certain military and intelligence locations, and certain manufacturing plants, there is a risk that your child may be detained or arrested or that the vehicle may be impounded. For this reason, by signing the Informed Assent and thereby agreeing to participate in the study, your child is also agreeing not to drive into any such areas while he/she is in this study. We have provided a letter for the glove box which can be used to explain the vehicle's role in the study while still maintaining your child's privacy and keeping confidential his/her role in the study.

Throughout the study, we will take all possible steps to protect your child's privacy and keep confidential his/her role in the study and the confidentiality of his/her personally identifying information. To help us protect your child's privacy, we have obtained a Certificate of Confidentiality from the U.S. Department of Health and Human Services National Institutes of Health. With this Certificate, the researchers and study sponsors cannot be forced to disclose

information that may identify your child, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. However, the Certificate of Confidentiality does not prevent the researchers from disclosing voluntarily matters such as child abuse, or a participant's threatened or actual harm to self or others. In terms of a vehicle, this could also include items such as driving under the influence of drugs or alcohol, allowing an unlicensed minor to drive the vehicle, or habitually running red lights at high speed. Such behaviors may result in your child's removal from the study and reporting of the behavior to the appropriate authorities. In the event of a crash, it may not be possible to prevent the equipment and the data from falling into the hands of the police or an insurance company; if this happens, however, the data are still encrypted and inaccessible and unreadable to these individuals.

However, you and your child, too, are responsible for taking steps to protect your child's privacy. Do not post or disclose your child's participation on any public forum including websites, Facebook, newspapers, radio and television. Protect your child's role in the study the same way that you protect other personal and private information. If you do not keep confidential your child's role in the study, there is a risk that some of the data collected during the study, including your child's personally identifying information, may be used against him/her in a court case or other legal proceeding.

The risk to your child of completing the pre-collection questionnaires and tests while the data collection equipment is being installed in the vehicle is no more than when he/she is doing activities in his/her daily life like filling in forms, walking, squeezing his/her hand, and working at a computer. The assessment component involves filling in forms, standard vision tests, and standard computer-based tests. It is believed that there are no more than minimal risks involved with such activities. In addition, your child will be asked to squeeze a grip strength tester and to rapidly walk 10 feet back and forth as fast as he/she can without running or falling. The risk with using the grip strength tester is brief hand soreness. The main risk with the Rapid Pace Walk is falling if he/she tries to go too fast. Because the assessment process may take 2 or 3 hours, your child may get tired, but he/she can also take breaks as needed.

If you (or you child) are not the owner, co-owner, or lessee of the vehicle, there is a risk that the owner may decide to withdraw the vehicle from the study earlier than your child's planned term of enrollment. If this occurs, your child will only be compensated for the portion of time he/she was enrolled in the study.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THIS STUDY?

While there are no direct benefits to your child from this research, he/she may find this study interesting. No promise or guarantee of benefits is being made to encourage your child's participation. Participation will help to improve the body of knowledge regarding driving behavior and safety. Participation may also help us design safer vehicles and roadways in future years.

HOW WILL MY CHILD'S DATA BE KEPT CONFIDENTIAL AND SECURE AND WHO WILL HAVE ACCESS TO MY CHILD'S DATA?

Any data collected during this study that personally identifies your child or that could be used to personally identify your child will be treated with confidentiality. As soon as your child begins participating in this study, his/her name and other identifying information will be separated from the raw data collected while your child drives the vehicle and replaced with a number. That is, your child's raw data will not be attached to his/her name, but rather to a number (for example, Driver 0011). The raw data collected while your child drives the vehicle will be encrypted (made unreadable) from the moment it is collected until it is transferred to one or more secure central storage locations. Your child's name also will be separated from any data about him/her, either provided by him/her in response to questionnaires or gathered by researchers during the study, including crash investigation data, and will be replaced by the same driver number (for example, Driver 0011). **YOU WILL NOT HAVE ACCESS TO YOUR CHILD'S DATA RESULTING FROM THIS STUDY.** However, if we have reason to believe that your child is an imminent or ongoing danger to themselves or others, we may notify you of our findings regarding your child.

Several types of information and data about your child and the study vehicle will be collected during the study:

1. **Contact information** includes your child's name, address, email address, phone numbers, and similar information used to contact your child when needed. It will be stored securely in electronic form during the course of the study and destroyed after the study is complete (unless your child grants permission for us to keep his/her contact information when the study is over). This information will not be linked to or mingled with your child's study data, and will not be used in any research or analysis.
2. **Auxiliary study information** includes your child's Social Security Number, license plate number, bank account information (for those using direct deposit) and similar information. This information is used to verify your child's identity and to make payments for his/her participation. This information will be stored at the site in electronic form (securely encrypted) and destroyed after the study is complete. This information will not be linked to or mingled with your child's study data, and will not be used in any research or analysis.
3. **Driver data** includes your child's answers to questionnaires, vision test results, and the results of the brief physical tests described above. This data will not contain your child's name or any identifying information and will be used in analyses, both on its own and in combination with the driving data, vehicle data, and additional crash data. This data will be stored securely in electronic form throughout the lifetime of the data (defined below).
4. **Vehicle data** includes the vehicle make and model, its condition, and how it is equipped. This data will not contain your child's name or any identifying information and will be used in analyses, both on its own and in combination with the driver data, driving data, and additional crash data. This data will be stored securely in electronic form throughout the lifetime of the data (defined below).

5. **Driving data** includes the data we collect from the vehicle while he/she is driving, including video data and sensor data. This information will contain video of your child's face and GPS coordinates of his/her trips, both of which could be used to personally identify him/her. These data will be encrypted (stored in an unreadable format) from the moment of their creation until they are downloaded from the vehicle, transferred to a secure data storage facility, and verified. From this point on they will be decrypted (made readable) on an as-needed basis for each analysis. These data will be used for analysis, both on their own and in combination with the driver data, the vehicle data, and the additional crash data. This data will be stored securely in electronic form throughout the lifetime of the data (defined below).
6. **Additional crash data** includes items we may collect after a crash, including answers to an interview with one of our researchers and the police accident report resulting from the crash. This data will not contain your child's name or any identifying information and will be used in analyses, both on its own and in combination with the driver data, vehicle data, and driving data. This data will be stored securely in electronic form throughout the lifetime of the data (defined below).

It is possible that an authorized Institutional Review Board (IRB) may view this study's collected data for auditing purposes. An IRB is responsible for the oversight of the protection of human subjects involved in research.

It is also possible that the study sponsors or investigators may view this study's driver data and driving data for quality control or administrative purposes; in this case, the study sponsors or investigators will be required to maintain the security and confidentiality of any data that personally identifies study participants or that could be used to personally identify study participants.

While driving the vehicle, a camera will videotape your child's face with some added space around the head to handle any head movements. An example is shown below. Also, video cameras will capture views of the forward view, the rear view, an external view to the right, as well as a dashboard/lap-belt view. A camera will also periodically take a permanently blurred snapshot of the vehicle interior which will allow researchers to count the number of passengers and make rough estimates of age, gender, and seatbelt use. Passenger identification will not be possible from these blurred snapshots. All video will be captured and stored in digital format (no tape copies will exist).

There will also be an ambient atmospheric analyzer that is capable of detecting the presence of alcohol in the passenger compartment under certain conditions. It may not be able to distinguish whether the alcohol was imbibed or applied (as in hand sanitizer), and it will be unable to determine whether it is emanating from the driver or a passenger. However, this sensor will flag the data for possible indications of impaired driving.

If a safety-related incident or crash occurs, we will ask your child to press a button on the unit mounted near the rearview mirror. He/she will know this button is working if a red light appears when he/she presses it. This will allow researchers to find the incident in the database after the data have been collected. Also, pressing the button starts a microphone for 30 seconds. During these 30-seconds, your child can tell us what happened. No audio will be captured except when

he/she presses this incident button. Please note that pressing this button does NOT make a phone call, unlike OnStar™. It simply records your child's voice in an audio file that remains in the vehicle until the data is collected.



During the data collection phase of this study, all data collected from the vehicle will be encrypted (made unreadable) from the time of its creation and then stored in a specific password-protected project folder on a secure server; the driving data will only be decrypted (made readable) once it has been stored in this folder. At the conclusion of the collection phase of this study, the driver data, driving data, and additional crash data will be permanently housed at one or more highly secure data storage facilities. One set of data will be permanently housed at Virginia Tech under the supervision of the Virginia Tech Transportation Institute, the organization overseeing the data collection for the entire study. It is possible that, after data collection is complete, one copy of study data will be transferred to the U.S. Department of Transportation (or other secure facilities as determined by the Transportation Research Board) for permanent storage and oversight.

Only authorized project personnel and authorized employees of the research sponsors will have access to study data that personally identifies your child or that could be used to personally identify your child. As explained below, other qualified research partners may be given limited access to your child's driver data, vehicle data, driving data, and additional crash data, solely for authorized research purposes and with the consent of an IRB. This limited access will be under the terms of a data sharing agreement or contract that, at a minimum, provides your child with the same level of confidentiality and protection provided by this Consent Form. However, even these qualified researchers will not be permitted to copy raw study data that identifies your child, or that could be used to identify your child, or to remove it from the secure facilities in which it

is stored without your consent and your child's assent (if your child is younger than 18) or without your child's consent (if your child is 18 years or older).

Project personnel, the project sponsors and qualified, authorized research partners may show specific clips of video at research conferences. The project sponsors also may show specific clips of video to the media, driver's education teachers and students, and others involved in efforts to improve highway and road safety. The face portion of the video will be blurred, blacked out, or replaced with an animation for these purposes. Your child's name and other personally identifying information will never be associated with the showing of these video clips. Identifying location information will not be shown in association with these video clips.

It is expected that the data we capture throughout the course of the entire study, including that from all the approximately 3,100 primary participants, will be a valuable source of data on how drivers respond to certain situations and how the roadway and vehicle might be enhanced to improve driver safety. Researchers who study traffic congestion and traffic patterns may also find the data useful. Therefore, it is expected that there will be follow-on data analyses using all or part of the data for up to 30 years into the future. These follow-on analyses will be conducted by qualified researchers with IRB approval, as required by law, who may or may not be part of the original project team. In consenting to this study, you are consenting and your child is assenting to future research uses of the information and videos we gather from him/her, consistent with the protections described above and elsewhere in this document.

If your child is involved in a crash while participating in this study, the data collection equipment in the study vehicle will likely capture the events leading up to the event. Your child is under **NO LEGAL OBLIGATION** to voluntarily mention the data collection equipment or his/her participation in this study at the time of a crash or traffic offense. We have provided a letter, which your child should keep in the glove box for these cases. The letter describes the vehicle's role in the study without identifying your child as a participant in the study.

Because the vehicle camera system is storing continuous video, it may capture some incriminating evidence if an at-fault collision should occur. To help us protect your child's privacy, we have obtained a Certificate of Confidentiality from the U.S. Department of Health and Human Services National Institutes of Health. With this Certificate, neither the researchers nor study sponsors can be forced to disclose information that may identify your child, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. Identifying information for the purposes of this study includes your child's contact information, your child's auxiliary study information, your child's driving data (including video of his/her face and GPS coordinates which may identify his/her home, work, or school locations), or any information in your child's driver data, vehicle data, or additional crash data that could be used to personally identify him/her. While your child's confidentiality is protected in most cases by the Certificate, you should know that in some rare instances involving alleged improper conduct by your child or others, your child may be prevented by a court from raising certain claims or defenses unless he/she agrees to waive the confidentiality protection. The researchers and study sponsors will use the Certificate to resist any demands for information that would identify your child, except as explained below.

The Certificate cannot be used to resist a demand for information from personnel of the United States Government that is used for auditing or evaluation of federally funded projects or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA).

This Certificate of Confidentiality does not mean that the Federal government endorses this study. You and your child should understand that a Certificate of Confidentiality does not prevent your child or a member of your child's family from voluntarily releasing information about your child or his/her involvement in this research. If an insurer, employer, or other person obtains your written consent and your child's written assent to receive research information, then the researchers may not use the Certificate to withhold that information. If you (or your child) are not the vehicle owner, you should know that the vehicle owner will not have access to your child's data.

The Certificate of Confidentiality also does not prevent the researchers from disclosing voluntarily matters such as child abuse, or subject's threatened or actual harm to self or others. This could also include behaviors such as habitually driving under the influence of drugs or alcohol, allowing an unlicensed minor to drive the vehicle, or habitually running red lights at high speed. If this type of behavior is observed, we reserve the right to remove your child from the study and inform the appropriate authorities of what we have observed. In most cases, we will notify your child first of the behaviors we have observed prior to removing your child from the study or informing others of our observations. If your child is removed from the study, his/her compensation will be prorated based on the time he/she has already spent as a participant in the study.

The protections of the Certificate of Confidentiality described herein may not apply to passengers or drivers of the vehicle who have not consented to being in this study. For this reason, Informed Consent will be sought from all other adults who drive the vehicle, and these individuals will be protected by the Certificate of Confidentiality to the same degree as your child.

To summarize, your child's level of confidentiality in this study is as follows:

1. There will be video of your child's face and portions of your child's body. There will be audio recorded, but only for 30 seconds if your child presses the red incident button. The study also will collect health and driving data about your child. The video, audio, and other data that personally identifies your child, or could be used to personally identify your child, will be held under a high level of security at one or more data storage facilities. Your child's data will be identified with a code rather than his/her name.
2. All data collected from other drivers who have not signed a consent form will be deleted. No identifying information will be collected on passengers.
3. For the purposes of this project, only authorized project personnel, authorized employees of the project sponsors, and qualified research partners will have access to study data containing personally identifying information, or that could be used to personally identify your child. The data, including face video which has been blurred, blacked out, or replaced by

animation, may be shown at research conferences and by the research sponsors for the highway and road safety purposes identified above. Under no circumstances will your child's name and other personally identifying information be associated with the video clips.

4. The personally identifying data collected in this study may be analyzed in the future for other research purposes by this project team or by other qualified researchers in a secure environment. Such efforts will require those researchers to sign a data sharing agreement which will continue to protect your child's confidentiality, and will also require additional IRB approval. The confidentiality protection provided to your child by these data sharing agreements will be as great as or greater than the level provided and described in this document. Research partners will not be permitted to copy raw data that identifies your child, or that could be used to identify your child, or to remove it from the secure facility in which it is stored except with your consent and your child's assent (if your child is younger than 18) or without your child's consent (if your child is 18 years or older).
5. A Certificate of Confidentiality has been obtained from the National Institutes of Health. With this Certificate, the researchers and study sponsors cannot be forced to disclose information that may identify your child, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. However, the Certificate of Confidentiality does not prevent the researchers from disclosing voluntarily matters such as child abuse, or a participant's threatened or actual harm to self or others. In terms of a vehicle, this could also include items such as driving under the influence of drugs or alcohol, allowing an unlicensed minor to drive the vehicle, or habitually running red lights at high speed. Such behaviors may result in your child's removal from the study and reporting of the behavior to the appropriate authorities. While your child's confidentiality is protected in most cases by the Certificate, you should know that in some rare instances involving alleged improper conduct by your child or others, your child may be prevented by a court from raising certain claims or defenses unless your child agrees to waive the confidentiality protection.

WILL MY CHILD RECEIVE PAYMENT FOR PARTICIPATING IN THIS STUDY?

Total payment for your child's participation in this research will be as follows, depending on the length of enrollment. Your child is scheduled to be enrolled for _____ months. Your child is required to provide a valid social security number in order to receive his/her first payment.

1. After your child has been enrolled in the study (the vehicle has been prepared for our study and your child has completed the enrollment process, including the online questionnaires), your child will receive \$100 via check or direct deposit. This initial payment covers months one through four of your child's participation in the study.
2. A second payment of \$100 via check or direct deposit will be received after the 6th month of participation. This payment covers months five through eight of your child's participation in the study.
3. A third payment of \$133 via check or direct deposit at the end of the 8th month (this is an enrollment bonus, prorated from \$200 for every 12 months of enrollment).
4. If your child's enrollment extends beyond 8 months, he/she will receive an additional payment via check or direct deposit every 4 months. This payment will be \$42 for each

month over the minimum 8 month enrollment period (this includes the monthly payment of \$25 plus a \$17 per month prorated bonus).

5. After your child's enrollment is complete, and after he/she returns to CUBRC to have the system removed from the vehicle and completes a few final questionnaires, your child will receive any final payment due via check or direct deposit. This final payment will be \$42 for each month or partial month since your child's previous payment (this includes the monthly payment of \$25 plus a \$17 per month prorated bonus).

If your child discontinues participation before the eight month minimum enrollment, by his/her own choice, because the vehicle owner decides to withdraw their vehicle, or because he/she is asked to leave by someone on the study team, your child will be paid \$25 for every month of participation in the study (for payment purposes, a partial month at the conclusion would be considered a full month). Your child will not receive any bonus amounts unless he/she completes the minimum eight months of participation. If your child discontinues enrollment after eight months, for any reason, his/her payment will be as described in items 1-5, above.

There will also be an ambient atmospheric analyzer that is capable of detecting the presence of alcohol in the passenger compartment under certain conditions. It may not be able to distinguish whether the alcohol was imbibed or applied (as in hand sanitizer), and it will be unable to determine whether it is emanating from the driver or a passenger. However, this sensor will flag the data for possible indications of impaired driving.

If a safety-related incident or crash occurs, we will ask your child to press a button on the unit mounted near the rearview mirror. He/she will know this button is working if a red light appears when he/she presses it. This will allow researchers to find the incident in the database after the data have been collected. Also, pressing the button starts a microphone for 30 seconds. During these 30-seconds, your child can tell us what happened. No audio will be captured except when he/she presses this incident button. Please note that pressing this button does NOT make a phone call, unlike OnStar™. It simply records your child's voice in an audio file that remains in the vehicle until the data is collected.

In addition, for every six months your child is enrolled, your child will also be entered into a drawing for \$1,000 paid in the same way as your child's other compensation. One \$1,000 prize will be awarded every six months for every 150 drivers currently enrolled at your child's site.

WHAT ABOUT INSURANCE?

Please note that since your child is driving his/her own vehicle or another vehicle with the owner's permission, neither study personnel nor their respective organizations are responsible for the expenses that are caused by a crash your child may experience. In the event of a crash, your child is **not** responsible for any damage to the data collection system that is installed into the vehicle.

Participants in a study are considered volunteers, regardless of whether he/she receives payment for his/her participation. Under New York state law, workers compensation does not apply to volunteers; therefore, the participants are responsible for his/her own medical insurance for

bodily injury. Appropriate health insurance is strongly recommended to cover these types of expenses.

If your child gets hurt in a crash, whether in or out of an automobile, the medical treatment available to your child would be that provided to any person by emergency medical services in the vicinity where the accident occurs.

The participant and their parents, guardians, or other party with standing agree that this agreement shall be construed in accordance with the laws of the Commonwealth of Virginia, notwithstanding any conflicts of law provisions. Further, any and all claims and/or actions against Virginia Tech or the Commonwealth of Virginia shall be brought in a court of the Commonwealth of Virginia.

IS MY CHILD FREE TO WITHDRAW FROM THIS STUDY AT ANY TIME?

As a participant in this research, your child is free to withdraw at any time without penalty. If your child chooses to withdraw, he/she will receive partial payment as described in the Payment for Participation section of this form. Your child is **free to choose not to answer any questions** or respond to any tests that he/she chooses without penalty. If your child withdraws or is dismissed from the study or if the vehicle owner withdraws the vehicle from the study, we will retain data collected before the withdrawal/dismissal, but delete any data collected in the interval between when we become aware of the withdrawal/dismissal and before we are able to remove the data collection equipment. If your child chooses to end participation in the study earlier than originally planned, we will need to schedule a time to remove the data collection system from the vehicle. Your child will not receive any final payment due until we have removed the instrumentation from the vehicle.

HAS THIS RESEARCH BEEN APPROVED?

Before this experiment begins, the research must be approved by the Institutional Review Board for research involving human subjects at Virginia Tech. The research has also been approved by the IRB for the National Academies of Science. You should know that this approval has been obtained and is valid through the date listed at the bottom of this form.

HOW DO I PROVIDE MY CONSENT?

I _____ (parent of minor participant) have read and understand this consent form and conditions of my child's participation. I certify that I am the parent or legal guardian of a minor participant in the SHRP 2 Naturalistic Driving Study. As such, I certify that I have legal standing to consent to my child's participation in this study. I understand what is being asked of my child. My questions have been answered. I freely agree to allow my child to participate and certify that neither he/she nor I have been coerced into participation. I understand that my child's participation is voluntary and that my child may withdraw at any time without penalty.

I certify that either I (or my child) is the owner, co-owner, or lessee of the vehicle that will be used in the study and that I am permitting the instruments and sensors to be installed in the vehicle or that I have obtained the vehicle owner's written permission to do so. If I lease my vehicle, I certify that I have carefully reviewed my lease agreement to be sure that the

installation of the instruments and sensors is allowed under the terms of my lease. I certify that my child holds a valid United States driver's license, and that the vehicle that will be used in the study has at least the minimum amount of liability insurance required by the state in which it is registered.

Parent of Minor Participant (Print Name) Signature Date

Experimenter (Print Name) Signature Date

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Should I have any questions about this research or its conduct, I may contact:

Alan Blatt CUBRC Site Principal Investigator (716) 204-5138
blatt@cubrc.org

Jon Antin Project Manager (540) 231-1579
jantin@vti.vt.edu

David Moore (540) 231-4991
moored@vt.edu Chair, Virginia Tech Institutional Review
Board for the Protection of Human Subjects
Office of Research Compliance
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24060

The Parent of the Minor Participant Must Be Provided With A Copy Of This Permission Form.