

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Consent to Take Part in a Research Study

Under the Paperwork Reduction Act, a federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control number. The OMB Control Number for this information collection is 2127-NEW (expiration date: MM/DD/YYYY). The average amount of time to review and complete the form is 45 minutes. The purpose of this research study is to examine drivers' interactions with advanced vehicle technologies and the relationships between attitudes, behaviors, and traffic safety. All responses to this collection of information are voluntary. If you have comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden send them to Information Collection Clearance Officer, National Highway Traffic Safety Administration, 1200 New Jersey Ave, S.E., Washington, DC, 20590.

Title of research study: *Drivers' Knowledge/Correct Use of New Technology In Vehicles Naturalistic Driving Study*

Principal Investigator: *Jonathan F. Antin, Ph.D., CHFP*

Primary Contact: *Brian Wotring (bwotring@vtti.vt.edu; 540-231-1045)*

Key Information: The following is a short summary of this study to help you decide whether you would like to participate in this study. More detailed information is included below this summary.

Why am I being invited to take part in a research study?

You are between the ages of 18 and 25, 35 and 55 or over 70 years old and eligible to drive an instrumented study vehicle.

What should I know about being in a research study?

- Someone will explain this research study to you.
 - Participation is optional. If you decide to take part, you are always free to change your mind and exit the study at any point without penalty.
- You will be assigned a late model Subaru (e.g., Outback or similar) to drive during your participation.
- The vehicle will be set up with sensors and cameras. The cameras will take video of your face, the instrument panel, the center stack, the driver's foot well, and the forward and rear roadway. No audio will be collected.
- The video and other data that tell who you are, or could be used to tell who you are, will be held under a high level of security. Your data will be linked with a code rather than your name.
- We will do our best to not collect identifying video information on passengers in the vehicle; however, passengers sitting right behind the driver will be the most vulnerable to being seen on video.
- Only qualified researchers will be allowed to have access to data that could be used to identify you. The level to which they have access will be based on their level of authorization.
 - You are welcome to ask all the questions you want before you decide.

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Why is this research being done?

The purpose is to study how drivers respond to and adjust to vehicles with advanced technologies.

How long will the research last?

Participation in this study will last up to 6 weeks.

What will I need to do if I choose to participate?

If you choose to participate, you will need to do the following:

1. Meet with a researcher who will review the consent form and answer any questions you have. The researcher will help you enroll in the study.
2. Complete 2 short surveys about your perceptions of advanced vehicle technologies.
3. Drive the assigned study vehicle as you normally would drive for 6 weeks.
4. Take two 74-mile round trip drives and five 20-mile round trip drives following a planned route.
5. At the end of your participation, return the study vehicle to the research facility.

Is there any way being in this study could be bad for me?

If you violate state or local driving laws, the instrumentation could record evidence of these violations. A variety of strategies are in place to reduce the potential for legal harm in these cases. There is also the risk of an accident normally present any time you drive an unfamiliar vehicle.

More detailed information about the risks of this study can be found under ***“Is there any way being in this study could be bad for me? (Detailed Risks)”*** on page 11.

Will being in this study help me in any way?

There are no benefits to you from your taking part in this research.

What happens if I do not want to be in this research?

Taking part in this research is completely up to you. You can decide to participate or not to participate.

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Detailed Information: The following is more detailed information about this study in addition to the information listed above.

How many people will be studied?

We plan to include about 180 people at this location out of 180 people in the entire study.

What happens if I say yes, I want to be in this research (Detailed Study Procedures)?

Steps involved in Enrollment

Consent and Study Intake

1. The research team can arrange transportation for you to the first session.
2. A researcher will meet with you in a private room at the research facility. First, the researcher will confirm your eligibility to participate by asking you to present a valid U.S. Driver's License and proof of liability insurance. The researcher will then review this form with you and answer any questions you might have.
3. You will then sign the consent form. A copy of the signed form will be provided to you.
4. Once you sign the consent form, you will complete a W-9 form for compensation purposes.
5. Half of participants will complete some study questionnaires at this point while others will complete the same questionnaires at the end of the study. The research team member will tell you when to complete the questionnaires. We will provide a computer or laptop for you to use to complete them. You can choose not to answer any questions without penalty. Paper surveys are available if you prefer. Completing the surveys should take you no more than 10 minutes.
6. The researcher will work with you to plan a 20-mile round trip route convenient to you to use during your weekly planned drives.

Study Questionnaires

1. As part of your participation in this study, you will complete 2 short questionnaires, a Knowledge and Opinions Questionnaire and a Usability Questionnaire. The research team member will tell you when it is time to complete the questionnaires which should take no more than 10 minutes to complete.

Vehicle Orientation:

1. Following your consent session, the researcher will introduce you to the vehicle and show you the study equipment.
 - a. During this session, we will give you an introduction to the study vehicle you will be driving. We will also show you the cameras and other data collection equipment in the vehicle.

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- b. We will ask you to sign a vehicle orientation checklist. The list will document the information you have received about the vehicle and its basic features.
2. At the end of this session, we will offer to help you pair your cell phone with the vehicle so that you can use the hands-free technology. This is entirely optional; you don't have to do this if you don't want to.
3. You will drive the study vehicle home from this session.
4. The initial session, including consent, intake, and vehicle orientation, should take no more than 2 hours.

Naturalistic Driving Period (6 weeks):

1. Drive as you normally would for 6 weeks. We ask that you not drive the vehicle into any areas where cameras are not allowed, including any international border crossings, military bases, or similar facilities.
2. For the first 2 weeks of this period, we ask that you not activate the adaptive cruise control or lane centering features. For our research purposes, it is important that you not try to use the systems during this period and before we have shown you how to properly use the systems.
3. For the last 4 weeks after you have been introduced to the systems you will be asked to use the adaptive cruise control and lane centering when you feel it is safe to do so and in line with recommendations from the auto manufacturer as to when and where to use the systems.
4. The owner's manual will be available in the glove box.
5. Each week during the first five weeks you are in the study, you will be asked to take a 20-mile round trip highway drive following the route you planned as part of your intake session. For the first 2 drives you will not use the adaptive cruise control or lane centering. For the next 3 drives, after you have been introduced to the systems, you will be asked to use the adaptive cruise control and lane centering when you feel it is safe to do so and in line with manufacturer recommendations for safe use.
 - a. A researcher will contact you each week to remind you to take this drive.
 - b. Fuel reimbursement for these drives will be included in your compensation.
 - c. These drives should each take about 30 minutes.
6. Should a need for maintenance to the study vehicle arise, please contact the study team at 540-xxx-xxxx.
7. If you are in a crash, we ask that you do the following three things (in the following order):
 - a. Find a safe place to pull the vehicle over.
 - b. Seek emergency help, if necessary, the way that you normally would.
 - c. Please let the research team know about the incident at your earliest convenience.

Baseline Drive and Technology Orientation:

1. At the end of the second week of your naturalistic driving period, you will return to the research facility and take a drive from the research facility on Interstate 81 following a route prescribed by the research team. You will be asked to not use the adaptive cruise control or lane centering features on this first drive.

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- a. Prior to this drive, you will be asked to initial this consent form to indicate ongoing consent.
 - b. Fuel reimbursement for this drive will be included in your compensation.
2. At this appointment, a researcher will remove the USB drive from the data collection equipment and replace it with a new drive.
2. Following this baseline drive, the researcher will introduce you to the adaptive cruise control and lane centering driver assist features on the vehicle.
 - a. The researcher will take you on a test drive so you can ask any questions about using the driver assist features. The route will include town roads, highway and freeway driving in the local area. Then, you will drive the vehicle, asking any questions you may have.
 - b. We will ask you to sign a technology orientation checklist after the test drive. The list will document the information you have received about these systems.
5. The baseline drive and technology orientation session should take no more than 4 hours.
6. You will then be released to complete the last 4 weeks of driving with the systems on and available for use as you see fit during your normal driving and for the 3 remaining weekly planned routes.

Post-Exposure Drive, Vehicle Return and Study Exit

1. At the end of your naturalistic driving period, you will return to the research facility and take a drive following the same route as earlier in the study on Interstate 81.
 - a. Prior to this drive, you will be asked to initial this consent form to indicate ongoing consent.
 - b. Fuel reimbursement for this drive will be included in your compensation.
2. Those participants who did not complete the questionnaires earlier in the study will complete the questionnaires at this time.
3. This appointment, including the planned drive, should last no more than 3 hours.
4. We will arrange for your transportation home from the exit session.

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The table below summarizes study tasks at every stage of your participation.

Item	Description	
	Group 1	Group 2
Study Appointment #1: Consent, intake, and vehicle orientation	1. Sign consent form and W-9 Tax form 2. Vehicle Orientation Session 3. Complete Knowledge and Opinions Questionnaire	1. Sign consent form and W-9 Tax form 2. Vehicle Orientation Session
Naturalistic Driving Period: Weeks 1-2	1. Drive study vehicle as you normally would. 2. Do not use adaptive cruise control and lane centering. 3. Complete weekly 20-mile round trip planned highway drive.	
Study Appointment #2: Baseline drive and Technology orientation	1. Complete 72-mile baseline drive on Interstate 81 with technologies off. 2. Technology orientation 3. Complete usability questionnaire	1. Complete 72-mile baseline drive on Interstate 81 with technologies off. 2. Technology orientation
Naturalistic Driving Period: Weeks 3-5	1. Drive study vehicle as you normally would. 2. Use adaptive cruise control and lane centering when you feel it is safe to do so and in line with manufacturer recommendations for safe use. 2. Complete weekly 20-mile round trip planned highway drive using driver assist features.	
Naturalistic Driving Period: Week 6	1. Drive study vehicle as you normally would. 2. Use adaptive cruise control and lane centering when you feel it is safe to do so and in line with manufacturer recommendations for safe use	
Study Appointment #3: Vehicle return and study exit	1. Complete 72-mile baseline drive on Interstate 81 with technologies available for use. 2. Return study vehicle	1. Complete 72-mile baseline drive on Interstate 81 with technologies available for use. 2. Return study vehicle 3. Complete study questionnaires

What happens if I enroll in the study, but I change my mind later?

1. You can leave the research at any time, for any reason, and it will not be held against you. The study consists of three phases, and partial compensation will be provided for completing each phase.
2. If you decide to leave the research, contact Brian Wotring at 540-231-1045 or bwotring@vti.vt.edu so he can schedule a time to pick up the study vehicle.
3. Should you choose to leave the research, we will not keep any of the data collected after you tell us you want to leave. However, we will keep data collected prior to that point.

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Data Collection

The next section describes the data and information to be collected as part of this research. It explains how the data will be collected and how the data will be stored and used in the future.

Data will be collected to be analyzed in future research efforts. Information is collected about you, where necessary. Both are stored securely and used as described below. There will be two categories of information and two categories of data collected.

INFORMATION

1. **Contact information** includes your name, address, email address, phone numbers, and similar information used to contact you when needed. It will be stored securely in electronic form at the Virginia Tech Transportation Institute (VTTI) research facility during the course of the study and destroyed one year after the study is complete (unless you grant permission for us to keep your contact information when the study is over). This information will not be linked to or mingled with your study data and will not be used in any research or analysis.
2. **Auxiliary study information** includes your Social Security Number and similar information. This information is used to compensate you for your participation. Auxiliary study information will be stored securely and destroyed after the study is complete. This information will not be linked to or mingled with your study data and will not be used in any research or analysis.

DATA (Used for Research)

1. **Driver data** includes your answers to surveys and the image of your face used for driver identification purposes. Driver data will not contain your name and will be used in analyses, both on their own and in combination with the driving data. These data will be stored securely in electronic form throughout the lifetime of the data (defined below).
2. **Driving data** includes the data we collect from the vehicle while you are driving, including video data and sensor data. This information will contain video of your face and GPS coordinates of your trips, and either or both could be used to personally identify you. These data will be stored securely in electronic form throughout the lifetime of the data (defined below).

How Data and Information are Collected

A small Data Acquisition System (DAS) containing cameras and sensors will be attached to the rearview mirror such that it does not interfere with your view of the forward roadway.

A camera will record your face with some added space around the head to handle any head movements. Also, six cameras will capture views of the forward and rear roadway, the driver's foot well, the center



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Video views

What happens to the information and data collected for the research?

We will make every effort to limit the use and disclosure of your personal information only to people who have a need to review this information. We cannot promise complete confidentiality.

Organizations that may inspect and copy your information include the project sponsor (the National Highway Traffic Safety Administration (NHTSA), part of the U.S. Department of Transportation) and its prime contractor (Dunlap and Associates, Inc.), Institutional Review Board (IRB), Human Research Protection Program, and other authorized representatives of Virginia Tech.

Any data collected during this study that personally identifies you or that could be used to personally identify you will be treated with confidentiality. As soon as you begin participating in this study, your name and other identifying information will be separated from the raw data collected while you drive the vehicle and replaced with a number. That is, your raw data will not be attached to your name, but rather to a number (for example, Driver 0011). The raw data collected while you drive the vehicle will be encrypted (made unreadable) from the moment it is collected until it is transferred to a secure server at VTTI in Blacksburg, Virginia. Your name also will be separated from any data about you, either provided by you in response to the eligibility questionnaire or gathered by researchers during the study, and will be replaced by the same driver number (for example, Driver 0011).

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.

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We expect the driver data and driving data from this study to be useful for many years after the study is over. As such, we will plan to keep and use it indefinitely. It is expected that other researchers beyond the original study team identified in this form as well as industry partners may also find the data and results of this study useful. We will allow these individuals to use the data under the following conditions:

Data containing Personally Identifying Information (PII): These data contain information that could be used to personally identify you. Examples of PII are images of your face or the GPS coordinates of the beginning and ending of your trips. These data will be stored securely only on VTTI servers. VTTI researchers, Dunlap and Associates, Inc., and NHTSA may all access PII for the purposes of this study. External researchers wishing to use data containing PII for future research will be required to submit proof of prior IRB approval. These researchers will only be allowed access to temporarily view these data with the permission of NHTSA in a secure environment or in adherence with National Institutes of Health (NIH) guidelines. These external researchers will be required to sign a data use agreement assuring they will extend the same privacy protections to your PII that are outlined in this form.

De-Identified Data: We will separate your private information from data that are collected during this research; de-identified data (which cannot be associated with your identity) could be used for future research studies or distributed to another investigator for future research studies without your additional informed consent.

The study sponsor, NHTSA, and its prime contractor, Dunlap and Associates, Inc., also will have access to the de-identified driver and driving data collected throughout all phases of this study. After data collection is complete, one copy of the de-identified data may be transferred to the Department of Transportation, Dunlap and Associates, and Battelle (a subcontractor) for storage and oversight. Please note that they will follow the same procedures as described elsewhere in this consent form for protecting participant privacy.

The sponsor of this project, NHTSA, may publicly release aggregated data, in final reports or other publication or media for scientific, educational, research or outreach purposes. Additionally, NHTSA may be required to release data under the Freedom of Information Act (FOIA) or other Open Government Initiative request or court order. Generally, data will not be: (1) released in raw form; (2) linked to your name or contact information; and (3) will be redacted or edited to remove personally identifying information. This includes editing of video files to remove personally identifying information if necessary. This also includes redaction/exclusion of GPS data when it identifies a location such as your home that could be used to identify you.

Additionally, project personnel and other qualified, authorized research partners may show specific clips of video to the study sponsor or at research conferences. Your name and other personally identifying information will never be associated with the showing of these video clips. Identifying location information will not be shared in association with these video clips.

You will not have access to your study data; we will not offer to share your data with you.

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If you would like to view a specific segment of your study data to defend yourself in a criminal or traffic case, or for any other legal or financial matter, you should contact the study coordinator, Jon Antin at (540) 231-1579.

Certificate of Confidentiality

Throughout the study, we will take all possible steps to protect your privacy and keep confidential your role in the study and the confidentiality of your personally identifying information. To help us protect your 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 you, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings. However, this privacy protection 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 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 you from the study and inform the appropriate authorities of what we have observed.

Identifying information for the purposes of this study includes your contact information, your auxiliary study information, your driving data (including video of your face and GPS coordinates which may identify your home, work, or school locations), or any information in your driver data or driving data that could be used to personally identify you.

You should understand that a Certificate of Confidentiality does not prevent you or a member of your family from voluntarily releasing information about your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide written consent to allow the researchers to release it.

The Certificate of Confidentiality does not mean that the Federal government endorses this study. The protections of the Certificate of Confidentiality described herein may not apply to passengers of the vehicle who have not consented to being in this study.

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

If you are 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. You are under **NO LEGAL OBLIGATION** to voluntarily mention the data collection equipment or your participation in this study at the time of a crash or traffic offense. We have provided a letter which you should keep in a safe place in the vehicle, such as the glove box in case a law enforcement officer asks you about the

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equipment. The letter describes the vehicle's role in the study without identifying you as a participant in the study.

Is there any way being in this study could be bad for me? (Detailed Risks)

1. There is the risk of an accident normally present while driving an unfamiliar vehicle.
2. There is minimal risk due to the additional miles you will drive for the prescribed routes required for this study.
3. There is a risk associated with using unfamiliar systems and technology. The vehicle's features are designed to provide alerts for certain types of crashes; however, risks are not completely eliminated and system malfunctions may occur.
4. There are non-driving risks inherent in this study. The vehicle is equipped with cameras. If you drive into an area where cameras are not allowed, including international border crossings, certain military and intelligence locations, and certain manufacturing facilities, there is a risk that you may be detained or arrested or that the vehicle may be impounded.
5. Because the vehicle camera system is storing continuous video, it is likely that it may capture some incriminating evidence if an at-fault collision should occur. Additionally, there is the risk that cameras may capture illegal activities 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, allowing an unlicensed minor to drive the vehicle, or habitually running red lights at high speed. With the Certificate of Confidentiality, the researchers cannot be forced to disclose information that may identify you, even by a court subpoena, in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings.

The following precautions will be taken to minimize the risk to you throughout your participation in the study:

General Steps Taken to Reduce Risk:

1. To help us further protect your privacy, a Certificate of Confidentiality has been obtained to prevent the continuous video and sensor data from being used against you in the event of an at-fault collision.
2. You are free to ask questions and to withdraw from the study at any time. You can decline to answer questions.
3. The study vehicles are all commercially available vehicles with commercially available technology packages. Any current driver could buy/lease/rent a similar vehicle. The advanced systems of interest are not modified for use in this experiment in any way.
4. The vehicles are equipped with a driver's side and passenger's side airbag, side airbags for both front passengers, curtain airbags for 1st and 2nd row occupants, and supplemental restraint system.
5. All data collection equipment is mounted in the vehicle such that, to the greatest extent possible, it does not pose a hazard in any foreseeable case. None of the data collection equipment will interfere with any part of the driver's normal field of view.
6. The vehicles will be maintained by the research team, including routine maintenance, to ensure they are safe to operate.

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7. The data collected from the vehicle and the video data will be encrypted at the onset of collection on the USB drive in the vehicle. The data remain encrypted until uploaded to a secure VTTI server.
8. Commonly touched areas of the vehicle will be disinfected before the vehicle is provided to you.

Reducing Risk During Technology Orientation, Baseline Drive, Post Exposure Drive:

1. The researcher will provide you with information about the vehicle and the technology. The researcher will demonstrate how the technology works while you ride as a passenger. The researcher will then ride along as you drive and be available to answer questions as you use the technology for the first time.
2. You and the in-vehicle experimenters will be required to wear the lap and shoulder belt restraint system while in the car during the orientation sessions.
3. You will be instructed to conform to the laws and regulations of driving on public roadways.
4. You will be reminded that driving is your primary responsibility.
5. The researcher will monitor your driving during the orientation session and can assist you in the event of an emergency.
6. The experimenters will have a cell phone in case of an emergency.
7. The technology orientation session will only be conducted in daylight in clear weather.
8. In the event of a medical emergency, or at your request, research staff will arrange medical transportation to a nearby hospital emergency room.

Reducing Risk During Naturalistic Driving Experience:

1. We have placed a letter in the glovebox which can be used to demonstrate the vehicle's role in the study while still maintaining your privacy and confidentiality. Should a law enforcement officer or other authority ask about the data collection equipment in the study vehicle, please let him or her know about the letter we have provided that explains the presence of the equipment before reaching for the letter.
2. You are required to wear the seatbelt restraint system while in the car and to ensure the proper use of safety belts and child safety restraints for all other occupants of the vehicle.
3. You are instructed to conform to the laws and regulations of driving on public roadways.
4. You will have access to the owner's manual of the vehicle that further describes features and their limitations. You should never fully rely on the onboard systems, and you should always exercise normal caution when operating the vehicle.
5. You may not allow anyone else, including family members, to drive the test vehicle.
6. We will do our best to not collect identifying video information on passengers in the vehicle; however, passengers sitting right behind the driver will be the most vulnerable to being seen on video. Should the cameras capture images of passengers, these images will be blurred.

Reducing Risk after participation.

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If you do choose to pair a personal cell phone with the vehicle, we will delete any downloaded contacts or other information from the vehicle at the end of your participation.

Can I be removed from the research without my OK?

The person in charge of the research study or the sponsor can remove you from the research study without your approval. Possible reasons for removal include being uncooperative (i.e., not following instructions) or habitually driving in an unsafe manner, the vehicle no longer being available, or the sponsor choosing to end the study early.

We will tell you about any new information that might affect your health, welfare, or choice to stay in the research.

What else do I need to know?

This research is being funded by the National Highway Traffic Safety Administration (NHTSA).

Study Compensation

If you agree to take part in this research study, you will receive compensation for your time and effort. After you sign the consent form, we will issue you a ClinCard MasterCard, and funds will be loaded onto the card in three installments following study appointments as follows:

Installment	Study Appointment	Included Study Tasks	Amount
1	Consent and Intake	<ul style="list-style-type: none">• Informed Consent• Intake• Vehicle orientation session	\$100.00
2	Baseline Drive and Technology Orientation	<ul style="list-style-type: none">• 2 weeks of driving *• 2 weekly 20-mile planned trips on the highway• 1 74-mile planned trip on Interstate-81• Technology Orientation	\$150.00* *
3	Vehicle return and study exit	<ul style="list-style-type: none">• 4 weeks of driving *• 3 weekly 20-mile planned trips on the highway• 1 74-mile planned trip on Interstate-81	\$200.00* *
Total Maximum Compensation			\$450.00

* Compensation for the naturalistic driving period will be prorated at \$25/week if you drive fewer than 5 weeks.

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** Compensation includes a fuel reimbursement. The amount is based on mileage of 26 mpg for the 2020 Subaru Outback and fuel prices in the Blacksburg area.

The final \$200 compensation will be added after the vehicle is returned.

In the event we ask you to return to the research facility for maintenance outside the scheduled data drive swap following the baseline drive in Week 2 of the driving period, an inconvenience fee of \$25 will be loaded onto your Clincard. This is not included in the maximum compensation amount identified above.

Insurance

In the event of an accident or injury in an automobile owned or leased by VTTI, the automobile liability coverage for property damage and personal injury is provided. The total policy amount per occurrence is \$2,000,000. This coverage (unless the other party was at fault, which would mean all expense would go to the insurer of the other party's vehicle) would apply in case of an accident for all volunteers and would cover medical expenses up to the policy limit. For example, if you were injured in an automobile owned or leased by VTTI, the cost of transportation to the hospital emergency room would be covered by this policy. Any coverage of the participant is limited to the terms and conditions of the insurance policy.

Participants in this study are considered volunteers, regardless of whether they receive payment for their participation; under Virginia law, worker's compensation does not apply to volunteers; therefore, if not in the automobile, the participants are responsible for their own medical insurance for bodily injury. Appropriate health insurance is strongly recommended to cover these types of expenses. For example, if you were injured outside of the automobile owned or leased by Virginia Tech, the cost of transportation to the hospital emergency room would be covered by your insurance.

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

The participant agrees 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.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, you can talk to Jon Antin at (540) 231-1579 or you can email him at jantin@vti.vt.edu.

This research has been reviewed and approved by the Virginia Tech Institutional Review Board (IRB). You may communicate with them at 540-231-3732 or irb@vt.edu if:

- You have questions about your rights as a research subject
- Your questions, concerns, or complaints are not being answered by the research team
- You cannot reach the research team
- You want to talk to someone besides the research team to provide feedback about this research.

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By signing below, you affirm that:

1. You will not remove, modify, or tamper with any of the installed components.
2. You will not block the forward or driver's face cameras and not hang decorative ornaments on study components or the rearview mirror.
3. You will notify research staff if you are involved in a crash, encounter any problems with the study vehicle, or if you have questions.
4. You will comply with the following rules about driving the study vehicle:
 - a. You must not take the study vehicle into any facilities or areas that do not permit video recording devices.
 - b. You must not allow other people to drive the study vehicle.
 - c. You must not use the study vehicle in a 'for hire' capacity such as a taxi, Uber, Lyft or other similar service.
 - d. You will wear your seatbelt at all times and ensure the proper use of safety belts and child safety restraints for all other occupants of the vehicle.
 - e. You will not use the vehicle to tow or put any type of bike rack, ski rack, storage rack, and/or container onto the vehicle or make any other modifications to the vehicle or its installed study equipment.
 - f. You will not use the vehicle to tow any form of trailer or haul any material greater than what the vehicle was designed to accommodate. Additionally, the vehicle cannot be used to transport flammable or hazardous materials (e.g., gasoline, acid, dynamite, lime).
 - g. The vehicle cannot be driven off- road.
 - h. You are responsible for all tickets received (including moving violations and parking tickets) while the vehicle is in your possession.
 - i. You must not smoke or vape or allow others to smoke or vape in the vehicle. Please keep the interior clean and odor free.

Signature of subject

Date

Printed name of subject

Signature of researcher obtaining consent

Date

Printed name of researcher obtaining consent

Consent to Take Part in a Research Study

Initial and date below to indicate ongoing consent to participate in study activities:

Before Baseline Drive

Initials of subject Date

Before Post-Exposure Drive

Initials of subject Date