VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER STUDY INFORMED CONSENT FORM

Principal Investigators: Scott Gabree

Sponsor: Federal Railroad Administration

Project Title: Pilot Study of Drivers at Highway Grade Crossings

1. WHAT IS THIS FORM?

This is an Informed Consent Form. It will give you information about this study so you can make an informed decision about participating. You need to be 18 years of age or older to give informed *consent*.

2. WHO IS ELIGIBLE TO PARTICIPATE?

Experienced adult driver's age 18 to 65 who have had a regular Driver's License for 5 or more years. Drivers, who experience motion sickness, either as a driver or passenger in a car, or in other modes of transport, should not participate.

3. WHO IS SPONSORING THIS STUDY?

The Federal Railroad Administration is sponsoring this study.

4. WHAT IS THE PURPOSE OF THE STUDY?

The purpose of this study is to investigate driver behavior using novel, simulator-based experimental methods.

5. WHERE WILL THE STUDY TAKE PACE AND HOW LONG WILL IT LAST?

This is a single-session study involving a driving simulator. The simulated drive will take place at the Volpe National Transportation Systems Center (Building Six) located in Cambridge Massachusetts. The X simulated drives will be conducted on the Center's Realtime Technology Incorporated driving simulator. The study will last approximately 1 hour.

6. WHAT WILL I BE ASKED TO DO?

During your session:

i) The experimenter will briefly explain the goals of the study and the associated procedures.

ii) Afterward, the experimenter will show you how to drive the Center's driving simulator (referred to as the "RTI simulator") and will give you general instructions for the drives. During the simulator drives, you should operate the controls of the simulated car just as you would those of any other car and move through the simulated world accordingly.

iii) You will then sit in the RTI simulator and be given a practice drive to become used to the driving simulator. Once you feel comfortable in the RTI simulator, you will begin X experimental drives. These drives will take about X-to-Y minutes each. **If at any time during the drives you feel discomfort or motion sickness, you should ask the experimenter to stop the simulation**.

iv) Throughout each drive you will encounter a series of railroad grade crossings.

v) After the simulator-based drives, you will be asked to complete a payment voucher.

7. ARE THERE ANY RISKS OR BENEFITS ASSOCIATED WITH PARTICIPATION?

There are no educational benefits to the participants of this study.

In terms of risks, there is a slight risk of simulator sickness when you operate the driving simulator. A small percentage of participants who drive the simulator may experience feelings of nausea or actual nausea. The experimenters work to minimize this risk, but it is still present. Because of this risk, any person who experiences motion sickness while in a real car should not participate in the experiment**.** If during the simulator drives, you feel discomfort or nausea, you should inform the experimenter immediately so that the simulation can be stopped. Halting the simulation should quickly reduce the discomfort. If you do not feel better soon after the simulation is halted, talk to the experimenter.

8. WHO WILL SEE THE RESULTS OF MY PERFORMANCE IN THE STUDY?

The results of this research may be published and submitted for presentation at professional society meetings and/or used by the sponsor for internal purposes. No participant will be identifiable from the reports nor will any participant's name, initials, or personal identifiers be used in the reports. To maintain confidentiality of your records, the researchers will use subject codes, rather than names, to identify all data collected during your simulation drives. Your face in all recordings will be blurred and your voice will be altered. The data will be secured in the Volpe Laboratory and will be only accessible by the principal investigators and the other lab researchers for the study, and sponsor personnel.

It is possible that your research record, including sensitive information and/or identifying information, may be inspected and/or copied by the study sponsor (and/or its agent), the Federal Railroad Administration (FRA), or federal or state government agencies, in the course of carrying out their duties. If your record is inspected by the study sponsor (and/or

its agents), or by any of these agencies, your confidentiality will be maintained to the extent permissible by law.

9. WILL I RECEIVE ANY PAYMENT FOR TAKING PART IN THIS STUDY?

You will receive a $50 amazon gift card for your participation in this study.

10. WHAT IF I HAVE A QUESTION?

Should you have any questions about the experiment or any other matter relative to your participation in this project, or if you experience a research related injury as a result of this study, you may call the primary researcher, Dr. Scott Gabree at 617-494-2530 or email him at Scott.Gabree@dot.gov. A copy of this consent form can be made, upon request, for your records.

11. WHAT IF I REFUSE TO GIVE OR WITHDRAW MY PERMISION?

Your participation is voluntary and that you may refuse to participate or may withdraw consent and discontinue participation in the study at any time without prejudice.

CONSENT SIGNATURES

12. SUBJECT STATEMENT OF VOLUNTARY CONSENT

By signing below, I, the participant, confirm that the experimenter has explained to me the purpose of the research, the study procedures that I will undergo and the benefits as well as the possible risks that I may experience. Alternatives to my participation in the study have also been discussed. I have read and I understand this consent form.

_____ _____

Printed name of participant Date

_____

Participant Signature

EXPERIMENTER SIGNATURE

13. EXPERIMENTER STATEMENT

By signing below, I the experimenter, indicate that the participant and the participant's parent or legal guardian has read and had explained to them this study, and that they have both signed this Informed Assent/Consent Form.

_____ _____

Signature of person obtaining informed consent Date