

APPENDIX A. RECRUITMENT MATERIALS

Initial Screening Contact Human Factors in ADS-equipped CMVs (IRB #21-827)

Note to Researcher:

Initial contact between participants and researchers may take place over the phone. If this is the case, read the following Introductory Statement, followed by the screening questions. Regardless of how contact is made, this information must be administered verbally before a decision is made regarding eligibility for this study.

Phone script for leaving a message (speak slowly):

Hello, my name is _____ and I am calling from the Virginia Tech Transportation Institute in Blacksburg, VA. We are looking for individuals, 21 and older who have a CDL (Class A or B), to participate in a research study that will explore automated driving systems in commercial motor vehicles. Participation involves coming to Blacksburg, VA to drive in our commercial motor vehicle driving simulator. Participants will be asked to take part in two sessions lasting approximately 4 hours each. This project provides compensation of \$200 for each session and a \$100 bonus for those who complete both sessions. Maximum total compensation for both sessions is \$500.

If you are interested and would like to hear more, please contact us at XXX-XXX-XXXX. Again, the number is XXX-XXX-XXXX and please mention the “Human Factors simulator” study (IRB# 21-827).

Thank you and have a great day.

Script for talking to potential participant:

Introductory Statement:

After prospective participant calls or you call them, use the following script as a guideline in the screening interview.

Hello. My name is (XXX) and I am with the Virginia Tech Transportation Institute in Blacksburg, VA. We are recruiting participants for a research study (IRB# 21-827) being conducted here at VTTI’s facility. Would you be interested in hearing more about this study?

If No: Ok, thank you for your time.

If Yes: Do you have about 10 minutes to listen to the details now?

If No: That is fine. When would be a better time to talk more?

Day: _____ Date: _____ Time: __: __ Phone #: _____

If Yes: (Read below.)

The purpose of the study is to understand driver distraction in semi-automated commercial motor vehicles and to develop and test a commercial driver distraction training program. This information will be used to improve knowledge on automated commercial motor vehicles, driver distraction, and safety as well as informing policy related to these issues. To accomplish this, we will gather driving data, eye tracking data, and your opinions that will be analyzed to understand these topics. To gather this information, we are inviting individuals to participate in a two-part driving simulator study in Blacksburg, Virginia. Participants would be compensated \$200 per session and \$100 bonus for those who complete both sessions. Maximum compensation for full participation is \$500. Participants will be compensated at the conclusion of each session via ClinCard, this is a pre-loaded debit card that is given to the driver after participating.

Participation in this study involves using VTTI's heavy vehicle driving simulator. People who are prone to motion sickness may find that driving in the simulator makes them feel unwell and should not participate in this study.

Before the research study begins, you will be asked to complete a W9 form. This is a tax form required by Virginia Tech to provide compensation for your participation in the simulator study. This initial portion of the meeting is private and will not be recorded. The simulator driving session will be recorded to understand behavior while driving ADS-equipped commercial vehicles. The data collected during this study will be kept secure. Your name will not be associated with any data used in analysis or reporting; all participants are assigned a participant number, such as #10. Further details of what is involved in participation will be provided to you, for your review, prior to any simulator driving.

Participation in this study is expected to take about 4 hours per session or 8 hours total. The first session involves filling out questionnaires and 'driving' in a simulator. The second session involves viewing a training on vehicle technology, completing questionnaires, and 'driving' again in the simulator.

Nothing you share with us will be linked with your identity when reported. All study data will be confidential. You are free to not answer any study questions and may withdraw from the study without penalty at any time.

Do you have any questions about participating in the study?

Does this study sound like something you would be interested in doing?

If no: Thank you for your time.

If yes: (Read below.)

If you are interested in participating, I need to go over some screening questions to see if you meet the eligibility requirements of this study. Any information given to us will be kept secure and confidential.

Do I have your consent to ask you the screening questions?

If no: *Ok, thank you for your time.*

If yes: *Continue with the following questions.*

1. Do you have a valid driver's license?
 - Yes (note answer)
 - No (stop here if no)

2. Do you have a valid commercial driver's license, Class A or Class B (CDL-A, CDL B)?
 - Yes (note answer)
 - No (stop here if no)

3. Do you currently drive a commercial motor vehicle?
 - Yes (note answer)
 - No (stop here if no)

4. What is your current age? If 21+, may we have your year of birth? _____
 - Yes (note answer)
 - No (stop here if no)

5. The research study will take place at the Virginia Tech Transportation Institute in Blacksburg, Virginia. Are you able to travel to Blacksburg, Virginia?
 - Yes
 - No (stop here if no)

6. For research purposes, do you identify as Male, Female [pause], or Other? (Circle one)
What are your personal pronouns"? _____

7. For this study, we are seeking a racially diverse population. Which of the following categories best describes you? (Select one or more)
 - White
 -
 - Black or African American
 - Asian
 - American Indian or Alaska Native

 - Native Hawaiian or Other Pacific Islander
 - A race, ethnicity, or origin not listed here: _____

Prefer not to answer

8. For payment documentation and tax recording purposes Virginia Tech will require you to complete a W-9 form at the time of participation. If selected to participate in this study, will you complete a W-9 form, which will require you to provide your SSN, in order to compensate you for your time as required by Virginia Tech? YES ___ NO ____

Please note: VA Tech would never ask for someone's SS # or any personal banking information during a phone call.

9. Are you a U.S. Citizen? YES ___ NO ____

If No, are you a permanent resident with a valid green card to work anywhere in the U.S.?

YES ___ NO ____

To clarify, Are you a Visa holder or do you have a *Valid Green Card with permanent resident status*? Visa ___ Green Card ____

If you have a Visa you will not be eligible to participate. Those with a Permanent Resident Green Card are eligible.

Notes: _____
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Criterion: Must be a U.S. citizen or permanent resident (green card holder able to work anywhere in the U.S. with NO restrictions such as limit on number of hours he or she can work each week or place he or she is allowed to work, for example, he or she can't be limited to only working at 1 company or VT only). Visa holders are not eligible.

I'm now going to ask you a few questions about your history of motion sickness. Please indicate how frequently you experience the following symptoms on a scale between 0 and 3. Zero indicates you never experience these symptoms, one is occasionally, two is often, and three is always. I can repeat these options at any time. You have...

Circle their response:

1. *The inability to sit close to a movie screen or watch the movement of a train or carnival ride without nausea, dizziness, or headaches*
0 1 2 3
2. *Frequent, and sometimes daily, pressure headaches*
0 1 2 3
3. *Nausea, headache, or dizziness on playground equipment*
0 1 2 3

- | | | | | |
|---|---|---|---|---|
| 4. Car sickness | 0 | 1 | 2 | 3 |
| 5. Fatigue, headaches, nausea, or dizziness when reading or sitting in front of a computer screen | 0 | 1 | 2 | 3 |
| 6. Nausea, headache, or dizziness from riding roller coasters | 0 | 1 | 2 | 3 |
| 7. Inability to watch rapid movement on a TV or movie screen without getting nausea or dizziness | 0 | 1 | 2 | 3 |
| 8. Nausea, headache, or dizziness when playing video games | 0 | 1 | 2 | 3 |
| 9. Seeing the floor or ground as being tilted or wavy | 0 | 1 | 2 | 3 |
| 10. Tendency to become nauseated or dizzy when turning, spinning, or doing rapid movements | 0 | 1 | 2 | 3 |
| 11. Feeling that something inside the body is in constant motion | 0 | 1 | 2 | 3 |
| 12. Sensation that print floats at times when reading | 0 | 1 | 2 | 3 |

Thank you for your answers, one moment while I write your score.

If a potential participant rates three or more of the above statements as **Always (3)** or six or more as **Often (2)** or all the statements as **Occasional (1)** on the Likert-type scale, they are not eligible to participate in the study.

If Ineligible read the following:

Unfortunately, you are not eligible for this particular study. Thank you for your time.

If Eligible:

- Schedule for the first session.

You are eligible, I would like to set up a time for you to participate in the study.

Would it be possible for you to participate in the driving simulator study on _____ (day of week) at ____: ____ hrs. (time)?

If the response is yes: go ahead and schedule the participant.

If the response is no, discuss possible times that may work for the participant.

Once the researcher has scheduled the participant repeat the schedule day and time back to the participant.

Great! We have you scheduled for simulator study, on _____ (day) at ____: ____ hrs.

VTTI will be calling you the day before to remind you of the appointment. If you need to cancel, please call 540-_____ immediately so we may find another participant to fill the appointment. The research is dependent on having enough participants to take part in each session.

I will also send you confirmation of this meeting via e-mail as well as the Informed Consent Form with details about the study. Please go over this information before the study and let me know if you have any questions or concerns. What is the best e-mail address for me to send these documents? (Note email address)

Thank you.

Do you have any questions right now that I can answer for you? (Answer the questions if any).

***If none:** Thank you for your time, please do not hesitate to reach out with any questions. Have a great rest of your day.*

VTTI WEBSITE

NEED COMMERCIAL DRIVERS FOR RESEARCH STUDY (IRB #21-827)

VTTI is currently seeking individuals who:

- Are ages 21 and above
- Have a valid Class-A or Class- B Commercial Driver's License (CDL-A or CDL-B)
- Drive a commercial motor vehicle such as a tractor-trailer as part of their job
- Are willing to participate in a driving simulator study in Blacksburg, Virginia
- Are *not* prone to motion sickness.

If you meet the above requirements and are interested in hearing more about this study, please call ###-###-#### Any information you provide will remain confidential and will not be shared with others outside of VTTI.

Full study participation includes coming to VTTI for 2 separate sessions (4 hours each). Compensation of up to \$500 will be provided for full participation.



FLYER and Social Media Post



VOLUNTEER FOR A RESEARCH STUDY

The Federal Motor Carrier Safety Administration and the Virginia Tech Transportation Institute are conducting a driving simulator study to learn more about semi-autonomous commercial motor vehicles.

We are recruiting commercial motor vehicle drivers to participate in this research study (IRB 21-827). To qualify you must be at least 21 years of age, hold a valid CDL-A or CDL-B, have no known sensitivity to motion sickness, drive a commercial motor vehicle as part of your job, be vaccinated for COVID-19, and be able to participate in a study in Blacksburg, Virginia.

Participants will “drive” in the VTTI driving simulator for two separate sessions. Each session is 4 hours long. The study will record continuous video of your face, your hands and steering wheel. You will also be asked to fill out questionnaires.

Participants receive a maximum of \$500 for full study participation.

Your data will be kept confidential.

If you are interested in more information, please contact at (540) ###-#### or #####@vtti.vt.edu

Electronic Media - Condensed:

(Ad for Social Media Platforms, such as Instagram, FaceBook, Twitter, electronic media, newsletters)

Condensed versions:

Title1: "Virginia Tech Seeking Commercial Vehicle Operators (Class A and Class B CDL) for a Research Study"

Title2: "Commercial Vehicle Drivers Needed to Drive in a Simulator for Research Study"

Body1: Do you have a CDL-A or CDL-B? The Virginia Tech Transportation Institute is looking for commercial vehicle drivers to participate in a research study (IRB #21-827). Study involves 'driving' in a simulator at VTTI for two separate sessions. Compensation provided. Interested?

Contact: 540-###-#### or #####@vtti.vt.edu and mention the Simulator study.

To learn more: www.vtti.vt.edu/###/

Body2:

VTTI is compensating commercial vehicle operators to participate in a simulator research study (IRB #21-827) at Virginia Tech. Must have a Class A or Class B CDL and currently be driving a commercial motor vehicle. Interested in learning more?

Contact 540-### or ###@vtti.vt.edu and mention the Simulator study.

To learn more:www.vtti.vt.edu/####/