\*\*Note that this form is to be kept up to date regularly (**at least every quarter**). Safe-D administrators may access your form on your Project Site at any time and pull for information reported to USDOT OST-R, use information for internal or external reports or presentations, etc.

Date of Last Update (edit each time): **7/1/2022**

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| UTC Project Information |  |
| Project Title | Measuring the Safety of ADS: How Safe is Safe Enough? |
| University | Virginia Tech |
| Principal Investigator | Andy Petersen |
| PI Contact Information | apetersen@vtti.vt.edu |
| Funding Source(s) and Amounts Provided (by each agency or organization) | VTTI: $759.406 |
| Total Project Cost | $759,406 |
| Agency ID or Contract Number | Grant No: 69A3551747115  Project: 06-014 |
| Start and End Dates | 7/1/22 – 6/30/2023 |
| Brief Description of Research Project | Automated driving systems (ADS) are being developed faster than any point in history. There is a need to have an independent system to measure the safety of ADS across technologies and corporations. There are a variety of efforts around the world trying to estimate the impact of these systems on safety both prior to and after implementation. A missing piece that could allow for more cohesion and safer implementation is the knowledge of what type of data is needed for the refinement and further development of these systems. The purpose of this project is to determine the best method to collect data on the earliest adopter of these advanced vehicle control system and how to rapidly to use this data to evaluate the safety of these systems in the field. A new data acquisition system will be developed through this project according. The data collected by this new data acquisition system will be analyzed, including root cause assessments to measure the safety levels of these systems, as well as how to understand why a system may not be achieving the safety benefit envisioned. The project focus will be on the data that should be collected, how to collect that data, how to rapidly get that data from the field and how to rapidly use that data to assess the safety of these advanced features including any benefit and disbenefits. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | The following are planned deliverables from this project:   * Final Report * Database Upload * Chapter of student’s dissertation * Published Journal article * Conference Presentation * Webinar Presentation * Outreach to STEM group (Women in Transportation) |
| Impacts/Benefits of Implementation (actual, not  anticipated) | This project will help inform the development of a data acquisition system to rapidly collect the information needed to evaluate the safety of ADS. This project may design an objective way to determine if an advanced vehicle is safe enough to operate within certain domains, and what information is needed in order to come to that conclusion. This information can hopefully shape future policy surrounding ADS implementation. |
| Web Links   * Reports * Project website |  |