



January 10, 2023

Ann Carlson
Acting Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: NHTSA Safety Research Portfolio Public Meeting: Fall 2022 Docket No. NHTSA-2022-0091

Applied Intuition welcomes the opportunity to provide comments in response to the National Highway Traffic Safety Administration (“NHTSA”) request for comments (“RFC”) on The Safety Research Portfolio Public Meeting: Fall 2022. Specifically, NHTSA has requested comments on the current and future research projects undertaken by the Agency.

Applied Intuition supports the safe development, testing, and deployment of automated driving assistant systems (“ADAS”) and automated driving systems (“ADS”) equipped vehicles. The company’s suite of simulation, validation, and drive log management software enables development and testing teams to create thousands of scenarios in minutes, run simulations at scale, and, critically, create traceability between simulation test cases and safety requirements. Applied Intuition’s toolchain automatically explores edge cases, creates simulation test cases from real-world events, and can supplement unsafe or difficult test coverage with synthetic datasets in virtual environments. These solutions support the safe research and development of ADS software in vehicles by catching failure modes early.

In response to this request, Applied Intuition expresses its support for NHTSA’s inclusion of virtual testing tools in research projects, like the study on ADS driving performance testing methods by NHTSA’s Intelligence Technologies Research Division. Applied Intuition believes that virtual testing is a critical capability that NHTSA should evaluate as a component of any safety research and compliance of ADAS and ADS systems.

In particular, NHTSA should continue to invest in commercially available modeling and simulation tools that are rigorous, scalable, and continuously maintained. The enacted Fiscal Year 23 Consolidated Appropriations Act includes a set-aside to NHTSA up to \$3.5 million “to support the virtual review, assessment and validation of autonomous vehicles.” The accompanying House Transportation, Housing and Urban Development Act Report language stresses that “integration of testing and evaluation platforms using virtual simulation and synthetic data generation would significantly enhance the agency’s ability to independently audit, assess and validate the safety of these systems.”



Applied Intuition looks forward to continued engagement with NHTSA to help provide modeling and simulation capabilities that can support the research and evaluation of ADAS and ADS technology within the automotive industry.

Sincerely,

Sunmin Kim
Director of Public Policy, Applied Intuition