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The Honorable Elaine L. Chao Secretary U.S. Department of Transportation 1200 New Jersey Avenue, SE Washington, DC 20590

Response to Docket Number: NHTSA-2018-0092

Dear Madam Secretary:

The Texas A&M Transportation Institute (TTI) appreciates the United States Department of Transportation (USDOT) and the National Highway Traffic Safety Administration's (NHTSA) interest in establishing a national pilot program to facilitate, monitor and learn from the testing and development of the emerging, advanced vehicle safety technologies and to ensure the safety of those activities. TTI has been part of several federal initiatives and private sector research projects that focus on testing of automation and new technology. We look forward to your leadership as vehicle technology develops more rapidly than ever before.

Regarding the design of a pilot program for the safe on-road testing and deployment of vehicles with high and full driving automation and associated equipment, TTI encourages a flexible, open program that allows for the innovation and accommodation of technology. NHTSA officials have commented in various forums that there will be more technology development in the next five years than in the last fifty. TTI's position as a research institution, which is leading discoveries in automation and connectivity, provides us a foremost opportunity to witness this phenomenon first-hand. New ideas and concepts pushing the limits of what was not possible yesterday are emerging today. It is important that a pilot program be open to different concepts and non-traditional relationships and practices that may not fit within legacy standards and guidance. NHTSA can work with pilot program applicants and participants to ensure high standards for safety, but also allow the latitude to make exceptions when needed to accommodate new concepts and methods as they develop.

This flexibility speaks to NHTSA's second and third areas of interest: the use of existing statutory provisions and regulations to allow for the implementation of such a pilot program and the additional elements of regulatory relief that might be needed to facilitate testing. NHTSA could review its current statutory provisions and regulations, along with those of USDOT and other federal agencies. This will help NHTSA identify areas in which it may have limitations and need additional permissions or flexibility. This activity will also help identify other administrations or agencies that can support NHTSA or are in conflict with NHTSA's activities. For example, there may be relationships with entities such as the Federal Communications Commission, Department of Defense's cyber provisions, Department of Commerce, Federal Trade Commission and others



given the nature of highly connected and automated proprietary technology. NHTSA also may want to consider alternate data protections so that data collected and analyzed are properly protected, especially when proprietary technology is involved.

Additionally, TTI respects the laws and regulations created to ensure safety, commerce, environmental compliance and numerous other areas that pertain to the safe operation of vehicles on the nation's roadways. However, TTI's researchers have experienced situations in which current statutory provisions may need to be waived or temporarily exempted to allow testing to occur. An example of this is truck platooning research. In some cases, the issue is with state laws or regulations, but in others it may be federal vehicle requirements or safety standards. TTI encourages NHTSA to consider ways in which the agency could provide the means for expedited waivers or exemptions as part of the pilot program if the applicant or testing entity has made a reasonable case or demonstrated that such change is needed.

Furthermore, with respect to the granting of exemptions to enable companies to participate in a pilot program, TTI understands the challenge in establishing the safety and other analyses needed by NHTSA to assess the merits of individual exemption petitions, as well as the types of terms and conditions it should consider to protect public safety. There is a significant risk involved in providing exemptions or approvals. TTI's experience in developing a concept of operations as part of its work on connected and automated vehicle development and operational testing has helped identify all facets of an operation. A concept of operations helps prepare for foreseen risks and accommodate unforeseen risks through proper preparedness and strategy. TTI encourages NHTSA to consider a concept of operations-type approach when evaluating new testing requests and technology. In addition, enlisting expert reviews to support NHTSA in its decisions would help provide guidance and insight. However, non-disclosure and proprietary sensitivities would need consideration similar to the current methods in which USDOT and NHTSA evaluate new vehicle technology and safety.

Finally, TTI believes that automated vehicle proving grounds can be used to test new technologies and use cases in a controlled environment. As a leading automated vehicle proving ground, TTI understands the importance of ensuring the safe operation of technology before on-road testing with the general public and encourages NHTSA to use leading proving grounds for this testing.

In summary, TTI appreciates the opportunity to provide input as NHTSA considers the type of pilot program that would help facilitate new vehicle technology, while ensuring public safety. TTI looks forward to the opportunities that this type of program will bring the nation and the resulting developments that will one day provide the safest, most secure and efficient transportation network possible.

Sincerely. Gregory D. Winfree, J.D.