



December 10, 2018

Acting Administrator Heidi King
National Highway Traffic Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

Subject: Advanced Notice of Proposed Rulemaking: Pilot Program for Collaborative Research on Motor Vehicles With High or Full Driving Automation - Docket No. NHTSA-2018-0092

Dear Acting Administrator King:

Transdev, a global company with operations in 20 countries, is the largest private sector operator of multiple modes of transit in North America, providing bus, rail, paratransit, shuttle, sedan, taxi, and most recently autonomous vehicle services. In the U.S. alone we contract with over 200 cities, transit authorities, airports, universities, and companies to provide safe and sustainable mobility solutions.

We are a pioneer in automated vehicle (AV) operations, system design, and integration, with over two million fully-automated passenger trips since 2005. At Transdev, we believe the future of mobility is PACE: Personalized, Automated, Connected and Eco-Friendly. As such, we are committed to testing out new kinds of mobility, giving our customers the best possible solutions to their travel needs. As an OEM-agnostic operator, we're committed to working with our public and private sector clients to design automated mobility solutions that meet their unique needs.

As a world leader in public transport, on demand public services, and AV technology implementation, we are uniquely positioned to provide a holistic perspective on critical workforce issues. The majority of our 82,000 employees globally will have their job roles significantly changed by PACE mobility. **We are committed to proactively developing solutions that ease this technological transition while maintaining a focus on the importance of the human element in delivering mobility solutions.**

Transdev contends that many of the regulatory barriers to AV deployment can be resolved by NHTSA's acceptance and use of alternative test procedures. Broad-based research may be a worthy exercise to support long-term development of uniform procedures, but it is not necessary to complete such research before NHTSA gains direct experience with the usefulness of specific companies' test procedures to demonstrate their vehicles' compliance with existing performance standards.

We agree that the Federal Motor Vehicle Safety Standards (FMVSS) of the future will need to be reconceptualized, developed and drafted to become nimbler and more performance-oriented; thereby, more accommodating of rapid technological change that has been the case to-date. Transdev encourages NHTSA to update the FMVSS in order to minimize the need for exemption-based approvals. Until that happens, Transdev would encourage NHTSA to promote on-road testing on both public and private roads with a minimal exemption process (e.g., self-certifying) and collect pertinent information in order to inform the FMVSS update.

FMVSS exemptions should continue to be granted to OEMs, but with specific provisions for qualified operators to deploy vehicles in pilot projects where they assume clear responsibility for the operation of the vehicle on the public right-of-way. Doing so will allow for more realistic business and operating models to be explored during the pilot phase, and open up testing opportunities and partnerships to companies that are incapable of producing a “full stack” software, hardware, and operations solution for automated vehicles.

With the goal of determining a comprehensive research and priority plan, **Transdev recommends that all FMVSS be comprehensively categorized.** The categories should identify not only those FMVSS that are barriers but also those FMVSS that may pose minimal or no barriers. We believe that having this common understanding between NHTSA and industry is critical as we define future research priorities and needs.

To facilitate regulatory consistency, USDOT should assist in developing a framework and set of national guidelines for AV licensing at the state level. Though NHTSA has developed broad principles for AV testing, licensing AVs for use by the general public is mostly a state endeavor at this time and should have some federal guidance in order to ensure continuity. AV manufacturers will be better able to meet detailed national requirements and just a handful of possible individual state requirements, rather than trying to match 50 potentially different sets of testing requirements across states. Existing state licensing should be seen as a complement to national efforts, which could streamline AV licensing and testing, enabling more efficient application of both public and private resources.

Furthermore, **Transdev encourages NHTSA to study and establish minimum safety driver and remote AV monitoring qualifications to provide a sound regulatory framework for operators to follow when deploying fleets of AVs alongside OEM partners;** thereby, liability, data collection, and reporting requirements and issues can be explored in a productive manner. For example, the California Code of Regulations provides for Autonomous Vehicle Test Driver Qualifications (13 CA ADC § 227.34), stating that a manufacturer shall only permit those that have met certain criteria to act as an AV test driver for testing AVs on public roads.

Lastly, with respect to operators, such as Transdev, the role of a professional AV system operator needs to be considered when designing a pilot program, crafting a regulation, or producing guidance documents.

Transdev appreciates the opportunity to comment, and we extend our thanks to you and your colleagues at NHTSA for your continued work to evolve and advance the federal guidance on automated vehicles. We look forward to continued engagement on these efforts.

Sincerely,



Richard M. Alexander
Executive Vice President