FORTERRA

March 5, 2024

The Honorable Marc Korman Chairman, House Environment & Transportation Committee Room 251 House Office Building Annapolis, Maryland 21401

Re: HB 1447 Motor Vehicles – Autonomous Vehicles – Standards, Requirements, and Prohibited Acts

Hearing Date: March 7, 2024

Position: Oppose

Chairman Korman, Vice-Chair Boyce, and members of the committee,

Forterra (formerly Robotic Research or "RRAI") is a Maryland based autonomous technology company who has proudly called Montgomery County home for 22 years. We are a leader in autonomous technology and while our business is currently focused on off-highway operations, we fully support the continued development and use of automated systems on all public roads for all (commercial and non-commercial) purposes. Accordingly, Forterra strongly opposes HB 1447.

As drafted, HB 1447 would prohibit anyone from operating a fully autonomous vehicle to transport passengers unless the operation is for personal and noncommercial purposes.

We strongly oppose this portion of the bill because it will not and does not improve road safety and serves to not only stifle innovation and continued development of automated systems, but to also deprive Maryland, its citizens and visitors from the full potential benefits created by automated driving systems.

As noted by NHTSA, vehicle safety promises to be one of automation's biggest benefits: helping to protect drivers and passengers, as well as bicyclists and pedestrians. Reducing the number of motor vehicle related accidents not only has a direct positive impact on human lives but will also significantly reduce the costs associated with these accidents. In addition, AVs stand to have transformative societal and environmental benefits. Automated driving systems could increase mobility of seniors, people with disabilities and expand transportation for underrepresented communities. From an environmental perspective, vehicle automation will potentially change the need for individualized parking spaces and lots, with increased use of automated ride share and shuttle fleets, which could dramatically transform land use and drive reductions of air pollutants from the transport sector. These are just some of the potential use cases and benefits associated with the transportation of passengers for commercial purposes- all of which will fail to be realized if HB 1447 is passed.

HB 1447 also prohibits the operation of a fully autonomous vehicle, "including for the transportation of goods" *unless* there is a person seated in the front seat of the vehicle while the AV is in motion. Requiring a human to be present in the front seat is more about the fear of potential job loss than safety. If the State is going to regulate automated driving systems, it should focus on the safety requirements that must be met to allow for the use of various levels of automated driving systems, including "driverless" operations. An outcome-based

approach focused on safety rather than a rigid, prescriptive directive on AV operations gives companies the freedom to innovate and incentivizes them to continue to invest in and further develop technology that will positively and substantially transform the way we live.

Instead of dictating how AVs can operate, the State and any legislation it enacts, should work with, and encourage AV companies to prove out the safety case for their technology and proposed use. Different companies may propose different ways to ensure safe, autonomous operations. Some may always require the presence of an in-vehicle operator. Some may provide for humans to oversee the AV through remote operations or otherwise create technology that is so far superior to human operations that no human intervention is needed. The key is to encourage industry to innovate, develop, and ultimately drive the continued advancement of this rapidly emerging technology. Do not let HB 1447 stifle innovation by mandating a person be in the vehicle at all times.

Autonomous technology companies spend a painstaking amount of time and money proving their "safety case." The safety case is a rigorous analysis which involves extensive testing all based on internationally recognized standards. A successful safety case shows, through large amounts of data, how the autonomous system produces repeatable results that are safer than humans. Safe operation backed by extensive data must be achieved before a human can be removed from any aspect of vehicle operation.

Each year, roughly 40,000 Americans are killed in traffic accidents, and many more Americans suffer non-fatal but extensive injuries. Accidents will continue to happen, but we can and should use technology in the pursuit of total elimination of all traffic accidents, especially when such technology can, in addition to saving lives, preventing injuries, and reducing costs associated with car accidents, also lessen traffic, cut down on negative environmental impact, and create independence among people who cannot drive.

The current legislation will only slow down the pace of technology, preventing Maryland, its citizens, and visitors from fully reaping its benefits. Nothing in this bill is aimed at stemming the tide of traffic accidents and fatalities. This legislation arbitrarily requires a person be in the vehicle while operating autonomously for commercial purposes. Safe operations is a required outcome. Companies should have greater license to determine how that outcome is achieved. In addition, HB1447 draws the arbitrary distinction between vehicles used for personal, non-commercial reasons and those for commercial uses. Road and vehicle safety is paramount regardless of whether they are being used for commercial or noncommercial purposes. The roads are shared by all.

For the reasons stated, we are opposed to this legislation.

Sincerely, Don Lefeve.

Vice President, Corporate Affairs