

Dr. Steven Cliff
Administrator of National Highway Traffic Safety Administration
1200 New Jersey Avenue SE
West Building
Washington, DC 20590

Dear Dr. Cliff and NHTSA staff,

The MIT Mobility Initiative (“MMI”) is writing to underscore the significant benefits that shared, autonomous & electric vehicles could offer. The MIT Mobility Initiative was founded as a platform to convene key stakeholders to drive innovation and provide strategic guidance to navigate today’s challenges in pursuit of a mobility system that is safe, clean, and inclusive. With thoughtful deployment, shared, autonomous & electric vehicles, such as the Cruise Origin, Zoox L5 and Navya Evo, will help achieve those aims.

While we recognize that there are several factors involved in the GM/Cruise exemption petition application, including FMVSS evaluation and furtherance of the goals of the Vehicle Safety Act, MMI focuses our responses on the Public Interest considerations laid out in NHTSA’s publication of GM and Cruise’s Petition Exemption, and in articulating the broad value that technology like the Origin can generate for our cities.

From a road safety perspective, NHTSA’s preliminary data shows 42,915 deaths on U.S. roads in 2021, the highest in 16 years and a 10% increase year-over-year compared to 2020. Shared, autonomous & electric shuttles deployed in dense, urban cores can work to address these worrying trends in driving behavior, fatalities, and fatality rates. Through its design as an autonomous vehicle without the need for human controls, vehicles like the Cruise Origin will never drive drunk, distracted, or text behind the wheel.

The NHTSA data demonstrate that not only are vehicle occupants increasingly at risk, but also pedestrians, cyclists and other users of our city streets. Autonomous vehicles offer an opportunity to protect these individuals as well, through the use of infrared cameras to detect heat signatures and 360-degree coverage to eliminate blind spots. MMI does recognize that vehicle speeds are an important consideration in reducing total harm for road users. Should Origin be approved, MMI encourages that state authorities ensure an iterative approach to service expansion that recognizes the importance of vehicle speeds in accident severity.

MMI would also like to note the benefits that shared, autonomous & electric vehicles can provide in terms of inclusive access - key additional Public Interest considerations outlined in NHTSA’s publication. These vehicles unlock access to mobility and economic opportunity for a range of riders who may lack sufficient transportation options today - including the elderly, people with disabilities, as well as equity priority communities that may be underserved in terms of transportation infrastructure.

MIT research demonstrates that life-cycle GHG emissions are always lower for electric vehicles over similarly-sized ICE vehicles – even in West Virginia, the state with the most coal-intensive electricity in the nation. There are also potential environment benefits to the fact that many of these vehicles will be operated by a fleet operator rather than as a collection of individually-owned automobiles. For example, Cruise has committed to powering its shared vehicle fleet with

renewable energy - an invaluable tool in providing a more sustainable mode for riders who may not be able to afford an electric vehicle.

We are excited to continue engaging in building a mobility system that is safe, clean, and inclusive and thank NHTSA for the opportunity to submit these comments to the record.

Very sincerely,



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