

BY ELECTRONIC SUBMISSION

Docket Management Facility
U.S. Department of Transportation
West Building Ground Floor, Room W12-140
1200 New Jersey Avenue, SE
Washington, DC 20590-0001

Re: **Request for Comments on Petition of General Motors, LLC for Temporary Exemption from Various Requirements of the Safety Standards for an All-Electric Vehicle with an Automated Driving System**
Docket No. NHTSA-2019-0016

Dear Sir or Madam:

On behalf of the Consumer Technology Association (“CTA”), we urge the U.S. Department of Transportation’s (“USDOT”) National Highway Traffic Safety Administration (“NHTSA”) to grant the petition of General Motors, LLC (“GM”) for exemptions to enable the further development of its driverless zero-emission autonomous vehicle (“ZEAV”). This is a pivotal opportunity for NHTSA to accelerate the development of automated vehicle (“AV”) technologies that have tremendous potential to expand mobility, reduce emissions, drive economic growth, and, above all, enhance safety on our nation’s roads and highways.

NHTSA has encouraged all entities, from traditional OEMs and suppliers to technology companies and new entrants, to seek use of its exemption authority to demonstrate the safety benefits of AV technologies.¹ We appreciate the agency’s commitment to using its regulatory tools to advance innovation and NHTSA’s related streamlining and modernization efforts, including the amended exemption procedures adopted this past December.² GM’s petition allows the agency to carry these efforts forward by giving them practical effect. This is a crucial step to validate the exemption pathway to support AV testing and development, particularly for innovative vehicle designs like the ZEAV which were not anticipated by NHTSA’s current regulations.

CTA’s support for GM’s petition is informed by our broad perspective on the promise of AV technology and our desire to ensure a level playing field that facilitates safety and innovation and drives new investment and jobs in the United States. As the trade association representing the \$398 billion U.S. consumer technology industry, our membership spans the full ecosystem of

¹ DOT/NHTSA Policy Statement Concerning Automated Vehicles: 2016 Update to “Preliminary Statement of Policy Concerning Automated Vehicles,” <http://www.nhtsa.gov/staticfiles/rulemaking/pdf/Autonomous-Vehicles-Policy-Update-2016.pdf>.

² Temporary Exemption from Motor Vehicle Safety and Bumper Standards, 83 Fed. Reg. 66,158 (Dec. 26, 2018) (to be codified at 49 C.F.R. pt. 555).

companies working to bring AV innovations to America's roadways, including vehicle and component manufacturers, software developers, transportation platforms, and companies engaged in multiple areas of this frontier industry. Reflective of our name, we also have a keen focus on what these innovations mean for the consumers who will use them.

The transformative potential of AVs like the ZEAV for industry and consumers alike supports our view that granting GM's petition is consistent with the public interest and with the National Traffic and Motor Vehicle Safety Act (the "Safety Act"), as required by the exemption statute.³ In evaluating past exemption petitions, "NHTSA has traditionally found that the public interest is served by affording consumers a wider variety of motor vehicles, encouraging the development of fuel-efficient and alternative-energy vehicles, and providing additional employment opportunities."⁴ NHTSA has also found that the public interest is served by demonstrating the viability of new technologies⁵ and by generating data to support future NHTSA policy decisions.⁶ As detailed below, granting GM's petition would advance each of these objectives, as well as the Safety Act's paramount goal of reducing traffic accidents and deaths and injuries resulting from traffic accidents.⁷

Safety. More than 37,000 people lost their lives on U.S. roadways in 2017, and hundreds of thousands more were injured in motor vehicle accidents.⁸ NHTSA has found that driver error is a factor in more than 94 percent of serious crashes.⁹ By diminishing the human role in the driving task, AV technology has the potential to eliminate this risk and substantially improve overall safety. As the latest version of the agency's AV policy guidance concludes, AV technology's "potential to reduce deaths and injuries on the Nation's roadways cannot be overstated."¹⁰

USDOT's AV guidance, while acknowledging that "[o]n-road testing cannot be expected to address all aspects of testing needs towards deployment,"¹¹ also draws a link between safety outcomes and field evaluation programs like the one that would be enabled by granting GM's petition: "On-road testing and early deployments are important to improving automated vehicle performance and allowing them to reach their full performance potential. Careful real-world testing allows developers to identify and rapidly fix system shortcomings, not just on individual vehicles but across fleets."¹² GM's petition indicates that the requested exemptions are necessary for deployment of the ZEAV in real-world driving situations.¹³ Granting the petition would thus advance NHTSA's objective of enhancing vehicle safety through automation.

³ 49 U.S.C. § 30113(b)(3)(A).

⁴ Wheego Electric Cars, Inc.; Grant of Petition for Temporary Exemption from the Electronic Stability Control Requirements of FMVSS No. 126, 77 Fed Reg. 47,915, 47,917 (Aug. 10, 2012) (hereinafter, "Wheego petition").

⁵ Toyota Motor North America, Inc.; Grant of Petition for Temporary Exemption from an Electrical Safety Requirement of FMVSS No. 305, 80 Fed. Reg. 101, 103 (Jan. 2, 2015).

⁶ Mercedes-Benz, U.S.A. LLC; Grant of Application for a Temporary Exemption From Federal Motor Vehicle Safety Standard No. 108, 71 FR 4,961, 4,963 (Jan. 30, 2006).

⁷ 49 U.S.C. § 30101.

⁸ U.S. DEP'T. TRANSP., PREPARING FOR THE FUTURE OF TRANSPORTATION: AUTOMATED VEHICLES 3.0 at 3 (2018) (hereinafter, "AV 3.0").

⁹ *Id.*

¹⁰ *Id.* at 1.

¹¹ *Id.* at 38.

¹² *Id.* at 1.

¹³ Petition of General Motors, LLC under 49 U.S.C. § 30113 and 49 C.F.R. Part 555 to Advance Safety and Zero-Emission Vehicles through Technology that Achieves the Safety Purpose of the FMVSS (Jan. 11, 2018) (hereinafter, "GM petition"), at 4–5.

NHTSA's exemption decisions have also considered the consequences of denying an exemption request.¹⁴ In this case, denial would require GM either to redesign the ZEAV to include human-operated controls or to test the ZEAV in private, controlled environments—eliminating the opportunity for “real-world” learning that the agency has deemed important. Both results would be perversions of NHTSA's statutory objective to enhance safety and undermine the agency's commitment to innovation and new vehicle designs. They would also overlook GM's integrated approach to AV system safety and the additional precautionary measures enabled by its plans for a controlled fleet deployment of exempted vehicles.¹⁵

Consumer Choice. With the ZEAV, GM is pioneering an entirely new category of passenger motor vehicles that “combines electrification, automation, and personalized mobility-on-demand services.”¹⁶ Innovations that create new product categories increase consumer choice by definition. In this case, the ZEAV would respond to consumer interest not only in automated passenger vehicles, but more broadly in innovative mobility options that enhance transportation safety, efficiency, and environmental performance. GM's ability to offer this new option through the ZEAV depends on the refinement of its technology through real-world testing. Granting the requested exemptions would thus support consumer choice by allowing GM to continue on the path toward commercialization of the ZEAV and its related shared mobility platform. In addition, NHTSA has previously found that the development of electric vehicles like the ZEAV contributes to the expansion of consumer choices in and of itself.¹⁷

Environmental Benefits. NHTSA has also found that “it is manifestly in the public interest to accelerate the development of electrically driven vehicles.”¹⁸ Granting GM's petition would support extension of electric vehicle innovation to the emerging category of AVs, proving the viability of electric-drive powertrains in a new motor vehicle category that could yield a range of environmental benefits in terms of reduced emissions and fuel consumption. These development activities and the benefits they would support are consistent with the legislative history of the low-emission vehicle exemption basis as documented by NHTSA.¹⁹

Employment Benefits. GM's petition explains how granting the requested exemptions will allow the company to maintain and grow its existing workforce and support additional employment opportunities among the company's suppliers, competitors, and supporting industries.²⁰ The exemptions will allow GM to continue the commercialization of the ZEAV, which in turn will yield revenue to support this U.S. job creation. NHTSA has previously found that the public interest is served by precisely this dynamic.²¹

Supporting GM's continued commercialization of the ZEAV by granting the petition will also contribute to the broader job creation potential of AV technology. A recent CTA research

¹⁴ See, e.g., Wheego petition at 47,917.

¹⁵ GM petition at 10-14, 21-22, AIII-1-23.

¹⁶ *Id.* at 10.

¹⁷ Think Technology AS; Grant of Application for a Temporary Exemption from the Advanced Air Bag Requirements of Federal Motor Vehicle Safety Standard No. 208, 74 Fed. Reg. 40,634, 40,636 (Aug. 12, 2009).

¹⁸ *Id.* (explaining that “Electric vehicles can help reduce the reliance of the nation on oil, and reduce greenhouse gas and other emissions.”).

¹⁹ See Nuro, Inc.; Receipt of Petition for Temporary Exemption for an Electric Vehicle With an Automated Driving System, Docket No. NHTSA-2019-0017, 84 Fed. Reg. 10,172, 10,176 fn. 21 (Mar 19, 2019).

²⁰ GM petition at 36.

²¹ Greenkraft, Inc.; Grant of Application for a Temporary Exemption from FMVSS No. 108, 80 Fed. Reg. 12,057, 12,060-1 (Mar. 5, 2015) (“Granting this exemption will enable Greenkraft to more quickly begin selling vehicles which will allow the company to begin realizing revenues from vehicle sales. The revenues from these vehicle sales will allow Greenkraft to continue to employ individuals involved in the manufacture and sale of these vehicles.”).

report found that the consumer technology industry supports 18.2 million American jobs and provides \$1.3 trillion in annual wages.²² Employment driven by AV innovation represents a significant and rapidly growing segment of this overall total. Regulatory frameworks and decisions that support AV commercialization are essential to realizing the industry's employment potential.

Economic Growth. As a corollary to its employment impact, granting GM's petition would drive substantial economic growth. As described above, the requested exemptions are part of a path to commercialization that could lead to the development of a vibrant market for GM's products and services. In addition, the company is part of a broader AV ecosystem that has tremendous economic potential. CTA's research has shown that AV technology is expected to contribute \$7 trillion to the global economy annually by 2050—a substantial portion of which will be generated in the United States.²³ Aggregate growth projections like these are the sum of many individual contributions by companies like GM. By facilitating GM's development program, granting its petition will place the company in the best position to contribute to this broader economic growth.

The ZEAV also has potential to create new economic opportunities and improve quality of life for the 20 to 30 million Americans of driving age whose physical disabilities have prevented them from driving, as well as the 16 million Americans over the age of 65 who have little or no access to public transportation. As described in GM's petition, "new mobility options may be an important factor in a person's ability to accept and maintain a job that may otherwise be unavailable due to limited transportation options . . . GM's ZEAVs will also stimulate competition for safe and innovative mobility solutions for all people, including those who cannot or do not drive."²⁴ These dynamics will further compound the potential economic benefits to be gained by granting the petition.

Public Confidence. Led by Secretary Chao, USDOT has highlighted the need to address public concerns about AVs and communicate the benefits of automation.²⁵ CTA's research has confirmed that consumers are eager to learn more about this technology.²⁶ Among other issues, U.S. adults are eager to learn more about the cost of purchasing and maintaining a self-driving vehicle, as well as how today's roads and other public infrastructure support both human-driven and self-driving cars operating together.²⁷

GM has envisioned a use case for its technology that builds public awareness and confidence by design. As described in its petition, "[b]ecause it will enable exposure to [the] vehicle in a manner that allows consumers to pay only for the rides they want—without having to purchase the vehicle—[the ZEAV] is an ideal platform for educating the public about the benefits of both automated and zero-emission vehicle technologies."²⁸ By allowing consumers to experience AV technology firsthand, granting GM's petition will directly advance the Department's

²² CONSUMER TECHNOLOGY ASSOCIATION, U.S. ECONOMIC CONTRIBUTION OF THE CONSUMER TECHNOLOGY SECTOR (APR. 2019), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/Supplements/Economic-Impact-Study.aspx>.

²³ CONSUMER TECHNOLOGY ASSOCIATION, ECONOMIC IMPACT: SELF-DRIVING VEHICLES at 10 (DEC. 2017), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/2018/Economic-Impact-Self-Driving-Vehicles.aspx>.

²⁴ GM petition at 36.

²⁵ AV 3.0 at ii.

²⁶ CONSUMER TECHNOLOGY ASSOCIATION, SELF-DRIVING VEHICLES: CONSUMER SENTIMENTS 2018 at 6 (OCT. 2018), <https://www.cta.tech/Research-Standards/Reports-Studies/Studies/2018/Self-Driving-Vehicles-Consumer-Sentiments-2018.aspx>.

²⁷ *Id.* at 15.

²⁸ GM petition at 37.

educational priorities. Finally, as described below, GM's activities may generate data that can be used to inform other public education efforts.

Data Sharing. CTA supports the voluntary sharing of data that can help improve AV safety and performance. We are pleased that NHTSA has also similarly endorsed a voluntary approach to data exchange, and affirmed that “[a]ny exchanges of data should respect consumer privacy as well as proprietary and confidential business information.”²⁹ To the extent that GM and NHTSA can agree upon a framework for the voluntary sharing of data about exempted vehicles, granting the petition could provide NHTSA with invaluable real-world information to support its ongoing oversight and policymaking activities in this area.

Taken together, these factors overwhelmingly support the conclusion that granting GM's petition would substantially advance the public interest and motor vehicle safety. The deployment GM has proposed would yield substantial public benefits in and of itself and is also an early step in the development of a broader industry ecosystem that will compound those benefits many times over. Moreover, GM's petition satisfies the factors that NHTSA has looked to in establishing the public interest as part of past exemption decisions. This is a landmark opportunity for NHTSA to advance its commitment to using its exemption authority to facilitate AV testing and development.

While the focus of our comments is on the public interest considerations outlined above, we encourage NHTSA to approach the specific questions posed in the Federal Register notice with a view toward the guiding principles for the agency's AV policy activities that we have advanced in our prior written comments to the agency. Above all, experience has shown that regulatory clarity and consistency are important to create a policy environment that allows innovation to thrive. Although AV technology is novel, NHTSA has well-established policies and procedures for evaluating exemption petitions and all stakeholders testing or deploying AV technologies should be able to avail themselves of the same federal policies and exemption pathways. The agency should follow this precedent as much as possible and avoid reading new or additional requirements into the exemption statute and regulations or NHTSA's approach to implementing them that would not have been anticipated by the applicants. Predictable and uniform application of NHTSA's rules and regulations is essential to cultivate a policy environment that encourages efforts to realize the safety potential of AV technology.

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²⁹ AV 3.0 at 31–32.

Thank you for your consideration of these comments. We are excited about NHTSA's review of GM's petition as another step forward in developing a pro-innovation policy framework around AV technology. As described above, we strongly believe that granting the petition would advance the public interest by enhancing safety, the environment, the economy, and mobility for all Americans. We look forward to your decision on the petition and to continued collaboration between government and industry in bringing AV innovation to the nation's roadways. Please do not hesitate to contact us with any questions you may have.

Sincerely,

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