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May 29, 2020

Mr. James Owens
Acting Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, D.C. 20590

Docket Number NHTSA-2020-0014

Submitted via Federal eRulemaking Portal at <http://www.regulations.gov>

Dear Acting Administrator Owens:

Nuro is pleased to comment on the National Highway Traffic Safety Administration's ("NHTSA" or "the Agency") notice of proposed rulemaking on modernizing the occupant protection provisions of the Federal Motor Vehicle Safety Standards ("FMVSS") for innovative vehicle designs, including occupantless vehicles. Nuro shares the Agency's perspective that Automated Driving System ("ADS") technology, properly harnessed, has the potential to provide tremendous benefits for road safety, the economy, and the public at large. We strongly support the Agency's efforts to modernize its regulations to facilitate the safe introduction of autonomous vehicles designed to never carry human occupants and having no functional or safety purpose for manual controls.

Nuro was founded with the mission to "accelerate the benefits of robotics for everyday life." We are the first company in the nation to operate a grocery delivery service using unmanned autonomous vehicles on public roads, beginning in Arizona and now operating in Houston, Texas. We are expanding our autonomous delivery services, along with our partners, to deliver pharmaceutical products and prepared food. Our latest unmanned vehicle, "R2," is a custom-designed robot designed for operation on public roads, with safety as our top priority. Unlike traditional passenger vehicles, these light-duty, autonomous delivery vehicles lack driver or passenger compartments; instead, they feature cargo compartments.

We appreciate the opportunity to provide comments on this proposed rule. In these comments, we seek to emphasize five points:

1. **We encourage NHTSA to complete its rulemakings expeditiously to safeguard American leadership in the safe deployment of ADS technology:** This rulemaking, and its companion proposals and advance notices of proposed rulemaking, will together

facilitate the safe introduction of innovative technology with substantial public benefits. Autonomous vehicle technology was invented here in America, and investments by American companies have been critical to its development. Some countries are moving quickly to advance their own autonomous vehicle technologies and support competitors to American companies. Moving forward expeditiously on these rulemakings will help accelerate the benefits of this innovative technology here in the United States.

2. **It is appropriate for NHTSA to update requirements by removing those that could degrade safety or offer no relevant safety purpose:** We support the general approach that NHTSA took to modernizing regulations in this proposal: examining the safety purpose of a requirement, and if it has no safety benefit or would actively degrade the safety of a particular vehicle type, not applying the requirement to that vehicle type. For example, NHTSA proposes removing requirements for occupant protection from a vehicle with no occupants. We encourage NHTSA to apply the same principle and approach in related rulemakings, including removing requirements for manual controls from vehicles that will never have a human occupant.
3. **We encourage NHTSA, in this rulemaking, to fully reform the 200 Series and related standards that are predicated upon human occupancy:** The proposal would modify eleven of the occupant protection standards by making clear they do not apply in vehicles without designated seating positions, and therefore without occupants. We support this change. However, NHTSA could provide manufacturers with greater certainty by being explicit in the final rule that all FMVSS that assume human occupants are not applicable to occupantless vehicles.
4. **We support NHTSA's intent to proceed in parallel on rulemaking on an occupantless vehicle category, and encourage the Agency to move forward promptly:** Because occupantless vehicles will never have a person inside, they represent a fundamentally lower risk class of vehicle, used in an application (last-mile delivery) that is likely to be one of the first use cases for AV technology. The lack of occupants may also simplify the regulatory drafting process. This creates an opportunity for completing rulemaking that removes “regulatory barriers” more quickly than for other kinds of innovative designs. This rulemaking need not await the completion of ongoing research on novel topics that NHTSA has never before regulated.
5. **This rule is likely to have significant benefits:** In its Preliminary Regulatory Impact Analysis, NHTSA calculated that the proposed rule would have billions of dollars of net economic benefits. We agree with this conclusion. In addition, we note that by providing manufacturers greater certainty and flexibility in the ability to design new kinds of vehicles, the rule may also impact the quantity of ADS-Dedicated Vehicles (“ADS-DV”) and the rate at which they are deployed. As studies have found substantial social benefits from the use of autonomous vehicles, that upside — even if difficult to

quantity — is likely to substantially outweigh any potential costs associated with the rule.

We expand on these points below.

1. We encourage NHTSA to complete its rulemakings expeditiously to safeguard American leadership in the safe deployment of ADS technology.

This proposal marks an important milestone, as it is the first-ever proposal from NHTSA to modernize the FMVSS for vehicles without manual controls. We commend NHTSA for issuing this first proposal. This milestone is important because this rulemaking, along with its companion proposals, could help facilitate the deployment of occupantless vehicles and other innovative designs that will substantially improve public safety, health, mobility, and the economy.

Occupantless ADS vehicles like Nuro's have the potential to be the safest vehicles on U.S. roads, because they:

- avoid human causes of collisions like distraction, impairment, and speeding;
- never carry human occupants who could be hurt in a collision;
- can be made lighter weight and narrower than many passenger cars and trucks; and
- can be designed to include external physical features to prioritize protecting pedestrians and other road users over the goods carried inside.

The benefits of delivery AVs are even more evident in a time when the COVID-19 pandemic is creating a need for social distancing. AVs, and especially occupantless AVs, can enable contactless delivery of medicine, food, and other necessities. That can help decrease the spread of disease by making it easier for customers to remain safely at home while receiving affordable deliveries, even in food deserts.

Over the past several months, Nuro has completed thousands of grocery deliveries to people's homes using our autonomous vehicles in Texas, partnered with local food banks to bring essential goods to the most needy, and has begun carrying medical supplies and food at two temporary field hospitals for coronavirus patients in California. Next month, we will begin delivering prescription medications with our first pharmacy partner.

While we are grateful to be able to be part of the response, we recognize that robots are not going to solve the present crisis. These efforts are currently at pilot scale. But by providing the regulatory certainty of final rules to facilitate the self-certification of occupantless vehicles, NHTSA will accelerate and increase the scale of future vehicles to better prepare our country for future challenges and opportunities.

We encourage NHTSA to move quickly to finalize this rule, and to issue proposed rules removing regulatory barriers for other standards such as manual control references in the crash avoidance standards, telltales and indicators, and creating a classification of occupantless

vehicles. Only once all rules are addressed will manufacturers have the regulatory certainty needed for design and production investments, and will society receive the full benefits of this new technology. NHTSA can accelerate this process by prioritizing the development of these “removing regulatory barriers” proposals, and by proceeding to NPRMs, as they did in this case, rather than additional preparatory RFCs or ANPRMs.

This is well justified, as NHTSA has already received hundreds of public comments on these issues through open comment periods on the 2018 Request for Comments, four generations of AV guidance, two AV exemption petitions, and ANPRMs on testing and verification procedures and a potential AV pilot program, in addition to input from NHTSA’s extensive research program and ADS Demonstration Grants.

2. It is appropriate for NHTSA to update requirements by removing those that could degrade safety or offer no relevant safety purpose.

The proposed rule would enhance safety and facilitate innovation by no longer requiring a driver’s seat or airbags in goods delivery vehicles that will never have a human occupant. Specifically, NHTSA proposed modifying eleven occupant protection standards to make clear that they do not apply to occupantless trucks, because these vehicles have no human occupants to protect. Occupantless vehicles will still be required to meet all relevant safety standards, such as stopping distance requirements.

We support these changes and the approach that NHTSA proposed with regards to occupantless vehicles, and encourage that it be followed in future rulemakings on other FMVSS. One important characteristic of this approach is that it looks at the safety purpose of a provision and applies it where it has a safety benefit, but not where it is inapplicable or safety detracting. In addition, the proposed rule is technology neutral, enabling diverse business models, including occupantless vehicles designed for vehicles as well as passenger vehicles. Maintaining this approach is critical to maximizing the benefits of autonomous vehicles, as it encourages innovation in the design and use of the technology.

Removing occupantless vehicles from the scope of occupant protection standards is well justified. NHTSA found that “all current crashworthiness standards are specifically intended for the protection of occupants within the vehicle to which they apply.”¹ Occupantless vehicles, by their nature, are designed to have no occupants. Thus, the vehicle is designed to have no one inside who could be injured, and adding equipment like seat belts in a cargo compartment would have no safety benefit.

Further, the occupant protection standards, as applied to an occupantless vehicle, could potentially degrade safety. Adding equipment like a driver’s seat to the vehicle, and the additional steel structural material required to protect occupants, increases vehicle width, mass, and rigidity. Greater width can increase the probability of a collision, simply because

¹ National Highway Traffic Safety Administration, “Occupant Protection for Automated Driving Systems,” 85 Fed. Reg. 17624, 17635, fn 55

there is less empty space between road users, and greater mass and rigidity increases the risk to occupants of other vehicles and vulnerable road users such as pedestrians and cyclists in the event of a crash. If a subset of the occupant protection standards were still applied to a delivery vehicle (e.g., seat belts), that could be particularly problematic, because it could inadvertently communicate to bystanders that the vehicle is designed for passenger transportation, when it clearly is not. The proposed rule's decision to remove occupantless trucks from the scope of all occupant protection standards most effectively promotes road safety.

3. We encourage NHTSA, in this rulemaking, to fully reform the 200 Series and related standards that are predicated upon human occupancy.

The proposed rule logically aims to remove occupantless vehicles from the scope of occupant protection standards. Therefore, it proposes modifying the regulations of eleven of the safety standards. The NPRM states that the remaining crashworthiness FMVSS do not apply, on their face, to occupantless vehicles without any designated seating positions (“DSPs”).² The NPRM does not address standards in the 100 or 300 Series that similarly are predicated upon human occupancy, provide no safety benefit in an occupantless vehicle, or simply do not apply in a vehicle with no human controls.

Providing certainty on remaining provisions of the 200 Series

Manufacturers would benefit from greater certainty on the inapplicability of other FMVSS to occupantless trucks. This is particularly the case with regards to windshields. The proposed rule would make clear that FMVSS No. 205, related to windshield glazing, does not apply to occupantless vehicles. By their nature and purpose, windshield intrusion standards like FMVSS Nos. 212 and 219 would have no application. However, the text of the applicability standard purports to still apply to all trucks, regardless of whether they have any designated seating positions.

We request that NHTSA provide additional clarity on this point. Because NHTSA made clear in the NPRM that they do not intend to apply standards such as FMVSS Nos. 212 and 219 to occupantless trucks, a final rule that uses different regulatory text, or elaborates on this point in its preamble, is clearly foreseeable.

There are several possible approaches that NHTSA could take to create this clarity:

Possible approach 1: Clarify in Subpart A of Title 49 that provisions setting forth performance standards for materials or motor vehicle features do not apply to vehicles that are not required to have those materials and features, and do not voluntarily use those materials and features. For example, NHTSA could add a new subsection to 49 C.F.R. 571.7, with language similar to the following: “(g) Each standard set forth in subpart B of this part, which sets forth performance requirements for materials or features used in motor vehicles, does not apply to motor vehicles

² See *id.*

that are not required to be equipped with those materials or features and are not equipped with those materials or features.”

This approach would have the effect of making clear that requirements related to windshield performance do not apply to vehicles outside the application of FMVSS No. 205. This approach also provides more predictability and regulatory certainty than a statement in the preamble. An additional advantage of this approach is that it makes clear that FMVSS Nos. 103 and 104, which specify requirements for keeping windshields clear, do not apply to vehicles without windshields.

Possible approach 2: Incorporate into the application section of the other 200 Series standards the same language as is proposed in FMVSS No. 208 and the other modified standards. Specifically, NHTSA could modify the regulatory text of those standards to limit application to vehicles with at least one DSP. This could be limited to the priority standards of FMVSS Nos. 212 and 219, or could be incorporated into all standards.

Possible approach 3: State clearly in the preamble to the final rule the principle implied by footnote 55: that regulations specifying requirements around equipment does not apply to vehicles that do not have that equipment. NHTSA could also elaborate in the preamble on its reasoning as to why each FMVSS clearly does not apply.

Other references to windshield

As occupantless trucks would not, under the proposed standard, be required to meet FMVSS No. 205 and therefore would not be expected to have a windshield, NHTSA should make corresponding adjustments in references to 205 outside of the 200 Series. This includes FMVSS No. 500 and Part 565.

Occupantless low-speed vehicles that have no designated seating positions can be removed from the scope of the windshield requirement by modifying 49 C.F.R. 571.500.S5(b)(8) to read, “A windshield that conforms to the Federal motor vehicle safety standard on glazing materials (49 CFR 571.205), *if the vehicle has at least one designated seating position*” (additional text in italics). The logic of this change is identical to the logic of the change for occupantless trucks, and is implicit in the approach contained in the proposed rule.

Part 565 requires that the VIN be visible through “the vehicle glazing” by an observer “whose eye-point is located outside the vehicle adjacent to the left windshield pillar.”³ While not a FMVSS, as the proposed rule now for the first time contemplates vehicles without a windshield, it would be appropriate to modify this section. NHTSA could consider requiring that, for a vehicle without at least one designated seating positions, that the VIN be located in a position that is visible in daylight conditions to someone standing adjacent to the front-left most position of the vehicle, or that the VIN be placed in the same position as the certification label.

³ 49 C.F.R. 565.13(f).

Clarifying “occupant compartment”

NHTSA states in the proposed rule that FMVSS Nos. 301-304 do not require modification.⁴ We note that some of the 300 Series standards, including FMVSS No. 302, contain references to an “occupant compartment” or “passenger compartment,” and that these terms are undefined in the standards of 49 C.F.R. 571.3. Based on NHTSA’s statement that these standards do not require modification to account for vehicles without occupants, we understand that NHTSA believes requirements related to an “occupant compartment” are among those standards that “clearly” do not apply to occupantless vehicles.⁵ NHTSA could consider making this interpretation explicit in the regulatory text, such as by adopting a definition of “occupant compartment” (e.g., as “a space within a motor vehicle containing at least one DSP”) or “occupant,”⁶ along with corresponding definitions for “passenger” or “passenger compartment.”

4. We support NHTSA’s intent to proceed in parallel on rulemaking on an occupantless vehicle category, and encourage the Agency to move forward promptly.

In its Notice, NHTSA indicates an intent to “complete research and separately seek public comment on the creation of a new FMVSS category for occupant-less vehicles.”⁷

We encourage NHTSA to promptly begin rulemaking on an occupantless vehicle category

Occupantless delivery vehicles are amenable to a separate classification from trucks because of their singular use case of cargo transportation. This could simplify the process of selecting the portions of the FMVSS that have a relevant safety purpose to this application. As NHTSA finds in this proposed rule, vehicles without occupants do not require occupant protection standards. This makes modifications to the 200 Series much simpler. Likewise, standards in the 100 Series and 300 Series meant to provide information or protection to occupants (e.g. visible in-vehicle telltales, side mirrors...) may remain relevant or require adaptation for a passenger vehicle without manual controls, but are straightforwardly inapplicable to an occupantless vehicle. Completing rulemaking on a new classification would set minimum standards for all manufacturers, while removing unnecessary requirements.

It is especially valuable for NHTSA to proceed efficiently with the completion of standards for occupantless vehicles because delivery is one of the first use cases for autonomy. Because the delivery application allows AV manufacturers to focus on protecting other road users, rather than also balancing occupant protection and occupant comfort concerns, ADS for occupantless vehicles can be developed more quickly and safely, as shown by their early emergence in commercial applications. Nuro first began completing deliveries in an open-to-the-public

⁴ See 85 Fed. Reg. at 17634, fn. 53.

⁵ See *id.* at 17635, fn 55

⁶ For example, the NPRM includes a definition of “occupant”: “a person, family, group, or organization that lives in, occupies, or has quarters or space in or on something.” 85 Fed. Reg. at 17625, fn. 5.

⁷ 85 Fed. Reg. at 17631.

service with its occupantless, fully autonomous R1 vehicle in December 2018, and several other autonomous vehicle companies have since run delivery pilots.

The early emergence of delivery AVs also presents an opportunity to build public trust in all autonomous vehicles. Surveys suggest that members of the public would have greater trust in AVs if the first application is a robot showing up at the curb with a dinner delivery.⁸ Accelerating the adoption of occupantless vehicles by providing greater regulatory clarity could pave the way for passenger applications.

We encourage NHTSA to commence rulemaking on a new categorization for occupantless vehicles and not await the completion of novel research

In the preamble of this rulemaking, NHTSA indicated it is considering the necessity of crash compatibility research, and potentially standards, for occupantless vehicles. Today, there are no FMVSS on crash compatibility, and vehicles that carry no human occupants should not be the priority for the first ever crash compatibility standards.⁹ Developing and applying such standards for the first time to this novel vehicle category would substantially and unnecessarily delay potentially life-saving ADS innovation from reaching the market, especially as the form factors and geometries of these vehicles are just beginning to emerge. There is no reason to believe that occupantless vehicles are more likely to require crash compatibility regulation than existing vehicles. In fact, the opposite is true due to the lower mass and smaller size that can be achieved for vehicles that will not carry, and need not include protections for, humans. In addition, in Nuro's experience designing occupantless vehicles, we have found that the last-mile goods delivery application lends itself to smaller vehicles (avoiding risk of overruns), but that the primary energy absorbing structures can be maintained at similar heights to other vehicles. By excluding these vehicles from FMVSS No. 208 and other occupant protection standards, this proposed rule would increase road safety by incentivizing the production of lower mass vehicles.¹⁰

⁸ See Partners for Automated Vehicle Education, "PAVE Poll: Americans wary of AVs but say education and experience with technology can build trust," May 2020, available at <https://pavecampaign.org/news/pave-poll-americans-wary-of-avs-but-say-education-and-experience-with-technology-can-build-trust/> ("51% of respondents agree with the statement 'I would trust AVs more if, at first, they were used to move cargo, not humans' while 27% disagree and 22% are unsure." Note, this was the second highest scoring response in the published poll results.).

⁹ Part 581, the bumper standard, focuses on reducing repair bills.

¹⁰ See e.g., IIHS, "Vehicle size and weight," <https://www.iihs.org/topics/vehicle-size-and-weight>; Charles Kahane, "Vehicle Weight, Fatality Risk and Crash Compatibility of Model Year 1991-99 Passenger Cars and Light Trucks," 2003, available at <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/809662> ("In MY 1991-99, and earlier, heavy vehicles had lower fatality rates per billion miles of travel than lighter vehicles of the same general type. When two vehicles collide, the laws of physics favor the occupants of the heavier vehicle (momentum conservation). Furthermore, heavy vehicles were in most cases longer, wider and less fragile than light vehicles. In part because of this, they usually had greater crashworthiness, structural integrity and directional stability. They were less rollover-prone and easier for the average driver to control in a panic situation. In other words, heavier vehicles tended to be more crashworthy and less crash-prone. Some of the advantages for heavier vehicles are not preordained by the laws of physics, but were nevertheless characteristic of the MY 1991-99 fleet. Offsetting those

The right place to consider testing and implementing the first standards on crash compatibility would be on larger vehicles that have proven to pose significant risk. The occupant of a car is 2.5x as likely to be killed if they are hit by a pickup truck than another sedan, and they are 28% more likely to be killed if hit by a SUV.¹¹ While the automotive industry should be commended for adopting voluntary standards that improved compatibility for SUVs substantially to their current (still higher risk) level, the risk from a pickup truck fell only a single percentage point over the last 25 years.¹² These vehicles have become ubiquitous: light trucks (including SUVs) accounted for 72% of all new cars sold in 2019,¹³ and in April 2020, pickups alone outsold all car models in the United States for the first time.¹⁴ Beyond vehicle-to-vehicle crash compatibility, pedestrian protection remains a major concern for these light trucks and SUVs, which are significantly more likely to kill a pedestrian than would a sedan.¹⁵ No federal safety standards or NCAP tests yet exist on pedestrian protection in the US.¹⁶ If NHTSA were to create crash compatibility standards only for occupantless vehicles, this could actually worsen overall crash compatibility of the fleet by creating a perverse incentive for manufacturers to instead use light trucks and minivans for goods transportation.

5. This rule is likely to have significant benefits

In the Regulatory Impact Assessment associated with this rule, we understand that NHTSA chose not to calculate all of the benefits and cost savings that would result from this rule, because of the uncertainty and because the rule is clearly justified on the basis of the cost savings from avoiding the installation of unnecessary manual controls.

We note that there are many further benefits from autonomous vehicles, some of which are discussed but not estimated in the rule, that qualitatively suggest the net benefits of this rule could be even higher. One study estimated that “over the 32-year period from 2018 to 2050, the discounted present value of AV benefits [for society] could be from \$3.2 to \$6.3 trillion.”¹⁷ While

advantages, heavier vehicles tended to be more aggressive in crashes, increasing risk to occupants of the vehicles they collided with.”); Bae, Lim, and Park, “Vehicle Compatibility in Car-to-Car Frontal Offset Crash,” 2, <https://www-nrd.nhtsa.dot.gov/pdf/esv/esv17/proceed/00247.pdf>.

¹¹ Monfort and Nolan, “Trends in aggressivity and driver risk for cars, SUVs, and pickups: Vehicle incompatibility from 1989 to 2016,” *Traffic Injury Prevention*, Aug 2019, available at <https://www.tandfonline.com/doi/full/10.1080/15389588.2019.1632442>.

¹² *Id.*

¹³ David Phillips, “Market slips 5.2% in Dec.; SAAR dips below 17M,” *Automotive News* (Jan. 3, 2020) <https://www.autonews.com/sales/market-slips-52-dec-saar-dips-below-17m>.

¹⁴ Craig Trudell and Gabrielle Coppola, “Pickup Trucks Outsell Sedans in U.S. for the First Time Ever,” *Bloomberg* (May 5, 2020), <https://www.bloomberg.com/news/articles/2020-05-05/pickups-outsell-passenger-cars-in-u-s-for-the-first-time-ever>.

¹⁵ NHTSA, “New Car Assessment Program: Request for Comments,” 80 Fed. Reg. 78522, 78547 (2015) citing Desapriya, E. et al. “Do light truck vehicles (LTV) impose greater risk of pedestrian injury than passenger cars? A metaanalysis and systematic review.” *Traffic Injury Prevention*, 4856 (2010).

¹⁶ See Government Accountability Office, “NHTSA Needs to Decide Whether to Include Pedestrian Safety Tests in Its New Car Assessment Program”, April 2020, 9, <https://www.gao.gov/assets/710/706348.pdf>.

¹⁷ W. David Montgomery, “Public and Private Benefits of Autonomous Vehicles,” *Securing America’s Future Energy* (June 2018), 3,

clearly those benefits are not wholly attributable to the present regulation, by providing greater regulatory certainty for the manufacturers of occupantless vehicles and other ADS-DVs, this rule is likely to have an impact on the rate and quantity of ADS-DVs, and their associated social benefits. The benefits of autonomous vehicles, and especially occupantless vehicles, include:

- **Safety:** Occupantless vehicles mean fewer vehicle occupants are at risk of injury, reduced crash severity due to lower mass (without offsetting risk in occupant protection) and improved pedestrian protection, and a reduced probability of crashes due to narrower design and avoiding human driving errors.
- **Efficiency and convenience:** Occupantless vehicles can save substantial time on activities like running errands. The average adult spends 140 hours a year driving to the store,¹⁸ and one study estimated that AVs could eventually save the average American 50 minutes a day.¹⁹
- **Economic:** Occupantless vehicles are likely to create new jobs picking-and-packing items in the store, as autonomous delivery replaces personal trips, and increase employment to manufacture, maintain, and oversee autonomous vehicles. Occupantless vehicles can also support Main Street businesses that are currently seeing decreased foot traffic by enabling them to offer delivery at an affordable price.
- **Health:** Contactless delivery can support social distancing, when required, and provide more reliable and affordable access to medicine.
- **Mobility and access:** Passenger autonomous vehicles will provide those with limited mobility greater flexibility to travel independently. Autonomous, electric delivery vehicles can also extend the reach of affordable delivery, which will particularly benefit people who cannot drive (e.g., some people with disabilities) and people who live in food deserts.
- **Environmental:** Occupantless vehicles will reduce fuel consumption and emissions, as they are more likely to be electric, and have lower mass due to the lack of occupant seating or protection.

Therefore, we believe that even if NHTSA were to identify additional costs to this proposed rule during the comment period, the substantial benefits from facilitating the introduction of these vehicles would more than offset them. We commend NHTSA for its work to remove barriers to

<https://avworkforce.secureenergy.org/wp-content/uploads/2018/06/W.-David-Montgomery-Report-June-2018.pdf>.

¹⁸ See National Household Travel Survey, 2017.

¹⁹ Michele Bertonecello and Dominik Wee, “Ten ways autonomous driving could redefine the automotive world,” June 2015, <http://www.mckinsey.com/industries/automotive-and-assembly/our-insights/ten-ways-autonomous-driving-could-redefine-the-automotive-world>.

innovation, to improve upon the safety standards applicable to ADS-DVs, and to facilitate substantial economic and social benefits.

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Thank you for the opportunity to comment on this notice of proposed rulemaking. If you have any questions, please do not hesitate to contact us.

Sincerely,

A handwritten signature in blue ink, appearing to read 'David Estrada', with a long horizontal stroke extending to the right.

David Estrada
Chief Legal and Policy Officer
Nuro, Inc.