1680 Mission St, San Francisco, CA 94103

April 3, 2026

The Honorable Jonathan Morrison
Administrator, National Highway Traffic Safety Administration
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

**Re:** Notice and Request for Comment; Proposal for a New United Nations Global Technical Regulation on Automated Driving Systems (ADS)
**Docket No. NHTSA-2026-0034**

Dear Administrator Morrison:

Sentient Futures is an international field-building organization focused on ensuring the welfare of sentient beings in the context of emerging technologies. We appreciate the opportunity to submit these comments in response to NHTSA's Notice and Request for Comment on the proposed United Nations Global Technical Regulation ("GTR") on Automated Driving Systems ("ADS").

Sentient Futures commends NHTSA for its leadership in the development of the GTR and supports a U.S. vote in favor at WP.29. We write to identify one gap in the current draft that we respectfully submit can be addressed before finalization without affecting the GTR's structure, timeline, or the industry's approach to compliance: animals are not explicitly referenced as “other road users,” despite NHTSA's own ADS guidance having recognized animal detection as an expected safety function since 2017.[1] The addition to the “other road user” definition proposed below would close this gap within the GTR's existing framework.

## I. The Regulatory Gap

Under the current draft, the safety obligations mandated for “other road users” do not clearly extend to animals. *Annex 5 Table 1* lists animals alongside pedestrians and cyclists as “static and dynamic behaviours of other objects (including other road users) that the ADS is reasonably expected to encounter,” indicating that the GTR recognizes animals as relevant actors in the ADS operating environment. *Section 5.3.1.9* similarly requires the system description to identify categories of other road users with whom the ADS is designed to interact, listing pedestrians and cyclists as non-exhaustive examples. Both provisions suggest that animals should be included in the broad definition of "other road user" in *Section 2.21*, as they are dynamic objects that the ADS is reasonably expected to encounter.

[1] https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/13069a-ads2.0_090617_v9a_tag.pdf

However, the current definition, "any entity making use of publicly accessible road infrastructure," lacks an enumerated list, leaving it ambiguous as to which entities are covered.

This ambiguity could have regulatory consequences. Because animals are not explicitly named as in *Section 2.21*, manufacturers may disclaim the safe interaction obligations (*Section 4.1.2.7*), safety case demonstration requirements (e.g., Section *6.3.2.2.3*) and the freedom from unreasonable risk requirement (*Section 5.3.3.2*), and fatality and injury reporting requirements (*Annex 2* and *Annex 3*). The question of whether animals fall within *Section 2.21* is therefore a question of whether animals are adequately accounted for in the GTR's core safety performance framework.

NHTSA's prior guidance speaks directly to this point. In "Automated Driving Systems 2.0: A Vision for Safety," NHTSA stated that ADS are "expected to be able to detect and respond to other vehicles (in and out of its travel path), pedestrians, bicyclists, animals, and objects that could affect safe operation of the vehicle." The GTR proposal submitted to this docket does not reflect this expectation. Clarifying that animals are a covered category in *Section 2.21* would resolve ambiguity in the GTR text, restore consistency with NHTSA's established position, and ensure that animals are recognized as an expected component of ADS safety performance.

## II. Background

Animal-vehicle collisions pose significant safety, socioeconomic, and conservation concerns. In the United States alone, an estimated 1-2 million crashes between motor vehicles and large animals occur every year, resulting in approximately 200 human deaths, 26,000 human injuries, and at least $8 billion in associated costs.[2] These figures capture only large animals, and the full toll is considerably higher. Recent estimates indicate that between 89 and 340 million birds die annually from collisions on U.S. roads.[3] Globally, vehicle collision is a leading human-caused source of animal mortality,[4][5] with direct population-level consequences for already-threatened species.[6][7]

Animal safety is also relevant to social trust and acceptance that the GTR identifies as "key to the widespread integration of ADS technology into people's daily lives." Public trust in ADS is built gradually and can erode quickly. Nearly 100 million U.S. households have pets that share the same roads where ADS vehicles operate.[8] An incident in which an ADS fails to detect and safely respond to a

[2] https://www.fhwa.dot.gov/publications/research/safety/08034/08034.pdf
[3] Loss, S.R., Will, T. and Marra, P.P. (2014), Estimation of bird-vehicle collision mortality on U.S. roads. Jour. Wild. Mgmt., 78: 763-771. https://doi.org/10.1002/jwmg.721
[4] Collins, C. and Kays, R. (2011), Causes of mortality in North American populations of large and medium-sized mammals. Animal Conservation, 14: 474-483. https://doi.org/10.1111/j.1469-1795.2011.00458.x
[5] Hill JE, DeVault TL, Belant JL. Cause-specific mortality of the world's terrestrial vertebrates. Global Ecol Biogeogr. 2019;28:680–689. https://doi.org/10.1111/geb.12881
[6] Moore, L.J., Petrovan, S.O., Bates, A.J., Hicks, H.L., Baker, P.J., Perkins, S.E. and Yarnell, R.W. (2023), Demographic effects of road mortality on mammalian populations: a systematic review. Biol Rev, 98: 1033-1050. https://doi.org/10.1111/brv.12942
[7] Grilo, C., Borda-de-Água L., Beja P., Goolsby E., Soanes K., leRoux A., Koroleva E., Ferreira F. Z., Gagné S. A., Wang Y., & González-Suárez M. (2021). Conservation threats from roadkill in the global road network. Global Ecology and Biogeography, 30, 2200–2210. https://doi.org/10.1111/geb.13375
[8] https://www.avma.org/resources-tools/reports-statistics/us-pet-ownership-statistics

companion animal is a high-visibility, emotionally resonant event that carries considerable public relations consequences.[9]

ADS systems are capable of detecting and responding to all road users, including animals, more reliably than human drivers are achievable, given the meaningful perceptual advantages ADS have over human drivers. Whether these advantages translate into safer outcomes in practice depends substantially on whether the regulatory framework requires manufacturers to treat animal encounters as a safety obligation.

**III. Proposed Addition to the GTR**

We request that NHTSA advocate for an addition to the definition in *Section 2.21* clarifying that "other road users" includes animals. We suggest the following definition: "'Other road user (ORU)' means any entity making use of publicly accessible road infrastructure, *including but not limited to vehicles, pedestrians, cyclists, and animals*."

This proposal is consistent with the performance-based, technology-neutral approach endorsed by other commenters in this docket and with NHTSA's own prior guidance recognizing animal detection as an expected component of ADS safety performance. Sentient Futures is available to discuss this proposal with NHTSA staff at the Agency's convenience.

A list of endorsing organizations and supporting evidence is available at https://sharedroads.sentientfutures.ai.

Respectfully submitted,

Dr. Constance Li
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Sentient Futures

[9] https://www.nbcbayarea.com/news/local/sf-supervisor-change-self-driving-cars/3975081/