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Montreal, November 5th, 2024

Deputy Administrator Sophie Shulman
Docket Management Facility, M-30,
U.S. Department of Transportation,
West Building, Ground Floor, Rm. W12-140,
1200 New Jersey Avenue SE,
Washington, DC 20590

Dear Deputy Administrator Shulman:

**RE: Docket No. NHTSA-NHTSA-2024-0057, RIN 2127-AK98,**
**Federal Motor Vehicle Safety Standards; Pedestrian Head Protection**

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On behalf of a coalition of Canadian organizations, we appreciate this opportunity to submit comments in response to the National Highway Traffic Safety Administration's (NHTSA) notice of proposed rulemaking (NPRM) regarding Federal Motor Vehicle Safety Standard No. 228, *Pedestrian head protection* (FMVSS).

U.S. vehicle imports represent approximately three-quarters of the new vehicle market in Canada[1], making the issue of U.S. vehicle safety a concern not only in the USA but also in our country, across all Canadian streets and roads. In view of this relation and the impact of imported vehicles on the safety of road users in Canada, we welcome and strongly support the newly proposed rule.

Larger vehicles present higher safety risks not only to pedestrians, but also to cyclists and other vulnerable road users. There is certainly little doubt, based on a growing body of research and evidence, that the high vehicle front ends of many pickup trucks and large SUVs pose significantly greater risks of death to pedestrians and cyclists in crashes. For instance, it is estimated that "a 10 cm increase in the vehicle's

[1] See https://www.trade.gov/country-commercial-guides/canada-automotive.

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front-end height is associated with a 22% increase in fatality risk" and "a cap on front-end vehicle heights of 1.25 m would reduce annual US pedestrian deaths by 509".[2]

The new proposed standard for vehicle safety is therefore likely to induce positive changes in the way manufacturers design their vehicles, such as lowering the height of the hood, thus contributing to smaller vehicles being produced and increasing safety for all vulnerable road users. By supporting the proposed rule, our goal is also to share with Canadian law-makers that we support updating vehicle design safety standards in Canada to at least be comparable to U.S. standards.

Finally, by encouraging the design and manufacturing of smaller vehicles, we firmly believe that the proposed new rule could not only improve the safety, but also the environmental and financial situation of American and Canadian households in need of smaller, cleaner, more affordable options to fulfill their transport needs. We also recommend adjustments to the rule which could generate even higher benefits in these respects.

**Pedestrian fatalities in Canada and road safety**

The proposed FMVSS will save many lives. Given the similarities between U.S. and Canadian markets — and, more importantly, the same vulnerability of pedestrians and cyclists in crashes on Canadian roads — the same urgency exists to address the risks caused by oversized vehicles on both sides of the border. As a matter of fact, SUVs and pickup trucks, which represent 83% of new vehicle sales in Canada,[3] are two to three times deadlier in crashes involving pedestrians and cyclists, and eight times more lethal to children.[4] In the Province of Ontario, for example, while road deaths have significantly decreased between 1999 and 2020, the percentage of

[2] See https://doi.org/10.1016/j.ecotra.2024.100342
[3] See https://www150.statcan.gc.ca/t1/tbl1/fr/tv.action?pid=2010002401&pickMembers%5B0%5D=1.1&pickMembers%5B1%5D=3.1&cubeTimeFrame.startMonth=04&cubeTimeFrame.startYear=2023&cubeTimeFrame.endMonth=04&cubeTimeFrame.endYear=2024&referencePeriods=20230401%2C20240401
[4] See https://www.pietons.quebec/sites/default/files/documents/summary-suv.pdf

pedestrian deaths has increased to 22 percent between 2009 and 2018.[5] In addition, based on numbers from the Ontario Ministry of Transportation, light-duty trucks (crossovers, SUVs, pickup trucks and vans), though representing only 41 percent of road vehicles, are involved in 61 percent of pedestrian fatalities.

**Expanding FMVSS no. 228 to larger vehicles would yield higher benefits.**

While we appreciate the rationale behind restricting the FMVSS to vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds (equivalent of 4,536 kg) or less for vehicles including multipurpose passenger vehicles (crossovers, SUVs, pickup trucks and vans), we urge the NHTSA to consider expanding the FMVSS to include vehicles that exceed this GVWR. Indeed, many of the best-selling vehicles in recent years are trucks that exceed this weight rating,[6] including, for example, the Chevrolet Silverado 3500,[7] Ford F-350,[8] and Ram 3500.[9] The strong correlation between vehicle front-end height and pedestrian safety suggests that expanding the proposed FMVSS could produce positive safety effects[10] while reducing the chance of a weight-based loophole for manufacturers who wish to avoid being subject to these safety standards.

**Other suggested adjustments and concerns**

We welcome the fact that the NHTSA does recognize the need to protect not only pedestrians, but also cyclists[11]. We would like to further encourage the administration to include all other vulnerable road users while designing and planning for the new tests - considering a diversity of vehicles or mobility modes and speed (such as ebikes, scooters, wheelchairs, strollers).

[5] See https://files.ontario.ca/mto-orsar-ontario-road-safety-annual-report-2020-en-2023-06-23.pdf
[6] See https://www.edmunds.com/most-popular-cars/;
https://www.jdpower.com/cars/shopping-guides/how-much-does-a-truck-weigh
[7] GVWR 14,000 lb, or 6350 kg. See: https://www.chevrolet.com/commercial/silverado-3500hd-chassis-cab
[8] GVWR 11,000 lb, or 4980 kg. See: https://www.ford.com/trucks/super-duty/models/f350-xlt/
[9] GVWR 13,500 lb, or 6123 kg. See:
https://www.ramtrucks.com/BodyBuilder/service/Image?imageId=MtQrP%2FFqLY5r%2Fest8MtGjGgHzAHGUTU0WB3rWuqSY7YmQ2vEhuBWBOluWOlfKj9Q%0A
[10] See https://doi.org/10.1016/j.ecotra.2024.100342 at 12.
[11] https://www.nhtsa.gov/sites/nhtsa.gov/files/2024-09/NPRM-pedestrian-head-protection-web-version.pdf at 9.

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Additionally, while we understand from the new standard technical document that tests with a head form represent the most efficient way to reduce fatalities and limit severe injuries to pedestrians, we would also like to encourage the NHTSA to consider including tests which could prevent severe injuries made to the upper body (where vital organs are located) during collisions.

Adult pedestrians who are killed or severely injured by larger vehicles, such as SUVs, pickup trucks and vans, have higher rates and numbers of upper extremity fractures and chest and torso injuries compared to pedestrians struck by cars. For adult pedestrians struck by these larger vehicles, the incidence of torso injury is approximately 50% higher than for pedestrians struck by cars, and torso injuries are the second-leading contributor to morbidity, after head injury. These injuries, which can include harm to internal organs and the spine, are most often caused by the hood edge or hood surface.[12]

**Tackling vehicle size will encourage more equity.**

There are also significant equity concerns regarding the trend from smaller vehicles to increasingly larger light-duty trucks that support the introduction of the FMVSS.

This trend is partly due to buyer perceptions of safety, while in reality, the higher safety of occupants inside pickup trucks and SUVs comes with a much higher risk to other road users : "for each fatal crash that occupants of large vehicles avoid, at least 4.3 additional fatal crashes involving others occur".[13]

[12] See Roudsari, B. S., Mock, C. N., & Kaufman, R. (2005). An evaluation of the association between vehicle type and the source and severity of pedestrian injuries. Traffic injury prevention, 6(2), 185–192. https://doi.org/10.1080/15389580590931680 and Ivarsson, B. J., Henary, B., Crandall, J. R., & Longhitano, D. (2005). Significance of adult pedestrian torso injury. Annual proceedings. Association for the Advancement of Automotive Medicine, 49, 263–277.

[13] See https://www.researchgate.net/profile/Michelle-White-18/publication/228261461_The_Arms_Race_on_American_Roads_The_Effect_of_SUV%27s_and_Pickup_Trucks_on_Traffic_Safety/links/00b4952e56cf5ed939000000/The-Arms-Race-on-American-Roads-The-Effect-of-SUVs-and-Pickup-Trucks-on-Traffic-Safety.pdf at 2.

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Another concerning fact is that buyers of light-duty trucks pay on average USD $8,000 more than compact car buyers,[14] as well as higher operating costs,[15] representing not only an equity issue but also effectively creating disparity in safety for less wealthy households and other road users, while providing higher profit margins for automakers.[16] In recent years, instead of offering consumers a choice, the industry has steered them toward luxury vehicles rather than more affordable options, with little regard to their needs or their economic reality. In December 2023, the average cost of a new vehicle sold in Canada was CAD $67,259, an increase of 14% compared to December 2022. This jump is even more dizzying when we compare it to the average cost of a new vehicle in 2019, which was then CAD $34,060.

**Tackling vehicle size is key to fighting climate change**

Addressing the increasing vehicle size — and growing height of vehicle front ends — is also a crucial part of the fight against climate change. Over the last year, we have watched both Canadian and U.S. residents fleeing climate disasters, including violent storms, floods, and wildfires.

Light-duty trucks are not only proportionally more numerous on the roads but also more polluting than compact cars. In fact, light-duty trucks use on average 20%[17] more fuel than cars according to the International Energy Agency. Because of their size, they also use more natural resources.

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[14] See https://www.theglobeandmail.com/drive/mobility/article-the-suv-markup-how-much-more-are-you-paying-for-an-suv/

[15] See https://www.equiterre.org/en/resources/limpact-des-vus-sur-lenvironnement

[16] See https://www.latimes.com/world-nation/story/2019-09-13/suvs-have-made-a-startling-rise-in-germany-now-comes-the-backlash

[17] https://www.iea.org/commentaries/as-their-sales-continue-to-rise-suvs-global-co2-emissions-are-nearing-1-billion-tonnes

Between 1990 and 2018, GHG emissions from light-duty trucks increased by 156% in Canada, contributing to the overall increase in national emissions (+21%). In 2018, light-duty trucks emitted on average 31%[18] more greenhouse gas (GHG) emissions per mile than standard cars in Canada. As a result, road transport was the only sector whose emissions did not decrease in 2020 despite the COVID-19 pandemic.[19]

The new rule has a very strong potential to reduce GHG emissions both in Canada and the USA (regarding its potential in reducing vehicle size). First, because buyers will be less inclined to purchase larger vehicles for their perceived safety, and second, by increasing road safety and therefore encouraging walking and cycling, and the use of smaller, less polluting vehicles.[20] Indeed, the promotion of cleaner modes of transportation can go hand in hand with reducing the risk of harm from oversized vehicles on our roads.

**Advocating for similar changes in Canada**

The Canadian *Motor Vehicle Safety Act* (MVSA) works similarly to its U.S. counterpart, the *National Traffic and Motor Vehicle Safety Act*, by creating statutory authority to implement vehicle safety regulations, namely the Canada Motor Vehicle Safety Standards (CMVSS). There are substantial similarities between the FMVSS and the CMVSS; in particular, neither country — unlike other jurisdictions beyond North America — currently adopts the Global Technical Regulation 9 (GTR 9). In view of the strong relationship between the U.S. and Canadian markets, following the implementation of FMVSS, including the integration of the GTR 9, our coalition will support the introduction of similar changes and work with Canadian legislators in the CMVSS to address the safety of pedestrians and cyclists (as well as other vulnerable road users).

[18] See https://www.sciencedirect.com/science/article/abs/pii/S2214629622002791#:~:text=In%20Canada%2C%20light%2Dduty%20trucks,to%20reduce%20passenger%20transport%20GHGs.
[19] See https://www.equiterre.org/en/resources/limpact-des-vus-sur-lenvironnement
[20] A recent U.K. study found that road safety was the most commonly cited barrier to active transportation: https://www.gov.uk/government/statistics/national-travel-attitudes-study-wave-9/national-travel-attitudes-study-ntas-wave-9-cycling

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Our coalition of Canadian organizations strongly support the proposed amendments to FMVSS No. 228, emphasizing the urgent need for enhanced pedestrian and cyclist protection associated with oversized vehicles. The interconnectedness of the U.S. and Canadian automotive markets also underscores the importance of harmonizing safety standards. Assuming the success of the U.S. initiative, we will advocate for and work with the Canadian government to adopt similar changes to Canadian regulations. Expanding the FMVSS to include larger vehicles can address significant safety, equity, and environmental concerns, ultimately leading to safer roads for all users, while promoting a shift towards more sustainable transportation choices.

We look forward to the success of the NHTSA proposal, and the many lives that will be saved on US and Canadian roads.

Marc-André Viau
Directeur des relations gouvernementales
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Signatory organizations :

Association québécoise des médecins pour l'environnement (AQME)
Canadian Association of Physicians for the Environment (CAPE)
Coalition to Reduce Auto Size Hazards (CRASH)*
David Suzuki Foundation
Ecology Action Center
Environmental Defence
Piétons Québec
Parachute Canada
Vélo Québec
Vision Zero Vancouver

(*) Members of the Coalition to Reduce Auto Size Hazards (CRASH) include :
*Advocacy for Respect for Cyclists (ARC)*

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*Bike Law Canada*
*Bike Windsor Essex*
*Bridging Overlea (Toronto)*
*Citizens Environment Alliance (Windsor)*
*Community Bikeways (TCBC)*
*Cycle Hamilton*
*Cycle Toronto*
*CycleWR (Waterloo)*
*Environment Hamilton*
*Friends and Families for Safe Streets (FFSS)*
*Going the Extra Mile for Safety (GEMS)*
*Guelph Coalition for Active Transportation (GCAT)*
*Hub Cycling (Vancouver)*
*London Cycle Link*
*Movement: Metro Vancouver Transit Riders*
*Safe Parkside*
*Safe Streets Halton*
*TTC Riders*
*Vélo Canada Bikes*
*Walk Toronto*

cc Minister of Transport (Canada), The Honourable Anita Anand
cc Minister of Environment and Climate Change (Canada), The Honourable Steven Guilbeault