

# MASSACHUSETTS VISION ZERO COALITION

July 20th, 2023

## **Re: Comment on NHTSA-2023-0012: Side Underride guards**

As members of the Massachusetts Vision Zero Coalition, we are writing to provide comments on Docket No. NHTSA-2023-0012: Side Underride guards. Thank you for inviting comments on the Advanced Notice of Proposed Rulemaking (ANPRM) for side underride guards on large trucks.

The [Massachusetts Vision Zero Coalition](#) is composed of transportation advocacy organizations, community-based groups, and individuals representing communities across Massachusetts who are dedicated to improving traffic safety. Massachusetts recently passed our own side guard requirement for state owned and contracted trucks, and we are hoping for federal regulations to ensure that all trucks in MA have this important safety measure.

Safer trucks are critical to meeting the goals of the National Roadway Safety Strategy. Crashes between large trucks and vulnerable road users (VRU) are some of the deadliest traffic crashes — in 2019, over 550 vulnerable road users were killed in crashes with large trucks, accounting for over 10% of total fatalities from large truck crashes.<sup>1</sup> In a study of crash data, the National Transportation Safety Board found that in crashes with tractor-trailers a majority of bicyclist and motorcyclist fatalities, and 29% of pedestrian fatalities, were from side impact crashes.<sup>2</sup>

Side underride guards could save many of these lives. The US DOT Volpe Center has found that side guards can reduce relevant bicyclist-large truck crash fatalities by 55-75 percent and pedestrian-large truck crash fatalities by 20-27 percent.<sup>3</sup> For this reason, at least a dozen U.S. cities, Massachusetts, and Washington, D.C. have enacted laws and regulations requiring side guards to protect people walking and biking.<sup>4</sup> In New York City, the fatality rate of crashes between trucks and VRUs decreased by 25% when trucks were equipped with side guards required by local law, compared to crashes with trucks lacking side guards.<sup>5</sup> By not accounting for the lives of non-motorized users, NHTSA is dismissing the most vulnerable of all road users and those with the highest likelihood of being killed in crashes with large trucks.

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<sup>1</sup> <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2022-01/FMCSA%20Pocket%20Guide%202021.pdf>

<sup>2</sup> <https://www.nts.gov/safety/safety-recs/RecLetters/H-14-001-007.pdf>

<sup>3</sup> <https://www.volpe.dot.gov/sites/volpe.dot.gov/files/2023-01/Volpe%20BCIRPU%20LPD%20slides.pdf>

<sup>4</sup> <https://www.volpe.dot.gov/LPDs>

<sup>5</sup> <https://www1.nyc.gov/assets/dcas/downloads/pdf/fleet/Safe-Fleet-Transition-Plan-Private-Vehicle-Crashes-and-Safety-Technology-December-2021.pdf>

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Additionally, crash data regarding vulnerable road users, as well as underride crashes as a whole,<sup>6</sup> lacks consistency. Due to this, we urge NHTSA to look at the potential for underreporting of fatal injuries in the FARS data or of miscoding critical information, such as the first point of impact on the striking vehicle.

We request that NHTSA do the following:

1. Reevaluate the cost-benefit analysis to include fatalities and serious injuries of vulnerable road users and motorcyclists in its rulemaking of side underride guards, including revisiting the accuracy of FARS data and adjusting to fully account for large truck-VRU crashes.
2. Consider *all* large trucks, and not just tractor trailers. Side guards installed on single unit trucks would increase the lives saved of people walking and biking.
3. Properly account for aerodynamic fuel savings of side guards used to prevent VRU fatalities. The US DOT Volpe Center found that adding aerodynamic side guards can save fuel costs, more than offsetting the purchase cost and added weight, yielding \$15-\$45 billion in net benefits over 25 years.<sup>7</sup> NHTSA should fully account for such cost-saving benefits of aerodynamic side guards — much in the same way they quantify the benefits of the Corporate Average Fuel Economy program. This will work in the best financial interest of truck-owners in the long term.
4. Review the cost of including side underride guards on new trucks and trailers at scale, which is less expensive than the cost of retrofitting trucks, and include lightweight tensile strap-based designs such as the Utility Trailer, Manac/PHSS, and Vanguard designs, as well as aerodynamic VRU side guard designs such as [Windyne](#), [Wabco](#), and [Transtex](#).

Thank you for your time and consideration.

Sincerely,

The Massachusetts Vision Zero Coalition

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<sup>6</sup> <https://www.pbs.org/wgbh/frontline/article/trucks-underride-crashes-nhtsa-dot-iihs-safety-cars/>

<sup>7</sup> <https://www.volpe.dot.gov/sites/volpe.dot.gov/files/2023-01/Volpe%20BCIRPU%20LPD%20slides.pdf>