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Legislative District 15
Montgomery County

Environment and Transportation Committee

Chair

Motor Vehicle and Transportation
Subcommittee



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THE MARYLAND HOUSE OF DELEGATES

ANNAPOLIS, MARYLAND 21401

Delegate Marc A. Korman
Chairman, House Environment and Transportation Committee
House Office Building – Room 251
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Mr. Chairman,

I am writing in favor of HB 652 – Vehicles Laws – Electric Vehicles – Weight Limits.

Electric vehicles weigh significantly more than gas-fueled vehicles, primarily because they are powered by a battery. The battery itself can weigh up to 16,000 pounds, accounting for nearly a quarter of the total weight of a truck.¹ To adhere to regulations, truckers often have to sacrifice cargo, reducing the quantity of goods transported per trip.

Currently, vehicles that utilize auxiliary power units or idle-reduction technology are permitted up to an additional 550 pounds total in gross, axle, tandem, and bridge formula weight limits. In Maryland, a semi-truck, including its cargo, can legally weigh a maximum of 80,000 pounds.² According to the American Trucking Associations, making trucks subject to strict weight restrictions decreases the payload of the truck while increasing traffic congestion. This can impede interstate commerce and deeply affect the ability to move critical goods at an efficient rate.³

To address concerns of transporting additional weight, it is important to recognize that electric trucks have a regenerative braking system. This system reverses electric motors that propel a vehicle, allowing the vehicle to decelerate as soon as the foot is lifted off the accelerator pedal. In turn, the vehicle is able to come to a smoother, quicker stop if necessary. Additionally, since the system captures the kinetic energy and transfers it into the vehicle's battery, it consumes less energy than friction braking.⁴

¹ Bianca Giacobone, "Electrifying Trucking Will Mean Sacrificing Critical Weight for Heavy Batteries, Eating into Already-Slim Margins," Business Insider, n.d., <https://www.businessinsider.com/electric-trucks-longhaul-batteries-tesla-heavy-cargo-weight-problem-2023-2>.

² "2018 Maryland Code :: Transportation :: Title 24 - Vehicle Laws -- Size, Weight, and Load; Highway Preservation :: Subtitle 1 - Size, Weight, and Load :: § 24-109. Gross Weight of Vehicles," Justia Law, 2018, <https://law.justia.com/codes/maryland/2018/transportation/title-24/subtitle-1/section-24-109/>.

³ "A Heavy Dose of Reality for Electric-Truck Mandates," American Trucking Associations, April 19, 2023, <https://www.trucking.org/news-insights/heavy-dose-reality-electric-truck-mandates#:~:text=Battery%2Delectric%20trucks%2C%20which%20run,than%20their%20clean%2Ddiesel%20counterparts.>

⁴ "How Regenerative Brakes Work," Energy.gov, n.d., <https://www.energy.gov/energysaver/how-regenerative-brakes-work>.

Many states have enacted legislation to address the weight restrictions on electric trucks. In 2014, Virginia passed HB 341, which allowed any natural gas and/or electric vehicle to exceed the weight limits by up to 2,000 pounds.⁵ Most recently, California adopted legislation in 2022 that authorized zero-emission vehicles to exceed weight limits on power units by up to 2,000 pounds.⁶

HB 652 allows plug-in electric drive vehicles and specific battery-operated vehicles to exceed gross, axle, tandem, and bridge weight limits by up to an additional 2,000 pounds total. This will ensure trucks do not have to sacrifice cargo weight on long haul routes, which often require larger batteries. Additionally, it will guarantee that the weight of the battery and electric devices are not subtracted from the cargo limits.

In order to achieve the state's carbon emissions goals, the pathway must be logical and technically achievable. As the state continues to transition to electric vehicles, regulations must be reflective of the changes in transportation. By providing an extension for electric truck weight requirements, Maryland would effectively address economic concerns while reducing our carbon footprint.

⁵ Title 46.2. Motor Vehicles,” § 46.2-1129.2. Further extension of weight limits for vehicles fueled by natural gas or powered by means of electric battery power, 2014, <https://law.lis.virginia.gov/vacode/title46.2/chapter10/section46.2-1129.2/>.

⁶ “2022 California Code :: Vehicle Code - VEH :: Division 15 - Size, Weight, and Load :: Chapter 5 - Weight :: Article 1 - Axle Limits :: Section 35551.,” Justia Law, 2022, <https://law.justia.com/codes/california/2022/code-veh/division-15/chapter-5/article-1/section-35551/>.