

Date of Hearing: April 1, 2024

ASSEMBLY COMMITTEE ON TRANSPORTATION
Lori D. Wilson, Chair
AB 1953 (Villapudua) – As Introduced January 29, 2024

SUBJECT: Vehicles: weight limits

SUMMARY: Clarifies that the maximum gross weight for a zero-emission or near-zero emission vehicle is 82,000 pounds.

EXISTING LAW:

- 1) Establishes maximum gross, or loaded weights, for vehicles, which vary based on the distance between axles and the number of axles. For two-axle vehicles the maximum weight is 40,000 pounds, for three-axle vehicles the maximum weight is 60,000 pounds, and for vehicles with four or more axles the maximum weight is 80,000 pounds. (Vehicle Code Section (VEH) 35551)
- 2) Authorizes a near-zero-emission or zero-emission vehicle to exceed the vehicle weight limits on the power unit by up to 2,000 pounds to the extent expressly authorized by federal law. (VEH 35551)
- 3) Defines “zero-emission vehicle” as a vehicle that produces no emissions of criteria pollutants, toxic air contaminants, and greenhouse gases (GHGs) when stationary or operating, as determined by the California Air Resources Board (CARB). (Health and Safety Code section (HSC) 44258)
- 4) Defines “near zero-emission vehicle” as a vehicle that utilizes zero-emission technologies, enables technologies that provide a pathway to zero-emissions operations, or incorporates other technologies that significantly reduce criteria pollutants, toxic air contaminants, and GHG emissions, as defined by the CARB in consultation with the State Energy Resources Conservation and Development Commission consistent with meeting the state’s mid- and long-term air quality standards and climate goals. (HSC 44258)
- 5) Existing federal law permits natural gas vehicles and electric vehicles to exceed weight limits on interstate highways by an amount equal to the difference between that vehicle and the weight of a comparable diesel tank and fueling system, at a maximum of 82,000 pounds (23 United States Code 127).

FISCAL EFFECT: Unknown

COMMENTS:

AB 2061 (Frazier) Chapter 580, Statutes of 2018 authorized zero-emission and near-zero emission vehicles to have an increased weight limit of 2,000 pounds to the extent permitted by federal law. The change in law was made to reflect that transitioning from diesel trucks to zero and near-zero-natural gas, battery electric, or hydrogen fuel cell trucks would increase truck weights, relative to the weight of diesel trucks.

According to the author, “AB 1953 simply clarifies existing law allowing zero and near-zero emission trucks to operate up to a gross weight of 82,000 pounds on non-federally funded highways. While it is widely understood that AB 2061 (Frazier of 2018) allows for this type of operation, this bill would add key technical language into Vehicle Code 35551 (f) that would remove all ambiguity and potential liability for the legal operation of a truck that weights up to 82,000 pounds.”

According to the University of California Institute of Transportation Studies (UC ITS) report *Effects of Increased Weights of Alternative Fuel Trucks on Pavement and Bridges*, long haul battery electric trucks are estimated to be 5,328 pounds heavier than their diesel counterparts. Hydrogen fuel cell long haul trucks are expected to weigh 2,267 more than their diesel counterparts, and natural gas trucks are estimated to weigh 500 to 2,000 pounds more than their diesel counterparts. The report notes that “The pavement damage analyses of the example state highway pavements and the county roads and urban arterials indicated that the projected changes for the implementation of alternative fuel trucks in 2030 and 2050 would cause a zero to approximately 1% increase in life reduction across all cases. The damage analysis for residential streets is only modeled for 500 to 2,000 pound increases in the weights of waste-hauling trucks indicated that these pavements would continue to fail by exposure to the environment rather than by the waste truck loading, despite the increased axle loads.”

The California Trucking Association, the sponsor of this bill, argues “Truck and trailer combinations are generally limited to operating at a total combined weight of 80,000lbs gross vehicle weight rating (GVWR). Recognizing that zero and near-zero-emission trucks are heavier than traditional diesel trucks due to the weight of batteries, fuel cells, and tanks, Congress has approved such vehicles to operate up to a maximum of 82,000 pounds GVWR.

While it has been widely understood that AB 2061 would allow zero and near-zero emission vehicles to operate up to 82,000 pounds, Vehicle Code Section 35551(f) is missing key language contained in federal statute that would unambiguously authorize zero and near-zero emission trucks to operate up to the same limit as authorized under federal law.

AB 1953 will provide the necessary technical clean-up to ensure that early adopters of zero and near-zero emission technologies are not exposed to unnecessary liability and are better able to compete with traditional diesel trucks as zero-emission trucks can weigh up to 8,000lbs more than their diesel counterparts, which reduces cargo payloads if they are subject to the lower weight limit.

While all zero and near-zero-emission vehicles are granted the weight exemption of an additional 2,000 pounds that weight exemption on the interstate highway system applies only to the extent permissible by federal law. As of the writing of this analysis, only electric trucks and natural gas trucks currently have that weight exemption. There is pending federal legislation to extend this weight exemption to hydrogen fuel cell vehicles this legislative session.

Previous Legislation:

AB 2061 (Frazier) Chapter 580, Statutes of 2018 authorized zero-emission and near-zero emission vehicles to have an increased weight limit of 2,000 pounds to the extent permitted by federal law.

SB 53 (Hueso) of 2017, would have authorized a motor vehicle with an engine fueled primarily by natural gas to exceed specified maximum weight limits by up to 2,000 pounds, and require a specified analysis to estimate the damage caused by these vehicles and a fee that compensates for the cost of that damage. SB 53 was held on Senate Appropriations Committee suspense file.

REGISTERED SUPPORT / OPPOSITION:

Support

California Trucking Association (sponsor)
California Renewable Transportation Alliance
Republic Services—Western Region
Valley CAN (Clean Air Now)

Opposition

None on file

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