Date of Hearing: March 19, 2018

# ASSEMBLY COMMITTEE ON TRANSPORTATION Jim Frazier, Chair AB 2061 (Frazier) – As Amended March 5, 2018

### SUBJECT: Near-zero-emission and zero-emission vehicles

**SUMMARY**: This bill authorizes a near zero-emission vehicle (NZEV) or a zero-emission vehicle (ZEV), as defined, to exceed axle, tandem, gross, or bridge formula weight limits, up to a 2,000 pound maximum, by an amount equal to the difference between the weight of the vehicle attributable to the fueling or propulsion system carried by that vehicle and the weight of a comparable diesel tank and fueling or propulsion system.

### **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.
- 2) 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 (ARB).
- 3) 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 ARB 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.
- 4) Existing federal law permits natural gas 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.

### FISCAL EFFECT: Unknown

# **COMMENTS**:

*Author's statement:* According to the author, "California's transportation sector accounts for 40 percent of all greenhouse gas emissions in our state. While heavy duty vehicles make up 3 percent of all vehicles on the road, they account for 23 percent of overall emissions. California must take steps to incentivize the purchase of cleaner trucks. To do this, we have to take into account the economic factors that impact the sale of these vehicles. Clean trucks weigh more than their diesel counterparts, and as a result of our weight limits, they have to give up their carrying capacity. This bill will remove this economic barrier for zero-emission and near zero-emission trucks by allowing them to maintain the same carrying capacity as diesel trucks."

*Meeting our emission reduction goals:* According to ARB, the transportation sector accounts for nearly 40% of all GHG emissions. Heavy duty vehicles are the most concentrated source of those emissions, causing 23% of transportation emissions while only making up 3% of vehicles.

If California is going to continue to meet its GHG reduction goals, reducing our heavy duty vehicle fleet's emissions will be necessary. Market penetration of heavy duty trucks using a fuel source other than diesel has been lacking. According to the Oak Ridge National Laboratory, 99% of Class 8 heavy duty trucks sold in the United States between 2011 and 2015 were diesel operated.

Diesel trucks tend to be \$25,000 to \$100,000 cheaper than a truck operating on natural gas. Electric trucks are still breaking into the market. The additional costs of a zero-emission or near zero-emission vehicles are exacerbated when considering these vehicles' fueling and propulsion systems weigh more than traditional diesel trucks. In order to comply with state mandated weight limits, these vehicles have to reduce their carrying capacity to comply with state and federal weight requirements. The reduced carrying capacity ultimately leads to either more trips taken or more trucks on the road.

*Weight Differences*: Zero-emission and near zero-emission vehicles weigh more than their diesel counter parts. Natural gas fuel systems weigh approximately 7-10 pounds more per diesel gallon equivalent than a diesel fuel system. For example, depending on the truck size, a natural gas fueling system can weigh 1,680 to 3,150 pounds more than a typical diesel fueling system. Zero-emission vehicles have not become widely popularized, but it is likely that the battery packs will weigh more than a typical diesel engine.

These weight differences lead to several policy considerations that have to be weighed. Increased weight does mean more damage to the roads. A 2,000 pound increase, the maximum permitted under this bill, only accounts for a 2.5% increase in weight for a truck weighing 80,000 pounds. Our roads are designed to handle more weight. The California Department of Transportation (Caltrans) is permitted to issue waivers for the weight limits, and issued over 146,000 permits for oversized trucks last year.

Under existing law, Caltrans and certain cities and counties have the authority to set lower weight limits on certain bridges or other structures if it is not within the structures safety to sustain those weights. Nothing in this bill affects this provision.

*Statement in Support:* According to numerous supporters, "Most of California's commercial heavy duty vehicle operators are small businesses. For these fleet operators, the purchase of a heavy duty vehicle is one of the largest investments they will make. The current weight restriction for near zero-emission and zero-emission heavy-duty vehicles creates a disincentive for fleet operators to convert their fleets to cleaner alternatives. For these operators, every pound added in vehicle weight is a pound of cargo sacrificed and a dollar lost."

In the short term, the lost carrying capacity of ZEV and NZEV vehicles results in a disincentive for trucking companies to purchase these vehicles, as they will either have to make more trips with a single vehicle or purchase multiple vehicles to make up for the lost capacity.

In the long term, as more and more of the trucking fleet converts to ZEVs, decreased carrying capacity will result in more trucks on the road, and ultimately more damage to the road.

Increasing the weight limit by 2.5% for a single vehicle may be preferable to more heavy vehicles on the road to make up for the loss in carrying capacity.

*Previous legislation:* 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.

AB 1250 (Bloom), Chapter 484, Statutes of 2015, exempted transit buses procured through a solicitation process that was issued before January 1, 2016, from the statutory weight limit of 20,500 pounds on any one axle of a transit bus. AB 1250 also established a declining curb weight per axle requirements for transit buses, as specified.

### **REGISTERED SUPPORT / OPPOSITION:**

### Support

California Natural Gas Vehicle Coalition (Co-Sponsor) CALSTART (Co-Sponsor) San Diego County Disposal Association (Co-Sponsor) Aces Waste Services Inc. Athens Services Alameda County Industries **Atlas Disposal Industries** Autocar Trucks **Bay Counties SMaRT Black Bear Environmental Assets BLT** Enterpises Blue Line Transfer, Inc. **Burrtec Waste Industries** California Refuse Recycling Council California Trucking Association City of Los Angeles Department of Transportation **Clean Energy** Clippercreek Coalition for Clean Air Cummins Westport Inc. Desert Valley Disposal, Inc. DVO Inc. East Bay Sanitary Co., Inc. EDCO **Efficient Drivetrains** Escondido Disposal, Inc. **evLABs** E-W Truck & Equipment Facility Builders & Erectors Inc. Fremont Recycling & Transfer Station Support Garaventa Enterprises

Garden City Sanitation Inc. Hyliion Inc. Inland Empire Disposal Association Kern Refuse disposal Inc. Livermore Sanitation Los Angeles County Waste Management Association Marin Sanitary Service Mid Valley Disposal Mission Trail Waste Systems Mt. Diablo Resource Recovery Napa City and County Waste Services Northern Recycling & Waste Services Palm Springs Disposal Services Peninsula Sanitary Service, Inc. Ramona Disposal Service Recology San Diego Gas and Electric Solid Waste Association of Orange County South San Francisco Scavenger Company, Inc. Southern California Gas Company Southern California Edison Specialty Solid Waste & Recycling South Lake Refuse & Recycling Tesla Thor Trucks Turlock Scavenger, Recycling, Transfer Upper Valley Disposal & Recycling Varner Bros., Inc. Volvo Waste Connections, Inc. ZeroTruck

### **Opposition**

None on file

Analysis Prepared by: David Sforza / TRANS. / (916) 319-2093