Date of Hearing: July 14, 2025

ASSEMBLY COMMITTEE ON TRANSPORTATION
Lori D. Wilson, Chair
SB 30 (Cortese) – As Amended May 5, 2025

SENATE VOTE: 28-10

SUBJECT: Diesel-powered on-track equipment: decommissioning: resale and transfer restrictions

SUMMARY: Prohibits a public entity to transfer a decommissioned Tier 0 or Tier 1 locomotive and requires a public entity wishing to transfer a decommissioned Tier 2, Tier 3, or Tier 4 locomotive to authorize the transaction in a public meeting and certify the transaction will lead to net air quality benefits. Specifically, **this bill**:

1) Prohibits a public entity from selling, donating, or otherwise transferring Tier 0 or Tier 1 decommissioned diesel-powered on-track equipment.

2) Requires a public entity wishing to donate, sell, or otherwise transfer a Tier 2, Tier 3, and Tier 4 decommissioned diesel-powered on-track equipment to do all of the following:

    a) Approve the transfer in a public hearing;
    b) Certify that the transaction will lead to a net air quality benefit where the receiving entity will be using the diesel-powered on-track equipment;
    c) Make available on its internet website any information or studies that led to the conclusion of net air quality benefits; and,
    d) In the case of Tier 2 diesel-powered on-track equipment, the receiving entity must agree, in any contract, to make modifications it deems feasible to reduce the equipment's emissions.

3) Defines "continued use" as the continued operation of the diesel engine from the diesel-powered on-track equipment as an internal combustion engine to provide power for on-track equipment or any other purpose.

4) Defines "decommission" as to permanently cease the service of on-track equipment when the public entity owning that on-track equipment replaces it with lower emission on-track equipment.

5) Defines "diesel-powered on-track equipment" as any locomotive or any other car, rolling stock, equipment, or other device that is operated on stationary rails and has a diesel engine.

EXISTING LAW:

1) Authorizes the California Department of Transportation (Caltrans) to build, buy, or lease, and improve and operate, rail passenger terminals and related facilities that provide intermodal passenger services along specific corridors. (Government Code (GOV) 14035(c))

2) Authorizes Caltrans to contract with Amtrak for commuter or intercity rail passenger services. (GOV 14035(d))

3) Requires Caltrans to request the involvement and cooperation of affected local agencies and private passenger carriers in decisions relative to the acquisition, development, and operation of intermodal passenger facilities. (GOV 14035.4)

4) Authorizes the Capitol Corridor Joint Powers Authority (JPA), San Joaquin JPA, and the Los Angeles- San Diego-San Luis Obispo (LOSSAN) Rail Corridor Agency to oversee state-supported intercity passenger rail service. (GOV 14070.4-14076)

5) Authorizes Caltrans to buy, sell, and lease rail passenger cars and locomotives and other self-propelled rail vehicles. (GOV 14038)

FISCAL EFFECT: Pursuant to Senate Rule 28.8, negligible state costs.

COMMENTS: *Mobile source emissions.* Mobile sources of air pollution are vehicles or equipment that can be moved from place to place and emit pollutants as they operate. These sources include on-road vehicles like cars, trucks, locomotives, and buses, as well as non-road vehicles such as aircraft, construction equipment, and marine vessels. Mobile sources and the fossil fuels that power them are the largest contributors to the formation of ozone, greenhouse gas (GHG) emissions, fine particulate matter ($PM_{2.5}$), and toxic diesel particulate matter (DPM).

Statewide, more than 21 million out of over 39 million Californians live in areas that exceed the federal ozone standards; within these areas, there are many low-income and disadvantaged communities that are exposed to not only ozone, but also particulate and toxic, pollutant levels significantly higher than the federal standards which have immediate and detrimental health effects.

In California, mobile sources are responsible for approximately 80% of smog-forming nitrogen oxide (NO_x) emissions. They also represent about 50% of GHG emissions when including emissions from fuel production, and more than 95% of toxic DPM emissions.

The National Ambient Air Quality Standard (NAAQS). The Clean Air Act of 1970 instructs the U.S. Environmental Protection Agency (US EPA) to set primary NAAQS to protect public health, and secondary NAAQS to protect plants, forests, crops and materials from damage due to exposure to six criteria air pollutants. These pollutants include: particulate matter, ozone, nitrogen oxides, sulfur oxides, carbon monoxide, and lead.

Federal law (42 United States Code 7409 and 7410) requires that all states attain the NAAQS and develop State Implementation Plans (SIP) for nonattainment areas to attain the NAAQS, and attainment areas to maintain attainment. Failure of a state to reach attainment of the NAAQS by the target date can trigger penalties, including withholding of federal highway funds.

State law (HSC 39602), requires the California Air Resources Board (CARB) to develop SIP emission reduction strategies for cars, trucks, and other mobile sources to meet the requirements in the Clean Air Act. Local air districts are primarily responsible for controlling emissions from stationary sources such as factories and power plants. CARB coordinates closely with local air

districts (such as South Coast Air Quality Management District [SCAQMD]) in the development of attainment plans which are then incorporated into the SIP.

Diesel locomotive emissions in California. According to CARB, locomotives in California emitted over 640 tons of PM2.5 and almost 30,000 tons of NOx in 2022. These locomotives travel across the state close to where people work and live, causing harmful impacts on air quality and public health. Relying almost exclusively on diesel fuel, locomotives were responsible for 10% of NOx emissions from mobile sources in California in 2020, a share CARB expects to increase to 15% in 2035 as other transportation sectors move toward using cleaner engines and zero-emission technology.

Locomotive emissions designations. The U.S. Environmental Protection Agency (U.S. EPA) sets emission standards for locomotives that relate to when the locomotive's engine was originally manufactured. Each tier represents a progressively stricter level of emission limits, with Tier 0 being the least stringent and Tier 4 being the current, most stringent standard. These tiers regulate the amount of pollutants, such as NO_x and particulate matter (PM) an engine can emit.

- **Tier 0 (Pre-2002):** Locomotives and engines manufactured before 2002, which don't have to meet any U.S. EPA emission standards.
- **Tier 1 (2002-2004):** Locomotives and engines manufactured from 2002 to 2004 and that have to comply with the first set of U.S. EPA emission standards.
- **Tier 2 (2005-2011):** Locomotives and engines manufactured that have to meet more stringent emission standards than those made under the Tier 1 standards.
- **Tier 3 (2012-2014):** Newly-built and remanufactured locomotives that have to comply with lower PM and NO_x emission levels and meet newly-established idle reduction requirements.
- **Tier 4 (2015-today):** The most stringent standards for locomotives and engines to date, requiring the use of advanced technologies to control and reduce NO_x and PM emissions. Tier 4 engines reduce NO_x emissions by roughly 50% and PM emissions by approximately 90% when compared to Tier 3 engines. Compared to Tier 0 engines, the Tier 4s produce 70% less CO_2, 95% less PM, 85% fewer hydrocarbons, and 86% fewer NO_x emissions.

Freight railroads own and operate the vast majority of the locomotives in the state. In contrast, passenger locomotives account for roughly 1% of the locomotives operating in California, (about 104 engines) and as of 2022, more than half of those comply with the Tier 4 standards. Overall, CARB estimates that of the approximately 12,900 locomotives operating in the state, about 80% are in Tiers 0, 1, and 2, about 15% are in Tier 3, and approximately 5% are in Tier 4.

Locomotives by type. According to CARB, based on data from 2022, the following types of locomotives operate in the state:

- **Historic.** 23 locomotives, which keep their original configuration to provide riders with historical experience (less than 1%).
- **Passenger.** 104 passenger locomotives in the state, operated by Metrolink in Southern California, Caltrain in the Bay Area, Altamont Commuter Express (ACE) in the Central Valley, Sonoma Marin Area Regional Transit in Northern California, the North Coast

Transit District in San Diego County, and Amtrak-operated Pacific Surfliner, and Capital and San Joaquin Valley Corridors, (approximately 3%).

- **Class 1, Switcher.** 500-600 switchers which are smaller locomotives that pull freight throughout railyards or for short distances outside railyards (approximately 5%).
- **Class 1, Line Haul.** 11,000-12,000 line haul locomotives that haul freight over long distances, through the state and the entire country (approximately 90%).
- **Class 2 and Class 3.** 158 Class 2 and 3 locomotives. Class 2 operators generally pull freight over short and medium distances between a small number of states. Class 3 operators pull freight over short distances, generally between a port and railyard or between a railyard and an industrial client (approximately 2%).
- **Industrial.** 61 industrial locomotives, generally used to move freight out to a main track so that it can be connected to a larger train (approximately 1%).

CARB regulations for In-Use Locomotives repealed in 2025. On April 27, 2023, CARB adopted the In-Use Locomotive Regulation designed to force older diesel locomotives to be retired and increase the use of zero-emission (ZE) technology. The rule projected to reduce 7,400 tons of PM, 386,300 tons NOx, and 21.6 million tons of greenhouse gas (GHG) emissions cumulatively between 2023 and 2050.

Under the CARB regulation, beginning in 2030, locomotives must be less than 23 years old to operate in California. This requirement will gradually ban old diesel locomotives from the state, starting with Tier 0, Tier 1, and some early Tier 2 models manufactured before 2007. However, if the locomotive is remanufactured or repowered to at least meet Tier 4 emission limits before 2030, the state will re-set the 23-year clock based on when they were remanufactured or repowered. The regulation also requires all passenger locomotives built after 2030 to operate with zero emissions in California.

In January 2025, CARB withdrew its application for the U.S. EPA waiver request to enforce the rule. On June 26th, 2025, CARB voted to repeal the In-Use Locomotive Regulation.

Locomotive costs. CARB released a "Preliminary Cost Document for the In-Use Locomotive Regulation" in March 2021 in which it detailed some locomotive-related purchase costs. According to the document:

New Tier 4 locomotive:	$2.7-$3.3 million
New Tier 4 passenger locomotive:	$7.165-$7.7 million
Hydrogen ZE locomotive:	$4.25 million
Hydrogen ZE passenger locomotive:	$12-$16 million
Battery Electric ZE locomotive:	$4.5-$8 million
Battery Electric ZE passenger locomotive:	$10-$12 million

Some passenger locomotives are transitioning to ZE. Some passenger rail operators in the state are adopting ZE locomotive technology. Caltrain recently launched a new electric train service from San Jose to San Francisco using 96 electric multiple units (EMUs) to replace approximately 75% of its diesel trains. EMUs consist of multiple vehicles, each equipped with its own electric traction motors, eliminating the need for a separate locomotive. In addition, Caltrans plans to buy 10 hydrogen multiple units (HMUs) by 2028 for the Amtrak system.

Others agencies are converting their locomotives to ZE technology. The San Joaquin Regional Rail Commission kicked off the Zero Emissions Benefitting Rail Advancement (ZEBRA) Pilot to convert its existing fleet of six Tier 0 diesel locomotives to hydrogen hybrid propulsion.

Caltrain Modernization Program. The Caltrain Modernization Program, also known as the Caltrain Electrification Project, was a $2.44 billion project that at electrified about 51 miles of Caltrain's main line from San Francisco to San Jose. The final segment from San Jose to Gilroy is served by diesel trains as those tracks are owned by Union Pacific and the two entities could not reach an agreement to electrify the final 33 miles of track.

Caltrain announced in November 2024 it had sold 19 Tier 0 diesel locomotives and 90 galley cars to the city government of Lima, Peru for $6.32 million. The U.S. State Department, which first proposed the transfer, stated the transfer will result in a net air quality improvement for the more than 10 million people who live in the Lima. According to the U.S. State Department white paper:

"The proposed Lima East-West Passenger Railway, leveraging repurposed diesel-electric locomotives from Caltrain, offers a transformative solution to Lima's pressing transportation and environmental challenges. By shifting between 150,000 to 250,000 daily passengers from buses and microbuses to rail, the project is poised to significantly reduce traffic congestion and greenhouse gas emissions along the 39-kilometer corridor.

"Current estimates indicate that buses and microbuses operating on this route emit approximately 59.17 metric tons of CO_2 daily. While the Tier 0 locomotives are not the most advanced in emission control, the overall environmental impact remains positive. The substantial reduction in vehicular emissions outweighs the emissions produced by the locomotives, leading to a net decrease in air pollutants. Additionally, repurposing existing locomotives aligns with resource efficiency principles by extending the life of existing assets and minimizing the environmental footprint associated with manufacturing new equipment."

The Bay Area Air Quality Management District, which provided Caltrain with some funding for its electrification project, worked with CARB to amend its initial contract with Caltrain to allow the trains to be sold to Lima, Peru instead of being destroyed as called for in the original agreement.

Committee comments. This bill only applies to train engines that public entities sell or donate – which make up about 104 or about 1% of the locomotives in the state. More than half of those locomotives are Tier 4 diesel engines, the cleanest burning diesel engines available today. There are currently 17 Tier 0 and Tier 1 locomotives owned and operated by public entities. This includes locomotives that have been overhauled to incorporate more emissions controls to comply with US EPA standards.

In contrast to the relatively clean locomotive fleet public entities operate, according to CARB in 2022, private entities were responsible for approximately 97% of the locomotive-generated pollution in the state.

According to the author. "SB 30 prohibits the resale, donation, or transfer of decommissioned Tier 0 and Tier 1 diesel locomotives for continued use. It also adds environmental guardrails to the transfer of Tier 2 and higher locomotives. The state of California should be leading the world in environmental protection and the transition to clean energy. As we make our own transition to zero-emission locomotives, we must look forward and ensure that the locomotives we stop using do not worsen pollution somewhere else. Diesel fuel is diesel fuel regardless of where you live, and the emissions continue to be harmful to people and the environment. As a world leader in decarbonization in our transportation sector, California needs to be serious about decarbonization worldwide."

Arguments in support. Move LA writes, "Diesel engine emissions are harmful to the health of our communities and our environment. Diesel exhaust contains over 40 substances known to cause cancer. It has also been attributed to an increase in hospital admissions for heart disease and respiratory illness. These locomotives contribute significantly to air pollution which has led to ground-level ozone that is damaging to vegetation, including crops, and contributes to climate change.

President Trump has withdrawn the United States from the Paris Agreement, an international treaty aimed at reducing global temperature increases related to climate change. He has also gutted our country's climate action goals and emission reduction initiatives. California is a world leader on climate issues, so now more than ever, it is vital to continue reducing global diesel emissions. We are all fighting to decarbonize the same air.

SB 30 is an opportunity for California to expand upon its contributions to decarbonization efforts and ensure that these locomotives do not worsen air quality and health outcomes in communities at home or abroad."

Arguments in opposition. The California Transit association, holding a position of oppose unless amended, writes, "Caltrans has expressed significant interest in leasing available vehicles to ensure timely service options. Due to a scarcity of rail vehicles, lower tier locomotives are the only options available for this purpose. In addition, it is common for agencies to borrow equipment from other agencies. During the upcoming FIFA Men's World Cup in 2026 and the Los Angeles Olympics in 2028, we fully expect that rail agencies may need additional equipment to ensure added, uninterrupted service and the option for leasing will be critical. SB 30 is unclear as to whether this would be permitted, adding confusion and uncertainty to agency planning. Should SB 30 be signed into law, it is significantly more likely that we will face shortages and disruptions.

SB 30 also encourages agencies to retain and use older equipment longer than necessary, rather than facilitating timely transitions to cleaner, more efficient technology. If unable to resell older equipment, agencies now have yet more reason why fleet transition is financially infeasible. Without extra funds to use on fleet upgrades, limiting the resale adds to the difficulty of moving to cleaner equipment.

We respectfully request the following changes to address these concerns:

1. Fully exempt higher tier diesel locomotives (Tier II – Tier IV+) recognizing that these cleaner vehicles would benefit other areas.

2. For Tier I and lower vehicles, require an air quality and greenhouse gas reduction benefit analysis in advance of the sale of decommissioned diesel locomotives in order to ensure that there will be quantifiable benefits to the transfer. Should this analysis demonstrate quantifiable benefits, exempt the transfer."

Committee amendments. The author and this committee have agreed to the following amendments:

The donation, sale, or transfer of ownership of decommissioned Tier 0 and Tier 1 on-track diesel-powered equipment is allowed if the diesel engine is removed and the transfer is approved in a public hearing. The donation, sale, or transfer of ownership of decommissioned Tier 2, Tier 3, and Tier 4, or emission equivalent, on-track diesel-powered equipment is allowed if the transfer is approved in a public hearing.

SEC. 2. Section 99153.5 is added to the Public Utilities Code, to read:

99153.5. (a) For purposes of this section, the following definitions apply:

(1) "Continued use" means the continued operation of the diesel engine from the diesel-powered on-track equipment as an internal combustion engine to provide power for on-track equipment or any other purpose.

(2) "Decommission" means to permanently cease the service of on-track equipment when the public entity owning that on-track equipment replaces it with lower emission on-track equipment.

(3) "Diesel-powered on-track equipment" means any locomotive or any other car, rolling stock, equipment, or other device that is operated on stationary rails and has a diesel engine.

(b) Except as provided in subdivision (c), a public entity that owns diesel-powered on-track equipment shall not sell, donate, or otherwise transfer *ownership of* that diesel-powered on-track equipment for continued use after the public entity decommissions the diesel-powered on-track equipment.

(c) A public entity may engage in a transaction otherwise prohibited by subdivision (b) if ~~all~~ *both* of the following criteria are satisfied:

(1) The diesel-powered on-track equipment meets any of the following conditions:

(A) The ~~diesel-powered on-track~~ equipment ~~to be sold, donated, or transferred ownership~~ is deemed to be in Tier 2, Tier 3, or Tier 4, as designated by the United States Environmental Protection Agency.

(B) The equipment produces emissions equivalent to any equipment within any of the tiers described in subparagraph (A).

(C) The diesel engine is removed from the equipment.

(2) The public entity authorizes the transaction in a public ~~meeting~~ *hearing*.

Previous and related legislation. AB 3132 (Katz) Statutes of 1994, Chapter 1220, requires Caltrans to request the involvement and cooperation of affected local agencies and private passenger carriers in decisions relative to the acquisition, development, and operation of intermodal passenger facilities

AB 1582 (Costa) Statutes of 1989, Chapter 740, created the Division of Mass Transportation within the Caltrans Office of Rail Services to develop a comprehensive passenger rail system and prepare the rail passenger development plan.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Bay Area Action
Cleanearth4kids.org
Climate Action California
Green Policy Initiative
Move LA
Silicon Valley Youth Climate Action
Supervisor Lynda Hopkins, County of Sonoma Fifth District

Oppose Unless Amended

California Transit Association

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