

SENATE THIRD READING
SB 30 (Cortese)
As Amended July 16, 2025
Majority vote

SUMMARY

Prohibits a public entity that owns diesel-powered on-track equipment from selling, donating, or otherwise transferring ownership of that equipment for continued use after the public entity decommissions the equipment, except as specified.

Major Provisions

Allows a public entity to engage in a transaction otherwise prohibited, as described above, if both of the following criteria are satisfied:

- 1) The diesel-powered on-track equipment meets any of the following conditions: a) the equipment is deemed to be in Tier 2, Tier 3, or Tier 4, as designated by the United States Environmental Protection Agency (U.S. EPA), b) the equipment produces emissions equivalent to any equipment within any of the aforementioned tiers, or c) the diesel engine is removed from the equipment prior to transfer.
- 2) The public entity authorizes the transaction in a public hearing.

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 PM_{2.5} and almost 30,000 tons of NO_x 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 NO_x 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. 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.

- 1) *Tier 0 (Pre-2002):* Locomotives and engines manufactured before 2002, which don't have to meet any U.S. EPA emission standards.
- 2) *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.
- 3) *Tier 2 (2005-2011):* Locomotives and engines manufactured that have to meet more stringent emission standards than those made under the Tier 1 standards.
- 4) *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.
- 5) *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 CO₂, 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:

- 1) *Historic*. 23 locomotives (less than 1%).
- 2) *Passenger*. 104 passenger locomotives in the state (approximately 3%).
- 3) *Class 1, Switcher*. 500-600 (approximately 5%).
- 4) *Class 1, Line Haul*. 11,000-12,000 (approximately 90%).
- 5) *Class 2 and Class 3*. 158 (approximately 2%).
- 6) *Industrial*. 61 (approximately 1%).

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:

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| 1) New Tier 4 locomotive: | \$2.7-\$3.3 million |
| 2) New Tier 4 passenger locomotive: | \$7.165-\$7.7 million |
| 3) Hydrogen ZE locomotive: | \$4.25 million |
| 4) Hydrogen ZE passenger locomotive: | \$12-\$16 million |
| 5) Battery Electric ZE locomotive: | \$4.5-\$8 million |
| 6) Battery Electric ZE passenger locomotive: | \$10-\$12 million |

Caltrain Modernization Program. The Caltrain Modernization Program, also known as the Caltrain Electrification Project, was a \$2.44 billion project that 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 minibuses to rail, the project is poised to significantly reduce traffic congestion and greenhouse gas emissions along the 39-kilometer corridor."

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.

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."

FISCAL COMMENTS

According to the Assembly Appropriations Committee, "The California State Transportation Agency, the California Department of Transportation, the Air Resources Board (ARB), and the Department of General Services do not anticipate any state costs as a result of this bill.

Caltrans notes the majority of its locomotives are Tier 2 and Tier 4 and are not subject to the bill's prohibition. Caltrans does, however, own two Tier 0 yard-switch locomotives that would be ineligible for sale under this bill, potentially resulting in foregone revenue of an unknown amount at some point in the future. Similarly, several commuter rail agencies operating in the state that own Tier 0 and Tier 1 locomotives may forego future revenue opportunities as a result of this bill."

VOTES

SENATE FLOOR: 28-10-2

YES: Allen, Archuleta, Arreguín, Ashby, Becker, Blakespear, Cabaldon, Caballero, Cervantes, Cortese, Durazo, Gonzalez, Grayson, Hurtado, Laird, Limón, McGuire, McNerney, Menjivar, Padilla, Pérez, Richardson, Rubio, Smallwood-Cuevas, Stern, Umberg, Weber Pierson, Wiener
NO: Alvarado-Gil, Choi, Dahle, Grove, Jones, Niello, Ochoa Bogh, Seyarto, Strickland, Valladares

ABS, ABST OR NV: Reyes, Wahab

ASM TRANSPORTATION: 10-5-1

YES: Wilson, Aguiar-Curry, Carrillo, Harabedian, Hart, Jackson, Lowenthal, Ransom, Rogers, Ward

NO: Davies, Ahrens, Hoover, Lackey, Macedo

ABS, ABST OR NV: Papan

ASM APPROPRIATIONS: 11-4-0

YES: Wicks, Arambula, Calderon, Caloza, Elhawary, Fong, Mark González, Hart, Pacheco, Pellerin, Solache

NO: Dixon, Jeff Gonzalez, Ta, Tangipa

UPDATED

VERSION: July 16, 2025

CONSULTANT: Aaron Kurz / TRANS. / (916) 319-2093

FN: 0001213