

- 4) Establishes a maximum curb weight of 22,000 pounds on any one axle of a bus procured through a solicitation process where the solicitation was issued on or after January 1, 2019. (VEH 35554(c)(2))
- 5) Establishes a maximum curb weight of 25,000 pounds on any one axle of a zero-emission transit bus procured through a solicitation process where the solicitation was issued between January 1, 2016, and December 31, 2017, inclusive. (VEH 35554(d)(1))
- 6) Establishes a maximum curb weight of 24,000 pounds on any one axle of a zero-emission transit bus procured through a solicitation process where the solicitation was issued between January 1, 2018, and December 31, 2019, inclusive. (VEH 35554(d)(2))
- 7) Establishes a maximum curb weight of 23,000 pounds on any one axle of a zero-emission transit bus procured through a solicitation process where the solicitation was issued between January 1, 2020, and December 31, 2021, inclusive. (VEH 35554(d)(3))
- 8) Establishes a maximum curb weight of 22,000 pounds on any one axle of a zero-emission transit bus procured through a solicitation process where the solicitation was issued on or after January 1, 2022. (VEH 35554(d)(4))
- 9) Requires a transit operator operating an articulated transit bus to provide notice to all cities and counties in whose jurisdiction the bus will operate in the upcoming calendar year, identifying among other things, the weight of the articulated bus. (VEH 35554(f))

This bill:

- 1) Extends the dates by which zero-emission transit buses must reach target, maximum curb weights, as follows:
 - a) Establishes a maximum curb weight of 25,000 pounds on any one axle for zero-emission buses procured through a solicitation process where the solicitation was issued between January 1, 2027, and December 31, 2027, inclusive.
 - b) Establishes a maximum curb weight of 24,000 pounds on any one axle for zero-emission buses procured through a solicitation process where the solicitation was issued between January 1, 2028, and December 31, 2029,

inclusive.

- c) Establishes a maximum curb weight of 23,000 pounds on any one axle for zero-emission buses procured through a solicitation process where the solicitation was issued between January 1, 2030, and December 31, 2031, inclusive.
- d) Establishes a maximum curb weight of 22,000 pounds on any one axle for zero-emission buses procured through a solicitation process where the solicitation was issued on or after January 1, 2023.

COMMENTS:

- 1) *Purpose of the bill.* According to the author, “California has set ambitious zero-emission goals, requiring that by 2029 all buses purchased by transit agencies must be zero-emission vehicles. However, because of axle-weight limits set by the Legislature, transit agencies are struggling to procure Zero Emission Buses that keep up with their operational needs while staying within existing weight limits. AB 1944 provides a practical and responsible solution by adjusting the timeline for these limits while maintaining the previously negotiated upper weight cap, allowing California Transit Agencies to continue making progress towards our clean transportation goals.”
- 2) *Clean air goals in transportation.* Over the past several decades both the state and federal government have passed numerous pieces of legislation and implemented numerous requirements aimed at cleaning up the air and reducing Greenhouse Gas (GHG) emissions. Federally, the Clean Air Act of 1970 instructs the U.S. Environmental Protection Agency (US EPA) to set primary National Ambient Air Quality Standards (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. Furthermore, states that fail to properly implement NAAQS can trigger penalties, including the withholding of federal highway funds.

At the state level, the Legislature, through SB 32 (Pavley, Chapter 249, Statutes of 2016), set ambitious targets to reduce GHG emissions to 40% below the 1990 level by 2030 and to achieve carbon neutrality by 2045. In order to achieve these goals, the California Air Resources Board (CARB), has been given broad authority to regulate GHG emissions and air pollution throughout the state. As part of this authority, CARB is tasked with developing a scoping plan to detail how the state will achieve its GHG emissions reduction targets.

CARB is also tasked with developing emission reductions strategies associated with meeting the state's requirements under the Clean Air Act.

To reach these goals, CARB has the authority to regulate emissions from mobile sources. 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, 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, GHG emissions, fine particulate matter, and toxic diesel particulate matter (DMP). Mobile sources in California are responsible for approximately 80% of smog-forming nitrogen oxide (NOx) emissions. They also represent about 50% of GHG emissions when including emissions from fuel production, and more than 95% of toxic DPM emissions.

- 3) *Innovative Clean Transit regulation.* In December 2018, as part of its efforts to regulate mobile sources, CARB adopted the Innovative Clean Transit (ICT) regulation. Unlike numerous other CARB regulations, the ICT is not currently being challenged by the federal government. ICT is a statewide rule that requires public transit agencies to transition their bus fleets to zero-emission vehicles. Specifically, the ICT sets up two different timelines for large and small transit agencies. A large transit agency is defined as (1) any transit agency in the South Coast or San Joaquin Valley Air Basin that operates more than 65 buses in annual maximum service, or (2) any transit agency outside of these areas, but in an urbanized area with a population of at least 200,000 that operates at least 100 buses in annual maximum service. A small transit agency is any agency that does not meet either of these definitions.

Under the ICT, large transit agencies are required to have 25% of their bus purchases in each calendar year be zero-emission starting on January 1, 2023, 50% be zero-emission starting on January 1, 2026, and 100% be zero-emission starting on January 1, 2029. Small transit agencies are required to have 25% of their bus purchases in each calendar year be zero-emission starting on January 1, 2026, and 100% be zero-emission starting on January 1, 2029. All transit agencies are required to fully transition all of their buses to zero-emission by 2040.

- 4) *Heavy buses damage roads.* As vehicles drive over roads, they exert pressure, causing wear, and thus damaging road surfaces over time. The amount of damage is proportional to the weight of the vehicle; however, this relationship is not linear. Instead, broadly speaking, road wear is generally thought of as

being proportional to a vehicle's axle weight to the fourth power¹. This means that doubling the weight of a vehicle can increase damage to the road by 16 times. Large vehicles, like trucks or transit buses, can weigh up to 20 times more than an average passenger vehicle, causing substantially more road wear than a typical passenger vehicle.

Thus, in order to mitigate these effects, large vehicles have maximum weight loads. Current California law limits buses to a single axle weight of 20,500 pounds. However, numerous exceptions have been made over time, including for transit buses and zero-emission buses. As of today, the maximum allowed single axle weight for a zero-emission transit bus is 22,000 pounds.

- 5) *Zero-emission bus availability.* Currently, many zero-emission bus options are available to transit agencies across California, including both battery electric and hydrogen fuel cell options. However, these buses are not one-to-one replacements for the traditional buses currently used by transit agencies in terms of cost or performance. As a result, transit agencies are struggling to comply with the latest phase of ICT rules.

These issues were highlighted in CARB's comprehensive review² of the ICT regulation ahead of the Phase II transition in 2026. This review was carried out before the 2026 rules came into effect in order to assess the readiness of transit agencies to conform with the regulations. Overall, while the report found that the market was generally able to support the required transitions to zero-emission buses, there were key exceptions. Namely, the report identified issues surrounding a lack of necessary infrastructure and associated high costs with infrastructure deployment, and a lack of longer-range bus models.

These problems are confounded by additional requirements on transit agencies from the federal government requiring them to purchase American-made vehicles and prohibiting them from purchasing Chinese zero-emission buses, which are among the cheapest and most advanced on the market. Currently, only two manufacturers have zero-emission buses available for U.S. transit agencies, Gillig and New Flyer.

As a result, transit agencies do not have access to zero-emission buses with the range necessary to comparably replace their current fleets. Generally speaking, transit buses need a range of up to 300 miles, with additional margin to account for weather conditions, terrain, running HVAC systems, and battery

¹ Kinder, D & Lay, M 1988, *Review of the fourth power law*, Australian Road Research Board ARRB, Vermont South, Victoria, Australia.

² <https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/program-update>

degradation overtime. Presently, however, zero-emission buses available to California transit operators have ranges maxing out at roughly 250 miles.

In order to increase bus ranges, bus manufacturers need to add additional battery capacity which in turn increases the weight. Current models, with lower ranges, are already at the statutory axle weight maximum in California. Therefore, according to the author, some kind of exemption is needed to allow bus manufacturers to find ways to increase range without substantially increasing weight.

Indeed, writing as the sponsor of AB 1944, the California Transit Association states, “In December 2018, CARB adopted the ICT regulation, which requires public transit agencies to convert their bus fleets to zero-emission technology by no later than 2040. The regulation functions by way of a tiered zero-emission bus (ZEB) purchase mandate, which requires that, beginning in 2023, transit agencies purchase a fixed percentage of ZEBs with each bus procurement...As ZEB deployment continues to increase (and short-range ZEBs are deployed on available shorter routes), transit agencies will be required to procure ZEBs with extended ranges to complete longer routes and more aggressive duty cycles. With today’s technology, extended range ZEBs require additional batteries, which result in additional weight that meet or, in some cases, exceed the axle weight limits in current law.”

Beyond the weight issues, cost is also a concern. A recent audit of East Bay Transit Agencies performed by the California State Auditor,³ found that the average zero-emission bus costs roughly twice as much as the average diesel bus. Multiplying this cost across the various agencies’ fleet sizes, the audit found that the costs generally far exceed agency revenues and reserves. Exacerbating factors further, the Federal Transit Administration has stopped awarding grants for purchasing zero-emission buses. As a result, the audit found that transit agencies will face difficulty meeting the ICT requirement and recommended that the Legislature extend the ICT deadline.

- 6) *Creating axle weight exemptions, again.* AB 1944 seeks to ease some of these burdens on transit operators by allowing them to operate heavier buses while industry works to catch up and supply buses compliant with the ICT. Specifically, this bill extends the dates by which transit agencies must reduce the weights of their zero-emission buses, pushing out the ultimate deadline for meeting the 22,000 pound curb weight requirement to 2032.

However, this is not the first time limits on transit bus weights have had to be

³ <https://www.auditor.ca.gov/reports/2025-120/>

pushed off. AB 1706 (Eng, Chapter 771, Statutes of 2012) allowed transit operators to operate buses over the previously established 20,500 pound axle weight limit, and to procure further overweight buses through 2015. As the new 2015 deadline approached, AB 1720 (Bloom, Chapter 263, Statutes of 2014) provided an additional two-year exemption. Finally, AB 1250 (Bloom, Chapter 484, Statutes of 2015) aimed to address the issue in the longer term by creating a decreasing weight schedule that allowed articulated buses and zero-emission buses to slowly come into compliance with an increased 22,000 pound limit over a seven year period. This final deadline for 22,000 pounds was reached in 2022.

As discussed above, however, this 22,000 pound limit is too restrictive to meet current needs. Currently, zero-emission bus manufacturers are attempting to offset weight increases associated with increased battery range by finding weight reductions in other areas throughout the bus. Manufacturers are counting on innovations in bus design and battery technology to reduce weights in time to meet the new deadlines for axle weight requirements put forward by this bill. However, absent a specific technological or design innovation, it is unclear if they will be able to do so, and thus this problem may reoccur in the future.

- 7) *Local jurisdictions are concerned about road damage.* While transit operators tout the need of a weight limit exemption, local jurisdictions, particularly cities, have raised concerns about increased road damage. A recent assessment of the condition of local streets and roads in California found an overall decrease in average pavement condition. Road condition is graded on the Pavement Condition Index (PCI), a value from 0 to 100, where 0 is a failed road and 100 is a pristine road. As of 2026, the total statewide PCI for local streets and roads had decreased relative to 2020, and the average road now has a PCI of 65, meaning an “at-risk” road.

Importantly, as roads deteriorate more, they become exponentially more expensive to repair, meaning relatively frequent resurfacing is cheaper than waiting to replace a pavement entirely once it has degraded too much. However, even these more modest repairs are out of reach for many jurisdictions, as in 2025 alone there was a \$54.2 billion shortfall in needed funding for maintaining pavement. As a result, many local roads across the state are at risk of further degradation, requiring more expensive repairs, and widening the shortfall even further.

For these reasons, local jurisdictions are concerned about allowing the operation of heavier transit buses. Writing in opposition, the League of California Cities states, “AB 1944 authorizes higher axle weight limits for transit vehicles,

which, by well-established engineering principles, will accelerate pavement damage on city streets. At the same time, the state's transportation funding system, heavily reliant on SB 1 (Beall, Chapter 5, Statutes of 2017), is projected by the Legislative Analyst's Office to decline by billions of dollars over the coming decade as zero-emission vehicle adoption increases. Without a corresponding funding solution, this creates an unsustainable mismatch between infrastructure wear and available resources."

One potential solution floated by some local jurisdictions is to allow transit operators to utilize lower weight, low NOx buses while waiting for advancements in zero-emission bus technology. While this would address the bus weight issue, it would violate and effectively nullify the ICT requirements by allowing the operation of GHG emitting buses. Ultimately, the Legislature should consider whether it wants to maintain the status quo, minimize road damage at the cost of increased transit emissions, or accept heavier buses and thus increased road wear in exchange for zero-emission transit buses.

RELATED/PREVIOUS LEGISLATION:

AB 1250 (Bloom, Chapter 484, Statutes of 2015) – Exempted transit buses procured through a solicitation process before January 1, 2016, from the statutory weight limit of 20,500 pounds on any one axle and established a declining curb weight per axle.

AB 1720 (Bloom, Chapter 263, Statutes of 2014) – Provided a two-year exemption for existing transit buses to exceed statutory weight limits and sunset at the end of 2016. Additionally provided a weight exemption for transit buses if incorporating a new fleet class expansion.

AB 1706 (Eng, Chapter 771, Statutes of 2012) – Permanently allowed the operation of overweight transit buses on non-interstate highways that were procured before January 1, 2013. Additionally, it authorized transit operators to purchase new overweight transit buses to replace existing buses of equal or lesser weight, or to incorporate a new fleet class under specified conditions, until 2015.

FISCAL EFFECT: Appropriation: No Fiscal Com.: No Local: No

POSITIONS: (Communicated to the committee before noon on Wednesday, June 3, 2026.)

SUPPORT:

California Transit Association (Sponsor)
Alameda-Contra Costa Transit District (AC Transit)
California Electric Transportation Coalition
Monterey-Salinas Transit (MST)
Orange County Transportation Authority
Sacramento Regional Transit District
San Diego Metropolitan Transit System
San Mateo County Transit District (SAMTRANS)
Santa Cruz Metropolitan Transit District
Sunline Transit Agency
Transportation Agency for Monterey County (TAMC)

OPPOSITION:

League of California Cities

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