

Proposed Framework for Incentivizing the Adoption of Zero Emission Transit Fleets

The California Transit Association (Association) has long been supportive of advancing zero emission bus (ZEB) technology, and continues to be an enthusiastic partner in the state's efforts to achieve the greenhouse gas (GHG) emissions reductions and air quality goals of AB 32 (Nuñez and Pavley) [Chapter 488, Statutes of 2006], SB 375 (Steinberg) [Chapter 728, Statutes of 2008], and various State Implementation Plans.

However, the Association believes that the Advanced Clean Transit (ACT) regulation, as currently drafted, which seeks to transition all transit fleets to zero emission technology (i.e. battery-electric and/or hydrogen fuel-cell) by 2040 is impractical for the following reasons: zero emission technology neither offers the range, nor the reliability to be operated in all conditions across the state's varied transit systems; and, zero emission technology often imposes significantly higher upfront capital costs than conventional technologies and requires expensive infrastructure construction that, without the provision of significant new funding, would place undue financial and operational burden on California's transit agencies.

In keeping with the transit industry's record of enthusiastically adopting – and incubating – clean technology that reduces GHG emissions and improves air quality, the Association believes that the Air Resources Board (ARB) should consider alternative frameworks for achieving the goals of the ACT regulation that more consciously take into account these operational limitations and financial constraints. Such a framework could be premised on the following:

1. The establishment of technology-neutral, performance-based emission and petroleum targets for ***transit fleets*** that further the state's environmental goals, while providing transit agencies with the ***flexibility*** to implement the zero or near-zero emission technology best-suited to meet their specific operational needs.
 - a. This approach recognizes that, for some transit agencies, broad implementation of battery electric or fuel-cell technologies is feasible, and perhaps even desirable; while,
 - b. Rebutting the assertion that robust or enthusiastic implementation of this technology in some transit systems means it can and should be aggressively implemented statewide.
 - c. This approach recognizes that many transit agencies have invested heavily in clean natural gas fleets and fueling infrastructure, and should be encouraged to – with cleaner low NOx engines and low carbon fuels – continue to utilize this technology to achieve even greater GHG and NOx emissions reductions.
 - d. This approach recognizes that many transit agencies operate electrified multimodal fleets (i.e. trolley and light-rail systems) that provide a significant level of zero emission service, and that these fleets must be counted toward a transit agency's achievement of its performance-based emission and petroleum targets.
2. A clear stipulation that the established performance-based emission and petroleum targets for transit fleets must be reasonably achievable through the adoption of a ***combination of commercially viable and cost-efficient*** zero or near-zero technologies, which would not adversely impact transit service.
3. A commitment by the ARB to identify and **secure, for the sole purpose of advancing this regulation, new and ongoing state and federal funding to facilitate the transition to zero emission fleets** without negative financial or operational impacts to transit agencies.

This funding must be sufficient to address the increased total cost of ownership of ZEB technology over conventional technologies including, but not limited to, upfront capital costs of bus and infrastructure construction, bus operation and maintenance, workforce development and training, midlife rebuild and bus disposal.

4. A commitment by the ARB and the Governor's Administration to **identify and promote new mechanisms, whether statutory authorities or streamlined regulations, to authorize transit agencies to more cost-effectively procure renewable energy.**
5. A clear and unequivocal caveat that, if the zero and near-zero emission technologies necessary to achieve the performance-based and petroleum targets for transit fleets are not commercially viable or cost-efficient OR the ARB fails to identify and secure, for the sole purpose of advancing this regulation, sufficient funding to achieve the regulation's goals, it must suspend the enforcement of the regulation until such technologies are practical AND adequate funding materializes.

In furtherance of developing the many details of this conceptual proposal, the Association formally requests the ARB to constitute a working group of public transit agency representatives, private sector suppliers to the transit industry, other interest groups as appropriate, and ARB staff, to collaborate on, and jointly formulate, the elements of any final proposed regulatory framework that ARB staff subsequently moves to the Board. A subset of this work, intended to help shape the proposed framework through coordination with public transit agencies, is scheduled to begin on December 16, 2015 under the Transit Agency Subcommittee.