

Summary of Transit Fleets' Comments Received

After the 12-15-17 Innovative Clean Transit (ICT) Workshop

- The timeline is too aggressive and does not allow for sufficient opportunities to access funding nor to assess technology, availability, and economic implications prior to enforcement.
- The proposed date of 2022 for an informational update to the Air Resources Board may be too early to give an accurate and complete picture of transit agencies' experience with ZEBs and initial review of technology readiness or should be conducted before the initial requirements begin.
- ICT proposal is based on ZEB ranges that have not been demonstrated in service for extended periods of time and fleets continue to be concerned with performance, reliability, and maintainability for available zero emission buses.
- The primary cost drivers would require re-assessment of the current operating infrastructure to include a revamp of the existing power grid for BEB which for capital infrastructure costs are daunting and still currently carry a premium in price with a financial uncertainty on utilities cost for electricity.
- ZEB deployment could have financial and operational impacts on transit agencies which could have unintended consequences of reduction in transit service and/or fare increases and could have negative ramifications on future potential funding.
- Cutaway style/smaller ZEB class 4-5 vehicles in ICT proposal is a major concern when no Altoona-tested vehicles are available on the market. The ICT proposal should either exclude or defer requirements and engage in a larger conversation with transit agencies about the types of buses that would be subject to the regulation until the technology is proven.
- Purchase provisions are not sufficiently developed and should be expanded with transit fleet participation. CARB should add a grace period for all transit agencies if any requirement is found to be technologically or economically infeasible.

December 2017 ICT Proposal Overview

Outline of the key elements of the ICT proposed regulation described in the discussion document at <https://arb.ca.gov/msprog/ict/meeting/mt171215/171215ictconcept.pdf>

Applicability

- All buses with GVWR > 14,000 lbs.
- Cutaway, standard, motor coach, articulated, trolley bus, and other
- Fleet size number of buses in active fleet as of 2019
 - Large (≥ 100 buses), medium (30-99 buses), and small fleet (less than 30 buses)

ZEB Requirements

- At time of normal new bus purchase (contract execution)
 - Details and duration of purchase process
 - Purchase cycle and fleet schedule
- Starting 2020 25% of bus purchases must be ZEB for large transit fleets
- Starting 2023 50% of bus purchases must be ZEB for medium and large transit fleets
- Starting 2026 75% of bus purchases must be ZEB for all transit fleets
- Starting 2029 100% of bus purchases must be ZEB for all transit fleets
- Joint compliance option

Early Action Credit

- ZEB credits for early actions and for exceeding the minimum requirements
- Encourages early action to remain eligible for funding
- How does proposal affect individual fleet's ability to access funding?

ZEB Purchase Provisions

- Utilities unable to provide service in timely manner
- Unforeseeable delay in infrastructure installation (both hydrogen & electricity)
- ZEB not passed Altoona testing (cutaways)
- Permitting/safety barriers
- Others (range/ space, etc.?)

Innovative Zero Emission Mobility

Renewable fuel for large fleets

Low NOx Engines (except at depots in NOx exempt area)

Reporting Requirements

- Bus purchases
- Data for performance based option development