



September 12, 2022

The Honorable Liane Randolph
Chair, California Air Resources Board
1001 I Street
Sacramento, CA 95811

RE: Innovative Clean Transit Regulation – Comprehensive Review

Dear Chair Randolph:

On behalf of the California Association for Coordinated Transportation (CALACT's) nearly 340 members, comprised of rural, small-urban, large urban and specialized nonprofit transportation providers, we write you to provide comments on the Innovative Clean Transit Regulations Comprehensive Review. Our members embrace the state's goal to move transit to zero emission operations and fleets but would like the California Air Resources Board to review and consider the needs of rural operators outlined in this letter and work together to find solutions.

CALACT is the largest statewide transit association comprised of small community and rural transit agencies. As you know, California is a diverse state which includes rural communities that provide critical transportation services to quality of life enhancing services. These services are vital to their communities, and agencies need significant resources to transition to a 100% zero emission fleet. Over eighty rural transit agencies in California will need to find additional resources to enable to continue providing the same level of transportation services while transitioning their operations to zero emission. A lack of additional funding could cause cuts to transit routes and decrease the amount of transportation services to rural residents.

CALACT has provided several training workshops in conjunction with CARB staff to help our small urban and rural agencies meet the ICT requirements. The training is assisting rural transit agencies to complete their Innovative Clean Transit plans that are due next year. Agencies are grateful for the opportunity to help California meet the goal of decreasing greenhouse gas emissions; however, without additional funding to support transitions to ZEB fleets, rural transit agencies face an uncertain future.

We agree with the purchasing mandate if there are enough resources to assist transit agencies in purchasing vehicles. CALACT collaborated on advocacy efforts with the Bus Coalition and the Community Transportation Association of America to secure additional federal funding for small operators and helped increase funding in the Lo/No and Bus and Bus Facility Programs. However, this year, the Lo/No program was overprescribed by 70%, allowing only a few California agencies to receive funding. The increase in funding is helpful but does not begin to cover the costs of implementing the ICT regulations. Therefore, transit agencies need continued access to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). In addition, the state needs to provide additional funding for agencies to finance the infrastructure and vehicles to meet zero emission requirements.

Most small and rural fleets operate long intercity duty cycles with a large fraction of highway miles, operating over mountainous terrain or in the desert. BEBs are not proving effective on most rural routes. Fuel cell electric buses (FCEBs) perform better at highway speeds, manage high HVAC loads more effectively, and achieve a



competitive range with diesel. Many rural agencies are looking at hydrogen fuel and vehicles to meet ICT targets. However viable, this option still requires financing that is outside of most rural agencies' budgets.

The Review of California's Innovative Clean Transit Regulation report fails to address or discuss the daunting cost of hydrogen fuel for those fleets where BEBs simply do not work. This report does not review the actual effective fuel prices, choosing instead to provide only four data points of the cost of delivered hydrogen and ignoring the significant operational costs associated with putting hydrogen onto the bus.

Small and rural agencies need fuel costs to be subsidized. Today's cost for hydrogen into the bus threatens to effectively double the cost of fuel for the foreseeable future compared with today's high diesel prices. Small transit agencies are facing a future where fuel costs could comprise up to twenty percent of their total operational budget. Rural transit agencies are facing \$10 - \$14 per kg into the bus today for a reliable liquid storage system using delivered hydrogen. This prohibitive cost is due to the following challenges:

It is challenging for small agencies to secure competitive fuel prices because of low daily consumption. Low volume consumption raises the cost per kg in multiple ways, fuel sales contract for small volumes are more expensive and fueling station operating and maintenance costs make up a large fraction of final "into the bus" cost of fuel at low daily consumption rates.

It can be challenging for rural agencies to take advantage of Low Carbon Fuel Standard (LCFS) credits, because rural agencies are located far from industrial hydrogen sources and trucking distances can be over 200 to 300 miles. The current use of diesel trucks to distribute hydrogen coupled with the long distance can significantly reduce or eliminate any LCFS credits. The higher LCFS credits for renewable hydrogen pathways buy down the marginal cost of renewable sources, doing little to address the high costs to rural transit. We hope that CARB will address this issue and find solutions to help subsidize the costs of hydrogen fuel to ensure that all transit agencies are able to meet the ICT requirements.

We appreciate the work that the California Air Resources Board and staff have completed to move California towards clean and healthy air for all California residents and appreciate the opportunity to continually provide input into the ICT program. We encourage the board to discuss the issues raised in this letter with CALACT and our small transit operators that want to be able to move to zero emission fleets while providing the same quality transportation services for their communities they always have.

Sincerely,

Jacklyn Cuddy

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