



Emily Wimberger  
Chief Economist  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

May 25, 2018

Dear Ms. Wimberger:

Thank you for submitting the standardized regulatory impact assessment (SRIA) and the summary (Form DF-131) for the proposed regulation Innovative Clean Transit (ICT) 2018 Amendments, as required in California Code of Regulations, title 1, section 2002(a)(1). As proposed regulatory amendments were not submitted with the SRIA, these comments are solely based on the SRIA and other publicly available information.

The proposed regulatory amendments reduce the requirements for large transit agencies to purchase zero-emissions buses (ZEBs) through 2019, codifying informal guidance issued in 2010. Purchase requirements for ZEBs would then increase beginning in 2020, raising bus purchase costs by an estimated \$147 million in 2029, when 100 percent of purchases must be ZEBs, but reducing operating costs and decreasing emissions. With an estimated 1,000 buses purchased by transit agencies each year, the proposed regulations are expected to lead to significant changes to the heavy-duty engine market. The proposed regulations also give credits for zero emission shuttles and other transit options, require the purchase of cleaner, low emission buses during the transition, and require large transit agencies to purchase renewable fuels in support of the low-carbon fuel standard program.

Finance generally concurs with the methodology used to estimate economic and fiscal impacts of the proposed regulation and alternatives. The SRIA clearly lays out for the public the proposed regulatory impacts versus the existing legal requirements under the baseline, and versus the current situation under ARB's informal guidance. It is also helpful that the connections with other state regulations and environmental goals are addressed, and that impacts on particular groups (such as urban residents) are discussed. However, there are two areas where changes must be made, and one area where further information would help public understanding.

First, battery disposal will increasingly be an issue once this proposed regulation is fully implemented. Either transit agencies will face disposal costs, or there will be environmental costs. The SRIA must include one or the other to fully cover regulatory impacts.

Second, the SRIA must have growth in the number of buses over time that is at least proportional to population growth, rather than assuming that the total remains at 2016 levels.

The 2029 population is projected to be more than 10 percent larger than the 2016 population. Economic trends suggest that growth is more urban, and with limited road capacity, the demand for public transportation will likely rise. The SRIA notes that the relative costs per bus will remain the same no matter the total, but a higher total will increase electricity demand and demand for low-carbon fuels. A key assumption is that renewable fuel prices decrease, with hydrogen prices falling to around 30 percent of current levels, and greater demand could either stimulate production or stress supplies and raise prices. There is a great deal of inherent uncertainty about how markets will develop, but the current static assumption will likely understate the scale of changes. Not keeping up with population growth also understates the health benefits of reducing emissions in urban areas.

Finally, public transit is no longer the only option to personal vehicles for individuals, and some private companies are now providing bus service, for their employees, as an alternative to public buses. If transit agencies raise prices to cover higher initial costs of this proposed regulation, such alternatives may be even more attractive, and undercut the estimated benefits. The SRIA could usefully add a discussion of these dynamics.

These comments are intended to provide sufficient guidance outlining revisions to the SRIA. The SRIA, a summary of Finance's comments, and any responses must be included in the rulemaking file that is available for public comment. Finance understands that the proposed regulations may change during the rulemaking process. If any significant changes to the proposed regulations result in economic impacts not discussed in the SRIA, please note that the revised economic impacts must be reflected on the Standard Form 399 for the rulemaking file submittal to the Office of Administrative Law. Please let us know if you have any questions regarding our comments.

Sincerely,

A handwritten signature in blue ink, appearing to read "Irena Asmundson".

Irena Asmundson  
Chief Economist

cc: Ms. Panorea Avdis, Director, Governor's Office of Business and Economic Development  
Ms. Debra Cornez, Director, Office of Administrative Law  
Mr. Richard Corey, Executive Officer, California Air Resources Board