

September 24, 2018

California Air Resources Board, Members
1001 I Street
Sacramento, CA 95814

RE: Response to the Initial Statement of Reasons for the Proposed Innovative Clean Transit Regulation

Chair Nichols and Members of the California Air Resources Board:

On behalf of the California Transit Association, I write to you today in response to the Initial Statement of Reasons for the Proposed Innovative Clean Transit (ICT) Regulation, released August 7, 2018. The Association and its more than 200 transit-affiliated members support the goal of converting California's transit bus fleet to 100% zero-emission by 2040. We greatly appreciate that the proposed regulation to achieve that goal takes a major step forward from the regulatory concept first released in December 2017 by improving on several central provisions that we have long-deemed onerous or problematic. While there are several changes to the proposed regulation we continue to seek – two in particular we believe are necessary to protect California's transit riders from the service cuts or fare increases that could result from pursuing widespread transit bus electrification too hastily – we thank you and your staff for your demonstrated commitment to working with us to deliver a progressive regulation that will achieve our shared goal.

To reiterate, we believe a regulation should be completed this year to facilitate the conversion to ZEB technology by 2040. Having said that, we are again calling your attention – and offering solutions – to several issues with the proposed regulation and challenges on the horizon that could force unfortunate trade-offs between capital and operational expenditures. These trade-offs, if not acknowledged and addressed head-on in the proposed regulation, would harm the very communities that should and deserve to benefit most from clean air investments.

Part 1 of these comments include technical suggestions and recommendations that we believe would enhance the proposed regulation and further the California Air Resources Board's (ARB) objectives while further limiting adverse impacts to California's public transit agencies and the riders who rely on our service. As you will see, building upon these suggestions, we are formally presenting these suggestions as an "alternative" to the regulation for consideration by ARB (the "Association's Alternative"). The recommendations that comprise this alternative were previously shared with you in our letter, dated July 19, 2018, and have since been formalized by our Executive Committee in the 45-day comment period.

Part 2 of these comments addresses ARB's obligations under the California Administrative Procedure Act, Govt. Code, § 11350, *et seq.* (the "APA"), and other statutes. This portion of the comments addresses ARB's duty to analyze regulatory alternatives under the APA; the Standardized Regulatory Impact Assessment (or "SRIA") prepared for the Proposed ICT Regulation; and, the external peer review process required under Section 57004 of the Health & Safety Code. Part 3 of these comments addresses ARB's duties under the California Environmental Quality Act, Pub. Resources Code, § 21000, *et seq.* ("CEQA").

We hope you will strongly consider this feedback, and direct ARB staff to address the deficiencies we identify and to incorporate our recommendations in the final regulation order by adopting the Association's Alternative. We thank you for this opportunity to comment and we look forward to participating in the public meeting on the proposed regulation, scheduled for September 28, 2018.

I. **Part I: Technical Suggestions and Recommendations to Improve the Proposed ICT Regulation**

A. **ARB Can Enhance the Proposed ICT Regulation by Adopting Several Technical Amendments**

Benchmarking and Regulatory Assessment (ISOR, pp. I-13-I-14): In our letter dated July 19, 2018, we recommended that, given the aggressive electrification goals sought in the proposed regulation and the continued uncertainty around, among other things, ZEB cost and performance, and funding availability, the regulation establish benchmarks for ZEB cost and performance and include a regulatory assessment to evaluate real-world cost and performance against these benchmarks. We argued that the regulatory assessment should take place before the ZEB purchase requirement goes into effect and should require the Board to issue an across-the-board suspension of the ZEB purchase requirement, much like the original Transit Fleet Rule did, if real-world ZEB cost and performance is underwhelming, or adequate funding to support the transition to a fully electrified transit fleet is unavailable.

The proposed regulation meets us halfway by incorporating aspects of our recommendations in the ISOR. More specifically, the ISOR states ARB staff's commitment to providing the Board with a *"comprehensive update on costs, performance, and reliability of ZEBs and corresponding infrastructure...at least one year prior to the initiation of any purchase requirement. The review would look at bus categories, such as cutaway buses and standard buses individually, to ensure categorical needs and characteristics are considered."*

The review would comprise the following components:

- **"Costs:** *Costs include infrastructure and vehicle capital, operating and maintenance costs. Infrastructure capital costs include charging/refueling equipment, installation, and utility upgrade costs.*
- **Battery Performance:** *Batteries used in the ZEBs will degrade over time. The assessment will help identify how battery degradation may affect daily operating range as vehicles age, and whether transit buses would require mid-life battery replacement. The assessment can help to estimate the remaining battery capacity after the end of their useful life in buses.*

- **Operating Range:** *The maximum operating range of a vehicle after it is fully charged or refueled. Range assessment will take into consideration various factors, such as energy storage capacity, battery degradation, HVAC, passenger loading, and grades. Understanding real world operating range is essential for a transit agency to plan for its routes and schedule using ZEB technologies.*
- **Performance and Reliability:** *Different from small pilot or demonstration projects, a successful system-wide transition to the ZEB technologies must demonstrate the reliability and viability of the technologies. Measurements could include bus availability, road call frequency, and other performance metrics, such as fuel efficiency and factors affecting fuel efficiency, refueling or charging time and frequency, and parts availability.”*

We greatly appreciate the inclusion of this language in the ISOR as it is an honest assessment by ARB staff that ZEB technology is still maturing and must be closely monitored to ensure operational viability at-scale. Unfortunately, we believe relegating the language to the ISOR is inadequate, because it does not: carry the same force of law as language included in the regulation order; or, outline the steps the Board would take, or even the options they would consider, if they determined that the ZEB purchase requirement would negatively impact transit service.

We recommend that ARB strengthen the performance review identified in the ISOR by:

- **Codifying its language in the proposed regulation; then,**
- **Adding language in the proposed regulation that would establish benchmarks for ZEB cost and performance and funding availability – these should be sourced from the inputs and assumptions used by ARB staff in the Original SRIA, Draft Environmental Analysis and Cost Update;**
- **Adding language in the proposed regulation that would require the Board to temporarily halt the ZEB purchase requirement, if real-world ZEB cost and performance and funding availability are misaligned with the benchmarks established in the proposed regulation.**

ZEB Purchase Requirements (Section 2023.1 (a)(1)): The proposed regulation maintains a ZEB purchase requirement as the primary mechanism for facilitating widespread transit electrification. We continue to believe that a ZEB purchase requirement is inappropriate, because it fails to take into consideration the diverse financial positions and operational needs of transit agencies. Nevertheless, ARB staff should be commended for acknowledging that the once-2020 purchase requirement start date was too soon to be practical for agencies, given the current state of ZEB technology and the reality of 18- to 24-month procurement cycles. We appreciate that ARB staff has also recognized that there are unique financial and administrative challenges faced by small agencies that justify delaying the purchase requirement for these agencies until 2026. Importantly, this delay will also allow small transit agencies to learn from the experiences of large agencies on effective ZEB deployment.

If combined with a strong benchmarking and regulatory assessment provision that allow for an across-the-board suspension of the ZEB purchase mandate, as discussed above; a realistic waiver for early compliance; and, case-by-case, agency-by-agency, ARB Executive Officer approved, off-ramps from the ZEB purchase mandate, the ZEB purchase requirement

schedule offered in the proposed regulation may be implementable. Together, these provisions would institute important safeguards that better ensure that agencies are not charged with purchasing ZEBs, if their cost and/or performance would jeopardize transit service. We are aware that various stakeholder groups, comprising the Advanced Clean Transit Coalition, support accelerating the ZEB purchase requirement schedule to claim ZEB deployments at more transit agencies sooner. **We recommend that ARB resist calls to accelerate the ZEB purchase requirement schedule and, instead, maintain the ZEB purchase requirement schedule in the proposed regulation.**

We assert that transformation of our state's public transit network will not come about from all transit agencies fumbling through new requirements and new technologies at once, but rather through targeted investments and successful ZEB demonstrations led by key agencies, which allow best practices to be developed and shared throughout the industry.

Waiver of Initial Zero-Emission Bus Purchase Requirements (Section 2023.1 (b)(1) and 2023.1 (b)(2)): The proposed regulation provides an opportunity to delay the start date for the ZEB purchase requirement faced by large transit agencies, if the number of ZEBs in operation and/or on order at the end of 2020 and 2021 reach 1,000 and 1,150, respectively. We appreciate the inclusion of this provision, as it represents a creative approach by ARB staff to permitting the leaders in transit electrification to continue to lead, while also encouraging other agencies to explore deploying ZEBs early.

We support this provision and recommend that ARB replace Section 2023.1 (b)(1) and 2023.1 (b)(2) in the proposed regulation with the following:

- **The zero-emission bus purchase requirements for calendar year ending December 31, 2023, are waived if California transit agencies collectively have at least eight hundred (800) zero-emission buses purchased or in active bus fleets by December 31, 2020, as determined by the Executive Officer based on the reporting data for calendar year 2020 required by section 2023.8.**
- **If the 2023 zero-emission bus purchase requirement is waived as a result of the implementation of section 2023.1(b)(1), then the zero-emission bus purchase requirements for calendar year ending December 31, 2024, are waived if California transit agencies collectively have at least one-thousand and two hundred (1,200) zero-emission buses purchased or in active bus fleets by December 31, 2021, as determined by the Executive Officer based on the reporting data for calendar year 2021 required by section 2023.8.**

These recommendations reflect the Association's best estimates for realistic ZEB purchase thresholds, based on the self-reported procurement schedules of our members and expected funding availability as of summer 2018. Without these adjustments, the ZEB threshold number for 2020 is too high and would translate into a *de facto* ZEB purchase requirement in 2023.

Large vs. Small Transit Agencies (Sections 2023 (b)(29) and 2023 (b)(49)): The proposed regulation defines a large transit agency as "a transit agency with a fleet size of one-hundred (100) or more buses" and a small transit agency as "a transit agency with a fleet size of fewer than one-hundred (100) buses." The proposed regulation defines a bus as "a rubber-tire vehicle designed to transport passengers by road with gross vehicle weight (GVWR) greater

than 14,000 pounds, but does not include a trolley bus...” The practical impact of the definition of a bus is that it counts both standard transit buses and cutaway vehicles toward fleet totals.

These definitions appear to have been promulgated by ARB staff for simplicity, but they are ultimately problematic, because they are misaligned with the definitions for small and large agencies used by the Federal Transit Administration (FTA) to determine the eligible uses of critical federal funding sources, like Chapter 53 of Title 49 U.S.C. 5307 funding (FTA 5307).

For background, FTA defines large agencies as those operating in Primary Urbanized Areas (UZAs) with populations greater than 200,000 and at least 100 vehicles in annual maximum service; and, defines small agencies as those operating in UZAs with populations less than 200,000 or those with fewer than 100 vehicles in annual maximum service. Understanding this is critical, because small agencies have long-been afforded, and have taken advantage of, the opportunity to use FTA 5307 funding to fund operations. FTA has deliberately provided this flexibility to these agencies in recognition that many of them operate in rural and/or suburban areas, and lack access to local funds and ancillary revenue that supports basic service needs. Should the regulation maintain the current definitions for small and large transit agencies, several agencies recognized as small by FTA would become large agencies for ARB’s purposes and would be forced to comply with the more aggressive ZEB purchase requirement schedule. This more aggressive schedule would likely require these small agencies to redirect their FTA 5307 funding from operations to meeting the ZEB purchase requirement, possibly undermining lifeline transit service.

To avoid conflicts with federal funding programs that could jeopardize the provision of transit service, particularly for small agencies, we urge ARB to defer to the Association and its members on the appropriate definition of large and small transit agencies.

We recommend that ARB replace Section 2023 (b)(29) in the proposed regulation with the following:

- **“Large Transit Agency” means a transit agency operating in an UZA with population of at least 200,000 with at least 100 vehicles in annual maximum service**

We recommend that ARB replace Section 2023 (b)(49) in the proposed regulation with the following:

- **“Small Transit Agency” means a transit agency that satisfies either of the following conditions:**
 - **The transit agency operates in an UZA with population less than 200,000**
 - **The transit agency operates fewer than 100 vehicles in annual maximum service**
- **For the purposes of this section, a transit agency that is otherwise defined as a small transit agency shall be considered a large transit agency, if the following conditions are met:**
 - **The agency operates in either the South Coast and San Joaquin Valley air basins**

- **The agency operates more than 65 vehicles in annual maximum service**

Role of Incentives (N/A): The proposed regulation would limit access to incentive funding to transit agencies that exceed their baseline ZEB purchase requirements.

We continue to assert that the state’s experience with ZEB deployments – i.e. 450 ZEBs now operating, or on order, all purchased with the help of state and/or federal incentives – the high cost of the proposed regulation between 2020 and 2040, and the role that robust transit service must play in reducing emissions from the transportation sector requires that the state remove all barriers to transit agencies accessing incentive funding. **We recommend that ARB fund the transition to ZEBs, even if that requires directly funding regulatory compliance.**

We note that we are not alone in making this request: Californians for Zero-Emission Vehicles, an advocacy group representing ZEB manufacturers and interest groups, and BYD Motors, Inc., recently filed similar comments with you. Like the Association, these groups recognize the devastating impact that an unfunded ZEB purchase requirement could have on the vital public service our members provide.

Purchase Definition (Section 2023.1 (a)(5)): The proposed regulation requires ZEBs to be “delivered within two years from the initial date of a Notice to Proceed” (NTP) to count as purchases under the ZEB purchase requirement. From discussions with ARB staff, we understand that the two-year delivery requirement was added to prevent a transit agency from attempting to count as purchases, options that would not be manufactured and delivered to the agency for many years. Having consulted with the leading Original Equipment Manufacturer (OEM), we believe this provision offers a solution to a problem that does not exist. That is, an OEM would not agree to manufacture an option (codified in an NTP) far in advance of delivery, because the price of components and raw materials could change, leading to an uncertain profit margin for the bus.

Additionally, it is common knowledge among transit agencies nationwide that deliveries of ZEBs and associated infrastructure are routinely – sometimes, chronically – late, a problem that can only be addressed by the OEMs, not transit agencies.

We recommend that ARB replace Section 2023.1 (a)(5) in the proposed regulation with the following:

- **A new bus is considered purchased when a Notice to Proceed or Purchase Order is issued to the manufacturer and a transit agency’s funds are identified, committed and encumbered.**

ZEB Rollout Plan (Section 2023.1 (d)): The proposed regulation requires transit agencies to submit ZEB rollout plans, approved by their governing boards, detailing their commitment to fully transition to ZEB technology by 2040 or earlier as well as their schedule and needs for realizing that transition. The proposed regulation requires large and small agencies to submit these plans to ARB by July 1, 2020 and July 1, 2023, respectively.

We support and appreciate the inclusion of this new provision, which recognizes the strength of our past request for individualized ZEB deployment plans. This provision will encourage transit agencies to think through the steps necessary for full fleet conversion to ZEB technology, but will also provide the state with useful information on costs, funding needs and

other barriers to electrification, which will help justify future state investment in ZEBs and support future legislative actions.

We recommend that ARB resist calls to accelerate the submission date for ZEB roll-out plans by small agencies and, instead, maintain the submission date in the proposed regulation. As we have communicated to you across many forums, even the transit agencies most bullish about ZEB technology are operating small ZEB fleets. These same agencies acknowledge that it will take time and resources for our industry to learn what it will take to successfully convert an entire fleet to ZEB technology, and to promulgate best practices. The lag in the submission date is useful, because it allows these early adopters and large agencies, many of which are better-capitalized, to uncover key insights into widespread ZEB deployment, which can be shared with small agencies and incorporated into their ZEB rollout plans.

ZEB Bonus Credit (Section 2023.3): The proposed regulation outlines a schedule of ZEB bonus credits, which allows early adopters to collect additional credits for ZEBs already in service. These ZEB bonus credits can be used to satisfy future ZEB purchase requirements. We believe the proposed schedule is appropriate, because it recognizes that transit agencies that have already deployed ZEBs assumed additional costs and risks to support the commercialization of ZEB technology. **We recommend that ARB maintain the proposed schedule, including the higher level of bonus credit for fuel-cell electric buses, which recognizes their higher upfront and operational costs; and, expand the schedule to include one bonus credit for conversions to battery-electric placed in service on or before December 31, 2017 and which remained in service as of January 1, 2018.**

Additionally, we recommend that ARB, in crediting ZEB deployments that exceed ZEB purchase requirements, provide the same level of credit for conversions to battery-electric as purchases of standard battery-electric buses, and one-half credit for electric trolley buses placed into service between January 1, 2018 and December 31, 2020.

Excluded Buses (Section 2023.1 (c)): The proposed regulation excludes cutaway buses, over-the-road buses and articulated buses from the ZEB purchase requirement until January 1, 2026 and until the applicable ZEB type has passed and obtained an Altoona bus testing report as required by Title 49 of the Code of Federal Regulations (CFR) Section 665.13. We appreciate and support this provision, which acknowledges that electric technology for these bus types is still nascent and, if included under the ZEB purchase requirement too soon, would have devastating impacts on transit services serving the disabled, the elderly as well as commuters. We also appreciate that the performance review discussed under *“Benchmarking and Regulatory Assessment”* offers ARB staff’s commitment to assessing the state of the technology for these non-standard buses before they are included under the purchase mandate.

Our support for this provision notwithstanding, we recommend that ARB look beyond the Altoona bus testing report as proof that a vehicle is ready for revenue service, and include language within the regulation requiring a technology assessment of these ZEB types in 2026 to evaluate commercial availability and operational readiness based on data gathered from real-world deployments of these ZEB types prior to the inclusion of these vehicles in the regulation.

Provisions for Extension or Exemption of a ZEB Purchase (Section 2023.4): The proposed regulation enumerates the conditions under which a transit agency may request an extension or exemption from the ZEB purchase requirement. These conditions, which must be verified by ARB’s Executive Officer, generally relate to delays in bus delivery, delays in infrastructure buildout, and the unavailability of requisite ZEB technology that exist beyond the transit agency’s control.

These conditions, which reflect many of the recommendations we offered in our July 19, 2018 comment letter are well-thought out and provide assurance that transit agencies will not be forced to comply with the ZEB purchase requirement, if external factors would make compliance impossible or otherwise harm transit service.

While we support this provision and the specific conditions outlined in the proposed regulation, we recommend that ARB replace Section 2023.4 (c)(4)(B)(3) in the proposed regulation with the following:

- **The cost or performance characteristics of the zero-emission bus would result in a transit agency violating any federal, state, or local laws, regulations or ordinances.**

Additionally, we commit to working with ARB staff to clarify that the deferral for ZEBs that cannot meet a transit agency’s daily mileage need requires the development of a new testing protocol to determine range based on real world operation, and should not use the Orange County bus test cycle.

Compliance Option for Joint Zero-Emission Bus Groups (Section 2023.2): The proposed regulation outlines the requirements for establishment of Joint Zero-Emission Bus Groups. This provision allows two or more transit agencies to pool their resources to meet their ZEB purchase requirements, if the agencies share the same Metropolitan Planning Organization (MPO), Transportation Planning Agency (RTPA) or are located in the same air basin. Overall, we support the inclusion of this provision, which offers an alternative, more flexible pathway to compliance for small agencies across the state. That said, there are several small agencies in close proximity to one another that do not share an MPO, RTPA or air basin, but which would benefit from this provision. **For that reason, we recommend that ARB remove the requirement that transit agencies share an MPO, RTPA or air basin to form a joint zero-emission bus group.**

B. The Association’s Alternative

The Association believes the technical recommendations described above would dramatically enhance the proposed regulation. As such, ARB should consider an alternative under which ARB would adopt the proposed regulation with the following amendments.

Collectively, the following proposals are referred to as the “Association’s Alternative.”

- **Strengthening Performance Review:**
 - **Establishing Benchmarks:** The inclusion of language that would establish benchmarks for ZEB cost and performance and funding availability. These benchmarks should be sourced from the inputs and assumptions used by ARB staff in the Original SRIA, Draft Environmental Analysis and Cost Update.

- **Relationship between Benchmarks and ZEB Purchasing Requirements:** The inclusion of language that would require ARB to temporarily halt the ZEB purchase requirement if real-world ZEB cost and performance and funding availability are misaligned with the benchmarks established in the proposed regulation.
- **Waiver of Certain ZEB Purchasing Requirements:** Section 2023.1, subdivisions (b)(1) and (b)(2) should be replaced with the following requirements:
 - **Subdivision (b)(1):** The ZEB purchase requirements for calendar year ending December 31, 2023, would be waived if California transit agencies collectively have at least eight hundred (800) zero-emission buses purchased or in active bus fleets by December 31, 2020, as determined by the Executive Officer based on the reporting data for calendar year 2020 required by section 2023.8.
 - **Subdivision (b)(2):** If the 2023 ZEB purchase requirement is waived under Subdivision (b)(1), the ZEB purchase requirements for calendar year ending December 31, 2024, would be waived if California transit agencies collectively have at least one-thousand and two hundred (1,200) zero-emission buses purchased or in active bus fleets by December 31, 2021, as determined by the Executive Officer based on the reporting data for calendar year 2021 required by section 2023.8.
- **Modification of Definition of “Large Transit Agency,” under Section 2023(b)(29):**
 - “Large Transit Agency” means a transit agency operating in an UZA with population of at least 200,000 with at least 100 vehicles in annual maximum service
 - For the purposes of this section, a transit agency that is otherwise defined as a small transit agency shall be considered a large transit agency, if the following conditions are met:
 - The agency operates in either the South Coast and San Joaquin Valley air basins
 - The agency operates more than 65 vehicles in annual maximum service
- **Modification of Definition of “Small Transit Agency,” under Section 2023(b)(49):**
 - “Small Transit Agency” means a transit agency that satisfies either of the following conditions:
 - The transit agency operates in an UZA with population less than 200,000
 - The transit agency operates fewer than 100 vehicles in annual maximum service

- **Role of Incentives:** Provisions would be added to the proposed regulation requiring ARB to fund the transition to ZEBs.
- **Purchase Definition:** Section 2023.1(a)(5) would be replaced with the following language:
 - A new bus is considered purchased when a Notice to Proceed or Purchase Order is issued to the manufacturer and a transit agency's funds are identified, committed and encumbered.
- **ZEB Bonus Credit:**
 - Section 2023.3(d) would be augmented to expand the schedule to include one bonus credit for conversions to battery-electric placed in service on or before December 31, 2017 and which remained in service as of January 1, 2018.
 - In addition, in crediting ZEB deployments that exceed ZEB purchase requirements, ARB would provide the same level of credit for conversions to battery-electric as purchases of standard battery-electric buses, and one-half credit for electric trolley buses placed into service between January 1, 2018 and December 31, 2020.
- **Excluded Buses:** The proposed regulation would be amended to include language requiring a technology assessment of these ZEB types in 2026 to evaluate commercial availability and operational readiness based on data gathered from real-world deployments of these ZEB types prior to the inclusion of these vehicles in the regulation.
- **Provisions for Extension/Exemption of a Zeb Purchase:** Section 2023.4(c)(4)(B)(3) would be replaced with the following language:
 - The cost or performance characteristics of the zero-emission bus would result in a transit agency violating any federal, state, or local laws, regulations or ordinances.
- **Compliance Option for Joint ZEB Groups:** The requirement that transit agencies share an MPO, RTPA or air basin to form a joint zero-emission bus group would be removed.

II. Part II: Comments on Appendix I and Concerns Arising Under the APA

A. Alternatives Analysis under the APA

The Legislature requires that state agencies avoid unnecessary or unduly burdensome regulation. As such, ARB may not propose regulations unless it has determined no alternative to its own proposal would be “as effective and less burdensome to affected private persons and equally effective in implementing the statutory purpose or other provision of law.” (Govt. Code, § 11346.5(a)(13).) To adopt a regulation, ARB must likewise affirm and explain, with “supporting information,” that “no alternative” it has considered “would be more effective and less burdensome to affected *private persons* than the adopted regulation, or would be more

cost effective to affected private persons and equally effective” in meeting the proposal’s legislative objective. (Govt. Code, § 11346.9(a)(4) [emphasis added].)

The proposed regulation will affect “private persons.” Specifically, if grant funding is inadequate to cover the high upfront capital costs, then transit agencies will be forced to increase fares or decrease transit service, and “private persons” will experience increased costs and reduced availability of public transit. The impact to “private persons” of the proposed regulation would be particularly acute for low-income persons and persons from minority communities who overwhelmingly comprise the transit customer base. Consider, for example, that the 2012 American Communities Survey found that the average income for a transit rider is \$15,281 in the City of Los Angeles; 71 percent of transit riders in Los Angeles are Hispanic. In the Cities of San Diego, San Francisco and Sacramento, the average income of transit riders is \$18,143, \$42,230, and \$30,227, respectively. These income levels are far below the average in these cities and significantly less than the income levels of all commuters.

Under these circumstances, ARB bears the burden of demonstrating no alternative would be “as effective and less burdensome to affected private persons and equally effective in implementing the statutory purpose or other provision of law.” (Govt. Code, § 11346.5(a)(13).) Likewise, before considering the proposed regulation for adoption, ARB must demonstrate, with “supporting information,” that “no alternative” that the Board has considered “would be more effective and less burdensome to affected private persons than the adopted regulation, or would be more cost effective to affected private persons and equally effective” in meeting the proposal’s legislative objective. (Govt. Code, § 11346.9(a)(4).)

The legislative objective (or, “statutory purpose”) of the proposed regulation can be found in the text of SB 32, which states:

[i]n adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the state board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030.

(Health & Saf. Code, § 38566.) Thus, the legislative objective underlying the proposed regulation is to ensure GHG emissions will be “reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030,” in a manner that is technologically feasible and cost-effective. (*Id.*; see also ISOR at X-1 [“The proposed ICT regulation is designed to reduce criteria pollutants, toxic air contaminants, and GHG emissions from the public transit sector, and to reduce community and regional air pollution.”].)

Although the Alternatives Analysis in Section IX of the ISOR includes some findings concerning the above statutes, those analyses do not contain supporting information for the conclusions drawn. For instance, ARB asserts that Alternative 2 (a proposal for a less stringent zero-emission bus purchase requirement) “will result in less emission reduction benefits in early years compared with the proposed purchase requirement.” (See ISOR, IX-11.) However, ARB has not shown that sufficient funding will be available to allow transit agencies to achieve the more demanding requirement without increased costs or decreased services. In the absence of such information, there is no basis for a conclusion that Alternative 2 would be less

effective than ARB's proposal. As such, ARB's alternatives analysis does not include the evidence and discussion required under Sections 11346.5 and 11346.9.

ARB should consider the Association's Alternative, which is identified in Part I(B) above. This alternative would be more than "equally effective in implementing the statutory purpose." (Govt. Code, § 11346.5(a)(13).) The Association's Alternative makes only modest changes to the waiver of certain ZEB purchasing requirements, and would be equally effective in implementing the statutory purpose of the proposed regulation. The Association's Alternative also makes several common sense changes to the proposed regulation to lessen its burden on transit agencies and to ensure that the regulation is achieving its intended goals, including strengthening ZEB performance review standards, modifying the definitions of "large" and "small" transit agencies to reflect real-world conditions, relaxing current limitations on funding for the purchase of ZEBs, and others. The Association's Alternative, would thus be equally effective in meeting CARB's statutory objectives, while at the same time reducing cost impacts to regulated entities, and thus, affected private persons.

As a result of the foregoing, ARB should not on the current record proceed to a final action because it cannot, among other things, comply with Section 11346.9(a)(4) of the Government Code. If ARB intends to pursue the proposed regulation, the record should demonstrate ARB has addressed the issues raised by the Association.

B. Association's Concerns Regarding the SRIA

The APA requires that state agencies proposing to "adopt, amend, or repeal any administrative regulation" first perform an assessment of "the potential for adverse economic impact on California business enterprises and individuals." (Govt. Code, § 11346.3(a).) Specifically, ARB must prepare a Standardized Regulatory Impact Assessment ("SRIA") analyzing "the potential adverse economic impact on California business and individuals of a proposed regulation," (Govt. Code, § 11346.3), and declare in the notice of proposed action any initial determination that the action will not have a significant statewide adverse economic impact directly affecting business. (Govt. Code, § 11346.5(a)(8); *Western States Petroleum Assn. v. Board of Equalization* (2013) 57 Cal.4th 401, 428 [hereinafter, "WSPA"].) The SRIA must evaluate several issues, including "elimination of jobs within the state," "the elimination of existing businesses within the state," and "[t]he competitive . . . disadvantages for businesses currently doing business within the state." (Govt. Code, § 11346.3, subs. (c)(1)(A)-(C).) The SRIA must be circulated with the ISOR, and must be supported by "facts, evidence, documents, [or] testimony," and made available for public review and comment for at least 45-days before an agency approves a regulation. (Govt. Code, §§ 11346.5, subs. (a)(7), (a)(8), 11347.3(b)(4).) The SRIA cannot be based on "mere speculati[on]." (*WSPA, supra*, 57 Cal.4th at 428.) "A regulation . . . may be declared invalid if . . . [t]he agency declaration . . . is in conflict with substantial evidence in the record." (*Calif. Ass'n of Medical Products Suppliers v. Maxwell-Jolly* (2011) 199 Cal.App.4th 286, 306.)

The SRIA does not meet applicable standards. One of the fundamental assumptions of the SRIA is that "the incremental costs to transit agencies of the proposed ICT regulation could be offset without relying on financing options" due to the availability of grant funding. (See SRIA at 41.) According to the SRIA, "grant funding **can reduce or eliminate most of the initial capital costs** of the proposed ICT regulation" such that transit agencies who experience

increased costs will not pass those costs on to individuals through decreases in service or increases fares. (See SRIA at 41.) On the basis of this assumption, the SRIA concludes that there are no direct costs incurred by individuals as a result of the proposed regulation. (*Id.*) However, ARB's analysis of available funding shows that it falls well short of covering the estimated cost of the proposed regulation, and consequently, fails to demonstrate that transit agencies will not have to reduce transit service and/or increase fares to comply with the proposed regulation.

ARB estimates that the cost of the proposed regulation through 2030 and 2040 will be \$605.7 million and \$1.1 billion, respectively. To arrive at these estimates, ARB built a complex cost model that rests on a series of optimistic assumptions, including bus purchase costs, bus maintenance costs, fuel costs, fuel efficiency, and charger install costs. We have particular concern about the assumption used in ARB's cost model that includes Low Carbon Fuel Standard (LCFS) credits for transit agencies through 2050 when, in fact, LCFS is presently only statutorily authorized through 2030. When the model is updated to reflect the true sunset date for LCFS, the estimated cost of the proposed regulation through 2040 climbs to \$2.01 billion. This higher cost estimate does not include changes to any of the other assumptions listed above, which would meaningfully increase the cost of the proposed regulation.

ARB identifies five potential funding sources. Taken together, however, these are clearly not sufficient to ensure that transit agencies will not be compelled to increase fares or decrease service as a result of the proposed regulation.

The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project ("HVIP") provides point-of-sale vouchers to partially offset the incremental cost of zero- and near-zero emission trucks and buses. These vouchers, which are funded through an annual appropriation by the State Legislature, are issued to public and private fleet owners on a first-come/first-serve basis. In FY 2017-18, HVIP made a total of \$188 million available to fleet owners, with at least \$35 million set aside for zero-emission bus deployment, specifically. (SRIA at 41.) In FY 2018-19, HVIP made an additional \$125 million available to fleet owners. While the current funding capacity of HVIP is substantial, this capacity is not specifically earmarked to zero-emission bus deployment, and the program itself relies on annual appropriation by the State Legislature, which provides no guarantee of future funding. Moreover, the capital costs of the proposed regulation are estimated to be at least \$74 million in the year 2020 alone, and as much \$989 million through 2032. (SRIA at 37, Table C12.) The currently available – and therefore, knowable – funding in HVIP is plainly inadequate to meaningfully offset these costs so as to ensure no changes in service or increased fares.

Pursuant to SB 350 Clean Energy and Pollution Reduction Act of 2015, the California Public Utilities Commission approved over \$750 million in funding for investments in infrastructure projects in the service territories of Southern California Edison and Pacific Gas & Electric that support the deployment of zero-emission vehicles. (See *id.* at 42.) Of this total, transit agencies in the SCE and PGE service territories are guaranteed a combined minimum investment in infrastructure projects of \$52.5 million. These funds, however, are available for only a five-year period. (See *id.* at 42.) Again, this is plainly inadequate in light of the \$989 million of estimated costs through 2032. (*Id.* at 37, Table C12.)

The Volkswagen Environmental Mitigation Trust (“Mitigation Trust”) provides California approximately \$423 million to fund specified eligible actions to mitigate the lifetime excess NOx emission caused by Volkswagen’s emission test defeat device. Of this total, \$130 million is specifically earmarked for transit, school and shuttle buses and supporting infrastructure. No more than 50% of this funding, or \$65 million, can be used for any one vehicle type (e.g. transit buses or shuttle buses). Guidelines for this funding have not been developed yet.

The Low Carbon Transit Operations Program (“LCTOP”) is claimed to provide an **unidentified amount** that “will support new or expanded bus or rail services, expand intermodal transit facilities, and **may** include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities . . .” (*Id.* at 42.) Yet, an unidentified amount that “may” be used to offset ZEB purchases, maintenance, and other costs cannot be relied upon to offset the increased costs to transit agencies.

Finally, the Transit and Intercity Rail Capital Program (“TIRCP”) provides **competitive** grants of **unidentified amounts** “to fund transformative capital improvements that will modernize California’s intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce GHG emissions, vehicle miles traveled, and congestion.” (*Id.* at 43.) Again, an unidentified amount that may or may not be used to offset the regulation’s initial capital costs, and which is not guaranteed to all transit agencies because it must be competitively granted, cannot be relied upon to meaningfully offset transit agencies capital costs.

ARB estimates that the cost of the proposed regulation through 2030 and 2040 will be \$605.7 million and \$1.1 billion, respectively. When their model is updated to reflect the true sunset date for LCFS of 2030, the estimated cost of the proposed regulation through 2040 climbs to \$2.01 billion. Although the SRIA claims that “grant funding **can reduce or eliminate most of the initial capital costs** of the proposed ICT regulation” and that, as a result, transit agencies will not pass on those costs to individuals through changes in services or increased fares, (*id.* at 41 [emphasis added]), the available grant funding identified in the SRIA falls well short of the proposed regulation’s estimated costs. The HVIP guarantees only \$35 million for ZEBs, much of which has already been committed, and only for FY 2017-18; SB 350 guarantees \$52.5 million for infrastructure projects that support zero-emission bus deployments in the SCE and PGE service territories, but not for ZEB purchases and only for a five year period; the Mitigation Trust provides a maximum of \$65 million for zero-emission transit buses and charging infrastructure; the LCTOP provides an **unidentified** amount, which “may include” ZEB costs; and, similarly, the TIRCP provides an **unidentified** amount that may or may not be used to fund ZEB-related activities.

Accordingly, the conclusions in the SRIA that transit agencies will not pass on costs to customers due to the availability of grant funding are not be supported by “facts, evidence, documents, [or] testimony,” (Govt. Code, §§ 11346.5, subs. (a)(8)), are “mere speculati[on],” (*WSPA, supra*, 57 Cal.4th at 428), and are contradicted by the record evidence.

C. External Peer Review

Pursuant to Health and Safety Code § 50074, ARB may not “take any action to adopt the final version of a rule unless” it undertakes a peer review to evaluate the “scientific portions” of the rule. (Health & Saf. Code, § 57004(d).) Section 57004 was enacted by the Legislature in response to “[s]ignificant questions . . . raised by both the environmental and regulated communities about the scientific basis for some rules.” (California Bill Analysis, S.B. 1320 Assem., 8/11/1997.) Thus, it requires CALEPA agencies, such as the ARB, to submit the “scientific portions” of a proposed regulation to an external peer reviewer “for the purpose of conducting an analysis of the science on which the regulation is based.” (*Id.*) The peer reviewer must then “provide a written evaluation as to whether the scientific portion of the rule is based on sound scientific knowledge, methods and practices.” (*Id.*; see also Health & Saf. Code, § 57004(d) [stating that “board, department, or office [must] submit[] the scientific portions of the proposed rule, along with a statement of the scientific findings, conclusions, and assumptions on which the scientific portions of the proposed rule are based and the supporting scientific data, studies, and other appropriate materials, to the external scientific peer review entity for its evaluation” and that the “external scientific peer review entity [must] prepare[] a written report that contains an evaluation of the scientific basis of the proposed rule”].) The “scientific portions” of a proposed regulation include “those foundations of a rule that are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment.” (*Id.*, subd. (a)(2).)

The proposed regulation contains numerous “scientific portions” that must be subjected to external peer review pursuant to § 50074 because they “are premised upon, or derived from, empirical data or other scientific findings, conclusions, or assumptions establishing a regulatory level, standard, or other requirement for the protection of public health or the environment.” (*Id.*, subd. (a)(2).) These “scientific portions” include, but are not limited to:

- Determination of the feasibility of implementing the ZEB purchase requirement
- Determination of the percentage of total new bus purchases that must be ZEBs
- Determination of the minimum number of ZEBs that transit agencies must collectively purchase to trigger waiver of the purchase requirements for 2023 and 2024
- Determination that all new bus purchases need to be ZEBs by 2029
- Determination of the number of zero-emission passenger miles per year deemed equivalent to having one ZEB in the agency’s fleet
- Determination of the number of bonus credits for each FCEB or BEB placed in service
- Determination of the dates for application of the bonus credits
- Determination of the date for requiring the purchase of low-NOx engines
- Determination of the date for requiring the use of renewable fuels for diesel and CNG buses
- Determination that sufficient funding will be available to offset initial capital costs such that transit agencies will not be forced to increase fares or decrease service

As such, CARB must submit these portions of the rule, “along with a statement of the scientific findings, conclusions, and assumptions on which [they] are based and the supporting scientific

data, studies, and other appropriate materials, to the external scientific peer review entity for its evaluation.” (*Id.* at subd. (d)(2).)

III. Part III: Comments on Appendix C

A. ARB’s Obligations under CEQA

State agencies such as ARB must “refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects.” (*City of Arcadia, supra*, 135 Cal.App.4th at 1421 [citing *Mountain Lion Found. v. Fish & Game Comm.* (1997) 16 Cal.4th 105, 134].) To perform this evaluation, ARB must “first . . . identify the environmental effects” of a proposed regulation, “and then . . . mitigate [any] adverse effects through the imposition of feasible mitigation measures or through the selection of feasible alternatives.” (*Sierra Club, supra*, 7 Cal.4th at 1233.) “The CEQA process is intended to be a careful examination, fully open to the public, of the environmental consequences of a given project, covering the entire project, from start to finish. This examination is intended to provide the fullest information reasonably available upon which the decision makers and the public they serve can rely in determining whether or not to start the project at all, not merely to decide whether to finish it.” (*NRDC v. City of Los Angeles* (2002) 103 Cal.App.4th 268, 271.)

State regulatory programs “that meet certain environmental standards and are certified by the Secretary of the California Resources Agency are exempt from CEQA’s requirements for preparation of EIRs, negative declarations, and initial studies.” (*City of Arcadia, supra*, 135 Cal.App.4th at 1421.) The scope of this exemption, however, is narrow, and only excuses ARB from complying with the requirements found in Chapters 3 and 4 of CEQA (*i.e.*, Pub. Res. Code, §§ 21100-21154) in addition to Public Resources Code § 21167. (Pub. Res. Code, § 21080.5(c).) However, “[w]hen conducting its environmental review and preparing its documentation, a certified regulatory program is subject to the broad policy goals and substantive standards of CEQA.” (Kostka & Zischke, *Practice Under Cal. Env. Quality Act* (2016 update) § 21.10) [“Kostka & Zischke”] [citing *City of Arcadia, supra*, 135 Cal.App.4th at 1422; *Sierra Club, supra*, 7 Cal.4th 1215; *Californians for Native Salmon & Steelhead Ass’n v. Dept. of Forestry* (1990) 221 Cal.App.3d 1419; *Env’tl Protection Info. Ctr. v. Johnson* (1985) 170 Cal.App.3d 604, 616].) The broad policy goals of CEQA include: (1) providing public agencies and the public with detailed information about the effect that a proposed project is likely to have on the environment, (2) identifying the ways in which the significant effects of a proposed project might be minimized, and (3) identifying alternatives to the proposed project. (See Pub. Res. Code §§ 21002, 21002.1(a), 21061; 14 C.C.R. § 15362.) Thus, the CEQA Guidelines expressly provide that “[i]n a certified program, an environmental document used as a substitute for an EIR must include ‘[a]lternatives to the activity and mitigation measures to avoid or reduce any significant or potentially significant effects that the project might have on the environment.’” (*City of Arcadia, supra*, 135 Cal.App.4th at 1422 [quoting CEQA Guidelines, § 15252(a)(2)(A)].)

ARB’s functional equivalent document is the “staff report,” which “shall be prepared and published by the staff of the state board.” (17 Cal. Code Regs., § 60005(a).) The regulations require the staff report to be “published at least 45 days before the date of the public hearing”

on the rulemaking, and to “be available for public review and comment.” (*Id.*) Staff reports must be prepared “in a manner consistent” “with the goals and policies of” CEQA, and “shall contain” “[1] a description of the proposed action, [2] an assessment of anticipated significant long or short term adverse and beneficial environmental impacts associated with the proposed action and [3] a succinct analysis of those impacts.” (17 Cal. Code Regs., § 60005(b).) Additionally, the analysis must “address feasible mitigation measures and feasible alternatives . . . which would substantially reduce any significant adverse impact identified.” (*Id.*)

The regulations also provide that an action “for which significant adverse environmental impacts have been identified during the review process shall *not* be approved or adopted as proposed if there are feasible mitigation measures or feasible alternatives available which would substantially reduce such adverse impact.” (*Id.*, § 60006 [emphasis added].) “Feasible” means “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors, and consistent with the state board’s legislatively mandated responsibilities and duties.” (*Id.*)

If ARB receives comments raising “significant environmental issues associated with the proposed action,” staff must “summarize and respond to the comments either orally or in a supplemental written report. Before taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue.” (*Id.*, § 60007.) ARB must respond to the issues raised by the public by providing a “good faith, reasoned analysis in response, and at a level of detail that matches the level of detail in the comment.” (CEQA Guidelines, § 15088(c); *Pfeiffer v. City of Sunnyvale* (2011) 200 Cal.App.4th 1552, 1568.) If ARB disagrees with the “recommendations and objections raised in the comments,” the “recommendations and objections” “must be addressed in detail,” with the agency “giving reasons why specific comments and suggestions were not accepted.” (CEQA Guidelines, § 15088(d).) “Conclusory statements unsupported by factual information will not suffice.” (*Id.*) Finally, because ARB may not take “final action on any proposal which raise significant environmental issues associated with the proposed action” until the state board “approve[s] a written response to each” issue raised, (Cal. Code Regs., § 60007(a)), ARB staff’s responses to environmental comments must be presented to the state board before consideration of the Proposed Amendments for approval. (*Id.*)

B. Compliance with ARB’s Certified Regulatory Program and CEQA

1. The EA does not Discuss the Proposed Regulation’s Potentially Significant Environmental Impacts From Transit Agency Service Changes

The EA estimates emissions savings resulting from the conversion of today’s transit bus fleet, powered by internal combustion engines, to zero-emission, all other things remaining equal. It projects that the proposed regulation will “reduce GHG emissions by 19 million metric tons of carbon dioxide equivalent (MMT CO₂e) from 2020 to 2050” and “result in an estimated 7,032 tons and 39.4 tons emission reduction from 2020 to 2050 for tailpipe NO_x and PM_{2.5}, respectively.” Absent from the EA is any assessment of how the cost of the regulation, estimated at \$1.1 billion through 2040 by ARB staff, might degrade transit service, whether

through higher fares or reduced service, and ultimately, transit ridership and statewide emissions.

An analysis by the Orange County Transportation Authority (OCTA), presented to their Board of Directors on September 20, 2018, proves that these impacts to transit service are more than hypothetical. The analysis found that “if the ARB adopts the Proposed Regulation, it would create financial implications for OCTA’s transit system if no additional funding is identified. It is currently expected that OCTA will proceed with its next large transit bus procurement after 2020, subjecting the procurement to the new purchase requirements. It is expected that almost 300 buses will be procured at that time. If the ZEB purchase requirement is in place, this could increase procurement costs by as much as \$114 million. **Overall, to replace our entire fleet with ZEBs, including paratransit, it would cost at least an additional \$442 million in current dollars, more than double what it would cost to replace the fleet with traditional fuel vehicles. These estimates assume that there would need to be an expansion of the fleet by about 40 percent due to range limitations with existing ZEBs; however, these estimates do not include the costs of infrastructure and potential for increased fueling costs. This would significantly impact OCTA’s ability to maintain existing services and could result in a service reduction of over 20 percent if the additional funding were not identified.** Furthermore, there are several technology challenges that continue to exist for ZEBs, including the inability to meet existing transit bus range requirements, lack of commercially available ZEBs to replace paratransit vehicles, and no guarantee that existing technology will meet necessary warranties to fulfill federal useful life requirements.”

Virtually every transit agency that has submitted comments on the ISOR has projected similar impacts to their transit operations. As of the drafting of these comments, these agencies include: AC Transit; City of Pasadena; County Connection; Golden Gate Bridge, Highway and Transportation District, Monterey-Salinas Transit; Napa Valley Transportation Authority; Riverside Transit Agency; San Diego Metropolitan Transit System; and, San Mateo County Transit District.

Because the proposed regulation would significantly increase the costs to transit agencies, the proposed amendments would impair transit ridership and, thus, emissions resulting from reduced service. For example, research compiled by the Victoria Transport Policy Institute, which cites studies by the American Public Transportation Association, among others, demonstrates that demand for transit service is not perfectly inelastic and can be negatively influenced by degradation of service quality and/or fare prices (Litman 2017). That is, if transit service is reduced, increasing the temporal cost of taking public transit, mode shift to other forms of motorized travel, like personal automobiles or transportation network companies, may be induced. These findings were validated by TransitCenter, which found that “the idea that people without cars are ‘captive’ and will use transit regardless of quality is severely overstated’ (TransitCenter, 2016). By the same token, if transit fares increase, some transit riders will substitute rides on buses and rail with other modes of motorized travel, increasing VMT and emissions. APTA found that average bus fare elasticities in large and small cities are -0.36 and -0.43, respectively (Pham and Linsalata, 1991). These elasticities mean that, in large and small cities, even a modest increase in fare prices of 10% will lead to a 3.6% and 4.3% decline in transit ridership. These findings were further validated by a major study in the United Kingdom that found that bus fare elasticities are -0.4 in the short-run and -0.7 in the long-run

(Daragay and Hanly, 1999). The larger impact of bus fare increases in the long-run reflects the fact that individuals, given time, will be able to secure additional travel options. The EA likewise fails to analyze the impact that higher costs may have on procurement habits, if agencies are unable to secure funding to purchase currently more expensive ZEBs. In this scenario, a resource-strapped transit agency would have the potential to delay the procurement of new buses until they have the resources necessary to purchase the mandated ZEB. This has the potential to cause agencies to operate an older, more polluting compressed natural gas or diesel bus, resulting in higher emissions.

The EA should be augmented to discuss these potential impacts, as it is not the burden of the public to investigate these issues. (See, e.g., *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 352, 311 [“CEQA places the burden of environmental investigation on government rather than the public,” and a lead agency “should not be allowed to hide behind its own failure to gather data.”].)

2. The EA’s Findings of Less-than-Significant Impacts for Certain Resource Categories Are Inadequate

An environmental document must identify and focus on the “significant environmental effects” of the proposed project. (See Pub. Res. Code § 21100(b)(1.); CEQA Guidelines, §§ 15126(a), 15126.2(a), 15143. A significant effect on the environment is defined as a substantial or potentially substantial adverse change in the environment. (See Pub. Res. Code §§ 21068, 21100(d); CEQA Guidelines, § 15382.) The “environment” refers to the physical conditions “existing within the area which will be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, [and] objects of historic or aesthetic significance,” among others. (Pub. Res. Code § 21060.5) The environment affected by a project includes both natural and man-made conditions. (See CEQA Guidelines § 15360.)

To assess the impact of a proposed project on the environment, the lead agency must examine the changes to existing environmental conditions that would occur in the affected area if the proposed project were implemented. (See CEQA Guidelines, § 15126.2(a); *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645.) An agency may find that an environmental impact is less than significant if it concludes the impact is not a substantial or potentially substantial adverse change to the environment. (See CEQA Guidelines, § 15382; *National Parks & Conserv. Ass’n v. County of Riverside* (1999) 71 Cal.App.4th 1341, 1359.) The agency must briefly indicate the reasons that possible significant effects were determined not to be significant. (See 14 CEQA Guidelines, § 15128.) Thus, when there is evidence that an impact might be significant, the agency may not adopt a contrary finding without providing an adequate explanation along with supporting evidence. (See *East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, 302.) Additionally, while economic and social effects ordinarily need to be discussed in an environmental document, physical changes to the environment caused by a project’s economic or social effects are secondary impacts that must be included in the impact analysis if they are significant. (See CEQA Guidelines, § 15131(a).)

The EA finds the potential impacts for several resource categories would be less-than-significant based on inadequate analysis. These resource categories include, but are not

limited to, public services, short-term, construction-related impacts energy demand, and short-term, construction-related impacts to mineral resources. The analyses for these resource categories all disclose substantial or potentially substantial adverse changes to the environment without providing an adequate explanation, including supporting evidence, of the reasons why these effects were deemed not to be significant.

Regarding impacts on public services, the impact analysis purports to address “Short-Term Construction-Related **and** Long-Term Operational-Related Effects on Public Services.” (Draft Environmental Analysis, p. 77 [emphasis added].) However, aside from one sentence addressing “increased demand on public services related to fire protection,” there is no discussion of the proposed regulation’s long-term operational impacts on transit services. (See *id.* at pp. 77-78.) This, notwithstanding that the analysis appears to rely on CEQA Guidelines, Appendix G for its significance standards, and Appendix G expressly identifies adverse impacts to “response times or other performance objectives.” As explained above, however, there is a significant danger that the proposed regulation will negatively impact transit agencies’ ability to maintain existing levels of service, which would cause physical changes in the environment as people are forced to forego public transportation in favor of individualized options.

Regarding the short-term, construction-related impacts to mineral resources, the EA acknowledges the possibility that building construction could have a negative impact on access to mineral resources. (Draft Environmental Analysis, p. 66.) However, the EA then discounts that impact because “buildings would be limited in size such that they would not wholly preclude resources recovery from adjacent areas.” (*Id.*) To illustrate, the EA then provides an example of a facility that “could occupy about 8 acres” and asserts that such a facility would be “unlikely to completely preclude mineral resources recovery from a specific deposit.” (*Id.*) “As a result,” the EA concludes, “this impact would be **less than significant.**”

This analysis is inadequate. While the EA asserts the impact is less than significant, it fails to cite evidence to support its assumptions regarding the size of the facilities to be constructed (*i.e.*, that they will general occupy about 8 acres) or the size of affected deposit areas (*i.e.*, that they will generally be larger than 8 acres). (See *East Sacramento Partnership for a Livable City, supra*, 5 Cal.App.5th at 302.) Indeed, the environmental document asserts elsewhere that there is “inherent uncertainty” as to “the exact location of new facilities,” the “geologic conditions at project sites,” the “characteristics of any new facilities,” and the “kinds of modifications to existing facilities” that would occur under the proposed regulation. (See Draft Environmental Analysis, p. 49.)

As a result, the EA should be revised and recirculated to address these issues.

3. The EA Should Further Analyze the Recognized Significant and Unavoidable Impacts Associated with New Facilities

According to the EA, the proposed regulation would result in the construction of a large number of new and modified facilities built to increase the supply of ZEBs. The EA finds the impacts of these new facilities to be significant for a wide range of resources. Although the EA identifies “suggested” mitigation to offset these impacts, and notes that these measures could

reduce the impacts to a less-than-significant level, the EA does not identify any mitigation measures that would provide enforceable mechanisms to lessen the significant impacts of the proposed regulation. Instead, for each of the resources, the EA finds the impact would continue to be significant and unavoidable because ARB does not possess land use authority over new facilities. There are several concerns with this approach, as explained below:

An environmental document cannot simply label an impact “significant and unavoidable” without first providing adequate discussion and analysis, as this would “allow[] the agency to travel the legally impermissible easy road to CEQA compliance.” (*Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm’rs* (2001) 91 Cal.App.4th 1344, 1370.) Accordingly, the eventual adoption of a statement of overriding considerations does not excuse the lead agency from properly conducting environmental review in the first instance. (*Id.*) Rather, the lead agency must adequately quantify the impact, and consider feasible mitigation based on that analysis, prior to concluding that an impact is “significant and unavoidable.” (See, e.g., *Sundstrom*, supra, 202 Cal.App.3d at 311 [“CEQA places the burden of environmental investigation on government rather than the public,” and a lead agency “should not be allowed to hide behind its own failure to gather data.”].) As such, “sole reliance” on another agency’s regulatory authority “is inadequate to address environmental concerns under CEQA.” (*Californians for Alternatives to Toxics v. Department of Food and Agriculture* (2005) 136 Cal.App.4th 1, 16.)

The draft EA claims that “there is inherent uncertainty in the degree of mitigation that would ultimately need to be implemented” because “the programmatic analysis in the Draft EA does not allow for identification of the precise details of project-specific mitigation.” (*Id.* at 20.) Consequently, the Draft EA’s significance conclusions “tend[] to overstate the risk that feasible mitigation may not be sufficient to mitigate an impact to less than significant.” (*Id.*) Nevertheless, the Draft EA claims, “[i]t is also possible that the amount of mitigation necessary to reduce environmental impacts to below a significant level may be far less than disclosed in th[e] Draft EA” because “[i]t is expected that many potentially significant impacts of facility and infrastructure projects would be avoidable or mitigable to a less-than-significant level as an outcome of their project-specific environmental review process.” (*Id.*) There are several problems with this approach.

First, “identification of the precise details of project-specific mitigation” is not necessary to determine “the degree of mitigation that would ultimately need to be implemented” in all cases, as the Draft EA claims. (*Id.* at 20.) For instance, the Draft EA claims “[o]peration of new or expanded [lithium-ion battery] recycling facilities could require substantial energy use to process, breakdown, and refurbish batteries.” (*Id.* at 48.) But then finds that “there is inherent uncertainty as to the location and size of new or expanded recycling facilities; therefore, the total energy demand for any future facility is speculative.” (*Id.*) However, the Draft EA contains sufficient information to permit a reasonable estimate of total energy demand. The Draft EA states that, at present, “there are ten specialized companies processing and recycling lithium-ion batteries in the U.S. and Canada.” (*Id.* at 59.) The Draft EA could have used the energy demands of these facilities to generate a reasonable estimate of how much energy a facility of that type requires. Further, the Draft EA could have used the production capabilities of these facilities to generate a reasonable estimate of how many additional recycling facilities will be needed to accommodate increased demand from the proposed regulation. Yet the

Draft EA did no such thing. Instead, the Draft EA simply concluded “the total energy demand for any future facility is speculative.” (*Id.* at 48.)

Similar examples can be found throughout the Draft EA. The Draft EA states that “[t]he demand for additional mining to meet increased use of [lithium-ion] batteries could result in the development of new mines and mining of lithium.” (*Id.* at 67.) It then asserts that “it would be too speculative to determine if, when, and where a new mine may be located.” (*Id.*) However, specific knowledge of these facts is not necessary to perform a meaningful analysis of potential environmental impacts. The Draft EA contains information regarding the number of lithium mines currently in operation in the U.S., the amount of lithium resources in the U.S., the amount of lithium resources globally, and the amount of demand that will be stimulated by the proposed regulation. (*Id.* at 67-68.) Using this information, the Draft EA could have analyzed how many new mining facilities will likely be needed to accommodate increased demand from the proposed regulation, and the types of impacts that can be expected to result from the construction and operation of such facilities. Information regarding the specific location and design of the facilities is not necessary to draw general conclusions regarding the likely scope of impacts.

Second, by expressly claiming to overstate the risk that feasible mitigation may be insufficient while, at the same time, asserting that impacts could be reduced to less-than-significant levels by local lead agencies, the Draft EA obscures the significance of its identified impacts. However, an environmental document that does not include sufficient information to “enable[] the reader to evaluate the significance of [] impacts” is inadequate under CEQA. (*Lotus, supra*, 223 Cal.App.4th 645, 654.) ARB’s approach “precludes both identification of potential environmental consequences arising from the project and also thoughtful analysis of the sufficiency of measures to mitigate those consequences.” (*Id.* at 658.) The fact that the proposed project’s significant environmental impacts may be mitigated by local lead agencies does not relieve ARB from its duty to consider and to quantify the project’s environmental impacts.

Third, by relying solely on local lead agencies to enforce mitigation measures, the Draft EA sidesteps analysis of important environmental impacts. Here, as in *Californians for Alternatives to Toxics*, ARB has “repeatedly deferred” to local and federal “regulatory scheme[s] instead of analyzing environmental consequences.” (*Californians for Alternatives to Toxics, supra*, 136 Cal.App.4th at 16.) As such, ARB has failed to discharge its duty under CEQA to “meaningfully consider the issues raised by the proposed project.” (*Id.*) In *Californians for Alternatives to Toxics*, the lead agency relied on another agency’s regulatory scheme to support a finding of no significant impact. (*Id.* at 17.) Here, in contrast, ARB finds a significant impact, but then immediately asserts that the impact may not actually be significant in light of state and federal regulatory schemes. In both cases, however, the result is the same: the lead agency sidesteps CEQA’s informational purpose and fails to “meaningfully consider the issues raised by the proposed project.” (*Id.* at 16.)

4. The EA Does Not Propose Adequate Mitigation for New/Modified Facilities

As explained above, CEQA requires mitigation measures to be enforceable through means that are legally binding. (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4.) This requirement is designed to ensure that mitigation measures will actually be implemented. (*Fed. of Hillside & Cyn. Ass'ns, supra*, 83 Cal.App.4th at 1261; *Anderson First, supra*, 130 Cal.App.4th at 1186.)

None of the mitigation measures identified in the draft EA are enforceable through legally binding means. Instead, the EA merely identifies “[r]ecognized practices routinely required to avoid and/or minimize impacts to” the relevant resource category. (See generally Draft Environmental Analysis, Attachment B.) There is, however, nothing in the proposed regulation that ensures those “recognized practices” will actually be implemented. Although ARB defends this approach on the ground that it “does not have the authority to require implementation of mitigation related to new or modified facilities that would be approved by local jurisdictions,” that is insufficient to discharge ARB’s obligations under CEQA. The environmental document contains no discussion or analysis regarding ARB’s consideration of feasible mitigation measures, other than to state in conclusory fashion that none exist. ARB must use whatever authority it has at its disposal to ensure that the mitigation measures identified in the EA are enforceable through legally-binding means. Thus, at the very least, ARB must analyze a range of potential mitigation measures and determine, based on the results of that analysis, whether such measures are feasible or not.

5. Alternatives Analysis

The requirement that environmental documents identify and discuss alternatives to the project stems from the fundamental statutory policy that public agencies should require the implementation of feasible alternatives or mitigation measures to reduce the project’s significant impacts. (See, e.g., Pub. Resources Code, § 21002.) The lead agency must “focus on alternatives to the project . . . which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives. . . .” (CEQA Guidelines, § 15126.6(b).) Additionally, the range of alternatives “shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects.” (*Id.* at subd. (c).) The CEQA Guidelines specifically recognize that comments raised by members of the public on an environmental document are particularly helpful if they suggest “additional specific alternatives . . . that would provide better ways to avoid or mitigate the significant environmental effects.” (CEQA Guidelines, § 15204.)

The Draft EA should include the Association’s Alternative in its alternatives analysis. As noted above, the Association’s Alternative makes only modest changes to the waiver of certain ZEB purchasing requirements, and would therefore be equally effective in implementing the statutory purpose of the proposed regulation. The Association’s Alternative also makes several common sense changes to the proposed regulation to lessen its burden on transit agencies and to ensure that the regulation is achieving its intended goals, including strengthening ZEB performance review standards, modifying the definitions of “large” and “small” transit agencies to reflect real-world conditions, relaxing current limitations on funding for the purchase of ZEBs, and others. Consequently, the Association’s Alternative “could feasibly accomplish [all]

of the basic objectives of the project and could avoid or substantially lessen one or more of [its] significant effects.” (CEQA Guidelines, § 15126.6(c).)

IV. Conclusion

These suggestions and recommendations, comprising the Association’s Alternative, represent the best thinking of our Association leadership for improving the proposed regulation, and were developed following many hours of thoughtful and collaborative engagement with ARB staff. We believe strongly that incorporating them in your final rule is essential to protecting transit service quality, maintaining affordable fares, and ensuring that the riders who depend on the service our members provide are not disadvantaged by the proposed regulation. These changes will maximize the chances of successfully reaching our shared goal of widespread transit electrification by 2040 and will minimize adverse impacts to Californians most in need of healthy and growing public transit options.

We thank you again for this opportunity to comment, and for your dedication to working with us to get the transition to a fully electrified transit bus fleet right.

Please contact Legislative and Regulatory Advocate Michael Pimentel at 916-446-4656 or at michael@caltransit.org, if you have any questions or comments about the Association’s feedback on this proposed regulation.

Sincerely,



Joshua W. Shaw
Executive Director

cc: Kim Craig, Deputy Cabinet Secretary, Office of Governor Edmund G. Brown, Jr.
Alice Reynolds, Senior Advisor, Office of Governor Edmund G. Brown, Jr.
Richard Corey, Executive Officer, California Air Resources Board
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