<table>
<thead>
<tr>
<th><strong>DOCKETED</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Docket Number:</strong></td>
<td>19-TRAN-02</td>
</tr>
<tr>
<td><strong>Project Title:</strong></td>
<td>Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure</td>
</tr>
<tr>
<td><strong>TN #:</strong></td>
<td>230563</td>
</tr>
<tr>
<td><strong>Document Title:</strong></td>
<td>California Transit Association Comments - Response to Concepts for Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Filer:</strong></td>
<td>System</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>California Transit Association</td>
</tr>
<tr>
<td><strong>Submitter Role:</strong></td>
<td>Public</td>
</tr>
<tr>
<td><strong>Submission Date:</strong></td>
<td>11/8/2019 3:37:14 PM</td>
</tr>
<tr>
<td><strong>Docketed Date:</strong></td>
<td>11/8/2019</td>
</tr>
</tbody>
</table>
Response to Concepts for Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure

See attachment for comments.

Additional submitted attachment is included below.
November 8, 2019

California Energy Commission
Docket Unit, MS-4
Re: Docket No. 19-TRAN-02
1516 Ninth Street
Sacramento, CA 95814-5512

California Energy Commission:

On behalf of the California Transit Association, I write to you today to register the following comments on the *Concepts for Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure*. The Association represents more than 250 transit-affiliated entities nationwide, including more than 80 transit agencies in California, transit allies/support groups, engineering firms, original equipment manufacturers, and transit industry suppliers. From 2015 through late 2018, we led negotiations between California’s transit industry and the California Air Resources Board (ARB) on the development of the Innovative Clean Transit (ICT) regulation. We have since spearheaded various efforts to reduce the financial and educational barriers to zero-emission bus (ZEB) deployment and take seriously our partnership with the state on facilitating widespread transportation electrification.

Today, as you consider our comments on these concepts, we ask that you recognize how they are informed by the recent adoption of the ICT regulation – a rule we still contend will add unprecedented new and unfunded costs on transit agencies – as well as the rationale used by ARB to advance it. As you may know, the ICT regulation requires transit agencies to begin to purchase ZEBs as soon as 2023, with the goal of transitioning all transit buses in California to zero-emission technology by 2040. Though the ICT regulation is expected to be expensive for resourced-constrained transit agencies, its adoption was predicated on zero-emission buses being a beachhead technology with the potential to develop the components, supply chains, knowledge and experience necessary to electrify other heavy-duty industries. [See Attachment 1 for a summary of the ICT regulation]

ARB’s Initial Statement of Reasons for the regulation notes¹:

“...experience from using zero-emission technology in buses and demonstrating its viability will benefit the market for the same technologies to be used in other heavy-duty vehicle applications. This is why ZEBs and their electric drivetrains have been identified as the beachheads, or technology footholds, of medium- and heavy-duty zero-emission vehicle (ZEV) technologies. The knowledge and experience gained from installing supporting infrastructure, developing training programs, and gaining operating experience with ZEB technologies is enabling market expansion into other heavy-duty vehicle applications. The experiences will transfer from transit agencies to school buses, delivery trucks, and

¹ Initial Statement of Reasons for Innovative Clean Transit Regulation, California Air Resources Board, pp. II-5 – II-6
vocational vehicles, which have similar weight considerations, durability requirements, drivetrains, and components. This is especially true because transit agencies are public entities and must share information with the general public. The proposed ICT regulation and resulting ZEB deployment will complement other heavy-duty ZEV applications, such as local delivery trucks, airport shuttles, yard trucks, and drayage trucks.” [Emphasis Added]

To us, the state’s decision to prioritize the electrification of transit buses requires a similar prioritization of transit agencies when it comes to state funding. We appreciate that the California Energy Commission (CEC) has introduced several new concepts for supporting medium- and heavy-duty infrastructure, including infrastructure needed by transit agencies. However, we **strongly encourage** the CEC to prioritize transit agencies for this funding, to the maximum extent possible, given the adoption of the ICT regulation and the chronic funding shortfalls faced by the transit agencies mandated to comply with it.

The following comments respond to **Concepts #2 and #3** and highlight the parameters of the concepts we support as well as those that require modification and/or further evaluation.

**“Concept #2: Transit and Truck Fleets, Capital Expense Assistance for Zero-Emission Infrastructure Deployment”** would provide funding to transit agencies and private fleet owners to cover capital expenses for the construction of new make-ready infrastructure and/or the updating of existing fueling infrastructure for zero-emission vehicles. As a technology-neutral organization, we greatly appreciate that this proposal would provide funding to support the deployment of battery-electric and hydrogen fuel-cell transit buses.

We believe the list of project components identified in the concept as eligible expenses is generally comprehensive; however, we recommend that the CEC consider expanding the list to include several additional expenses, which are not currently covered by existing make-ready programs. These additional expenses, which are necessary for successful infrastructure buildout, include, but may not be limited to: overhead gantry systems needed to support charging infrastructure in space-limited depots; and, the relocation and site setup costs for temporary depots needed while existing depots are upgraded for zero-emission infrastructure.

As it appears this concept was designed to fill the funding gap left by the elimination of the voucher enhancement for infrastructure in the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), we recommend that the CEC distribute funding from this concept in a manner that is intentionally complementary to HVIP. To accomplish this, we believe funding should be distributed in a manner that prioritizes efficiency, allows for quick receipt of funding by fleet owners, and that ultimately minimizes the cost of administration to the state. As the CEC grows into its role of the state’s primary funder of zero-emission infrastructure, we also strongly encourage you to consider how you can make the process of applying for funding more “user-friendly,” particularly for transit agencies and small fleet owners that may not have the staff resources to navigate the current grant solicitation process. We ask that you consider distributing the funding from this concept through a block grant program structure, which has worked well for end-users of other programs.

As we mention earlier in our comments, we believe the adoption of the ICT regulation and the funding challenges faced by transit agencies, necessitates that this funding be distributed with priority to transit agencies. The CEC may actualize this recommendation by establishing a carveout within this concept for transit agencies, guaranteeing that they receive minimum funding level, or preferential scoring for transit projects.
We believe that further conversation between the CEC and stakeholders is required to address questions on: the level of funding, or percentage of project costs, that is appropriate per project from this concept; and, the establishment of a mechanism that ensures an equitable distribution of funds. CEC should also clarify that this concept could fund hardware and installation costs in addition to make-ready. Finally, we recommend that the CEC eliminate the concept’s requirement for a preliminary capacity check, as it may create an unnecessary barrier for transit agencies that wish to participate in this concept.

“Concept #3: ZEV Blueprints for MD/HD Vehicles Infrastructure” would provide funding to public and private fleet owners to develop planning blueprints, which identify the actions and milestones needed for implementation of ZEVs and ZEV infrastructure. This funding would be targeted toward small seaports, disadvantaged communities, railyards, inland warehouses, and multimodal freight distribution centers.

While we understand the rationale for this concept, we argue it constitutes a missed opportunity to provide funding to meet a clear and existing need created by state policy. Under the ICT regulation, transit agencies across the state are required to develop individual ZEB rollout plans. For large agencies (i.e. transit agencies with more than 100 vehicles in maximum annual service), these plans are due by July 1, 2020; for small agencies (i.e. transit agencies with fewer than 100 vehicles in maximum annual service), these plans are due by July 1, 2023. As is the case with all other aspects of the ICT regulation, the development of these plans is almost entirely unfunded, which creates enormous fiscal pressures on transit agencies across the state. We recommend that CEC harmonize its funding decisions with state policy by focusing this concept, in part, on funding the development of the required ZEB rollout plans. This modification would support compliance with the ICT regulation, limit financial duress at transit agencies, and provide greater coherence to the state’s beachhead approach to medium- and heavy-duty electrification.

In closing, we appreciate the opportunity register these comments on the Concepts for Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure. We look forward to continuing to engage with you, your staff and your partner agencies, to further the state’s goals of widespread transportation electrification.

Please feel free to contact me at 916-446-4656, if you have any questions about the recommendations provided in this letter.

Sincerely,
Michael Pimentel
Legislative & Regulatory Advocate
On Friday, December 14, the California Air Resources Board (ARB) adopted the Innovative Clean Transit regulation. The regulation, which has been in development since spring 2015, requires transit agencies to begin to purchase zero-emission buses (ZEBs) as soon as 2023, with the goal of transitioning all transit buses in California to zero-emission technology by 2040.

The regulation initially impacts standard transit buses, postponing the ZEB purchase mandate for non-standard buses (i.e. articulated, cutaway, over-the-road coaches) until at least 2026. The main provisions of the regulation are as follows:

- **Individualized ZEB Rollout Plans:** The regulation requires large and small transit agencies to develop and submit a ZEB rollout plan by July 1, 2020 and by July 1, 2023, respectively.

- **ZEB Purchase Mandate:** The regulation requires transit agencies to acquire a minimum number of ZEBs at the time of new bus purchases, based on the following schedules.

<table>
<thead>
<tr>
<th>Large transit agencies:</th>
<th>Small transit agencies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023: 25%</td>
<td>2023: N/A</td>
</tr>
<tr>
<td>2026: 50%</td>
<td>2026: 25%</td>
</tr>
<tr>
<td>2029 and After: 100%</td>
<td>2029 and After: 100%</td>
</tr>
</tbody>
</table>

The regulation does not require the purchase of zero-emission articulated or cutaway buses or over-the-road coaches until at least 2026.

Importantly, state incentive funding, like HVIP, will only be available to transit agencies that purchase ZEBs before – or in excess of – the requirements established by the regulation.

- **Statewide Thresholds:** The regulation includes a mechanism for encouraging the early elective adoption of ZEBs and postponing the purchase mandate. Under this mechanism:
  
  - If transit agencies statewide have 850 ZEBs in operation and/or on order by December 31, 2020, the 2023 purchase mandate impacting large transit agencies (noted above) would be postponed until 2024.
  
  - And, if transit agencies statewide have 1,250 ZEBs in operation and/or on order by December 31, 2021, the 2024 purchase mandate impacting large transit agencies (noted above) would be postponed until 2025.
• **Low NOx Requirement:** The regulation requires transit agencies to purchase low NOx engines, if available, for conventional internal combustion engine bus purchases.

• **Renewable Fuel Requirement:** The regulation requires transit agencies to purchase renewable fuels when diesel or natural gas contracts are renewed.

The regulation authorizes transit agencies to request a one-year exemption from the ZEB purchase mandate to address the following issues:

- Delays in bus delivery or infrastructure buildout;
- The unavailability of ZEBs with sufficient range to meet a transit agency’s daily mileage needs;
- The unavailability of ZEBs that meet Americans with Disabilities Act requirements or any other federal, state or local law, regulation or ordinance; and,
- Financial hardship at the transit agency, including the inability to secure funding to offset the incremental cost of a ZEB over a conventionally-fueled equivalent bus.

The one-year exemption can be renewed by ARB’s Executive Officer if the issues persist.

The board resolution that accompanies the regulation directs ARB’s Executive Officer to provide the ARB Board with a comprehensive review of the regulation at least one year prior to the initiation of any ZEB purchase requirement. The comprehensive review will assess the following issues:

- Cost, performance and reliability of ZEBs;
- Availability of incentive funding;
- Infrastructure necessary to support ZEB deployment;
- Extent of job creation resulting from the rule;
- Deployment status of ZEBs and related technologies; and,
- Barriers to ZEB deployment.