

**DOCKETED**

<b>Docket Number:</b>	19-TRAN-02
<b>Project Title:</b>	Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure
<b>TN #:</b>	232240
<b>Document Title:</b>	Center for Transportation and the Environment Comments - Funding Public Transit Hydrogen Fueling Stations
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Center for Transportation and the Environment
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	2/26/2020 9:22:59 PM
<b>Docketed Date:</b>	2/26/2020

*Comment Received From: Center for Transportation and the Environment  
Submitted On: 2/26/2020  
Docket Number: 19-TRAN-02*

## **Funding Public Transit Hydrogen Fueling Stations**

*Additional submitted attachment is included below.*



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Berkeley, CA 94704-1238  
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February 26, 2020

Esther Odufuwa  
Energy Commission Specialist 1, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-552

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

Please find attached letters from 18 transit agencies in California, expressing their interest in Fuel Cell Electric Bus (FCEB) technology and their support for funding hydrogen fueling infrastructure to facilitate the expansion and commercialization of FCEBs. Specifically, they and CTE are asking that CEC provide an opportunity to compete for a share of the \$47.5 million Medium- and Heavy-Duty Zero-Emission Vehicle and Infrastructure GFO, to build new heavy-duty hydrogen fueling stations and hydrogen-safe maintenance facilities for transit agencies.

California Transit agencies are under the mandate of the Innovative Clean Transit Regulation to transform their fleets to Zero-Emission by 2040. They will need both Battery-Electric Buses (BEBs) and FCEBs to accomplish this transformation, but unfortunately, the availability of grant funds to assist with the construction of hydrogen infrastructure for transit have been eliminated from further CARB grant opportunities. While subsidies for electric charging infrastructure are aided by utility ratepayers as a result of SB 350, funds for hydrogen infrastructure are significantly less.

CTE has been working to expand the network of heavy-duty fueling stations since 2013. In 2016, the California Air Resources Board (CARB) awarded CTE over \$22 million in Low-Carbon Transportation Funds to launch a pilot program to move FCEBs and heavy-duty fuel cell technology closer to commercialization. Two high-capacity hydrogen fueling stations have recently been commissioned at AC Transit in Emeryville and Orange County Transportation Authority (OCTA) in Santa Ana. The larger of the two will fuel up to 50 buses in an 8-hour transit fueling window. The second station will support 30 or more buses in a 10-hour window.

Initial operation of the buses in service at AC Transit and OCTA are demonstrating in excess of a 300-mile range, enabling these vehicles to operate as one-to-one replacements for diesel and CNG buses on all of AC Transit's and most of OCTA's routes. Another key outcome resulting from

CARB's investment was to drive down the cost of the buses by 50% from previous models, to less than \$1.2 million per bus.

The advancements made by this pilot project can be further leveraged by scaling up the pilot project to 100 or more buses, which will help drive down the costs of FCEB by an additional 30%, to below \$900,000. Increasing the demand for hydrogen will also promote increased supply and lower energy prices. However, the primary obstacle facing large-scale deployments is the need for infrastructure funding to support fueling stations and upgrades to diesel and CNG maintenance facilities to safely work on hydrogen.

The advancements in FCEB technology has a direct link to advancing the use of fuel cells and hydrogen fueling systems for truck and freight applications. With transit operators moving toward the implementation of the Innovative Clean Transit Rule, timing is critical in order to deliver price competitive buses and fueling infrastructure. Therefore, we encourage your favorable consideration to address the infrastructure gap facing public transit properties, and hydrogen facilities in particular, as you consider funding options relative to the Medium- and Heavy-Duty ZEB Vehicle and Infrastructure GFO.

Sincerely,



Jaimie Levin

Director of West Coast Operations

(510) 851-0625

Jaimie@CTE.tv

Attachments – Support Letters from:

Alameda-Contra Costa Transit District  
Central Contra Costa Transit Authority  
Gold Coast Transit District  
Golden Gate Transit District  
Monterey-Salinas Transit  
Omnitrans (San Bernardino)  
San Joaquin Regional Transit District  
Shasta Regional Transportation Agency  
Tri-Delta Transit (ECCTA)

Big Blue Bus (Santa Monica)  
Foothill Transit  
Golden Empire Transit District (GET)  
Long Beach Transit  
North County Transit District  
San Diego Metropolitan Transit System  
Santa Cruz Metropolitan Transit District  
SunLine Transit Agency  
Victor Valley Transit



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Alameda-Contra Costa Transit District

Michael Hursh, General Manager

January 7, 2020

Ester Odufuwa  
Energy Commission Specialist 1, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814-5512

**Re.: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure – Support For 100 Bus Initiative**

Dear Ms. Odufuwa:

I write on behalf of the Alameda-Contra Costa Transit District (“AC Transit”) to support the 100-Bus Initiative created by the Center for Transportation and the Environment (“CTE”) to coordinate with various transit agencies to facilitate a combined purchase of 100 or more Fuel Cell Electric Buses (“FCEBs”). The intent of this initiative is to reduce the unit cost of FCEBs and, through the increased number of agencies using hydrogen, attract new suppliers into the hydrogen market, increasing competition and, hopefully, reducing the cost of hydrogen. The cost of hydrogen is an impediment to the broader adoption of FCEBs.

The California Air Resources Board (“CARB”) has adopted the Innovative Clean Transit Regulation. To achieve the goals set forth by that regulation to reduce greenhouse gases and local criteria pollutants, California needs multiple options to successfully transition its fleet to zero emissions.

We strongly support funding programs that will assist us and other California transit agencies in procuring ZEBs and supporting fueling and maintenance facilities. Thanks to prior CEC, CARB, and federal funding we have sufficient fueling and maintenance facilities for our next increment of ZEBs; that is not the case for California agencies seeking to begin to operate ZEBs. The California Public Utilities Commission (“CPUC”) has authorized California's Investor Owned Utilities (“IOUs”) to finance BEB infrastructure with ratepayer funds, but there is no such funding for FCEB infrastructure.

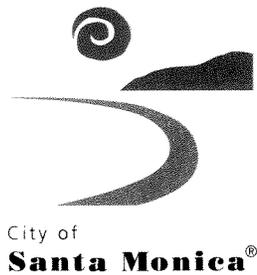
The CEC is preparing for the release of a \$47.5 million Grant Funding Opportunity (“GFC”) during the first or second quarter of 2020, under CEC's “Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure” program. AC Transit recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. (AC Transit has upgraded four maintenance bays in two of our yards to accommodate FCEBs and can provide data as to the costs of those upgrades.) The 100-Bus Initiative holds the promise of substantially reducing the cost of FCEBs and possibility reducing the cost of hydrogen, but without funding to support the construction of supporting facilities we will not realize the emergence of a vibrant commercial market for this critically important ZEB technology and its fuel.

AC Transit is aware of, and has benefited from, CTEs extensive work on zero-emission and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB, and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,



Michael Hursh  
General Manager



**Edward F. King**  
*Director of Transit Services*

Big Blue Bus  
1660 7th Street  
Santa Monica  
CA 90401

January 21, 2020

**Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

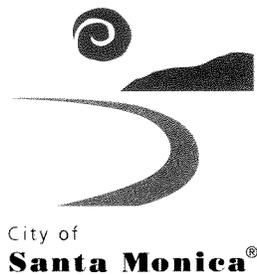
RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of the City of Santa Monica's Big Blue Bus to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

The Big Blue Bus serves the City of Santa Monica and surrounding cities in West Los Angeles region with 195 transit buses and an annual ridership of 14,000,000 passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. Big Blue Bus recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.



**Edward F. King**  
*Director of Transit Services*

Big Blue Bus  
1660 7th Street  
Santa Monica  
CA 90401

Big Blue Bus is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,



Edward F. King  
Director of Transit Services

# County Connection

2477 Arnold Industrial Way    Concord, CA 94520-5326    (925) 676-7500    countyconnection.org

February 5, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of County Connection express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

County Connection serves the central and southern portions of Contra Costa County in the suburban east bay of the San Francisco Bay Area with 121 buses and an annual ridership of 3.8 million. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. County Connection recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

County Connection is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,



Rick Ramacier  
General Manager

Clayton • Concord • Contra Costa County • Danville • Lafayette • Martinez  
Moraga • Orinda • Pleasant Hill • San Ramon • Walnut Creek

CENTRAL CONTRA COSTA TRANSIT AUTHORITY



**Foothill Transit**  
Going Good Places

January 16, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

**RE: Docket #19-TRANS-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure.**

Dear Ms. Odufuwa:

The purpose of this letter is to express our support of the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs).

Foothill Transit is the primary public transit provider in the Pomona and San Gabriel Valleys of eastern Los Angeles County. Since our first deployment of ZEBs in 2010, Foothill Transit has been a leader in zero-emission transit bus efforts. Today, we have 33 battery-electric buses in operation and two more battery-electric double deck buses slated to start service this spring. This represents roughly 10% of our fleet. Our transition schedule is guided by CARB's Innovative Clean Transit (ICT) Regulation, which mandates that California transit agencies transition to a zero-emission bus fleet by 2040.

Although Foothill Transit is at the forefront of the state-wide electrification efforts, we are continuously learning about zero-emission vehicle (ZEV) technologies to determine our best option going forward. We have found that deploying grid-powered battery-electric buses is not practical for all transit routes. In light of this, we are currently exploring the addition of FCEB's to our fleet.

Our initial inquiry into FCEBs revealed that the most daunting challenge to this technology is the high cost of FCEBs and the cost and complexity of supplying

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**MEMBER CITIES** Arcadia, Azusa, Baldwin Park, Bradbury, Claremont, Covina, Diamond Bar, Duarte, El Monte, Glendora, Industry, Irwindale, La Puente, La Verne, Monrovia, Pasadena, Pomona, San Dimas, South El Monte, Temple City, Walnut, West Covina and Los Angeles County **A PUBLIC AGENCY**

Docket #19-TRANS-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure.

January 16, 2020

Page 2

the hydrogen fuel. We believe that purchasing both a larger quantity of vehicles and fuel could help bring these costs down.

In light of this, we recommend that the CEC's \$47.5 million Grant Funding Opportunity under "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program for 2020 allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative could reduce the unit cost of FCEBs and allow the technology to become more competitive with other technologies.

We thank you for your continued work on this important effort and appreciate your attention to this letter. If you have any questions or concerns, please do not hesitate to reach out.

Sincerely,



Doran J. Barnes  
Executive Director

cc: Michael Pimentel, California Transit Association



December 10, 2019

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

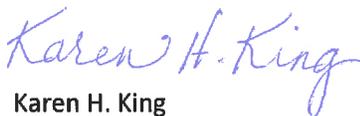
I am writing on behalf of Golden Empire Transit District to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

Golden Empire Transit District serves the greater Bakersfield City area with 88 fixed route buses and an annual ridership of 6.2 million riders. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. Golden Empire Transit District recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

Golden Empire Transit District is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,



Karen H. King  
Chief Executive Officer



February 11, 2020

**Ms. Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. On behalf of the Golden Gate Bridge, Highway and Transportation District (Bridge District), I am writing to request that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of Fuel Cell Electric Buses (FCEBs), in addition to applications associated with Battery Electric Buses (BEBs). The Bridge District believes that flexibility allowing for the use of all available zero emission technologies is crucial in order to achieve the goals set forth by CARB's Innovative Clean Transit Regulation.

In addition, the Bridge District would like to state its support for the comments registered by the California Transit Association in its letter to the CEC, dated November 8, 2019, regarding the Concepts Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure. I would like to highlight two comments in particular with respect to Concept #2, Transit and Truck Fleets Capital Expense Assistance for Zero-emission Infrastructure Deployment: 1) Transit Agencies be prioritized in the funding process, and 2) the CEC consider establishing a more user-friendly, transparent program, such as a block grant program structure, for allocating capital assistance.

The Bridge District seeks to improve, enhance and preserve the environment by providing high-quality, reliable and sustainable transportation for Bay Area residents that encourages bicycling, walking and transit as opposed to single-occupant vehicle usage in the Golden Gate corridor; and by continuing to evaluate and implement ways to reduce emissions and human-based climate change in all of its operations.

The Bridge District owns and operates the Golden Gate Bridge, along with a fleet of buses and ferries that provides an alternative to driving in the Golden Gate Corridor. Weekdays from 5:00 a.m. until 9:00 a.m., 23 percent of all trips from Marin and Sonoma Counties into San Francisco are on our buses and ferries. This reduces congestion and greenhouse gas emissions which contributes to the overall quality of life in the community.

The Bridge District primarily operates commute routes between Sonoma, Marin, San Francisco and Contra Costa Counties, utilizing approximately 150 buses and serving over 3 million annual passengers. Our fleet is a mix of MCI commuter and Gillig urban buses, and our vehicles typically travel 300-400 miles per weekday. This operational profile introduces technical and economic challenges that may be best met by providing flexibility regarding technology options to successfully transition its fleet to zero emissions.

Thank you for your consideration of our comments. Please feel free to contact me at 415-923-2203, or Mona Babauta, Deputy General Manager, Bus Division at 415-257-4467 or [MBabauta@goldengate.org](mailto:MBabauta@goldengate.org), if you need any additional information.

Sincerely,



Denis J. Mulligan  
General Manager



January 22, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of Gold Coast Transit District, in Oxnard, CA to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

Gold Coast Transit District serves western Ventura County, CA with 61 fixed-route buses and an annual ridership of nearly 3.5 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. Gold Coast Transit District recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

Gold Coast Transit District is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

Steven P. Brown  
General Manager

**GOLD COAST TRANSIT DISTRICT**

CITY OF OJAI | CITY OF OXNARD | CITY OF PORT HUENEME | CITY OF VENTURA | COUNTY OF VENTURA  
1901 AUTO CENTER DRIVE, OXNARD, CA 93036-7966 | P 805.483.3959 | F 805.487.0925 | GCTD.ORG

December 19, 2019

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of Long Beach Transit (LBT) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

LBT serves the greater Long Beach area and 12 surrounding communities in southeastern Los Angeles County and northwestern Orange County with 250 buses and an annual ridership of 23 million boarding customers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. LBT recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

LBT is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California.

Sincerely,



Debra A. Johnson  
Deputy Chief Executive Officer



December 6, 2019

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

**RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure**

Dear Ms. Odufuwa,

I am writing on behalf of Monterey-Salinas Transit (MST) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

MST serves as the public transit operator for Monterey County and provides public transit services throughout four counties (Monterey, San Luis Obispo, Santa Cruz, Santa Clara) of the central coast region of California covering one-fifth of California's coast with 162 buses and an annual ridership of 4.5 Million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. MST recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

*Advocating and delivering quality public transportation as a leader within our community and industry.*

**Transit District Members** Monterey County • Carmel-by-the-Sea • Del Rey Oaks • Gonzales • Greenfield • King City • Marina • Monterey  
Pacific Grove • Salinas • Sand City • Seaside • Soledad **Administrative Offices** 19 Upper Ragsdale Drive, Suite 200 Monterey, CA 93940

PH 1-888-MST-BUS1 (1-888-678-2871) • FAX (831) 899-3954 • WEB [mst.org](http://mst.org)

MST is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in black ink, reading "Carl G. Sedoryk". The signature is written in a cursive style with a large initial "C" and a long, sweeping underline.

Carl G. Sedoryk  
CEO and General Manager

810 Mission Avenue  
Oceanside, CA 92054  
(760) 966-6500  
(760) 967-2001 (fax)  
GoNCTD.com

January 22, 2020

Ms. Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Re: Docket No. 19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa:

I am writing on behalf of the North County Transit District (NCTD) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. The California Resources Board (CARB) has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

NCTD provides public transit in North San Diego County, from the Pacific Ocean east to Ramona, and from the Orange County border south to Del Mar, with connections extending to downtown San Diego. NCTD's fixed route fleet consists of 152 full size low floor buses (143 Compressed Natural Gas (CNG) and 9 Diesel). NCTD carries an approximate 10.3 million annual passengers across all modes, and 6.4 million annual passengers on fixed route bus service alone. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. NCTD recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

Re: Docket No. 19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and  
Infrastructure

January 22, 2020

Page 2 of 2

NCTD is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in black ink that reads "Matt O T". The signature is written in a cursive, slightly slanted style.

Matthew O. Tucker  
Executive Director, NCTD

cc: Damon Blythe, Chief Operations Officer – Service Planning and Bus  
Operations, NCTD



1700 W. Fifth St.  
San Bernardino, CA 92411  
909-379-7100  
[www.omnitrans.org](http://www.omnitrans.org)

December 11, 2019

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of Omnitrans to express support for the Center for Transportation and the Environment (CTE)'s 100-Bus Initiative, which is a joint effort with other transit agencies to purchase 100 or more fuel cell electric buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs in order to reduce greenhouse gas emissions and local criteria pollutants. In order to achieve the goals set forth under CARB's Innovative Clean Transit Regulation, transit agencies need a variety of technology options to successfully transition our fleets to zero emissions.

Omnitrans serves the San Bernardino Valley area with 184 fixed-route buses and an annual ridership of 11 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring zero-emission buses (ZEBs) and supporting fueling and maintenance facilities.

As the California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) for Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure in 2020, Omnitrans recommends that the GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs; thus, funding is needed to construct supporting facilities in order to realize the emergence of a commercial market for this important ZEB technology.

Omnitrans is aware of CTE's extensive work on zero-emission bus-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe the 100-Bus Initiative will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

Erin Rogers  
Interim CEO/General Manager



**Metropolitan Transit System**

1255 Imperial Avenue, Suite 1000  
San Diego, CA 92101-7490  
(619) 231-1466 • FAX (619) 234-3407

December 06, 2019

**Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of the San Diego Metropolitan Transit System (MTS) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

MTS serves the metropolitan service area, 570 square miles of urbanized areas of San Diego County as well as the rural parts of East County, 3240 total square miles with a fleet of over 800 buses, in addition to MTS' rail system and an annual ridership of nearly 90 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. MTS recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

MTS is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael Wygant", is written over a blue circular stamp or seal.

Michael Wygant  
Chief Operating Officer Transit Services, San Diego Metropolitan Transit System (MTS)



February 11, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

**RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure**

Dear Ms. Odufuwa,

I am writing on behalf of San Joaquin Regional Transit District (RTD) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

RTD serves as the regional transit provider for San Joaquin County with 164 buses and an annual ridership of 3.4 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. RTD recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

RTD is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our

**CHIEF EXECUTIVE OFFICER:** Gloria Salazar

**BOARD OF DIRECTORS:** CHAIR Gary S. Giovanetti • VICE CHAIR Michael Restuccia • Joni Bauer • Balwinder T. Singh • Les J. Fong

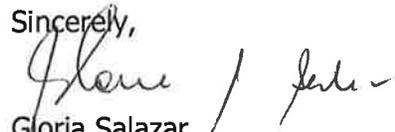
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**SAN JOAQUIN REGIONAL TRANSIT DISTRICT**

P.O. Box 201010 • Stockton, CA 95201 • (209) 943-1111 • (209) 948-8516 Fax • sjRTD.com

support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gloria Salazar".

Gloria Salazar  
Chief Executive Officer

*Santa Cruz Metropolitan  
Transit District*



February 12, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of the Santa Cruz Metropolitan Transit District (METRO) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

METRO serves Santa Cruz County and provides commuter service to Santa Clara County through a Joint Partnership Agreement with the Santa Clara Valley Transportation Authority, AMTRAK, Capital Corridors, San Joaquin Regional Transit and San Jose State University with a ninety-four (94) bus fleet and an annual ridership of five (5) million riders. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. METRO recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

METRO is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

  
Alex Clifford  
Chief Executive Officer

*110 Vernon Street, Santa Cruz, CA 95060 (831) 426-6080, FAX (831) 426-6117  
METRO online at <http://www.scmtd.com>*



1255 East Street, Suite 202 • Redding, CA 96001 • (530) 262-6190 • Fax: (530) 262-6189

E-mail: [srta@srta.ca.gov](mailto:srta@srta.ca.gov) • Website: [www.srta.ca.gov](http://www.srta.ca.gov)

**Daniel S. Little, Executive Director**

February 5, 2020

**Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of the Shasta Regional Transportation Agency (SRTA) to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

SRTA is currently implementing an intercity bus service between Redding and Sacramento, and the availability of FCEBs and associated infrastructure is crucial to the success of the service. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. SRTA recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

SRTA is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in blue ink that reads "Dan Little". The signature is stylized and cursive.

Daniel S. Little

Executive Director, Shasta Regional Transportation Agency



MEMBERS: Desert Hot Springs Palm Springs Cathedral City Rancho Mirage  
Palm Desert Indian Wells La Quinta Indio Coachella Riverside County

February 4, 2020

Esther Odufuwa  
Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

**RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure**

Dear Ms. Odufuwa,

I am writing on behalf of SunLine Transit Agency to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

As the public transit provider for the Coachella Valley, SunLine provides access to safe and environmentally conscious public transportation services with alternative fuel solutions to meet the mobility needs of the communities we serve. SunLine's service area is comprised of 1,120 square miles, carrying approximately 4 million riders annually throughout the Coachella Valley. As a leader in alternative fuels, we strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. SunLine Transit Agency recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

SunLine Transit Agency is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lauren Skiver".

Lauren Skiver  
CEO/General Manager



**TRI DELTA TRANSIT**  
EASTERN CONTRA COSTA TRANSIT AUTHORITY

801 Wilbur Avenue  
Antioch • California 94509  
925 • 754-6622  
925 • 757-2530 FAX

[www.TriDeltaTransit.com](http://www.TriDeltaTransit.com)

February 24, 2020

**Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing on behalf of Tri Delta Transit to express our support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, we will need multiple technology options to successfully transition our fleet to zero emissions.

Tri Delta Transit serves the Eastern Contra Costa cities of Pittsburg, Antioch, Oakley, Brentwood and the unincorporated area of Bay Point with 62 buses and an annual ridership of 2 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. Tri Delta Transit recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

Tri Delta Transit is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

Jeanne Krieg, Chief Executive Officer

February 4, 2020

**Esther Odufuwa**

Energy Commission Specialist I, Freight and Transit Unit  
Advanced Fuels and Vehicle Technologies Office  
Fuels and Transportation Division  
California Energy Commission

RE: Docket #19-TRAN-02 Medium and Heavy-Duty Zero-Emission Vehicles and Infrastructure

Dear Ms. Odufuwa,

I am writing as the Executive Director/CEO of Victor Valley Transit Authority (VVTA) to express support for the 100-Bus Initiative created by the Center for Transportation and the Environment (CTE) to coordinate with other transit agencies a combined purchase of 100 or more Fuel Cell Electric Buses (FCEBs). The intent of this initiative is to reduce the unit cost of FCEBs, and to further the goals of reducing greenhouse gas emissions and local criteria pollutants. CARB has adopted the Innovative Clean Transit Regulation, and to achieve the goals set forth by that regulation, it will be necessary for VVTA to have multiple technology options to successfully transition our fleet to zero emissions.

VVTA serves the Victor Valley, San Bernardino and Barstow areas consisting of over 950 square miles with 116 buses and an annual ridership of 1.7 million passengers. We strongly support funding programs that will assist us and other California transit agencies in procuring Zero-Emission Buses (ZEBs) and supporting fueling and maintenance facilities. While we have an interest in procuring FCEBs, not all agencies have the necessary infrastructure to support the deployment of these vehicles.

The California Energy Commission (CEC) is preparing for the release of a \$47.5 million Grant Funding Opportunity (GFO) during the first or second quarter of 2020, under CEC's "Medium- and Heavy-Duty Zero-Emission Vehicles and Infrastructure" program. VVTA recommends that this GFO allow for competitive applications to build heavy-duty hydrogen fueling stations and upgrade maintenance facilities to support the deployment of FCEBs. The 100-Bus Initiative holds the promise to substantially reduce the cost of FCEBs, but without funding to support the construction of supporting facilities we will not realize the emergence of a commercial market for this critically important ZEB technology.

VVTA is aware of CTE's extensive work on zero-emission bus and freight-related demonstration and deployment projects in California and their successful record of obtaining numerous grants from the federal government, CARB and CEC for

these types of projects. We believe our support and commitment to the 100-Bus Initiative will indicate the viability of a program such as this and will significantly improve the availability of clean heavy-duty vehicles in California. We look forward to working with you on this exciting endeavor.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Kane', with a long horizontal flourish extending to the right.

Kevin Kane  
Executive Director/CEO  
Victor Valley Transit Authority