

AGENDA ITEM 3 B
Information Item

MEMORANDUM

DATE: January 26, 2022

TO: El Dorado County Transit Authority
Transit Advisory Committee

FROM: Brian James, Planning and Marketing Manager

SUBJECT: Zero Emission Bus (ZEB) Transition Plan

REQUESTED ACTION:

BY MOTION,

No action. Information item.

BACKGROUND

The Innovative Clean Transit (ICT) regulation became effective October 1, 2019 and requires all public transit agencies to gradually transition their bus fleets to zero-emission technologies. The ICT regulation applies to all transit agencies that own, operate, or lease buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. It covers standard, articulated, over-the-road, double decker, and cutaway buses. The ICT regulation requires a percentage of new bus purchases to be zero-emission buses (ZEBs) with percentages increasing gradually with time. The ZEB purchase requirements begin in 2026 for small transit agencies. Starting 2029, 100 percent of all new bus purchases must be ZEBs, with a goal of complete transition to ZEBs by 2040.

The ICT regulation requires small transit agencies to submit a Zero-Emission Bus Rollout Plan (Rollout Plan) to the California Air Resources Board (CARB) by July 1, 2023. The Rollout Plan will be a living document and is meant to guide the implementation of zero-emission bus fleets and help the El Dorado County Transit Authority (El Dorado Transit) work through many of the potential challenges and explore solutions. The Rollout Plan includes estimated timelines based on best available information for future bus purchases, infrastructure upgrades, and workforce training.

Once the Rollout Plan is submitted and approved by CARB, El Dorado Transit will update the Rollout Plan to account for changing conditions and any updates will be resubmitted to CARB. The components of the plan will provide the state with crucial information, such as the probable number of buses to be deployed by each transit agency in the state, which will inform future policy and funding decisions, and other ways state agencies can support transit agencies through this transition. The Rollout Plans will also help fuel providers learn about infrastructure needs

during different stages of transition and help inform decisions regarding what support would best help transit agencies as they develop and expand the needed charging infrastructure. Information provided in the Rollout Plans is necessary to address barriers to implementation.

El Dorado Transit worked with the El Dorado County Transportation Commission (EDCTC) who obtained a Caltrans Sustainable Transportation Planning Grant to fund the ZEB transition study prepared by Stantec Consulting Services, Inc. The draft ZEB transition plan was presented by the Stantec Project Manager David Verbich to the El Dorado Transit Board on October 7, 2021.

DISCUSSION

Based on comments received during the Board meetings, public comment period, community workshops, stakeholder committee meetings, and the Project Development Team meetings, the final documents were completed which include the ZEB Strategy and Final Report which is available for review, and the Zero Emission Bus Rollout Plan which is provided in this agenda.

Zero-Emission Bus Rollout Plan

Section A: Transit Agency Information

Please provide the following information regarding your agency.

El Dorado County Transit Authority

6565 Commerce Way
Diamond Springs, CA 95619

El Dorado Transit is part of the El Dorado County Air Quality Management District (AQMD) and part of the Mountain Counties Air Basin.

Peak Vehicles: 30
Population: 147,200¹

Contact Information:

Matthew Mauk
Executive Director
(530) 642-5383 ext. 210
mmauk@eldoradotransit.com

El Dorado Transit is not part of a Joint Zero-Emission Bus Group.

Section B: Rollout Plan General Information

1. *Does your transit agency's Rollout Plan have a goal of full transition to zero-emission technologies by 2040 that avoids early retirement of conventional transit buses?*
2. Yes, the goal is for a full transition. However, this goal relies on assumed improvements in battery technology for motor coaches, and smaller vehicles like cutaways and vans for demand response services, to achieve necessary operating ranges.
3. *The ICT regulation requires 100% ZEB purchases in 2029. Conventional transit buses that are purchased in 2028 could be delivered in or after 2029. Please explain how your transit agency plans to avoid potential early retirement of conventional buses to meet the 2040 goal. Optional*
4. *When did your transit agency's board or governing body approve the Rollout Plan?*
 - a. Approval date 11/4/2021
 - b. Resolution number 21-24
 - c. *Is a copy of the board approved resolution attached to the Rollout Plan submitted to CARB? Yes (required)*
5. *Contact information for follow-up on details of the Rollout Plan (optional)*
 - a. Matthew Mauk
 - b. Executive Director
 - c. (530) 642-5383 ext. 210
 - d. mmauk@eldoradotransit.com

¹ Vehicles operated in maximum service and service area population from NTD 2019 profile

6. *Who created the rollout plan? A consultant*
 - a. *If consultant, please identify the company name: Stantec Consulting Services, Inc.*
7. *Cost for Rollout Plan creation (optional)*
8. *How many person-hours did it take to create the Rollout Plan? (optional)*

Section C: Technology Portfolio

What type(s) of zero-emission bus technologies (e.g. battery electric and fuel cell electric buses) does your transit agency plan to deploy through 2040?

El Dorado Transit plans to deploy battery electric buses (BEBs).

Section D: Current Bus Fleet Composition and Future Bus Purchases

Please complete Table 2 regarding expected future bus purchases, including the number of buses in total expected to be purchased or leased in the year of purchase. Identify the number and percentage of ZEBs of the total bus purchases each year, as well as bus types and fuel types. Identify the same type of information for purchases of conventional buses. Bus types include standard, articulated, over-the-road, double decker, and cutaway buses. For zero-emission technologies, identify the fuel type as diesel, CNG, LNG, diesel hybrid (dHEB), gasoline hybrid (gHEB), propane, or gasoline.

1. *Table 1 – current bus fleet (Optional).*

2. *Table 2 represents the anticipated revenue service vehicles that will be purchased in the future.*



Table 2: Future Vehicle Purchases (Required)

<u>Timeline (Year)</u>	<u>Total # of Buses to Purchase</u>	<u># of ZEB Purchases</u>	<u>% of Annual ZEB Purchases</u>	<u>ZEB Bus Type(s)</u>	<u>Battery Size</u>	<u>ZEB Fuel Type(s)</u>	<u># of Conv. Bus Purchases</u>	<u>% of Annual Conv. Bus Purchases</u>	<u>Type(s) of Conv. Buses</u>	<u>Fuel Type(s) of Conv. Buses</u>
2021	0	0	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A
2022	8	0	0%	N/A	N/A	N/A	3	100%	2 35-ft. cutaway 1 cutaway 5 vans	Diesel Gas Gas
2023	0	0	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A
2024	5	0	0%	N/A	N/A	N/A	5	100%	Vans	Gas
2025	9	0	0%	N/A	N/A	N/A	9	100%	Motorcoach	Diesel
2026	11	2	33%	Cutaway	230 kWh	BEB	9	66%	4 cutaways 5 vans	Diesel Gas
2027	1	1	100%	Motorcoach	544 kWh	BEB	0	0%	N/A	N/A
2028	5	0	N/A	N/A	N/A	N/A	5	100%	Vans	Gas
2029	1	1	100%	Motorcoach	544 kWh	BEB	0	0%	N/A	N/A
2030	11	11	100%	6 cutaways 5 vans	230 kWh 80 kWh	BEB	0	0%	N/A	N/A
2031	0	0	N/A	N/A	N/A	N/A	0	N/A	N/A	N/A
2032	12	12	100%	6 35-ft. 1 cutaway 5 vans	450 kWh 230 kWh 80 kWh	BEB	0	0%	N/A	N/A
2033	5	5	100%	Motorcoach	544 kWh	BEB	0	0%	N/A	N/A
2034	5	5	N/A	Vans	80 kWh	N/A	0	N/A	N/A	N/A
2035	4	4	100%	35-ft.	450 kWh	BEB	0	0%	N/A	N/A
2036	11	11	100%	6 cutaways 5 vans	230 kWh 80 kWh	BEB	0	0%	N/A	N/A
2037	3	3	100%	35-ft.	450 kWh	BEB	0	0%	N/A	N/A
2038	5	5	N/A	Vans	80 kWh	N/A	0	N/A	N/A	N/A
2039	0	0	N/A	N/A	N/A	N/A	0	0%	N/A	N/A
2040	21	16	100%	10 motorcoaches 6 cutaways 5 vans	544 kWh 230 kWh 80 kWh	BEB	0	0%	N/A	N/A



El Dorado Transit also uses vans for revenue service, and while vans are not captured by CARB's definition of a "bus", they are included in this table for El Dorado Transit's planning purposes but excluded from the '% of annual ZEB purchases column' as they are not subject to ICT purchase requirements.

3. *Table 3 – Range and estimated costs of Future ZEB purchases (optional)*
4. *Is your transit agency considering converting some of the conventional buses in service to zero-emission buses?* El Dorado Transit is not considering converting some conventional buses to zero-emission buses. El Dorado Transit will purchase zero-emission vehicles for replacement of buses per the timeline above.

Section E: Facilities and Infrastructure Modifications

1. *Please complete Table 5 with names, locations, and main functions of transit agency divisions or facilities that would be involved in deploying and maintaining zero-emission buses. Please limit the facilities to bus yards and facilities with maintenance, fueling, and charging functions, and exclude other operational functions like training centers, information and trip planning offices, and administrative buildings.*

1. El Dorado Transit will have some modifications to its division to accommodate the transition to zero-emission. Below is a table of facilities and infrastructure modifications.

Table 5: Facilities Information and Construction Timeline (Required)

<u>Division/ Facility Name</u>	<u>Address</u>	<u>Main Function(s)</u>	<u>Type(s) of Infrastructure</u>	<u>Service Capacity</u>	<u>Needs Upgrade? (Yes/No)</u>	<u>Estimated Construction Timeline</u>
El Dorado Transit Operations and Maintenance Facility	6565 Commerce Way Diamond Springs, CA 95619	Operations, Maintenance, Training, Recharging ZEB	New BEB charging equipment, additional electrical utility service and associated site improvements.	14 – Coaches 10 – 35 ft-buses 14 – Cutaways 10 – Vans 10 – Light-duty cars	Yes	2025, before first introduction of BEBs in 2026.

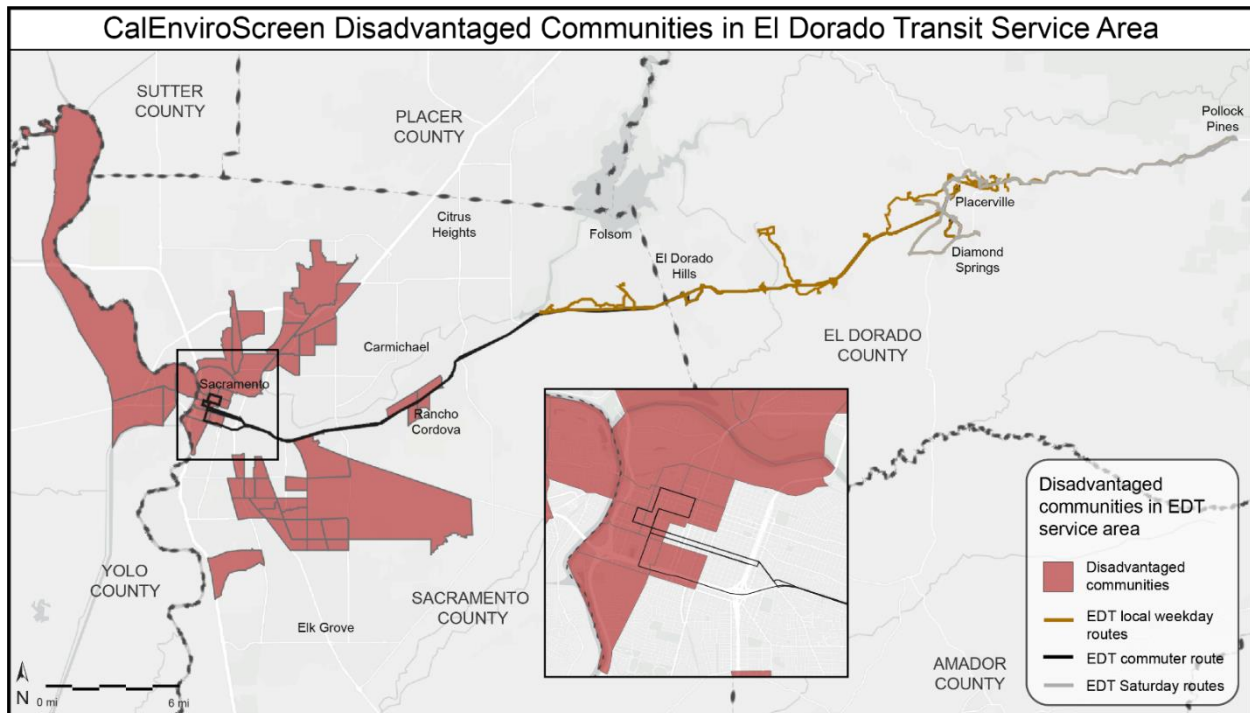
Questions 2 through 5 are optional.

6. *Please identify the electric utilities in your transit agency’s service area.* Electric utility in El Dorado Transit’s service area is Pacific Gas & Electric (PG&E).

Section F: Providing Service in Disadvantaged Communities

1. El Dorado Transit does serve one or more disadvantaged communities as listed in the latest version of CalEnviroScreen.

For El Dorado Transit, all census tracts that are categorized as disadvantaged communities are located outside of El Dorado County and are touched by El Dorado Transit’s commuter service to Sacramento (see map below). No local routes touch any disadvantaged communities.



So that El Dorado Transit can more accurately plan for deployment in disadvantaged communities, the following table details the specific census tracts that are classified as disadvantaged communities with the associated routes.

Census Tract	City	County
6067009008	Rancho Cordova	Sacramento County
6067009006	Rancho Cordova	Sacramento County
6067009007	Rancho Cordova	Sacramento County
6067005205	Sacramento	Sacramento County
6067002000	Sacramento	Sacramento County
6067002100	Sacramento	Sacramento County
6067000800	Sacramento	Sacramento County
6067001101	Sacramento	Sacramento County

Section G: Workforce Training

Describe your transit agency's plan and schedule for the training of bus operators and maintenance and repair staff on zero-emission bus technologies. (Required)

The table below provides a high-level overview of El Dorado Transit's plan and schedule for the training of bus operators and maintenance and repair staff on ZEB technologies.

Timeline (year)	Operator Training	Maintenance/Technician Training	Other Training
FY2026	Drive training-4 sessions-4 hours each Overall vehicle/system orientation-20 sessions-2 hours each	Preventative maintenance training-4 sessions-8 hours each Electrical/electronic training-6 sessions-8 hours each Multiplex training-4 sessions-3x8 days per session HVAC training-4 sessions-4 hours each Brake training-4 sessions-4 sessions ESS, lithium-ion battery and energy management hardware and software training-6 sessions-8 hours each Electric drive/transmission training-6 sessions-8 hours each	Agencywide orientation to new BEB technology Local fire and emergency response department introduction to new technology
FY2027	Annual refreshers	Annual refreshers	No activity
FY2028	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2029	Annual refreshers	Annual refreshers	No activity
FY2030	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2031	Annual refreshers	Annual refreshers	No activity
FY2032	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2033	Annual refreshers	Annual refreshers	No activity
FY2034	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2035	Annual refreshers	Annual refreshers	No activity
FY2036	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2037	Annual refreshers	Annual refreshers	No activity

Timeline (year)	Operator Training	Maintenance/Technician Training	Other Training
FY2038	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology
FY2039	Annual refreshers	Annual refreshers	No activity
FY2040	Annual refreshers	Annual refreshers	Local fire and emergency response department training on new technology

Section H: Potential Funding Sources

Please identify all potential funding sources your transit agency expects to use to acquire zero-emission technologies (both vehicles and infrastructure).

The table below shows all potential funding sources El Dorado Transit will explore to use to acquire zero-emission technologies.

Fund/Grant	Level of government	Description	Applicability
Low or No Emission Program (Low-No Program)	Federal/FTA	Low-No provides competitive funding for the procurement of low or no emission vehicles, including the leasing or purchasing of vehicles and related supporting infrastructure. This has been an annual program under the FAST Act since FY2016 and is a subprogram of the Section 5339 Grants for Bus and Bus Facilities. There is a stipulation for a local match.	Based on federal budget adoption of a new transportation appropriations bill, it's likely a similar program will continue. In FY2020, the FTA awarded \$130 million to 41 projects for the Low-No program. \$180 million has been announced for FY2021 projects.
Buses and Bus Facilities Program (5339)	Federal/FTA	Grants applicable to rehabbing buses, purchase new buses, and invest and renovate related equipment and facilities for low or no emission vehicles or facilities. For FY20, FTA announced ~\$455 million in competitive grant funding. Requires a 20% local match.	FY2020 5339 funding totaled \$808 million, which is a combination of formula, bus discretionary, and Low-No funding. The JPA in Merced County ("The Bus") was awarded \$2 million for ZEB electric buses and associated charging equipment in FY19.
Urbanized Area Formula Grants (5307)	Federal/FTA	5307 grant funding makes federal resources available to urbanized areas for transit capital and operating assistance. Eligible activities include capital investments in bus and bus-related activities such as replacement, overhaul and rebuilding of buses. The federal share is not to exceed 80% of the net project cost for capital expenditures. The federal share may be 90% of the cost of vehicle-related equipment attributable to compliance with the Clean Air Act.	Typically, the MPO or another lead public agency is the direct recipient of these funds and distributes these to local transit agencies based on TIP allocation. Agencies can allocate these funds for the purchase of ZEBs.

Fund/Grant	Level of government	Description	Applicability
Better Utilizing Investments to Leverage Development (BUILD)	Federal/FHWA	Formerly TIGER, BUILD is a discretionary grant program aimed to support investment in infrastructure. BUILD funding supports planning and capital investments in roads, bridges, transit, rail, ports, and intermodal transportation. A local match is required.	FY2020 provided \$1 billion in BUILD grants to 70 projects with a stipulation requiring 50% of funding for projects in rural areas.
Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP)	State/CARB	Voucher program created in 2009 aimed at reducing the purchase cost of zero-emission vehicles. A transit agency would decide on a vehicle, contact the vendor directly, and then the vendor would apply for the voucher.	\$165 million in funding for the 2020-2021 year was announced in June 2021 to be distributed in two "waves." The first wave of \$84 million was opened on June 8, 2021 and fully requested within three hours of opening. The second wave of \$83 million will open on a first-come, first-served basis beginning on August 10, 2021.
Carl Moyer and AB 923	State/CARB	Funding to help procure low-emission vehicles and equipment. Transit buses are eligible for up to \$80,000 funding.	The El Dorado County AQMD is accepting, evaluating, and awarding projects that meet Carl More guidelines on an ongoing basis. The AQMD also encourages submittal of proposals to the Sacramento Metropolitan AQMD Sacramento Emergency Clean Air & Transportation (SECAT) grant, as the Sacramento Metropolitan AQMD oversees this grant program for the El Dorado County AQMD.
Caltrans Transportation Planning Grants – Adaptation Planning Grants	State/ California Transportation Commission	The overarching goal of this grant program is to support planning actions at local and regional levels that advance climate change adaptation efforts on the transportation system, especially efforts that serve the communities most vulnerable to climate change impacts. The program awarded \$6 million in FY 2019-20 funds in May 2019. There is a grant minimum of \$100,000 and maximum of \$1 million. An 11.47% minimum match is required and may be in the form of an eligible in-kind contribution (e.g., staff time from the primary applicant counts as cash match).	The programs could fund planning that furthers the state goal of reducing GHG emissions.
Caltrans Transportation Planning Grants - Strategic Partnership Grants	State/ California Transportation Commission	The FY 2020-21 cycle made \$4.5 million available to identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. The program's transit component funds planning projects that address multimodal transportation deficiencies with a focus on transit.	The programs could fund planning that furthers the state goal of reducing GHG emissions. MPO or RTPA must be primary applicant
State Transportation Improvement Program (STIP)	State/ Caltrans	The STIP is a program of formula funds adopted by the CTC by April of each even year (i.e., 2020, 2022, 2024).	The ZEB Fleet Replacement project could compete for STIP funding but only for FY 2022 and beyond and in even years only.

Fund/Grant	Level of government	Description	Applicability
Sustainable Transportation Equity Project (STEP)	State/CARB	A new pilot that takes a community-based approach to overcoming barriers to clean transportation. Two different grant types: Planning and Capacity Building Grants (up to \$1.75 million for multiple grantees) and Implementation Grants (up to \$17.75 million for between one and three grantees). Lead applicant must be a CBO, federally-recognized tribe, or local government representing a public transit agency.	The application window closed as of August 31, 2020. It still has not been announced if there will be additional funding for future years.
Low Carbon Transit Operations Program (LCTOP) and Transit and Intercity Rail Capital Program (TIRCP)	State/CARB /Caltrans	5% and 10% of the annual Cap and Trade auction proceeds fund these programs. These programs fund projects that support new or expanded bus and rail services, improve multimodal facilities and can include equipment, fueling, maintenance and other costs. Projects must reduce greenhouse gas emissions. LCTOP is formula funding transit agencies commonly use for operations and TIRCP is a competitive program.	Many agencies are already recipients of these funds and can use these funds to purchase ZEBs and related equipment.
SB1 State of Good Repair	State/Caltrans	SGR funds are formula funds eligible for transit maintenance, rehabs, and capital programs – agencies receive yearly SB1 SGR funding through their MPO, based on population and farebox revenues.	Agencies can decide to devote its portion of SB 1 funds to ZEB transition.
SB 350	State/ California Energy Commission	Clean Energy and Pollution Reduction Act will enable transformation of energy production to zero-emission. Primarily provides funding to public utilities to reduce GHG emissions. Also supports transportation electrification by providing rebates of up to 50% of the electric vehicle supply equipment (chargers, etc.) for transit fleets.	If agency proceeds with BEBs, agency should apply for SB 350 at the appropriate time to reduce infrastructure costs. Funds are distributed through utility companies. Currently, SCE, PG&E, and SDG&E have received funding for electrification programs.
Clean Transportation Program	State/ California Energy Commission	The California Energy Commission's Clean Transportation Program provides funding to support innovation and acceleration of development and deployment of zero-emission fuel technologies. A local match is often required.	The Clean Transportation Program provides up to \$100 million annually for a variety of renewable and alternative fuel transportation project throughout the state, including specific projects for heavy-duty public transit buses. Agency should continue to monitor program website for when relevant funding opportunities open.
SB1 Local Partnership Program (LPP)	State/ California Transportation Commission	The LPP includes both a formulaic and competitive program to distribute funds to local and regional transportation agencies to further projects that improve transit and rail, aging infrastructure, and more. Funds are distributed to eligible agencies through a 60% formulaic component and 40% competitive component.	SB1 created the LPP and continuously appropriates \$200 million annually to local and regional transportation agencies that are within jurisdictions with voter approved taxes, tolls, or fees which are dedicated solely for transportation improvements.
Solutions for Congested Corridors	State/ California Transportation Commission	The SCCP includes programs with both formula and competitive funds. Funding is available to projects that make specific performance improvements and are a part of a multimodal comprehensive corridor plan designed to reduce congestion in highly traveled corridors by providing more transportation choices for	Improvements to transit facilities are eligible projects. Cycle 2 funding of \$500 million covers two years (FY2022 and FY2023). To submit a LPP/SCCP application, you need to know exactly what sources will be funding the project

Fund/Grant	Level of government	Description	Applicability
Program (SCCP)		residents, commuters, and visitors to the area of the corridor while preserving the character of the local community and creating opportunities for neighborhood enhancement projects.	and when the funds will be used, as well as which project phase they will be used for.
Affordable Housing and Sustainable Communities Program (AHSC)	State/ Department of Housing and Community Development	The AHSC Program funds land use, housing, and transportation projects to support development that reduces GHG emissions. The program provides both grants and loans that reduce GHG emissions and benefit disadvantaged communities through increasing accessibility via low-carbon transportation. The program distributed \$193 million for transportation projects in FY18-19.	Sustainable transportation infrastructure projects, transportation-related amenities, and program costs (including transit ridership) are eligible activities. Agencies can use program funds for assistance in construction or modification of infrastructure for ZEB conversion as well as new vehicle purchases.
PG&E EV Fleet Program	State/PG&E	Objective is to support the conversion of fleets to electric by lowering the upfront cost of electric charging infrastructure, specifically through installation of level 2 and DC fast chargers at 700+ sites by the end of 2023, supporting 6,500 medium- and heavy-duty vehicles, including transit buses. This program offers incentives and rebates for chargers and associated infrastructure.	PG&E offers two ownership structures: Option 1: customer designs, builds, owns, operates, and maintains BTM infrastructure, where PG&E constructs, owns, and maintains all TTM costs and provides an incentive for BTM costs Option 2: PG&E designs, builds, owns, operates, pays for, and maintains all infrastructure Agency must commit to a ten year term of agreement for operation and maintenance of the chargers. Agencies can apply for vehicles that will be operated in the future as long as vehicles are procured within five years of program contract execution.
VW Environmental Mitigation Trust Funding	State	VW's settlement provides nearly \$130 million for zero-emission transit, school, and shuttle bus replacements. Transit may be eligible for up to \$65 million.	Applications are open for transit agencies and funding for transit buses is still available. The grant is a one-time deal. Applications are processed on a first come, first serve basis and will be considered for funding if eligible and while project funds are available. As of January 2021, according to the CTE, California's solicitation for transit and shuttle buses remains open on a first-come, first-served basis until all funds have been committed. Currently, this program has approximately \$10 million of available funding.
Low Carbon Fuel Standard (LCFS credits)	N/A	LCFS credits are not necessary funding to be applied for; rather, they are offset credits that are traded (through a broker) to reduce operating costs.	Once ZEBs are acquired and operating, agencies can collect LCFS and 'sell' them to reduce operating costs of ZEBs. Both hydrogen and electricity used as fuels are eligible for LCFS credits
Congestion Mitigation and Air Quality (CMAQ)	EDCTC	The Congestion Mitigation and Air Quality Improvement (CMAQ) Program provides funds to States for transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards.	Projects that reduce criteria air pollutants regulated from transportation-related sources, including ZEBs.

Section I: Start-up and Scale-up Challenges

El Dorado Transit faces the following key challenges:

- Lack of fleet options for ZE technologies that fit El Dorado Transit's operating profile. El Dorado Transit operates motorcoaches, cutaways, and vans for revenue service. ZE options are currently limited, constraining the modeling and choices developed as part of the ZEB rollout plan. Furthermore, significant improvements in ZE technology will be necessary to operate cutaway/demand response service with ZE equivalents as El Dorado Transit does currently with fossil fuel vehicles.
- The very large service area and mountainous terrain that El Dorado Transit operates in, and that pushes the boundaries of ZE technology. As such, the strategies identified in the rollout plan assume that the fleet will grow modestly, that El Dorado Transit will re-block/re-schedule vehicle shifts, assumes that midday recharging will be used, and that ZE tech improves. Importantly, we have assumed that recharging infrastructure will be available to El Dorado Transit (and likely other operators) in downtown Sacramento to accommodate commuter service. Similarly, for the Lake Tahoe service that El Dorado Transit now operates, the plan assumed the charging infrastructure will be available at either the South Lake Tahoe terminal, or in downtown Sacramento.

Appendix

Resolution/Council Approval

Full Rollout Plan