Zero-Emission Bus Rollout Plan

May 2023

Prepared by:

City of Calabasas Transit Staff

CITY *of* CALABASAS

Zero-Emission Bus Rollout Plan

Introduction

The City of Calabasas is located in western Los Angeles County next to the Ventura Freeway, approximately 25 miles from downtown Los Angeles. Neighboring cities include Los Angeles, Agoura Hills, and Hidden Hills. A portion of the City's northern boundary also borders Ventura County. In 2016, the City's population was 24,502. The City provides a local transit system which aims to meet the changing needs of the community by providing fixed route, peak-hour route, demand-response, and Dial-A-Ride paratransit programs. The City has been a regional role model in environmental concerns and will continue this leadership through implementing this Plan.

In 2019, the California Air Resources Board (CARB) established the Innovative Clean Transit (ICT) regulation. This regulation required all public agencies to transition bus fleets to zero-emission technologies by 2040. As a small transit agency, Calabasas will be required to begin purchasing zero-emission busses (ZEBs) by 2026, to purchase only ZEBs by 2029, and fully convert our fleet by 2040. In order to have a successful transition, state-wide ICT regulation requires agencies to complete and submit this Zero-Emission Bus Rollout Plan to serve as a blueprint for full transition. The purpose of this document is to provide a base plan for Calabasas staff and highlight current challenges transit agencies are facing to allow for more statewide support moving forward.

Section A: Transit Agency Information

Transit Agency:	City of Calabasas Transit
Address:	100 Civic Center Way
	Calabasas, CA 91302
Air District:	South Coast
Air Basin:	South Coast
Annual Maximum Service[1]:	5
Population:	24,052 (2016)
Agency Director:	Lanzafame, Philip
	Interim Public Works Director
	818-224-1600
	planzafame@cityofcalabasas.com
Joint Group:	N/A

[1] The ICT regulation defines "Annual Maximum Service" (13 CCR § 2023(b)(3)) as the number of buses in revenue service that are operated during the peak season of the year, on the week and day that maximum service is provided, but excludes demand response buses. Annual maximum service excludes an atypical service day, on which a transit agency provides extra service to meet the demands for special events such as conventions, parades, or public celebrations, or operates significantly reduced service because of unusually bad weather (e.g. snowstorms) or major public disruptions (e.g. earthquakes or terrorism); or one-time special events.

Section B: Rollout Plan General Information

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 (13 CCR § 2023.1(d)(1)(A))?

Yes

The ICT regulation requires 100% ZEB purchase 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 in order to meet the 2040 goal.

In order to meet the 2040 goal and avoid potential early retirement, Calabasas will only purchase ZEV effective immediately.

Rollout Plan approval date

June 21, 2023

Resolution Number

2023-1849

Is a copy of the board approved resolution attached to the Rollout Plan submitted to CARB (13 CCR § 2023.1(d)(2))?

Yes, Attachment A

Contact for Follow-Up Questions

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Assistant Engineer

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Who created the Rollout Plan?

City of Calabasas Staff

How many person-hours did it take to create the Rollout Plan?

30

Section C: Technology Portfolio

The City plans to deploy Battery Electric Vehicles (BEVs). BEVs use electricity stored in a battery to power the vehicle's motor. Once the battery is depleted, the battery is recharged by a dedicated charging facility. Due to widespread availability of BEVs it was determined that this type ZEB fuel will best suit Calabasas in its initial switch from gas and diesel.

City Staff will investigate other fuel cell options as technology improves and costs go down.

Section D: Current Bus Fleet Composition and Future Bus Purchases

Calabasas Transit's fleet is comprised of 12 shuttles and 1 trolley, owned by Calabasas and 2 paratransit vehicles owned by Ideal General Services, Inc (IGS). Shuttles operate 1 fixed-route service, 4 peak-hour services Monday-Friday, and a Beach Bus service Monday-Friday during the summer. The trolley operates a fixed-route service on Saturdays during the summer. Paratransit vehicles operate our Dial-A-Ride Program Monday-Friday and a weekend public demand-response program. The Beach Bus and paratransit programs are operated in and outside of City of Calabasas limits.

Table 1: Individual Vehicle Information on Current Fleet

Vehicle ID	Engine Model Year	Bus Model Year	Fuel Type	Bus Type	Mileage*
3	2010	2003	Gas	Cutaway	312060
4	2004	2003	Gas	Cutaway	292172†
5	2003	2003	Gas	Cutaway	292172†
6	2005	2004	Gas	Trolley	323276
7	2016	2005	Gas	Cutaway	245452
8	2005	2005	Diesel	Cutaway	200389
9	2005	2006	Diesel	Cutaway	260535†
10	2009	2009	Gas	Cutaway	198662
11	2003	2003	Gas	Cutaway	215336
12	2016	2015	CNG	Standard	43953
13	2016	2016	CNG	Standard	43830
14	2019	2019	CNG	Standard	17431
15	2019	2019	CNG	Standard	12855
IGS-1	2016	2016	Gas	Minivan	82805
IGS-2	2019	2019	Gas	Minivan	9091

*Mileage from December 2022

†Last reported prior to 2020

Total Buses: 13 busses, 2 Diesel (15%), 7 Gas (54%), 4 CNG (30%), 12 Cutaway (92%), 9 Past End of Useful Life (70%), 4 Inoperable (30%)

Total Vans: 2 paratransit vans

In order for Calabasas Transit to complete transition to Zero Emission Buses by 2040, the City has determined a timeline for replacing all current vehicles. This timeline would result in a 100% ZEB fleet by 2034, without early retirement. This timeline would allow for the City to maintain 8 operable shuttles starting in 2024 and replace them at the end of their useful life*. Since the transit fleet's minivans are operated by a service provider, the City will require the next contract to include a transition to electric vehicles by 2029.

Calabasas Transit is considering converting the trolley to electric, but the option may be cost prohibitive.

Table 2: Future Bus Purchases

Timeline (Year)	Total Number of Buses to Purchase	Number of ZEB Purchases	Percentage of Annual ZEB Purchases	ZEB Bus Type(s)	ZEB Fuel Type(s)	Number of Conv. Bus Purchases	Percentage of Annual Conv. Bus Purchases	Type(s) of Conv. Buses	Fuel Type(s) of Conv. Buses
2024	2	2	100%	Cutaway	BEV	0	0%	N/A	N/A
2026	2	2	100%	Cutaway	BEV	0	0%	N/A	N/A
2032	2	2	100%	Standard	BEV	0	0%	N/A	N/A
2034	2	2	100%	Standard	BEV	0	0%	N/A	N/A
2036	1	1	100%	Cutaway	BEV	0	0%	N/A	N/A
2038	2	2	100%	Cutaway	BEV	0	0%	N/A	N/A

Table 3: Schedule of Converting Conventional Buses to Zero-Emission Buses

Timeline (Year)	Number of Buses	Bus Type(s)
2026	1	Trolley

Section E: Facilities and Infrastructure Modifications

Existing Calabasas Transit facilities include Calabasas Park 'n Ride in Old Town Calabasas and the City's Yard. With regard to implementing electric infrastructure, the City will need to invest in a new facility for housing and charging electric vehicles. Since we are planning to have a maximum of 8 electric vehicles in our fleet, we will need to have a facility or facilities to charge and house up to 8 vehicles.

Table 4: Facilities Information and Construction Timeline

Facility	Address	Function	Type	Capacity	Upgrade?	Timeline
Old Town Park 'n Ride	23577 Calabasas Road	Park and Ride Facility	Charging Facility	4	Yes	2024
City Yard	24811 Calabasas Road	Maintenance Storage	Charging Facility	4	No	2026

At the Old Town Park 'n Ride, Calabasas plans to connect to existing public chargers and create a dedicated area to store 4 shuttles and provide 2 dual chargers. This would eliminate up to 15 existing parking spaces. The Park 'n Ride typically does not have many users, except on Saturdays for the City's Farmers Market. The City is already looking at parking alternatives for this event due to the existing lot not being large enough to accommodate patrons. Alternatives would be investigated with the knowledge that we will soon be eliminating public parking at this location.

At City Yard, the City will investigate opportunities to create a facility similar to the one proposed in Old Town.

Southern California Edison is the electric utility for the Calabasas area.

Section F: Providing Service in Disadvantaged Communities

The ICT regulation defines the "CalEnviroScreen" (13 CCR § 2023(b)(10)) as a mapping tool that is developed by the Office of Environmental Health Hazard Assessment (OEHHA) at the request of the California Environmental Protection Agency (CalEPA) to identify California's most pollution-burdened and vulnerable communities based on geographic, socioeconomic, public health, and environmental hazard criteria. The CalEnviroScreen is available for public use at https://oehha.ca.gov/calenviroscreen. Disadvantaged communities are defined as the top 25% scoring areas along with other areas with high amounts of pollution and low populations.

There are no disadvantaged communities in Calabasas' Transit Area per the CalEnviroScreen 4.0 application (Figure 1).

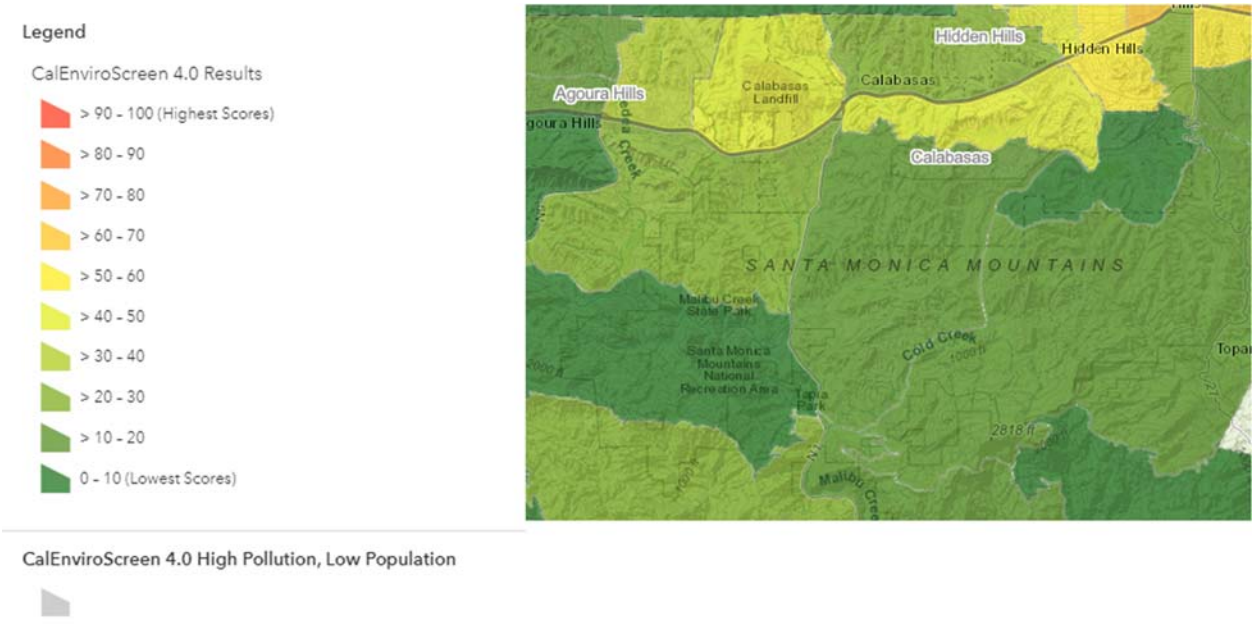

Figure 1: CalEnviroScreen 4.0 Results for Calabasas

Section G: Workforce Training

As the City of Calabasas contracts with a third-party to provide drivers for our transit program, this contractor is currently required to complete training for drivers. The City will require the contractor to complete additional trainings to ensure that all drivers are able to operate the new vehicles and accompanying infrastructure.

Section H: Potential Funding Sources

The following potential funding sources to purchase ZEB's and create charging stations have been identified by staff at this time:

- Carl Moyer Program
- Local Transit Services Subcommittee (LTSS) Call for Projects
- Southern California Edison Ready Charge Program
- AB2766 Air Quality Improvement Funds
- California Hybrid and Zero-Emission Truck and Bus Voucher Inventive Project (HVIP)
- Low Carbon Fuel Standard (LCFS)
- Clean Mobility Options
- Transit and Intercity Rail Capital Program (TIRCP)
- SCAQMD Clean Fuels Program
- SCAQMD Enhanced Fleet Modernization Program
- Power Up LA!
- SCE's Charge Ready Transport
- FTA Low or No Emission Vehicle Program

Section I: Start-up and Scale-up Challenges

The major challenges facing the City in terms of start-up and scale-up surround the fact that Calabasas is a small agency. Implementation of this program will require a large financial commitment, a majority of which will need to come from grant sources. Available staff time to work on these grants is minimal, which will heavily affect our ability to apply for many grants and limits the submission of successful grants.

Appendix A

Resolution Approving

Zero-Emission Bus Rollout Plan

Calabasas City Council Resolution No. 2023-1849

[Space for Signed Resolution No. 2023-1849]