

Zero- Emission Bus Rollout Plan



Prepared For:



Prepared By:

The City of Santa Fe Springs
Public Works Department



Section A: Transit Agency Information

City of Santa Fe Springs
11710 Telegraph Road
Santa Fe Springs, CA 90670

The City of Santa Fe Springs is part of the South Coast Air Quality Management District (AQMD) and South Coast Air Basin

Total Number of Buses in Annual Maximum Service: 4
Population: 18,581

Contact Information:
Kevin Periman
Municipal Services Manager
562-868-0511 ext. 3604

Santa Fe Springs is not part of a Joint Zero-Emission Bus Group.

Section B: Rollout Plan General Information

The City of Santa Fe Springs has a goal to fully transition to zero-emission buses by the 2040 deadline. We have started purchasing zero-emission technologies in 2023. The City plans to fully transition to 100% battery-electric buses (BEB) between 2023 and 2039. This transition will not entail early retirement of any City vehicles.

This plan was prepared by City staff. A copy of the City Council approved resolution was approved on June 6, 2023 and is attached in Appendix A.

For any additional information regarding the Rollout Plan, please contact:

Kevin Periman
Municipal Services Manager, City of Santa Fe Springs
kperiman@santafesprings.org
562-941-5484

Section C: Technology Portfolio

Types of zero-emission bus technologies to be deployed through 2040

The City of Santa Fe Springs will be purchasing a total of 2 BEB Cutaway Buses and 2 BEB Passenger Vans to replace two existing Gasoline Cutaway Buses and two Gasoline Powered Passenger Vans. The City's Fleet Management Plan focuses on replacing its existing cutaways between 2024 and 2030. The City will also be identifying and acquiring four level three (3) dual chargers through the charge ready transport program to charge the buses overnight and during midday layovers.

Section D: Current Bus Fleet Composition and Future Purchases

Existing Bus Fleet

The City of Santa Fe Springs operates a Dial a Ride Program Monday through Friday for Senior and Disabled Residents of the City. Residents are able to travel anywhere within the City of Santa Fe Springs for any purpose including shopping and to participate in the City's Nutrition Program at the Gus Velasco Neighborhood Center. Residents can also travel to Downey, Norwalk, Pico Rivera, and Whittier, within a five mile radius of the City for medical appointments.

The City of Santa Fe Springs currently has a total of three (3) vans and two (2) cutaways. The vans are not required for inclusion in the rollout plan but are described for context. Both cutaways are powered by gasoline. The model year for the cutaways range for 2020 to 2024.

Table 1: Individual Bus Information of Current Bus Fleet

Number of Vehicles	Engine Model Year	Bus Model Year	Fuel Type	Vehicle Type
2	2017	2017	Gasoline	Transit Vans
1	2020	2020	Gasoline	Cutaway
1	2024	2024	Gasoline	Cutaway
1	2023	2023	Hybrid	Mini-Van

Table 2: Future Bus Purchases (by estimated Delivery Date)

Timeline	Total Number of Buses to Purchase	Number of ZEB Purchases	Percentage of Annual ZEB Purchase	ZEB Bus Type	ZEB Fuel Type	Charging Technology	Number of Conventional Bus Purchase	Percentage of Annual Conventional Bus Purchases	Type(s) of Conventional Buses	Fuel Type(s) of Conventional Buses
2027	1	1	100%	Cutaway	EV	Plug-in Garage Charging	N/A	N/A	N/A	N/A
2031	1	1	100%	Cutaway	EV	Plug-in Garage Charging	N/A	N/A	N/A	N/A

Table 3: Estimated Costs of Future ZEB Purchase (by Delivery Date)

Timeline	Number of ZEBs	Bus Types	Estimated Cost of each Bus
2027	1	Cutaway	\$271, 000.00
2031	1	Cutaway	\$271,000.00

Table 4: Schedule of Converting Conventional Buses to Zero-Emissions Buses

Timeline	Number of Buses	Bus Type	Removed Propulsion System	New Propulsion System
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A

Section E: Facilities and Infrastructure Modifications

The City of Santa Fe Springs currently houses the City's three (3) vans and two (2) cutaways at the Municipal Services yard located at 12636 Emmens Way, Santa Fe Springs, CA 90670. A total of 4 dual Level 3 plug-in charges are proposed to be installed (see Figure 1 below). These chargers can be used for both overnight and quick rapid charging. The City will pursue Carl Moyer Grant funding as well as participation from Southern California Edison under the Charge Ready Transport Program.

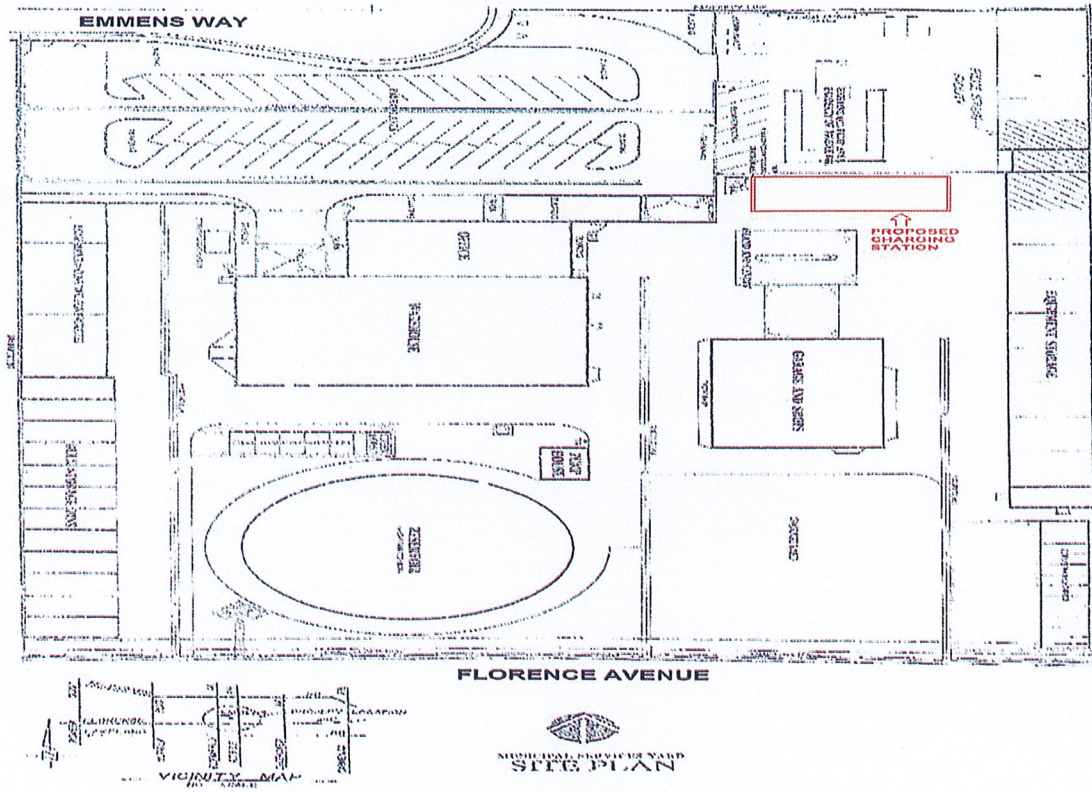


Figure 1. Proposed Charging Station Locations

Table 7: Facilities Information and Construction Timeline

Facility Name	Address	Main Function	Types of Infrastructure	Service Capacity	Needs Upgrade (Y/N)	Estimated Construction Timeline	Electric Utility Company
Santa Fe Springs Municipal Services Yard	12636 Emmens Way, Santa Fe Springs, CA 90670	Storage and Maintenance of City Fleet	Garage, 4 dual plug-in depot chargers (proposed)	2 Cutaway Buses, 1 Ford Transit Van	YES	2024- ???	Southern California Edison

Section F: Service in Disadvantaged Communities

According to the California Office of Environmental Health and Hazard Assessment (OEHHA), disadvantaged communities are defined as the top 25% in terms of scoring in the CalEnviroScreen. The CalEnviroScreen is a tool that identifies communities that are most vulnerable to pollution by using environmental, health, and socioeconomic data to produce a score for every census tract within the State of California.

According to the OEHHA Disadvantage Communities map, The City of Santa Fe Springs provides services within a disadvantaged community as shown in Figure 2: City of Santa Fe Springs Disadvantaged Communities Map.

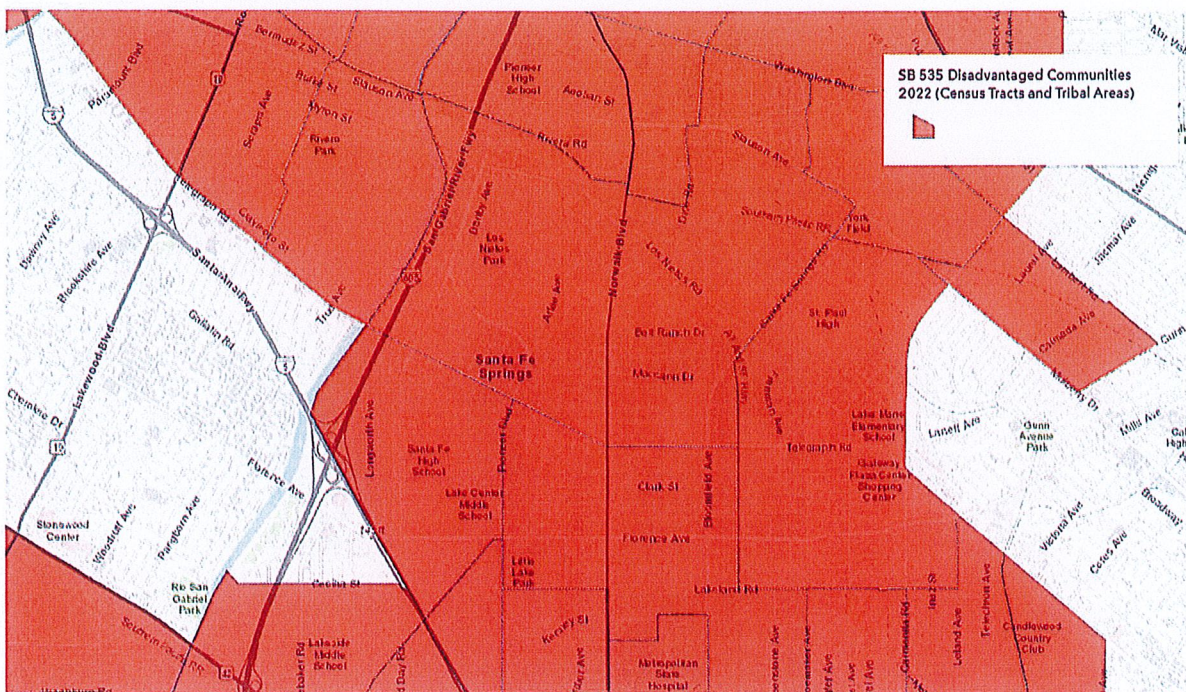


Figure 2. City of Santa Fe Springs disadvantaged Communities Map

Section G: Workforce Training

The City is in the process in identifying training for its Mechanics and Drivers. We are exploring options such as Vehicle Manufacturers and Bus Dealerships to provide ZEB maintenance and operations training.

Section H: Potential Funding Sources

Carl Moyer Program

The Carl Moyer Program offers grant funding for cleaner engines, equipment, and other sources of air pollution reduction. The City of Santa Fe Springs will be applying to the Carl Moyer grant funding for the purchase and installation of four dual port electric plug-in chargers.

Southern California Edison Ready Charge Program

The Charge Ready program supports businesses or organizations for installation of EV Charging Equipment. Public Sector Properties are eligible for two both the Charge Ready Program and the Charging Infrastructure and Rebate Program. The City is in the application process for these programs.

California Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)

The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) supports deployment of zero-emission and near-zero-emission technologies by facilitating point-of-purchase price reductions. The program is administered by CALSTART on behalf of California Air Resources Board (CARB).

AB2766 Air Quality Improvement Funds

The City of Santa Fe Springs receives a per capita allocation of vehicle license fees collected by the South Coast Air Quality Management District (AQMD). These funds are reserved for transportation projects and programs which reduce criteria air pollutants. The City intends to use these funds for the purchase of ZEBs as well as charging infrastructure.

Los Angeles County Local Transportation Sales Taxes

Los Angeles County has four sales taxes devoted to transportation. Part of each sales tax has a "local return" portion which is distributed to each city based on statute and population. The City plans on using these funds for capital and operations of the transit fleet.

Section I: Start-Up and Scale-Up Challenges

Resiliency Considerations

The City of Santa Fe Springs will also need to consider resiliency as it deploys BEBs. Because BEBs are reliant on electric charging, a power outage at the City yard may mean that it would not be possible to provide scheduled service for those who depend on it. In addition, in recent years, there have also been an increasing number of power shut-offs due to wildfire risk from high winds during the dry season and excess energy usage during heat waves. If these trends continue into the future, as expected, this will only exacerbate the need for the City to have a strategy to charge buses during power outages. The City of Santa Fe Springs will be exploring opportunities to install on-site solar photovoltaic panels to generate on-site power, as well as battery solutions for on-site energy storage. Grant opportunities cited in the above section could potentially be used to

fund such installations to augment the resiliency of The City of Santa Fe Springs transit program operations.

Cost Considerations

While BEBs have a higher purchase price than CNG or gasoline-powered vehicles, maintenance and fuel costs tend to be lower. However, due to the developing nature of the technology this, lower maintenance and fuel costs may not materialize as expected. Additionally, there are limited sources of funding for new capital expenditure. Much of the existing funding is programmed to capital, operations, and maintenance. One avenue of opportunity would be partnership or group application for small operators to seek additional funding.

Technological Maturity and Uncertainty

Cutaway BEBs are relatively new on the market, and their market may not be entirely mature in terms of product development. Their performance is also somewhat unproven. This may be mitigated with contract warranties and a planned spare ratio of 25%. However, performance issues could potentially lead to challenges with providing scheduled service.

RESOLUTION NO. 9863

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA FE SPRINGS
APPROVING THE ZERO-EMISSION BUS ROLLOUT PLAN**

WHEREAS, California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.3, Part 2023.1(d) Zero Emissions Bus Rollout Plan Requirements requires that a transit agency Zero-Emission Bus Rollout Plan must be approved by its governing Board; and

WHEREAS, Zero-Emission Bus Rollout Plan sets forth the City of Santa Fe Springs plan which meets the following requirements:

- A goal of full transition to zero-emission buses by 2040 with careful planning that avoids early retirement of conventional internal combustion engine buses;
- Identification of the types of zero-emission bus technologies Santa Fe Springs is planning to deploy;
- A schedule for zero-emission and conventional internal combustion engine bus purchases and lease options;
- A schedule for conversion of conventional internal combustion engine buses to zero-emission technologies;
- A schedule for construction of facilities and infrastructure modifications or upgrades, including charging, fueling, and maintenance facilities, to deploy and maintain zero-emission buses;
- Explanation of how the City of Santa Fe Springs plans to deploy zero-emission buses in Disadvantaged Communities;
- A training plan and schedule for zero-emission bus operators and maintenance and repair staff; and
- Identification of potential funding sources.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Santa Fe Springs hereby approves the City of Santa Fe Springs' Zero-Emission Bus Rollout Plan as set forth in Exhibit "A."

BE IT FURTHER RESOLVED that insofar as the provisions of any Ordinance, Resolution, document, or previous action of the City Council prior to the date of this Resolution, are inconsistent with the provisions of this Resolution or any policy adopted by this Resolution, this Resolution and the policies adopted herein shall control.

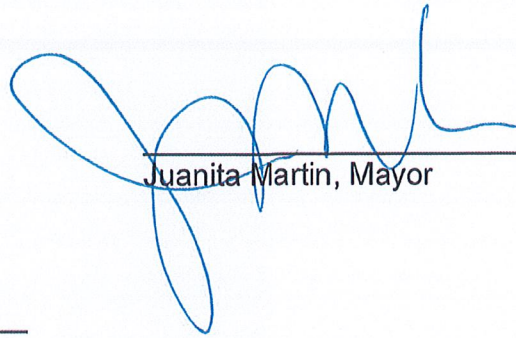
PASSED, APPROVED AND ADOPTED on this 6th day of June, 2023 by the following vote:

AYES: Councilmembers Rodriguez, Rounds, Zamora, Mayor Pro Tem Sarno, and Mayor Martin

NOES: None

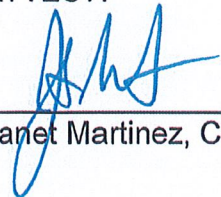
ABSENT: None

ABSTAIN: None



Juanita Martin, Mayor

ATTEST:



Janet Martinez, CMC, City Clerk