Montebello Bus Lines
Zero Emission Bus Rollout Plan

October 27, 2021

Montebello
BUS LINES

TABLE OF CONTENTS

SECTION A: Transit Agency Information

1. Transit Agency's Name	Montebello Bus Lines
2. Mailing Address	400 S. Taylor Ave Montebello, CA 90640
3. Name of Transit Agency's Air Districts	South Coast Air Quality Management District
4. Name of Transit Agency's Air Basin	South Coast Air Basin
5. Total Number of Buses in Annual Maximum Service	66
6. Population of Urbanized Area Transit Agency Services *(Last Published by the Census Bureau as of 2019)*	520,344
7. Contact Information	Adrianna Kendricks Acting Director of Transportation (323)558-1625 ext. 201 akendricks@cityofmontebello.com
8. Is your agency part of a Joint Group (13 CCR§2023.1 (d) (3))?	**Yes**☐ **No**☒

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 (13 CCR § 2023.1(d)(1)(A))?**

   Yes.

2. **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.**

   Montebello Bus Lines (MBL) will begin purchasing zero-emission buses (ZEB) in the first quarter of 2023, and gradually purchase additional ZEBs through 2040. This purchasing strategy will coincide with the disposition of conventional transit buses at the end of their lifecycle expectancy. MBL does not intend to acquire additional non-ZEBs after 2023.

3. **When did your transit agency's board or governing body approve the Rollout Plan?**

   a. Rollout Plan's approval date: 10/27/2021
   b. Resolution number: 21 - 80
   c. Is a copy of the board approved resolution attached to the Rollout Plan submitted to CARB (13 CCR § 2023.1(d) (2))? Yes

4. **Please provide contact information for CARB to follow up on details of the Rollout Plan, if needed.**

   a. Contact name: John Soria
   b. Title: Transit Administration Manager
   c. Phone Number: (323) 558-1625 ext.106
   d. Email: jsoria@cityofmontebello.com

5. **Who assisted in creating the Rollout Plan?**

   MBL staff worked with bus manufacturing consultants and representatives to create a customized plan that considers MBL's Current Bus Fleet Composition and Future Bus Purchases, Facilities and Infrastructure Modifications, Workforce Training, Potential Funding Sources, and Start-up and Scale-up Challenges.

SECTION C: Technology Portfolio

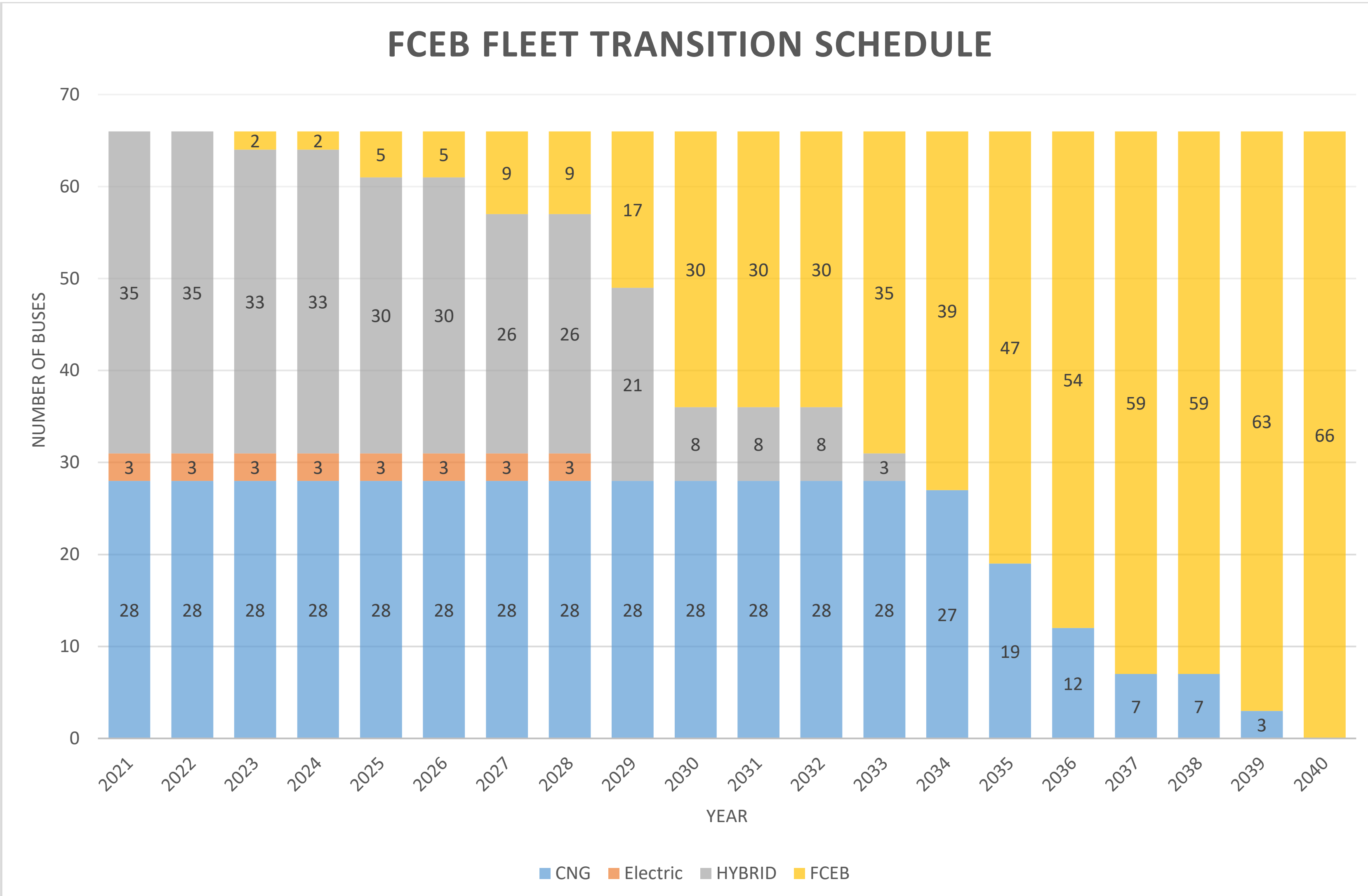
1. What type(s) of zero-emission bus technologies does your transit agency plan to deploy through 2040? (13 CCR § 2023.1(d)(1)(B))

MBL intends to deploy a complete fleet of Fuel Cell Electric Buses (FCEB). While Battery Electric Buses (BEBs) are also ZEBs with several notable configurations, MBL concluded that FCEBs are more efficient and better aligned with the transit agency's operational needs. Key considerations used to identify the preferred option were performance and ease of implementation. FCEBs can accommodate larger energy demands over the BEBs. In addition, FCEB technology is operationally flexible during power outages and rolling blackouts. According to bus manufacturer, New Flyer of America, Inc., FCEBs provide the following:

- Long-range transit services of 350 miles without refueling.
- Refueling process between 8 – 20 minutes.
- Increased bus life expectancy of 16 years (CNG – 12 years).
- Increased passenger load capacity of 82 (CNG – 62).

Further considerations were made regarding infrastructure needs for both types of ZEBs. Deploying an FCEB fleet will not require significant changes to the current infrastructure and will provide long term cost savings when compared to a BEB fleet. Figure 1 illustrates MBL's plan to achieve a complete FCEB fleet by 2040. The procurement of FCEBs and the gradual development of MBL's infrastructure to receive and support its new fleet will begin in 2023.

FIGURE 1: MBL's FCEB Fleet Transition Schedule Over the next 20-Year Period



SECTION D: Current Bus Fleet Composition and Future Bus Purchases

Please complete Table 1 with information on each individual bus in your current bus fleet.

Table 1 represents MBL's fleet as of the fourth quarter of 2021. Listed are vehicles that routinely operate in service, as well as a supporting contingency fleet.

TABLE 1: Bus Information for Current Bus Fleet

Series	Model Year	No. of Buses	Active/Non-Active	Bus Type	Engine Model Year	Engine Serial Number	Engine Model	Engine Family	Fuel Type
SR952	2005	3	NON-ACTIVE	New Flyer	2010	R07470255	FORD	5ISEC6.8HB	UNLEADED/HYBRID
SR1224	2008	11	ACTIVE	New Flyer	2010	R07721220	FORD	9ISEH06.8HB	UNLEADED/HYBRID
SR1224	2008	3	ACTIVE	New Flyer	N/A	N/A	N/A	N/A	ELECTRIC
SR1363	2009	8	ACTIVE	New Flyer	2010	R07443458	FORD	9ISEH06.8HB	UNLEADED/HYBRID
SR1362	2009	16	ACTIVE	New Flyer	2010	R07454955	FORD	9ISEH06.8HB	UNLEADED/HYBRID
SR1490	2011	3	ACTIVE	New Flyer	2010	73165084	ISLG 280	ACEZH0540LBD	CNG
SR1570	2011	4	ACTIVE	New Flyer	2011	73321795	ISLG 280	BCEXH0540LBG	CNG
SR1683	2013	8	ACTIVE	New Flyer	2013	73504250	ISLG 280	DCEXH0540LBG	CNG
SR2049	2016	7	ACTIVE	New Flyer	2016	74015640	ISLG 280	GCEXH0540LBG	CNG
SR2241	2018	5	ACTIVE	New Flyer	2018	74263223	ISLG 280	JCEXH0540LBM	CNG
SR2524	2020	1	ACTIVE	New Flyer	2020	74708434	L9N	LCEXHO540LBM	CNG

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 zero-emission buses 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, please identify the fuel type as hydrogen or electricity and the type of charging technology (depot, wireless, and/ or on-route). For conventional technologies, identify the fuel type as diesel, compressed natural gas (CNG), liquefied natural gas (LNG), diesel hybrid (dHEB), gasoline hybrid (gHEB), propane, or gasoline. (13 CCR § 2023.1(d) (1) (D))

Figure 2 illustrates a purchase forecast for MBL to acquire ZEBs while maintaining reliable service. The chart further demonstrates a projected schedule for MBL to fully convert to a ZEB fleet through procurement planning for future years. This process enables MBL to become familiar with the new technology and avoid service disruptions. In addition, the chart reflects the 12-year life span of the current fleet and the 16-year ZEB replacement plan beginning in 2023. Table 2 demonstrates MBL's commitment to a 100% ZEB procurement planning process beginning in 2023. Years in which buses are not purchased are omitted from the table.

FIGURE 2: MBL's Projected Annual FCEB Bus Procurement

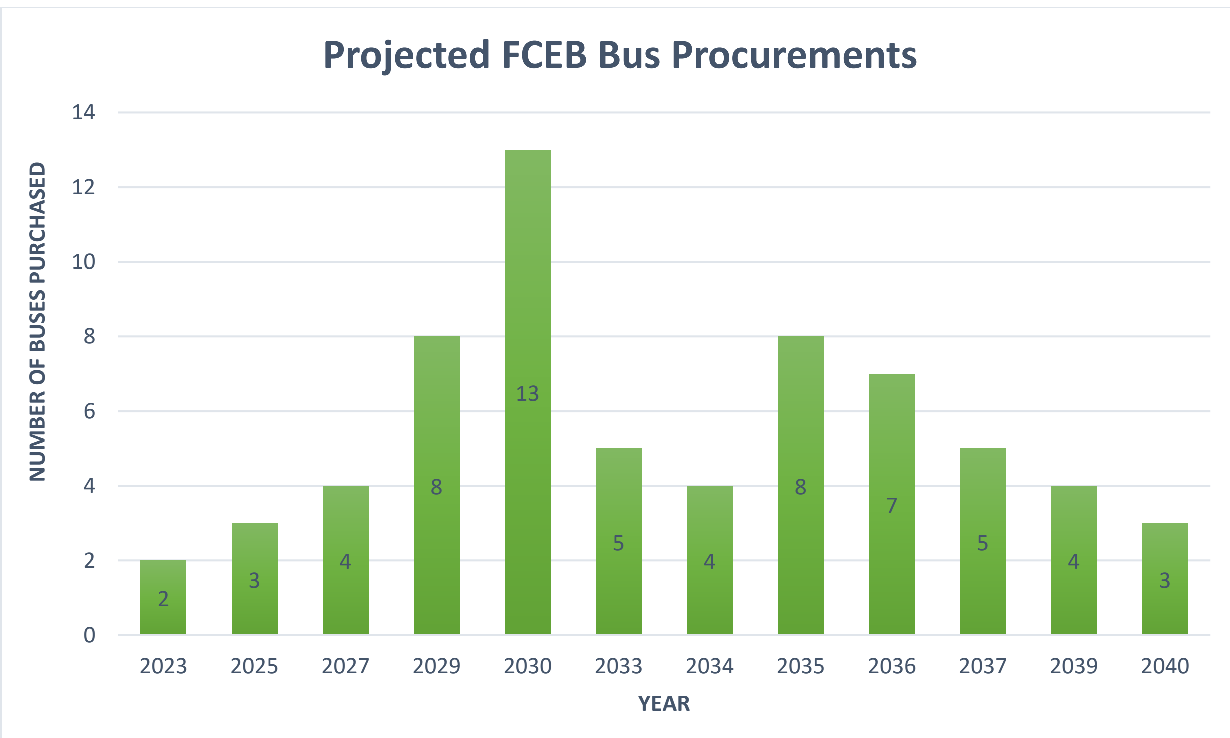


TABLE 2: MBL's Projected Annual Bus ZEB Procurement Details

Timeline (Year)	Total Number of Buses to Purchase	Number of ZEB Purchases	Percent of Annual Bus Purchases	ZEB Bus Type(s)/ZEB Fuel Type(s)	Number of Conventional Vehicles
2023	2	2	100%	40' Standard FCEB / Hydrogen	0
2025	3	3	100%	40' Standard FCEB / Hydrogen	0
2027	4	4	100%	40' Standard FCEB / Hydrogen	0
2029	8	8	100%	40' Standard FCEB / Hydrogen	0
2030	13	13	100%	40' Standard FCEB / Hydrogen	0
2033	5	5	100%	40' Standard FCEB / Hydrogen	0
2034	4	4	100%	40' Standard FCEB / Hydrogen	0
2035	8	8	100%	40' Standard FCEB / Hydrogen	0
2036	7	7	100%	40' Standard FCEB / Hydrogen	0
2037	5	5	100%	40' Standard FCEB / Hydrogen	0
2039	4	4	100%	40' Standard FCEB / Hydrogen	0
2040	3	3	100%	40' Standard FCEB / Hydrogen	0

Following the same bus purchase timeline as identified in Table 2, please identify in Table 3 the required operational range your future zero-emission buses should have to be able to serve in your fleet. Please provide the estimated cost of each bus with that required operational range.

Table 3 demonstrates consideration of the FCEBs achievable duty cycle and range based on the manufacturer's specifications. One of MBL's main reservations is the FCEBs ability to complete a full-service block without the need to refuel. An informal Line-by-Line analysis determined that the FCEB technology will generate adequate energy to provide reliable service for longer routes.

Within the first four years of the ZEB deployment, MBL will deploy nine FCEBs on three of its longest and busiest routes. In 2023, MBL will purchase two FCEBs to be deployed on Route 10. This route is approximately 13 miles in each direction with an average of six trips per day. Acknowledging the FCEBs 350 miles long-range capability, the buses will be expected to provide sufficient service without the need to refuel. After analyzing the performance of the first two FCEBs, MBL intends to deploy an additional three buses on Route 40 in 2025. The purchase and deployment of FCEBs on Route 10 and 40 will be to meticulously assess performance, efficiency, and identify any challenges. This strategic approach will assist MBL's scalability efforts during the transition process from conventional to zero-emission (ZE) transit buses.

Route 50 is MBL's longest route, covering 25.6 miles from 5th St/Beaudry Blvd to Adelfa Dr/Santa Gertrudes Blvd. While Route 50 is one of the most demanding and rigorous routes within MBL's system, MBL anticipates a 100% block achievability. Initially, MBL will deploy four new FCEBs on Route 50 and gradually increase the number of buses on route. Using the same methodology, MBL will purchase additional FCEBs to be deployed on the remaining routes: 20, 30, 60, 70, and 90.

Table 4 shows the average cost of ZEBs available for purchase using the Washington State Transit Bus Cooperative Master Contract. Although alternative pricing options are available on this Master Contract, the illustrated price is the current cost of a transit FCEB manufactured by New Flyer of America, Inc. Table 4 also depicts MBL's historic configurable options costs and the state sales tax.

TABLE 3: Verifying Block Achievability Throughout Fleet Transition

Timeline (Year)	Number of FCEBs in Fleet	Total Number of Active Buses in Fleet	Proportion of FCEBs in Fleet	Proportion of FCEB Achievable Blocks*
2023	2	66	3%	100%
2025	3	66	5%	100%
2027	4	66	6%	100%
2029	8	66	9%	100%
2030	13	66	14%	100%
2033	5	66	8%	100%
2034	4	66	15%	100%
2035	8	66	12%	100%
2036	7	66	11%	100%
2037	5	66	8%	100%
2039	4	66	6%	100%
2040	3	66	5%	100%

TABLE 4: Estimated Costs of Future ZEB Purchases

	40' BEB	***40' FCEB***
Average Bus Base Price from Washington State Contract	$805,000	$1,087,000
Estimated Cost of Configurable Option	$88,000	$88,000
Tax	10.25%	10.25%
Estimated Total Cost *	$984,533	$1,295,438

*Steady state pricing is assumed for modeling purposes. The general expectation is that but FCEB prices will fall, although there is not enough information to make a confident projection in future pricing.

Is your transit agency considering converting some of the conventional buses in service to zero-emission buses (13 CCR § 2023.1(d) (1) (E))?

N o

SECTION E: Facilities and Infrastructure Modifications

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. Please identify which facility(ies) require construction, infrastructure modifications, or upgrades to support your transit agency's long-term transition to zero-emission technologies and the estimated timeline for such an upgrade. Please also specify the type(s) of infrastructure planned in each division or facility and provide their service capacities (e.g., en-route high-power charging system to deploy 20 BEB in 2025). (13 CCR § 2023.1(d) (1) (C)).

In the initial 2-5 years of the ZEB deployment, MBL intends to lease a mobile FCEB fueling station as a temporary short term solution. MBL considers the mobile fueling station to be a more efficient, cost-effective, and convenient option, while slowly transitioning to this innovative technology. During this period, MBL will conduct extensive research, infrastructure master planning, and design to accommodate a permanent fuel station as illustrated in Appendix A. Hydrogen infrastructure costs include maintenance bay upgrades for H2 detection, ventilation systems, and the build-out of a hydrogen fueling station which includes design, construction, and equipment installation costs. Figure 3 identifies these costs and the related bus procurement costs associated with each project year.

Figure 3 illustrates the projected annual infrastructure cost from the commencement of the ZEB project through 2040. MBL estimates it will expend approximately $600,000 by the end of the initial 5-year period. This cost will include facility modifications, the mobile hydrogen fuel station, and training sessions for maintenance staff and first responders. The initial infrastructure builds also correspond to the annual bus procurement schedule in Figure 2.

FIGURE 3: Estimated Annual Infrastructure Costs

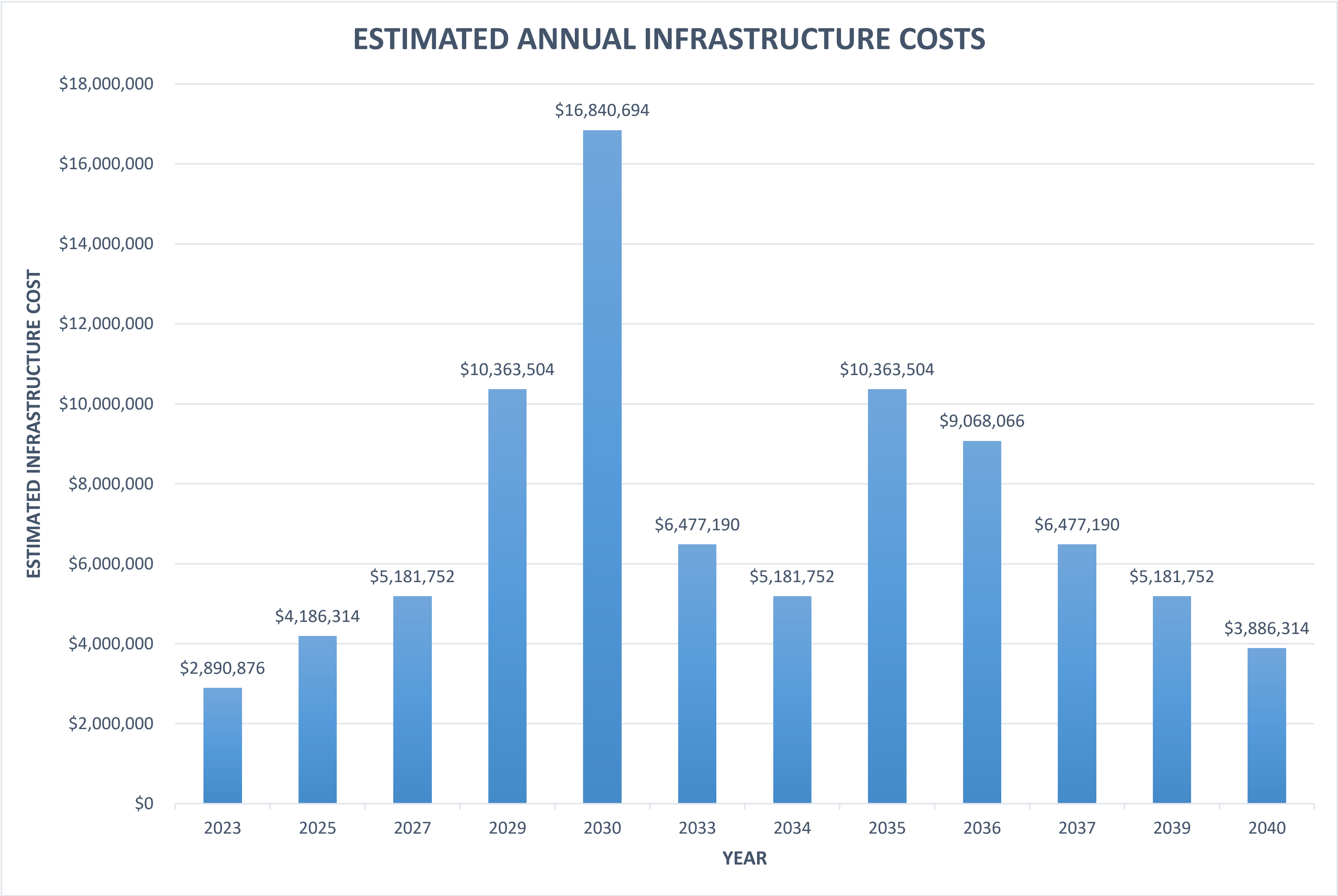


TABLE 5: Facilities Information and Construction Timeline

Division/ Facility Name	Address	Main Function(s)	Type(s) of Infrastructure	Service Capacity	Needs Upgrade?
MBL	400 S. Taylor Ave. Montebello, CA 90640	CNG, Hybrid, Electric, and FCEB Division	Hydrogen Fueling Station	70 Buses	Yes

Regarding the information provided in Table 5, please explain the types of necessary upgrades or infrastructure modifications each facility or division needs to support your transit agency's long-term transition to ZEB. Please also provide the specification of each infrastructure in the related facility or division before and after the upgrades or modifications.

To facilitate the transition from conventional CNG transit buses to a ZEB fleet, MBL plans to conduct extensive research analysis to better understand the functionality of a hydrogen fuel station, safety and security measures, related grid and utility functions, storage, compression, and ongoing maintenance and support mechanisms. In addition, MBL will incorporate the ZEB rollout plan into the agency's comprehensive operation analysis and short-range transit plan.

Do you expect to make any modifications to your bus parking arrangements? Explain the modifications and why they are needed.

An assessment of MBL's parking layout determined slight modifications to the parking lot design will be required. MBL will need to reconfigure the parking lot design to accommodate the hydrogen fueling station and provide designated parking areas for the FCEBs to refuel without disrupting the operation of the conventional bus fleet.

To optimize space, the parking area currently used to store the contingency fleet and surplus equipment will be converted to parking space for active buses. The intent of the parking lot redesign is to maintain an effective operational setup while transitioning into a ZEB fleet.

Do you expect to need additional parking spaces for completing the transition to zero-emission technologies? Explain why.

No. MBL has sufficient space to develop a hydrogen station infrastructure without encroaching on areas originally dedicated to bus parking.

In Table 6, please identify the propulsion system of all buses that will be dispatched from the facilities identified in Table 5.

TABLE 6: NOx-Exempt Area and Electric Utilities' Territories

Division/Facility Name	*Type(s) of Bus Propulsion Systems*	*Located in NOx-Exempt Area?*	*Name(s) of Electric Utility in Service Area*
MBL	CNG, Hybrid, Electric	No	Southern California Edison

Please identify the electric utilities in your transit agency's service area.

- Southern California Edison.

Note: The ICT regulation defines "NOx Exempt Areas" (13 CCR § 2023(b)(39)) as the following counties and air basins: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Eastern Kern (the portion of Kern County within the Eastern Kern Air Pollution Control District), Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Monterey, Nevada, Northern Sonoma (as defined in title 17, California Code of Regulations, section 60100(e)), Plumas, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz, Shasta, Sierra, Siskiyou, Northern Sutter (the portion of Sutter County that is north of the line that extends from the south east corner of Colusa County to the southwest corner of Yuba County), the portion of El Dorado County that is within the Lake Tahoe Air Basin (as defined in title 17, California Code of Regulations, section 60113), the portion of Placer County that is East of Highway 89 or within the Lake Tahoe Air Basin, Trinity, Tehama, Tuolumne, and Yub.

Section F: Providing Service in Disadvantaged Communities

Does your transit agency serve one or more disadvantaged communities, as listed in the latest version of CalEnviroScreen?

Yes.

If yes, please describe how your transit agency is planning to deploy zero-emission buses in disadvantaged communities (13 CCR § 2023.1(d) (1) (F)).

MBL operates a network of 8 fixed routes and provides service to 117 disadvantaged communities (DAC). Currently, MBL operates three conventional buses converted to ZE with the purchase and deployment of two FCEBs tentatively scheduled for the first quarter of 2023. Additional FCEBs will be purchased every other year through 2040. To avoid service disruptions, the procurement planning process and progressive deployment of the new fleet will coincide with the replacement cycle of older conventional transit buses. MBL envisions a fully functional ZEB fleet to service all 117 DACs beginning 2040 (see Appendix B).

Please complete Table 7 with the estimated number of zero-emission buses your transit agency is planning to deploy in disadvantaged communities and the estimated timeline

TABLE 7: Service in Disadvantaged Communities

MBL Route	Expected Year of First ZEB Deployment	Year of Complete Route Electrification	Location of Disadvantaged Community By Census Tract Number
10	2023	2037	06037482002 06037530400 06037482701 06037530301 06037531701 06037531702 06037532303 06037531800 06037531901 06037531902 06037530204 06037530102 06037530101 06037532001 06037532002 06037532101 06037500700 06037500600 06037500402 06037501001 06037501300 06037501002 06037501400 06037502100 06037504504 06037501804 06037501802 06037501900 06037501700 06037503301
20	2034	2037	06037481102 06037481202 06037481103 06037482301 06037482401 06037482402 06037530003 06037530005 06037530006

cont'd			06037500500 06037530102 06037530101 06037532101 06037532002 06037532200
30	2033	2033	06037481603 06037481604 06037530204 06037531902 06037531800 06037531902 06037532303 06037532304 06037533902 06037534001 06037534202 06037534203 06037534201 06037536102
40	2027	2030	06037209200 06037207301 06037207302 06037206031 06037203032 06037206050 06037204410 06037204420 06037204600 06037204700 06037204300 06037204120 06037203900 06037531101 06037531201 06037531102 06037531503 06037530500 06037531504 06037530400 06037531603 06037530301 06037530302 06037530204 06037530203 06037530102

cont'd			06037530006 06037530004 06037530101 06037500500 06037500600 06037500404 06037500402 06037500403
50	2025	2035	06037209200 06037207301 06037224010 06037224020 06037226001 06037203031 06037206050 06037205120 06037532400 06037532302 06037532303 06037532001 06037532200 06037500700 06037502500 06037502401 06037502301 06037502200 06037502302 06037502100 06037502700 06037502004 06037501803 06037501504 06037501400 06037501803 06037501804 06037502003 06037502902 06037503902
60	2036	2036	06037500404 06037500402 06037500403 06037500600 06037502401 06037502602 06037502601

70	2035	2035	06037530003 06037530005 06037530203 06037530204 06037530006 06037530102 03037531902 06037532001 06037532002 06037532101 06037532200
90	2036	2036	06037209200 06037207400 06037207301 06037207302 06037206031 06037206032 06037206050 06037204600 06037204700 06037204810 06037203900 06037531101 06037531201 06037531102 06037531503 06037531000 06037530500 06037530400 06037530301 06037530302 06037530204 06037530203 06037530102 06037530006 06037530005 06037530004 06037530003

SECTION G: Workforce Training

Please describe your transit agency's plan and schedule for the training of bus operators and maintenance and repair staff on zero-emission bus technologies (13 CCR § 2023.1(d)(1)(G)). (Required)

The transition to an all-ZEB fleet will significantly alter MBL's service and operations due to different maintenance needs, operational best practices, and the change in technology. The conversion to ZE from the existing traditional internal combustion engine is logistically complicated and will impact the operational organization. A comprehensive operational analysis will be conducted to restructure the appropriate prerequisite of critical knowledge, skills, abilities, and other characteristics (KSAOs) for management and training to comply with ZEB innovations.

Photo 1: Hydrogen Fuel Pump Station

The original equipment manufacturer (OEM) of ZEB equipment (e.g., bus, charge management software, battery charging equipment, etc.) will provide training, included as a deliverable on the procurement contract. Internal training courses conducted on an annual, semi-annual, tri-annual, and on an as needed basis includes: Operator Refreshing, Bus Familiarization, New Operator, and New Bus Training.

Photo 2: Fuel Cell Energy Bus Refueling

Bus Operator training incorporates pre-trip inspections, door operators, emergency equipment operator, steering, operational concerns, DMV pre-trips, bus components and other related bus functions, and operations technology. Maintenance mechanic training embodies imperative technical bumper to bumper training focusing on preventive maintenance, high voltage hazards, personal protective equipment (PPE), component training, lock-out/tag-out inspections, diagnostic/troubleshooting, and charging/refueling source training. Proficiency in high voltage safety and proper use of PPE is required to minimize the risk of electrical shocks and arc flashes. In addition to OEM and internal training, maintenance and operations personnel will be required to participate in the Southern California Regional Transit Training

Consortium (SCRTTC) and Arc Flash Electrical Safety National Fire Protection Association (NFPA) 70E courses.

Transit supervisors will work collaboratively with local first responders, such as the Fire and Police Department, to conduct training comprised of bus familiarization, energy storage systems, and emergency shutdown procedures.

Personnel and positions requiring retraining upon the adoption of the ZEB Rollout Plan include, but are not limited to, those listed in Table 8.

TABLE 8: Forecasted Personnel and Positions Training Requirements

Position	Required Training
Facilities Maintenance Staff	Scheduled/unscheduled maintenance and repair of high-voltage systems of ZEBs equipment
Mechanics	Safety-related features and other components of ZEBs equipment
Service Workers	Proper charging/refueling protocol and procedures of ZEBs equipment
Towing Service Providers	Proper towing protocol and procedures for of ZEBs equipment
Transit Supervisors	Operations and safety-related protocol and procedures of ZEBs equipment
Bus Operators	Safety-related & operational protocol and procedures of ZEBs equipment, Pre-Trip inspections, and pantograph operations.
First Responders	Proper safety protocol and procedures for ZEBs equipment in the event of an accident

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) (13 CCR § 2023.1(d) (1) (H)).

MBL currently receives funding for the procurement and maintenance of its fleet from the following federal grant programs: the Federal Transit Administration's (FTA) Urbanized Area Formula; discretionary grant programs such as the Bus and Bus Facilities (B&BF) program; and Low or No Emission Vehicle Deployment Program (LoNo).

To secure funds for future fleet procurement processes, MBL will seek additional funding from state resources through grant opportunities such as Senate Bill 1 – State of Good Repair (SGR) and the Low Carbon Transit Operations Program (LCTOP).

SECTION I: Start-up and Scale-up Challenges

Please describe any major challenges your transit agency is currently facing in small scale zero-emission bus deployment. (Optional). How might CARB assist you to overcome these challenges? Please share your recommendations. (Optional)

Please describe any challenges your transit agency may face in scaling up zero-emission bus deployment. (Optional) How might CARB assist you to overcome these challenges? Please share your recommendations. (Optional)

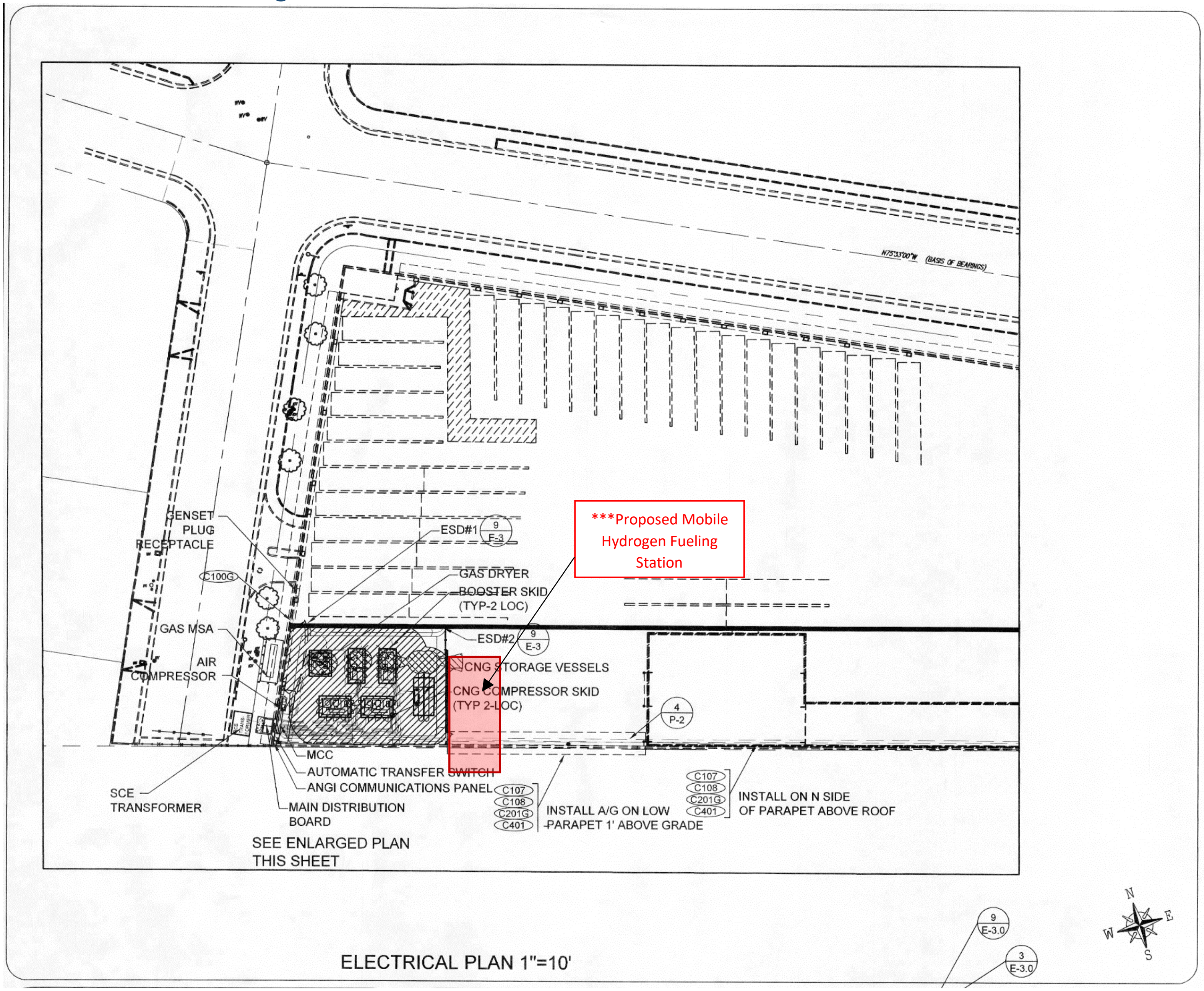
ZE technology is an innovative and progressive industry with significant unpredictable advancement challenges due to the developing nature of the unprecedented technology. These challenges pose a risk to transit performance, service reliability, capital, and operational and maintenance (O&M) costs.

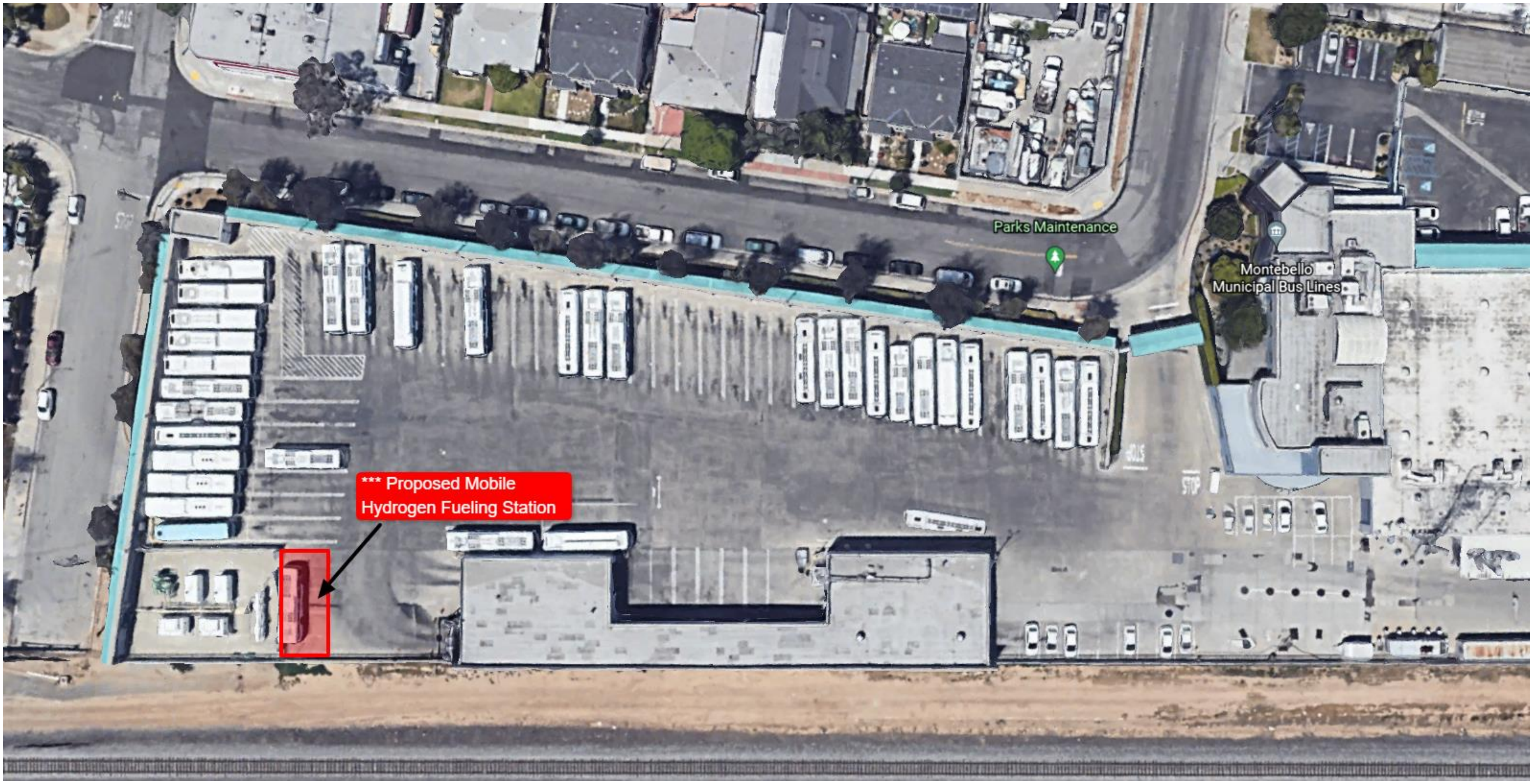
MBL has encountered multiple challenges since implementing the BEB Deployment Pilot Program in 2019. Major ongoing challenges with the deployment of ZEBs include OEM technical support and training, poor performance and range, high capital and O&M costs, funding, and facility infrastructure. The OEM technical support and training provided is insufficient to maintain and repair the BEBs. For each week of use, BEBs require a lead time of approximately three weeks for repairs due to the complexity of the electrical component. MBL's BEB fleet requires several hours to fully charge and suffers from underperforming batteries that are unable to attain the advertised range miles (265 miles per full charge) and lifespan. These BEBs attain 180 miles per full charge and the batteries self-discharge degraded more rapidly than the guaranteed expected shelf life. Consequently, battery replacements were accelerated at a high cost for replacement batteries and disposal fees. The high capital and O&M costs include, but are not limited to, electricity, towing services, proprietary products, software, and services associated with frequent equipment breakdowns. Deploying BEBs is not economically and operationally feasible for MBL's business operations. Correspondingly, MBL's historical records and experiences associated with ZEBs and ZE technology cast a long shadow of apprehension on the ZE industry.

The ZEB market value is notably greater than its alternative fuel counterparts, with an upward value of approximately $250,000. Additional upfront costs include a facility fuel infrastructure upgrade. CARB's influence in tax exemption, policy and law administration, and grant funding will help transit agencies adopt a ZE fleet with minimal setbacks.

Overall, MBL's current facility and infrastructure are not economically and operationally structured to support and sustain any ZEB deployment. MBL's present geographic footprint cannot accommodate expanding growth and requires innovative upgrades to the existing infrastructure. Therefore, any construction work will require a concurrent strategic plan that will not hinder daily operational activities. Funding sources are the most crucial component in executing any proposed project to support capital expenditures that account for the cost of assets, facility and infrastructure upgrades, O&M, workforce, and workforce training. CARB's presence as a central information system that provides and supports the latest research and development of ZEBs and ZE technology (e.g., ZEBs performances, O&M costs & labor hours, workforce training, OEM reports, etc.) can ensure transit agencies are retrieving the most current data and grant applications. The ZE industry is highly volatile, considering the fact that ZEB and ZE technology is progressively collecting new data and evolving from obsolete prototypes. Correspondingly, federal and state grant funding administers relief and mitigates the turmoil involved in the conversion to ZEBs and ZE technology.

APPENDIX A: MBL Site Renderings




Parks Maintenance
Montebello Municipal Bus Lines
*** Proposed Mobile Hydrogen Fueling Station
BUS
STOP

APPENDIX B: DAC and Low-Income Service Map