

Overview

LBT is committed to having a 100 percent alternatively fueled fleet. To ensure that LBT's commitment for an alternatively fueled fleet becomes a reality, the agency published a solicitation for a Request For Proposals (RFP) for Battery-Electric Buses (BEBs). The solicitation was for a negotiated procurement with qualified proposers.

An initial solicitation for an RFP for zero-emission buses was published on October 1, 2012, which resulted in a contract being awarded on April 29, 2013. On November 1, 2013, the Federal Transit Administration (FTA) informed LBT that the awarded contract had been deemed null and void. LBT and the previous contractor agreed to terminate the contract. That decision was ratified by the LBT Board of Directors on March 27, 2014.

Staff developed a detailed document that will allow for an alternate fuel concept, whereby a proposer is able to include innovative ideas in their response to the RFP. Such innovative ideas may reduce costs or provide other efficiencies, subject to LBT's review and acceptance. Proposals were received and evaluated. Staff drafted a recommendation to the Board for consideration on April 27, 2015.

Latest Board Actions

April 25, 2016: Authorized the President and CEO to enter into a contract with BYD Motors, Inc. (BYD) for the purchase of 10 BEBs, depot charging equipment, WAVE inductive charging system, oversight of construction, diagnostic tools, training and spare parts for a not-to-exceed cost of \$10,601,910, plus, authorization for an additional \$467,409 to address any unforeseen requirements, for a total authorization of \$11,069,319.

July 25, 2016: Authorized the President and CEO to enter into a contract with Fast-Track Construction Corporation (Fast-Track), for the design-build construction of the BEB station at the Long Beach Convention Center (Convention Center), for a total authorization amount not to exceed \$1,465,314.

September 26, 2016: Authorized the President and CEO to enter into a contract with Eco Energy Solutions, Inc., for the construction of an Electric Bus Charging Station and Parking Lot Improvements at LBT1 to support the 10 BEBs in production, for a total authorization amount not to exceed \$939,333.

Status

LBT has now received and accepted all 10 BEBs, which were placed in service in March 2017 and are currently deployed on LBT's Passport route.

Work was completed for charging depots which are operational.

The bus stop improvement project at the Long Beach Convention Center is scheduled to be completed in June 2018.

<u>Project Milestones</u>	<u>Planned</u>	<u>Actual</u>
Issued RFP 15-001	8/1/14	9/23/14
Pre-Proposal Conference Meeting	10/3/14	10/3/14
Questions Due	10/17/14	10/17/14
LBT Responses Due	10/29/14	10/29/14
RFP Closes, submittals due (extended by 2 weeks)	11/26/14	12/10/14
Contract Award	4/1/15	5/12/15
First Vehicle Delivered	1/1/16	3/07/16
All Vehicles Delivered	6/1/16	12/1/17
Contract Complete	9/1/16	TBD

Budget

This project, as a whole, is budgeted at \$14,577,767. It includes the purchase of up to 10 BEBs, up to two en-route charging stations, civil permits and construction necessary to modify a bus stop at the Long Beach Convention Center, and program management services to assist with project and post reporting for up to three years after implementation.

Overview

Long Beach Public Transit (LBT) operates a diverse fleet of 248 transit buses, including diesel, gasoline-hybrid electric, compressed natural gas (CNG) and battery-electric.

Gasoline-electric hybrid buses are no longer manufactured, thus leaving CNG and battery-electric technologies as LBT's bus fleet options.

As of May 2018, LBT has replaced 10 diesel buses with Battery-Electric Buses (BEBs) and 23 diesel buses and seven gasoline-electric hybrid buses with CNG buses.

LBT has an additional 89 buses eligible for replacement between 2019 and 2021.

Below is LBT's current five-year fleet replacement plan:

Bus Type	2017	2018	2019	2020	2021
30' BEB			20	10	10
40' BEB	10		10	24	15
40' CNG		40			
Total	10	40	30	34	25

Latest Board Action

January 25, 2016: Authorized the President and CEO to enter into a contract with New Flyer for a total of 129 buses that include the base year purchase of 40 CNG buses and to preserve options for an additional quantity of up to 89 replacement buses over the four option years ending in 2021.

Status

Staff is currently pursuing an alternative option in lieu of proceeding with exercising the aforementioned 89 replacement CNG buses with New Flyer. An RFP is currently being developed for 30-foot and 40-foot BEBs.

Rather than exercise remaining options with New Flyer for additional CNG's, LBT will expand its BEB fleet at LBT 1 via a new RFP for 89 replacement buses and options for up to 11 expansion buses. This RFP will be for a five-year term and include a mix of vehicle lengths (i.e., 30, 35 and 40 foot). The RFP will be issued in mid-2018 and a recommendation will go to the Board for consideration in early 2019.

Once LBT replaces 89 buses, all buses at LBT1 will be electric. Beginning in 2024, CNG buses at LBT2 would be eligible for replacement.

<u>Project Milestones</u>	<u>Planned</u>	<u>Actual</u>
Board Approval	1/25/16	1/25/16
New Flyer CNG – 1 st (of 40) Vehicles Delivered	8/11/17	7/28/17
New Flyer CNG – 39 buses – Base year Delivery	4/20/18	6/30/18
Project Closeout	7/27/18	TBD

Below are the anticipated milestones for LBT’s BEB expansion:

Year	Milestone
2019	<ul style="list-style-type: none"> • Production and delivery of two pilot buses of varying length • Production of 20, 30-foot buses and 10, 40-foot buses (30 total buses)
2020	<ul style="list-style-type: none"> • Production and delivery of 34 buses of varying length
2021	<ul style="list-style-type: none"> • Production and delivery of 25 replacement buses of varying length
2021–2023	<ul style="list-style-type: none"> • Up to 11 optional buses for service growth

Budget

Budget totals \$23,212,920 for the replacement of 39 40’ CNG buses and one expansion CNG bus that was funded by the federal Job Access Reverse Commute (JARC) grant that enabled LBT to expand Route 1 in August 2015.

The budget includes monies for replacement vehicles, training, maintenance equipment, spare components, in-line and post-delivery inspections.