



Massachusetts Bay Transportation Authority

Bus Overhaul Program

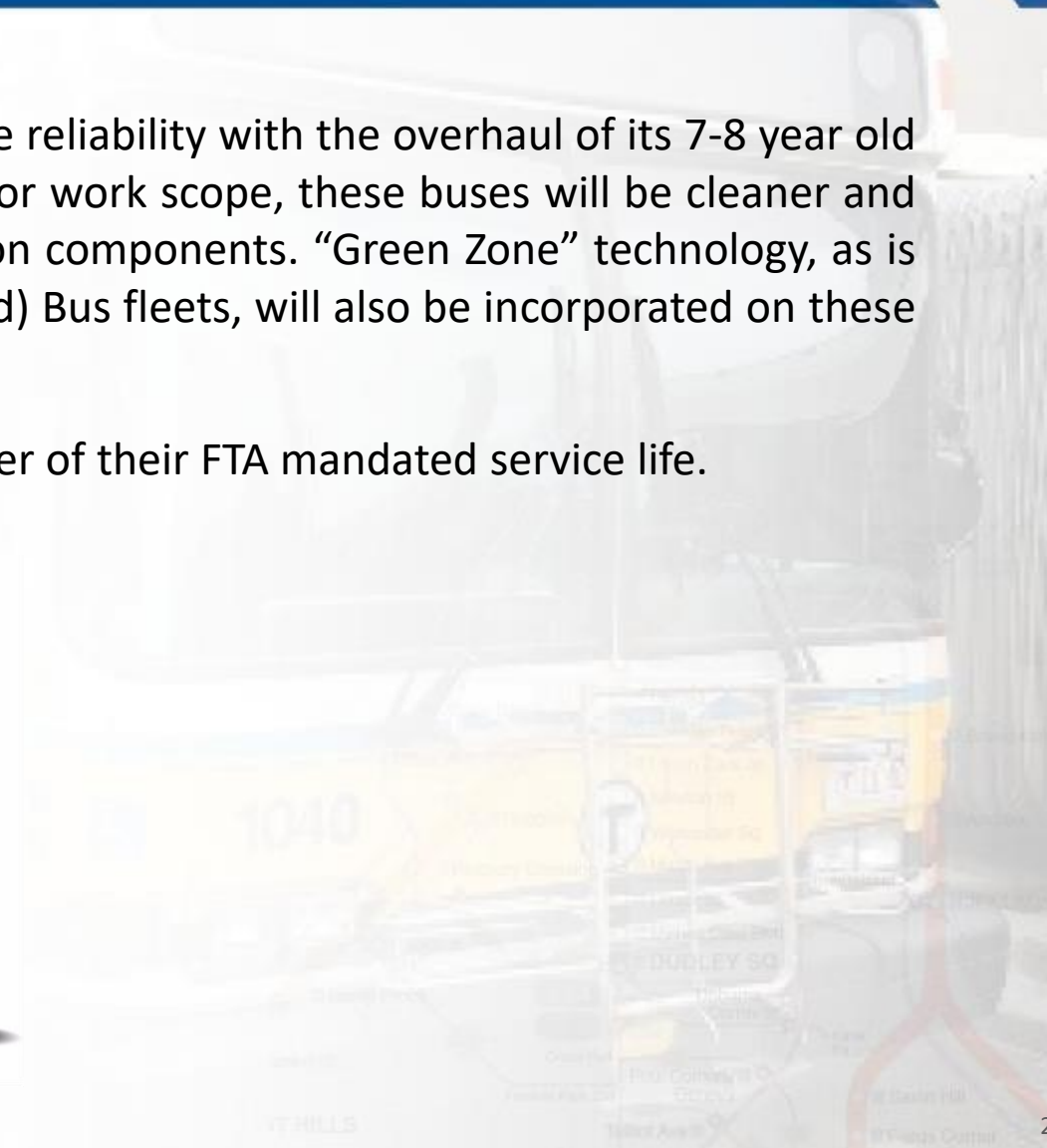
*RFP No. 142F-20 Recommended Award for Overhaul of
60 New Flyer Forty-Foot Hybrid Buses*

▪ May 26, 2022

Introduction

The MBTA is continuing its focus on fleet improvement and overall service reliability with the overhaul of its 7-8 year old New Flyer Hybrid Bus fleet. In addition to the specific interior and exterior work scope, these buses will be cleaner and quieter through the replacement and upgrade of propulsion and emission components. “Green Zone” technology, as is being implemented on the Authority’s new EEH (Enhanced Electric Hybrid) Bus fleets, will also be incorporated on these overhauled vehicles.

The overhaul of 60 New Flyer Hybrid Buses will ensure a reliable remainder of their FTA mandated service life.



Procurement and DBE Participation

Contract:

- Up for award is the overhaul of 60 Forty-Foot Hybrid Buses including Options 1, 2, 4, and 5

Procurement Timeline:

- The MBTA issued Request for Proposal (RFP) No. 142F-20 on January 12, 2021
- Pre-Proposal Meeting was held on January 26, 2021
- Contractor selection was made in April 2022
- Presentation to the MBTA Board on May 26, 2022

DBE Participation:

- The DBE participation goal (17%) was met by Midwest Bus Corporation (MBC)

Bus Overhaul Timeline:

- Anticipated Contractor Notice to Proceed (NTP) in June 2022
- Pilot bus delivery to occur no later than 22 weeks from Contractor NTP
- Serial Production buses shall be delivered at a rate of 1.5 buses per week, with the final bus delivered in 2023

Overhaul Program Work Scope

These buses are currently 7-8 years old and require overhaul of major systems and components to ensure continued safe and reliable operation, and to meet FTA service life requirements

Base Work Scope:

- Refurbishment or replacement of major systems and components, including:
 - Cummins ISB 6.7L engine
 - BAE hybrid drive system
 - ADA accessibility ramp
 - Axles, brakes, and suspension
 - HVAC
 - Body / side impact panels
 - Floor covering
 - Underbody corrosion protection

Optional Work Scope (to be performed concurrently with Base Work Scope):

- Option 1 – Additional Corrosion Protection Application
- Option 2 – Engine (Cummins) Extended Warranty
- Option 4 – New Destination Signs
- Option 5 – Increased Capacity Energy Storage System with Geofencing



Overhaul Benefits and Emissions Reduction

- As part of this overhaul, Option 5 calls for the installation of a larger capacity Energy Storage System (11.2-kWh to 32-kWh) with added “Green Zone”, “Start / Stop”, and “Arrive and Go” capabilities. Together, these improvements will allow the fleet to operate in an engine off mode, improving fuel efficiency and eliminating emissions during that time
- **“Green Zones”** are a newer feature implemented on MBTA hybrid buses that allow selective engine-off operation. Extended operation with engine-off allows for increased fuel efficiency and reduced emissions
- **“Start / Stop”** and **“Arrive & Go”** features turn the engine off when in traffic and at traffic signals, as the bus slows to a stop, and in low speeds after stopping



Illustration of Green Zones

Recommended Award: Midwest Bus Corporation

Following negotiations and receipt of Best and Final Offers, Midwest Bus Corporation's Proposal was determined to provide the best value to the Authority

- Midwest Bus Corporation (MBC) has successfully completed three (3) bus overhaul programs for the MBTA totaling over 450 buses since 2009 and numerous projects for other transit providers
- The Authority is satisfied with MBC's proposed management team, production schedule, and the previous quality of work
- MBC's pricing for the overhaul of 60 buses including Options 1, 2, 4, and 5 is fair and reasonable

Board Vote

Vehicle Engineering requests that the MBTA Board of Directors authorize the General Manager & CEO, or his designee, to award and execute Formal Contract No. 719 to Midwest Bus Corporation (MBC), for the overhaul of 60 New Flyer forty-foot Hybrid Buses, including contract Option 1 (Additional Corrosion Protection Application), Option 2 (Engine Extended Warranty), Option 4 (New Destination Signs), and Option 5 (Increased Capacity Energy Storage System with Geofencing), for a total delivered amount **not to exceed \$36,594,263.40**