

Electric School Bus Deployment at Boston Schools

This profile reflects the electric school bus deployment experience and perspective of Boston Public Schools in Massachusetts.

Overview

Boston Public Schools (BPS) has made remarkable and swift progress in electrifying its school bus fleet, rolling out 40 electric school buses since 2023. By the end of 2025, they will more than double their electric school bus fleet to 94. Their implementation has been going well and more smoothly than initially anticipated.

The fleet currently includes a diverse mix of electric buses to meet the district's operational needs. At the start of the 2025-26 school year, BPS operates Blue Bird buses including: 38 Blue Bird Type-C buses (155 kWh), 1 Blue Bird Type-C bus (196 kWh), 3 RePower retrofitted

Contact	Jackie Hayes, Deputy Director, Department of Transportation
District Size	125 BPS schools, 105 out-of-district schools
Student Population Transported	22,000 students
Bus Fleet	750 buses

short 30-passenger Blue Bird Type C buses (120 kWh), 35 Blue Bird Type-C buses (194 kWh), and 34 Blue Bird short 30-passenger Type-C buses (140 kWh).

Charging Infrastructure

To support their electric fleet, BPS builds EV chargers ahead of bus deliveries. BPS currently has 100+ chargers installed, including:

- Several L2 chargers attached to maintenance garages and other opportunistic locations
- 30-kW DC wallbox chargers on pedestal mounts with above-ground conduit raceway
- 60-kW DC wallbox chargers on concrete k-rail base with above-ground conduit
- 60-kW and 120-kW DC all-in-one chargers with below-ground conduit trench
- 600-kW power cabinets with 10 microdispenser mini plugs with k-rail base for above ground conduit

The chargers as well as the buses are owned by the City of Boston and operated by a single contractor. BPS uses **Synop** for their charge management software. Although the school district does not yet have renewable energy infrastructure installed, they are working toward it. **Eversource** is the district's electric utility providing power for the fleet.

Funding Sources

The school district's pilot electric buses were purchased with local city funds in 2023. The chargers and installation for that same pilot were funded with American Rescue Plan Act of 2021 (ARPA) funds. The second installation that followed the pilot was funded through a combination of Eversource Make Ready funding, ARPA funds and local city fleet funding. The district is currently waiting for new buses which have been funded with federal EPA Clean School Bus Program funds and Clean Heavy Duty Vehicle Program funds combined with local state funds.

Motivation

Boston Public Schools pursued electric school buses to support student success, promote healthy development and maximize learning time.

Implementation Challenges

 Building trust was a challenge in some cases. It was important to take the time to listen and work through the hesitations of teammates.

Community Benefits

- A better student experience and improvements in health due to less vehicle noise and vibration
- 2. **A better driver experience** thanks to quieter and smoother rides with calmer students
- 3. Ease and simplicity of maintenance

"Keep it simple! Move slow, steady, and intentional."



 $- \, {\sf Jackie\, Hayes, \, Deputy \, Director, \, Department \, of \, Transportation, \, Boston \, Public \, Schools}$



