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Customer profile

Brockton Area Transit Authority

Brockton, MA

Driving community sustainability through fleet electrification

Since 1974, the Brockton Area Transit Authority (BAT) has provided innovative transportation solutions to connect Boston's Central Business District with neighboring communities. Playing a vital role in the region's economy and accessibility, BAT's 12 fixed routes run in and out of major industrial parks, colleges, medical facilities, shopping centers, and commuter rails.

In addition to providing safe, reliable, and efficient services to customers, clients, and communities, BAT strives to secure a more sustainable future for the region. From solar panels on its parking garages to water bottle filling stations, LEDs, and smart heating and cooling systems throughout its buildings, BAT has made numerous efforts to reduce its environmental footprint and align with Massachusetts' climate initiatives.

BAT also has set ambitious goals to reduce carbon emissions and modernize its fleet to electric vehicles (EVs). **By partnering with National Grid and ICF through the Massachusetts Fleet Advisory Services Program, BAT has received technical assistance, infrastructure incentives, and operating cost support to lay the groundwork for a cleaner, more sustainable transit system.**

The opportunity

With over 100 vans and buses in its fleet, vehicles are BAT's biggest investment – and greatest opportunity for reducing its energy use. Administrator Mike Lambert says that when BAT adds new vehicles to its fleet, it tries to prioritize eco-friendly options that benefit the entire region.

"Asthma is a big problem here … so, our ability to reduce our emissions matters," says Lambert. **"EVs are quieter, cleaner, and have better acceleration. They offer ongoing operational savings too, so upgrading makes a lot of sense."**

Through National Grid's Fleet Advisory Services Program, ICF conducted a complete fleet assessment for BAT, which helped to determine project scope, along with estimated costs and projected savings. "ICF took a detailed look at our fleet replacement plan, the makeup of our non-revenue and paratransit fleets, and the different route segments we operate," says Lambert. The assessment helped BAT strengthen its funding applications and build political support.

"The support from National Grid and its partners has been instrumental in helping us navigate the transition to a greener fleet," says Lambert. "They gave us the confidence to move forward with electrification without disrupting our operations."

The solution

National Grid's Electric Vehicle Make-Ready Program covers up to 100 percent of the costs associated with electric infrastructure for approved EV projects. **Through the program, BAT received $723,000 toward its project costs.**

In June 2024, BAT added five GILLIG 35-foot battery electric transit buses, along with electrification infrastructure that includes five dual-port, 200 kW charging stations with 10 charging ports, and two mobile chargers. "This allows us to charge the vehicles while they're being maintained, plus we can double up with charge management software in the future," says Lambert.

The financial incentives from National Grid, along with state and federal funding, helped to make the electrification upgrades more affordable. "There's simply no more important partner in all this than National Grid," says Lambert. "The resources they had available are still critical to this day."

National Grid's Fleet Off-Peak Charging Program provides a utility bill credit when the buses charge during off-peak hours, and its Demand Charge Alternative Program provides up to 100 percent discounts on demand charges for low-utilization sites. **BAT enrolled in both programs and can expect to save thousands of dollars per month, while lowering its operational cost per mile.**

> **"We've always looked for ways to be a good environmental partner with the city and with our community. The financial incentives that National Grid makes available really cement the deal."**
>
> Mike Lambert, Administrator
> Brockton Area Transit Authority

The results

By replacing its five diesel buses with electric transit buses, BAT expects to save $979,600 in fuel costs and $633,140 in maintenance expenses over the projected 12-year lifetime of the vehicles. By enrolling the buses in National Grid's Fleet Off-Peak Charging Program, BAT moved nearly 75 percent of its 48 MWh of charging to off-peak hours, **saving over $1,000 in electricity costs in less than three months.**

The transition also helps reinforce BAT's commitment to sustainability by improving air quality across its service area. The agency will remove about 425,700 gallons of diesel fuel, eliminating 4,340 metric tons of CO_2 emissions.

For customers, this means more of the safe, reliable service they've come to expect from the regional transit authority. "Our customers are just worried about getting to work or an appointment on time," says Lambert. "Hopefully they won't notice a difference at all."

BAT is on pace to complete 4 million passenger trips this year and is actively expanding its electric bus fleet in partnership with National Grid. As part of its ongoing commitment to cleaner, more sustainable public transportation, BAT aims to purchase two 40-foot battery electric buses, then pursue more electric options.

Project profile

Total project costs:

$2.4 million
in infrastructure

$5.1 million
from the Capital Investment Program supported the purchase of the first five buses

Incentives received:

$10.5 million
in additional funding from the Federal Transit Administration's Low or No Emission Grant Program to cover the second wave of seven additional electric buses and charging infrastructure

$723,000
from National Grid's Fleet EV Charging Program

Up to
100%
discounts
on demand charges through National Grid's Demand Charge Alternative Program

Off-peak electricity rebates of
>$1,000
per quarter from National Grid's Fleet Off-Peak Charging Program

Learn more about National Grid's EV program at **ngrid.com/ma-evcharging**

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