

Eye-popping cost of MBTA's new Quincy bus garage outpaces similar projects in US and Canada

By **Taylor Dolven** Globe Staff, Updated April 20, 2022, 2 hours ago



The former site of a Lowe's is where the T is building its new Quincy bus garage. MATTHEW J LEE/GLOBE STAFF

In 2017, the MBTA said it expected to spend [\\$808 million](#) to modernize or replace its nine aging bus garages. Five years later, the agency now says that just the first of those projects, replacing the century-old garage in Quincy, will eat up half that amount — an eye-popping [\\$402.1 million](#).

The price tag for the new 120-bus maintenance and storage facility, scheduled to open in 2024, exceeds the budgets of similar projects completed or underway in other US and Canadian cities, a Globe review found. And the projected cost raises questions about whether the cash-strapped agency will be able to upgrade its remaining eight garages to achieve its goal of switching from fossil fuel to battery-electric buses, a key component of the state's climate plans.

The Massachusetts Bay Transportation Authority has a history of ballooning budgets and delays for large transit projects. In 2015, the state nearly scrapped the Green Line Extension, first promised in 1990, because the cost of the project had exceeded \$3 billion, but then revised the scope of construction. The T's new fare collection system, now expected to be completed in 2024, is years behind schedule and will cost far more than what New York City's transit authority paid for a similar system, [WCVB found](#).

When it opens, the MBTA's new 360,000-square-foot, three-story facility in Quincy will be the largest enclosed fully electric-bus garage in the United States, the agency said. The new facility is much needed; many of the MBTA's buses don't fit in the existing garage, and none of its facilities are equipped to charge a large fleet of battery-electric buses.

But the new garage, fêted at a groundbreaking earlier this year by Governor Charlie Baker and other top officials, will come at an only-in-Massachusetts cost: about \$3.4 million per bus.

For comparison, Montréal's transit authority said it is building an all-electric 250-bus facility for roughly \$420.7 million, or \$1.68 million per bus, that it expects to be completed next year.



State House Speaker Ronald Mariano, US Representative Stephen Lynch, Lieutenant Governor Karyn Polito, Governor Charlie Baker, MBTA General Manager Steve Poftak, Quincy Mayor Thomas Koch, US Senator Elizabeth Warren, state Transportation Secretary Jamey Tesler, and others threw some dirt at a groundbreaking ceremony for the Quincy bus garage. DAVID L. RYAN/GLOBE STAFF

The T, for its part, said its Quincy garage is pretty much incomparable, given the agency's operations and the uniquely pricey nature of building in eastern Massachusetts. The agency said the Quincy garage is so unique that its experts found it difficult "to obtain sufficient information on program specifics and breakdown of total project costs to support an appropriate apples-to-apples comparison."

The new facility — on the site of a former Lowe's on Thomas Burgin Parkway — will have rooftop solar panels, locker and training rooms, bike storage, and T offices, in addition to bus charging and maintenance space. The MBTA initially plans to house 45 new battery-electric buses and around 45 of the agency's diesel buses there, according to spokesperson Joe Pesaturo. In 2025, the MBTA anticipates purchasing 75 more battery-electric buses to replace the diesel ones.

The total price of the Quincy project included in the MBTA's [recently released five-year spending plan](#) is \$20 million higher than it was in the [agency's spending plan](#)

opening plan as \$30 million higher than a 2017 MBTA opening plan
published just a year ago. In a budget breakdown of the earlier, lower cost provided by Pesaturo, construction was the largest expense at \$210 million, including \$30 million for battery electric charging equipment, plus a \$42 million contingency, followed by the real estate acquisition at \$44 million.

Pesaturo declined to provide a breakdown of the newer, larger budget.

All in all, the MBTA plans to spend \$3,350,833 per bus on the Quincy garage, more than projects similar in size and specifications elsewhere.

Pesaturo cited several specific factors that contribute to the higher costs: electrical work such as a switching station and duct banks, equipment to support a full battery-electric bus fleet, additional square footage to allow for counterclockwise circulation to support worker safety and operational efficiency, labor given the high cost of living in Boston, administrative costs, current cost volatility, and supply chain issues.

Also, Pesaturo said the MBTA bus system carries more passengers per mile than most other systems in the country, creating more wear and tear on its buses and reducing downtime for maintenance.

“This in turn can lead to design choices to optimize efficiency for our maintenance staff given the high volume of work they complete — all in support of keeping our employees safe and bus service reliable for MBTA passengers who rely on it — which contribute to higher costs,” he said in a statement.

The total cost of replacing all nine garages will likely be higher than the 2017 MBTA estimate of \$808 million because that was made before any design work on the facilities, Pesaturo said, and did not include “today’s level of construction cost volatility and supply chain issues.”

The Globe requested full budget breakdowns from eight transit agencies across the United States and Canada that have recently completed or are working on large bus

facilities: LA Metro, Metro Transit in Minneapolis–Saint Paul, Société de transport de Montréal, Pioneer Valley Transit Authority, TransLink in British Columbia, Metropolitan Transportation Authority in New York, Metropolitan Atlanta Rapid Transit Authority, and Washington Metropolitan Area Transit Authority.

Some facilities have differences that experts said could explain their lower figures. For example, Atlanta's transit authority could only provide the cost of construction, \$116 million, for its 250-bus Clayton County facility planned for completion in 2026 and has not yet determined how many of the buses there will be electric. Meanwhile, a bus facility in Los Angeles County is partially outdoors.

Some garages include office space, like the MBTA's, while others are strictly for bus storage and maintenance. The size of buses stored at a facility can also impact its cost per bus.

But some facilities are more closely comparable.

In Minneapolis, Metro Transit said it is completing a 200-bus facility for \$163.6 million, or around \$818,000 per bus, next year. When it opens, the garage will be able to accommodate eight battery-electric buses, fewer than the MBTA's, and will be outfitted for more electric capacity over time, a spokesperson said.

The second-largest transit agency in Massachusetts, the Pioneer Valley Transit Authority opened a 130-bus facility in Springfield in 2019 that it built for \$63.35 million, or around \$487,286 per bus, according to administrator Sandra Sheehan. Ten battery-electric buses are stored there now.

Pesaturo said several issues, including that these facilities are not fully electric, make them too different to compare.

"We do not view those bus operations or the referenced facilities as ideal comps for an MBTA bus facility," he said in the statement.

The project closest in budget to the MBTA's Quincy garage the Globe reviewed is DC Metro's planned 150-bus Northern Bus Garage. [WMATA plans to spend \\$471.2](#) million, or around \$3.14 million per bus, to rebuild the 114-year-old depot to accommodate electric buses by 2026, according to its most recent capital investment plan.

However, at 600,000 square feet for bus storage and maintenance, according to a spokesperson, the WMATA facility is much larger than the 360,000-square-foot Quincy garage.

The MBTA is not the first agency to invest in electric charging infrastructure for its bus fleet. King County Metro Transit in Washington state recently [opened a facility](#) that can charge up to nine battery-electric buses at one time. The Antelope Valley Transit Authority in California was the first to go [fully battery-electric](#) in the United States, with a [charging depot for its 57 buses](#). Metro Transit in St. Louis recently outfitted a garage with charging equipment for 24 battery-electric buses.

Taulby Roach, chief executive of Bi-State Development, which oversees Metro Transit in St. Louis, said the charging infrastructure cost around \$5.5 million, and the local utility company spent an additional \$1 million on a substation to make sure there would be enough power.

When you're on the "cutting edge" of the market, costs can be higher, Roach said, and it's important to remember the benefits that will come from these large investments.

"Sometimes the value should be the driver," he said. "Our end product is not to make money, it is to deliver service. There's no question that an electric fleet will improve quality of life within a metro area."

Transit agencies often review the costs and specifications of similar projects to determine how to most efficiently complete their own, said Brian Lamb, former Metro Transit general manager in the Minneapolis–Saint Paul area.

The MBTA has not yet provided records the Globe requested on Feb. 15 for its analysis of comparable projects for the Quincy garage. Pesaturo, in his statement, said the MBTA had phone conversations with transit agencies in Minneapolis, Washington, D.C., Chicago, Seattle, and New Jersey about specific projects and bus electrification.

Kevin Desmond, former chief executive of TransLink, said there are a host of factors that can escalate the cost of a bus facility project like the one in Quincy, including making it entirely enclosed, real estate costs, required environmental mitigation, permitting fees, added amenities, and the infrastructure needed to perform heavy bus maintenance.

On its face, the price of the Quincy garage is high, Desmond said. Having enough trained people inside the agency dedicated to procurement and efficiency is key to keeping costs in check, he said.

“An agency that is very skilled and experienced in doing major capital projects should have a good capital engineering department and a good procurement department that puts together thoughtful procurement documents,” Desmond said.

In Massachusetts, the transportation sector accounts for the [largest portion of the state's emissions](#), and electrifying and building more public transit is central to the state's goal of achieving net-zero emissions by 2050.

For the Green Line Extension project — budget: \$2.3 billion — MBTA program manager John Dalton said the T formed a transit agency within a transit agency, dedicated entirely to getting the project done on budget after the state nearly scrapped it in 2015 when costs ballooned. Baker and MBTA general manager Steve Poftak have repeatedly credited this model with keeping the project on track.

The bus facility projects are being handled by MBTA staff who are overseeing other projects simultaneously.

That troubles advocates, who hope the MBTA can find a more efficient way to build the

next garage on its list: Arborway, a 200-bus facility in Jamaica Plain it plans to complete in 2027.

A dedicated team is needed here, said Jarred Johnson, executive director of the advocacy group Transit Matters, as the MBTA develops budgets for its next eight garages.

“I would love a scenario where the bus transformation office is doubled and there’s one person whose job it is to look at cost control,” Johnson said. “What lessons are you taking from this into Arborway? What does that pathway look like to getting to do these garages cheaper?”

Pesaturo said the MBTA does not expect to need to create a separate entity for the bus projects.

The MBTA is [accepting bids from construction companies](#) for the Quincy garage until May 5. The agency has not yet determined budgets for the Arborway garage or the overhaul of its 35-bus North Cambridge garage that it plans to complete next year. After that, the MBTA plans to build a 200-bus facility in Wellington by 2029 and a 65-bus facility in Lynn by 2030, and then rebuild its Cabot, Charlestown, Southampton, and Albany facilities.

“There’s been a tremendous amount of focus on the buses; there’s been a lot less focus on the facilities you actually need to maintain and operate them and repair them,” Baker [said at a news conference following the Quincy garage groundbreaking in February](#). “We have a pretty decent track record of coming in at or below budget on most of our capital programming at the MBTA, and I expect this one will be consistent with that as well.”

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