massDOT
Massachusetts Department of Transportation

Honorable Brendan Crighton
Chair, Joint Committee on Transportation
State House, Room 109-C
24 Beacon Street
Boston, MA 02133

Honorable Michael J. Rodrigues
Chair, Senate Committee on Ways & Means
State House, Room 212
24 Beacon Street
Boston, MA 02133

Honorable James Arciero
Chair, Joint Committee on Transportation
State House, Room 146
24 Beacon Street
Boston, MA 02133

Honorable Aaron Michlewitz
Chair, House Committee on Ways & Means
State House, Room 243
24 Beacon Street
Boston, MA 02133

April 2, 2025

Dear Chairs Crighton, Arciero, Rodrigues and Michlewitz,

Pursuant to FY25 Budget please find the enclosed report providing a cost analysis of fare-free bus.

Sincerely,

Lynsey M. Heffernan
Chief of Policy and Strategic Planning

FY 2025 MBTA Fare-Free Bus Report

March 2025

1 Introduction

This *FY 2025 MBTA Fare Free Bus Report* is a product of the MBTA's Policy and Strategic Planning team – written in consultation with representatives of several community advocacy organizations – intended to satisfy the below requirement included in the Massachusetts FY 2025 Final Budget (1595-6369):

> *[....] the authority shall conduct a feasibility study of implementing year-round fare free bus pilot programs including, but not limited to, in areas outside of the city of Boston;*
>
> *provided further, that the authority shall submit a proposed design for establishing said programs, including methods for data collection;*
>
> *provided further, that the authority may establish evaluative criteria for potential route selection including, but not limited to:*
>
> > *(a) whether a municipality has identified a route for a fare free pilot program;*
> > *(b) opportunities for increased ridership;*
> > *(c) increased service accessibility to low-income individuals;*
> > *(d) opportunities for increased reliability of on-time performance due to dual-door boarding;*
> > *(e) potential cost savings arising from elimination of contracted farebox equipment and enforcement personnel;*
> > *(f) opportunities to reduce or eliminate rider and driver altercations; and*
> > *(g) geographic equity;*
>
> *provided further, that the authority, in developing the study and report, shall consult with community advocacy organizations including, but not limited to, LivableStreets Alliance and Transportation for Massachusetts; and*
>
> *provided further, that not later than March 1, 2025, the authority shall submit a report to the joint committee on transportation and the house and senate committees on ways and means detailing findings related to the feasibility of such programs [….]*[1]

Section 2 of this report presents a feasibility study of implementing fare-free bus service in the MBTA service area, both on limited route and full systemwide bases. Section 3 discusses a potential design template for establishing fare-free bus programs. Section 4 addresses potential evaluative criteria for fare-free bus route selection, and also speaks to the merits of such criteria for evaluating a systemwide fare-free bus initiative. Section 5 details the consultation process the MBTA undertook with community advocacy organizations in the generation of this report.

A key finding of this report, stated in Section 2.6 is that limited route-specific fare-free bus programs are geographically inequitable, difficult to communicate, and work against MBTA goals of providing equitable and consistent transportation across the Authority's entire service area. These limited "pilot programs" are unsustainable and are not recommended by the Authority as an initiative to pursue. Any future fare-free bus service expansions – to the extent additional funding is available to cover their costs – should be designed and implemented to serve the entire bus network, at a cost of $72M to $121M annually, not limited routes chosen by municipal boundaries or other similar bases.

[1] Massachusetts FY 2025 Final Budget at 1595-6369. https://malegislature.gov/Budget/FY2025/FinalBudget

2 Fare-Free Bus Feasibility Study

This Section presents a feasibility study for expanding fare-free bus service in the MBTA service area, both on a route-by-route basis and on a systemwide basis. Section 2.1 describes the paratransit implications of fare-free bus initiatives. Section 2.2 explores the recent history of fare-free service on the MBTA, most notably on bus Routes 23, 28, and 29 and on Silver Line 1 service from the Logan Terminals. Section 2.3 describes FTA fare change regulations and the requirements they impose for any fare change lasting longer than 6 months. Section 2.4 details cost estimates for fare-free bus service, presenting both estimates generated in recent years and an updated cost estimate as of March 2025. Section 2.5 describes challenges inherent with limited-duration route-specific fare-free service programs. Finally, Section 2.6 concludes the feasibility study with a finding that route-specific fare-free bus service is not sustainable, and a recommendation that future fare-free bus efforts be applied on a systemwide basis and accompanied by additional dedicated funding sources to cover their costs.

2.1 Paratransit Implications of Fare-Free Bus

An important but sometimes overlooked aspect of a fare-free bus program is that, per Americans with Disabilities Act (ADA) requirements, fare-free bus service necessitates fare-free paratransit service as well. Section 37.131 of the ADA details service criteria for complementary paratransit services including required paratransit service areas and fares, specifying:

> *(a) Service Area*
>
> *(1) Bus.*
>
> *(i) The entity shall provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each side of each fixed route. The corridor shall include an area with a three-fourths of a mile radius at the ends of each fixed route.*
>
> *(ii) Within the core service area, the entity also shall provide service to small areas not inside any of the corridors but which are surrounded by corridors.*
>
> *(iii) Outside the core service area, the entity may designate corridors with widths from three-fourths of a mile up to one and one half miles on each side of a fixed route, based on local circumstances.*
>
> *(iv) For purposes of this paragraph, the core service area is that area in which corridors with a width of three-fourths of a mile on each side of each fixed route merge together such that, with few and small exceptions, all origins and destinations within the area would be served.*
>
> *(2) Rail.*
>
> *(i) For rail systems, the service area shall consist of a circle with a radius of 3/4 of a mile around each station.*
>
> *(ii) At end stations and other stations in outlying areas, the entity may designate circles with radii of up to 1 1/2 miles as part of its service area, based on local circumstances.*
>
> *[…]*

and

(c) Fares. The fare for a trip charged to an ADA paratransit eligible user of the complementary paratransit service shall not exceed twice the fare that would be charged to an individual paying full fare (i.e., without regard to discounts) for a trip of similar length, at a similar time of day, on the entity's fixed route system.

(1) In calculating the full fare that would be paid by an individual using the fixed route system, the entity may include transfer and premium charges applicable to a trip of similar length, at a similar time of day, on the fixed route system.

(2) The fares for individuals accompanying ADA paratransit eligible individuals, who are provided service under Sec. 37.123 (f) of this part, shall be the same as for the ADA paratransit eligible individuals they are accompanying.

(3) A personal care attendant shall not be charged for complementary paratransit service.

(4) The entity may charge a fare higher than otherwise permitted by this paragraph to a social service agency or other organization for agency trips (i.e., trips guaranteed to the organization).[2]

Consistent with these ADA requirements, the MBTA provides paratransit service through The RIDE for trips with origins and destinations within ¾ of a mile of all its fixed route bus and rail stops for an ADA fare of $3.35, which is less than two times the current full fare bus fare ($1.70). In situations where MBTA bus or rail service is provided for free as a matter of fare policy – including but not limited to MBTA bus Routes 28, 28, and 29; Logan Terminal Silver Line service; and fare-free mitigations for service disruptions such as those associated with the Sumner Tunnel closures in the summers of 2023 and 2024 – the MBTA provides ADA service on The RIDE on a fare-free basis as well.

Following this legislative requirement and established MBTA policy, an expansion of fare-free bus service – either on a route-specific or systemwide basis – would also necessitate fare-free paratransit service. This requirement impacts the MBTA financially both through (i) the loss of paratransit fare revenue, and (ii) additional operating costs to serve paratransit trips "induced" by the decrease in fares to $0. The magnitudes of these paratransit-associated costs are discussed Section 2.4.

2.2 Examples of MBTA Fare-Free Bus Service

City of Boston Routes 23, 28, and 29

In partnership with the City of Boston, the MBTA began running fare-free service on bus Route 28 in August 2021. This fare-free Route 28 program was initially conducted as a pilot program and intended to run through February 2022. In March 2022, the City of Boston and the MBTA expanded their fare-free bus partnership to also include Routes 23 and 29 in addition to Route 28. This 23 / 28 / 29 program was intended to run through February 2024 but was extended in early-2024 to run through February 2026. Consistent with the ADA requirements discussed in the previous section, the fare-free bus programs also provide fare-free RIDE paratransit trips for journeys that start and end within ¾ of a mile of the three routes. Fare-free service on Routes 23, 28, and 29 was added to the MBTA tariff as official fare policy in 2022 following a vote of the MBTA Board of Directors.

The City of Boston has predominately funded these fare-free bus programs by using American Rescue Plan Act (ARPA) federal funding to reimburse the T for lost fare revenue and additional operating expenses incurred.[3]

[2] 49 CFR § 37.131 - Service criteria for complementary paratransit. https://www.transit.dot.gov/regulations-and-guidance/civil-rights-ada/part-37-transportation-services-individuals-disabilities#sec.37.131

[3] *See* Section 3.1 for more detail on the reimbursement arrangement between the City of Boston and the MBTA.

The City of Boston has published two fare-free bus pilot evaluation reports, the first focused on Route 28 in March 2022[4] and the second evaluating all three fare-free routes in March 2023.[5] Per the findings of these reports as of October 2022, 42% of riders on the fare-free routes saved money as a result of the fare-free bus service while 58% of riders did not; 26% of riders reported saving more than $20 per month. The three fare-free bus routes collectively reported greater increases in ridership from Fall 2021 to Fall 2022 than the bus system as a whole, and use of The RIDE within the program area also grew faster than The RIDE system ridership as a whole. With respect to speed, dwell time per passenger decreased but the number of passengers on the busses increased, resulting in no material change in overall travel time. As of October 2022, 75% of passengers on the fare-free routes reported that they still would have been riding the bus were it not free. Of the remaining 25% of passengers who would not have been riding the bus, 6% of passengers would have taken a different MBTA service, 13% would have walked or biked, 4% would have taken a car, and 2% would not have made the trip at all. Generally, the pilot evaluation reports show increases in program effect over time from data collected in October 2021 to data collected in May 2022 and October 2022.

Massport Logan Terminal SL1

In addition to the fare-free bus routes operated in partnership with the City of Boston, the MBTA also provides fare-free Silver Line 1 (SL1) service from the Logan Airport Terminals operated in partnership with Massport. Massport and the MBTA have been partners in providing SL1 service to Logan Airport since the launch of the route in 2004, and Massport has funded free fares on SL1 from the Logan Terminals since 2012. These free fares are intended to ease parking and traffic congestion pressures at the airport and to facilitate ground travel for passengers landing at the airport who may not be familiar with the MBTA's fare payment systems.

Like the agreement between the City of Boston and the MBTA, Massport pays the MBTA a reimbursement for free Silver Line 1 boardings at the Logan Terminals as well as for free RIDE trips originating from the airport and terminating within ¾ of a mile of an MBTA subway station. The Massport agreement also includes more complicated elements such as reimbursement for purchases of bus vehicles and operating and maintenance cost subsidies for SL1 service, incorporating payments between the MBTA and Massport that go in both directions.

2.3 FTA Fare Change Regulations and Restrictions on Pilots

All public transit fare changes, whether fare increases or decreases, are subject to federal regulation under Title VI of the Civil Rights Act of 1964, as detailed in FTA Circular 4702.1B *Title VI Requirements and Guidelines for Federal Transit Administration Recipients*.[6,7] At a high level, Circular 4702.1B specifies that all fare changes require public engagement, equity analysis, and board approval.

With respect to the required equity analysis, the MBTA must ensure that any fare change package does not have a disparate impact on riders of color nor impose a disproportionate burden on riders with low-income. This means that for a fare increase, the MBTA must show that that fares do not increase materially more for riders of color or for low-income riders than they increase for riders as a whole; for a fare decrease, fares must not decrease materially less for riders of color or for low-income riders than they decrease for riders as a whole.

Circular 4702.1B is clear that any pilot program exempt from these public outreach, equity analysis, and board approval requirements cannot last longer than six months:

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[4] https://www.boston.gov/sites/default/files/file/2022/03/Route28_Report_FINAL.pdf
[5] https://www.boston.gov/sites/default/files/file/2023/03/Fare%20Free%20Mid%20Program%20Report.pdf
[6] FTA Circular 4702.1B. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf
[7] Note that smaller transit agencies such as Regional Transit Administrations (RTAs) are subject to different regulation than larger transit authorities such as the MBTA under Circular 4702.1B.

b. Fare Equity Analysis

(1) Fare Changes. The fare equity analysis requirement applies to all fare changes regardless of the amount of increase or decrease. As with the service equity analysis, FTA requires transit providers to evaluate the effects of fare changes on low-income populations in addition to Title VI-protected populations.

(a) Exceptions.

(i) "Spare the air days" or other instances when a local municipality or transit agency has declared that all passengers ride free.

(ii) Temporary fare reductions that are mitigating measures for other actions. For example, construction activities may close a segment of a rail system for a period of time and require passengers to alter their travel patterns. A reduced fare for these impacted passengers is a mitigating measure and does not require a fare equity analysis.

(iii) Promotional fare reductions. If a promotional or temporary fare reduction lasts longer than six months, then FTA considers the fare reduction permanent and the transit provider must conduct a fare equity analysis.[8]

As such, a potential year-long fare-free bus pilot would be considered a permanent fare change by the FTA, requiring it to be incorporated in the official MBTA tariff through a process of public comment, equity analysis, and board approval. The MBTA followed this framework following the launch of fare-free service on bus Routes 23, 28, and 29 in 2021 and 2022, finalizing public outreach, equity analysis, and board approval in 2022.[9] Fare-free service on Routes 23, 28, and 29 is now listed as official fare policy in the MBTA tariff[10] even though funding for that fare-free service is scheduled to end in early-2026.

The *ending* of a fare-free bus program, meaning the resumption of fare collection for riders, after more than 6 months of operations also requires public comment, equity approval, and board approval. Given that MBTA bus routes generally have a higher percentage of riders of color and riders with low-income than the system as a whole, the creation of a fare-free bus program is likely to "pass" an equity analysis.[11] However, if and when fare-free service is to end on those routes, the required equity analysis will likely return a failing result absent significant mitigation. In short, the requirement for equity analysis of any fare change lasting longer than six months makes fare-free bus programs relatively easy to begin but hard for the MBTA to end.

2.4 Fare-Free Bus Costs

It is important to fully understand the additional costs that expanded fare-free bus service would impose on the MBTA.

[8] FTA Circular 4702.1B, Chap IV-19. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf

[9] *See* https://cdn.mbta.com/sites/default/files/2022-07/Free-Bus-Fare-Equity-Analysis-June-22.pdf

[10] https://cdn.mbta.com/sites/default/files/2024-08/2024-08-01-MBTA-Tariff.pdf

[11] For example, the Title VI equity analysis conducted for the 23 / 28 / 29 program found that fares decreased for riders of color and low-income riders 3.7 and 3.9 times more, respectively, than for riders overall as a result of free service on those routes. *See* https://cdn.mbta.com/sites/default/files/2022-07/Free-Bus-Fare-Equity-Analysis-June-22.pdf

2.4.1 Methodology of Costing

When evaluating the cost of running fare-free bus service, the MBTA considers four primary channels of financial impact:

- Fixed route fare revenue loss
- Additional bus operations costs
- Paratransit fare revenue loss
- Additional paratransit operation costs

The approach the MBTA uses to quantify these impacts is detailed below.

Fixed Route Fare Revenue Loss

Perhaps the most obvious financial impact of a fare-free bus program is bus fare revenue loss. However, the calculation of fare revenue lost resulting from a fare-free bus program is not as simple as summing up the value of all cash and "stored value" fares paid on bus vehicles. Considerations must be made, for instance, to address the impacts of pass-purchasing and of likely rider behavior changes. A simplistic approach to the calculation could both overstate and understate certain components of fare revenue loss. Rather, the MBTA employs a methodology that calculates:

1. Pay-per-ride revenue loss from bus-only journeys
2. Local Bus pass revenue loss
3. Revenue lost through shifts from LinkPasses to pay-per-ride rapid transit
4. Revenue lost through shifts from pay-per-ride rapid transit to free bus

Each of these four "channels" of fixed route fare revenue loss are detailed below.

Pay-per-ride Revenue from Bus-Only Trips
MBTA fare policy provides "step-up transfer" rules for certain journeys consisting of multiple legs, wherein the total fare for a multi-leg journey is the cost of the single most expensive leg of that journey. Current MBTA subway fares ($2.40 full fare / $1.10 reduced fare) are higher than current MBTA Local Bus fares ($1.70 full fare / $0.85 reduced fare). Therefore, under "step-up transfer" rules, the total cost of a "bus-subway-bus" three-leg journey, for example, is equal to only the cost of one subway fare. A full-fare rider taking such a journey would pay $1.70 for their first bus leg, $0.70 for the "step-up transfer" to their subway leg (*i.e.*, $2.40 minus $1.70), and $0 for their final bus leg. In the event that bus service became fare-free, this journey would still cost $2.40; however, rather than $1.70 being collected on bus and $0.70 being collected on subway, all $2.40 would be collected on subway.

Given these policy rules, a fare-free bus policy only saves money for riders – or results in fare revenue loss to the agency – for bus trips that are *not* part of journeys that connect to higher-priced modes where step-up transfers apply. Accordingly, fare-free bus pay-per-ride revenue loss must *exclude* fares paid for bus trips that connect to other more expensive transit modes.

Local Bus Pass Revenue
One of the fare products that the MBTA offers is a monthly pass valid only on Local Bus routes (currently priced at $55). In FY24 the MBTA sold nearly 81,000 of these monthly passes, generating more than $4.4 million in revenue. As this product is not valid on any mode other than Local Bus, revenue from this product would go to zero if bus service were to provided fare-free.

Shift from LinkPass to Pay-per-ride

The first two "channels" of fare revenue loss consider only bus pay-per-ride and bus pass revenue for bus-only travel; however, a fare-free bus policy would also be expected to have broader fare revenue impacts.

The MBTA's most popular and highest-selling pass product is the LinkPass, which provides for unlimited travel on both Local Bus and subway and is available in monthly ($90 full fare / $30 reduced fare), 7-Day ($22.50 full fare / $10 reduced fare), and 1-Day ($11) varieties. The typical LinkPass purchaser uses that product on a mixture of routes and services, including both subway and Local Bus. If bus service were to be provided fare-free, this would decrease the value proposition of purchasing a LinkPass.

For example, a full-fare rider who may make 32 subway journeys and 10 bus journeys in a month would rationally find it "worth it" to buy a LinkPass under current pricing. However, if bus service were to be provided fare-free, this same rider may rationally give up their $90 per month LinkPass and instead spend approximately $77 per month for their subway journeys on a pay-per-ride basis.

An MBTA card-level analysis of LinkPass usage found that approximately 19% of LinkPass purchasers may rationally choose to switch to paying per-ride if bus service were to be provided fare-free. These "pass switchers" would then pay back a portion of the value they formerly spent on their passes in the form of pay-per-ride fares, resulting in about 7.5% of overall LinkPass revenue being lost as a net result of this switch in purchasing behavior.

Shift from Pay-per-ride Rapid Transit to Free Bus

The final "channel" of fare revenue loss results from riders shifting their mode of travel from subway to bus in the event that bus service is provided fare-free. Some examples of routes where this may occur include Routes 39 and 43 which both generally follow the Orange Line corridor, with the 39 running from Forest Hills to Back Bay and the 43 running from Ruggles to Park Street. Under a pricing structure where full fare subway costs $2.40 and full fare bus costs $1.70, a rider traveling from, for example, Ruggles to Downtown Crossing may find it "worth" the extra $0.70 for faster subway service as opposed to bus service in mixed traffic. However, if bus service were to provided fare-free, the fare premium for subway over bus would rise from $0.70 to $2.40 and that same rider may now elect to take the free bus instead. This mode shift would save the rider money but would result in less efficient use of transportation resources and lead to lost *subway* fare revenue.

The City of Boston's March 2023 evaluation of its fare free program on Routes 23, 28, and 29 documents this mode shifting occurring, estimating that approximately 20% to 35% of new riders on the fare-free routes would have taken a different MBTA service had the bus routes not been fare-free.[12]

MBTA modelling estimates that approximately 36% of MBTA subway trips are "replaceable" by an alternative Local Bus. If between 10% and 20% of riders who take these "bus replaceable" subway trips were to shift to fare-free bus, this could decrease pay-per-ride subway fare revenue by approximately 4% to 7%.

Additional Bus Operations Costs

Bus ridership would be expected to increase if bus service were to be provided fare-free. This is consistent with economic theory, the "channels" of fare revenue loss discussed above, and the findings of the City of Boston's fare free bus program on Routes 23, 28, and 29. In some situations – and especially on routes that are already crowded – this increase in ridership could overwhelm existing service and require additional trips to be run to keep up with

[12] https://www.boston.gov/sites/default/files/file/2023/03/Fare%20Free%20Mid%20Program%20Report.pdf, slide 31 of 33.

demand and avoid passengers being "left behind" on the curb. These additional trips would not generate additional revenue under a fare-free service model but would incur additional operational costs to the Authority.

Paratransit Fare Revenue

As discussed in Section 2.1, fare-free bus service would necessitate fare-free paratransit service. Accordingly, all RIDE revenue for ADA-mandated trips would be expected to go to zero if bus service were to provided fare-free on a systemwide basis. Note that "Premium" trips on The RIDE – defined as trips that serve origins or destinations more than ¾ of a mile from fixed route service – would not be required to be fare-free by law, but the MBTA would expect them to also become fare-free as a practical matter.

Additional Paratransit Operations Costs

As is the case for bus service, paratransit demand would also be expected to increase if trips on The RIDE were to be provided fare-free. However, while fixed route service is relatively "scalable" and capable of absorbing some amount of increased demand without necessitating increased service, paratransit service is delivered on a one-to-one basis.

As a paratransit service that serves people who cannot use bus, subway, or trolley due a disability, The RIDE is a personalized service. The RIDE provides door-to-door transportation in smaller vehicles (cars or vans) dispatched to serve passengers at specific times. This nature of the paratransit mode makes total costs highly variable and tied to ridership, resulting in a high costs on a per-passenger basis. Each additional trip on The RIDE costs upwards of $50 to provide, while the costs of additional bus trips per-passenger are only a small fraction comparably.

Additionally, the MBTA has legal obligations under the Americans with Disabilities Act to ensure adequate and timely paratransit service to a degree that does not apply on the T's fixed route modes. If a bus rider cannot board a vehicle due to crowding and gets left behind at the curb, that is an unfortunate and unacceptable failure of service. However, if a paratransit customer is not served by The RIDE and gets left behind at the curb, that is a much more severe violation of federal civil rights law.

While it is generally the case that a fare-free bus policy would be expected to lead to greater fare revenue loss than additional operating costs on the fixed routes, the opposite is true for The RIDE.

Additional Notes: Elasticity and Induced Demand

One of the greatest sources of uncertainty with respect to the financial impact of any fare change is the elasticity of demand for travel, or the degree to which the quantity of travel demanded changes with a change in price. The MBTA generally applies estimates of elasticity derived from the Fare Elasticity, Ridership, and Revenue Estimation Tool (FERRET) model prepared by the Central Transportation Planning Staff (CTPS). This model finds price elasticities of demand for MBTA services generally range from -5% to -45%, depending on the mode, rider type, and method of payment.[13] CTPS estimates that the price elasticity of demand for full fare bus travel ranges from -15% to -35%, implying that a 10% decrease in bus fares would be expected to increase bus ridership by between 1.5% and 3.5%. However, economic theory teaches that demand curves are not straight and thus elasticities are not fixed along the entire range of potential prices. Accordingly, it would be expected that the price elasticity of demand would be different for a small price change than for one that brings prices all the way down to zero.

[13] *See* Table 1, https://cdn.mbta.com/sites/default/files/fares/fare-proposal-2019/equity-anlaysis-sfy20-fare-changes-march2019-FINAL.pdf

The inherent unknowns around the application of elasticity will always introduce uncertainty to the overall cost estimates of a price change, and that is especially true with respect to the estimation of additional operating costs in the current study.

Additional Notes: Express Bus

While this report generally refers to "bus" as one mode at one price point, the MBTA does in fact have three distinct categories of price points for what could be considered "bus" service.[14] For the purposes of this study, only Local Bus routes are considered as potential fare-free routes. Accordingly, all estimates of the costs of fare-free bus assume that Express Bus routes and Silver Line 1, 2, 3, and W do not provide fare-free service.

2.4.2 Previous Systemwide Cost Estimates

The MBTA Fare Policy team has on two occasions in recent years presented estimates to the Board of the cost to the Authority of a systemwide fare-free bus policy, first in May 2021 (using pre-COVID ridership and revenue numbers) and again in October 2022 (using modeled FY24 post-COVID ridership and revenue). Those previous estimates are summarized below.

May 2021 Cost Estimate

The cost estimates below were estimated in Spring 2021 using historic pre-COVID ridership and revenue levels as a baseline. Results were presented at the Fiscal and Management Control Board Meeting on May 10, 2021.[15]

Table 1: 2021 Fare-Free Bus Cost Estimate (Pre-COVID Ridership)

	Low Estimate	High Estimate
Fixed Route Fare Revenue Loss	$56 million	$70 million
Additional Bus Operating Costs	$24 million (+ $160 million year one and $6 million annually recurring capital costs)	$53 million (+ $433 million year one and $13 million annually recurring capital costs)
Paratransit Fare Revenue Loss	$5 million	$5 million
Additional Paratransit Operating Costs	$25 million (+ $10 million year one and $1 million annually recurring capital costs)	$44 million (+ $17 million year one and $3 million annually recurring capital costs)
Total Annual Costs **(+ capital expenses)**	**$110 million** **(+ $170 million year one and $7 million annually recurring capital costs)**	**$172 million** **(+ $460 million year one and $16 million annually recurring capital costs)**

A notable element of the 2021 cost estimates is the significant capital expense related to bus operating costs. These estimates employed pre-COVID ridership as a baseline, when the bus network lacked excess capacity and conditions were often crowded. Accordingly, these estimates include potential costs of significant expansion of the bus fleet and related bus facilities.

[14] The vast majority of MBTA bus routes (140+) are "Local Bus" ($1.70 full fare / $0.85 reduced fare). Seven MBTA bus routes are "Express Bus" ($4.25 full fare / $2.10 reduced fare) and three of these seven Express Bus routes have portions or stops where Local Bus fares are charged. Four Silver Line bus rapid transit routes (SL 1, 2, 3, and W) charge subway fares ($2.40 full fare / $1.10 reduced fare), while two Silver Line bus routes (SL 4 and 5) accept Local Bus fares ($1.70 full fare / $0.85 reduced fare).

[15] https://cdn.mbta.com/sites/default/files/2021-05/2021-05-10-fmcb-I-fare-policy-update_0.pdf

October 2022 Cost Estimate

The cost estimates below were estimated in Fall 2022 using modelled post-COVID FY24 ridership and revenue projections. Results were presented at the meeting of the MBTA Board of Directors on October 27, 2022.[16]

Table 2: 2022 Fare-Free Bus Cost Estimate (FY24 Projected Ridership)

	Low Estimate	High Estimate
Fixed Route Fare Revenue Loss	$40 million	$49 million
Additional Bus Operations Costs	$4.9 million	$16 million
Paratransit Fare Revenue Loss	$3.9 million	$3.9 million
Additional Paratransit Operations Costs	$45 million	$72 million (+ $9 million vehicle capital costs)
Total Annual Costs **(+ capital expenses)**	**$94 million**	**$141 million** **(+ $9 million vehicle capital costs)**

Estimates of fixed route fare revenue loss, bus operations costs, and RIDE fare revenue costs all decreased materially from the 2021 to 2022 estimates, primarily driven by decreases in baseline fare revenue, ridership, and bus crowding from pre-COVID to post-COVID patterns. However, estimates of RIDE operations costs increased due to higher costs expectations for fuel and personnel, updated induced demand expectations using methodologies better aligned with other MBTA analyses, and the inclusion of various RIDE cost components omitted in the 2021 analysis. Capital costs projected in the 2022 estimates were limited to potential purchases of vehicles for the RIDE, as an expansion of the bus fleet and related facilities was no longer considered necessary due to excess bus capacity in the post-COVID environment.

2.4.3 Updated Systemwide Cost Estimate for Today's Conditions

The MBTA's ridership and fare revenue landscape has changed in two material ways since the 2022 cost estimates.

1. **Ridership and revenue have stabilized following the uncertainty of the post-pandemic years**

The future state of MBTA ridership was still highly uncertain in 2022 when the last cost estimates of fare-free bus were conducted. At that time, projections of ridership and revenue for FY24 were employed as baseline. In the nearly two-and-a-half years since, MBTA ridership and revenue has stabilized, and the Authority is now more confident as to what "new normal" rider demand looks like. With FY26 starting in fewer than four months, the updated cost estimates summarized below employ projected FY27 ridership and revenue as their "baseline."

2. **The MBTA has expanded Reduced Fares**

The MBTA materially expanded the availability and applicability of Reduced Fares in 2024. Across the fixed route modes, the MBTA expanded Reduced Fares to Income-Eligible riders. This expansion grants riders of any age with incomes at or below 200% of the Federal Poverty Level (as evidenced by enrollment in other social support programs such as MassHealth or SNAP) access to the same Reduced Fare discounts of 50% or more that had previously been available to Seniors, riders with disabilities, students, and young adults with low income. The MBTA also expanded Reduced Fares to The RIDE for the first time, lowering fares by approximately 50% for Senior RIDE users and RIDE users with low income. These expansions of Reduced Fares intersect with the potential cost of fare-free bus service in numerous ways.

[16] https://cdn.mbta.com/sites/default/files/2022-10/Fare%20Affordabilty%20Board%20Slides%20October%202022%20vF.pdf

i. Lower Reduced Fares, especially on bus and paratransit, decrease the baseline level of fare revenue that stands to be potentially lost under a fare-free model of bus service.
ii. Riders with access to Reduced Fares are relatively more likely to purchase LinkPasses, as they provide a greater discount off full fare levels than is available on a pay-per-ride basis. For example, the reduced Local Bus fare is 50% of full fare levels while the Reduced Fare monthly LinkPass costs 33% of the full fare equivalent. Additionally, the Reduced Fare LinkPass (which covers both bus and subway) costs 45% *less* than the Local Bus pass (which is not offered in a Reduced Fare variety). These dynamics are expected to change the makeup of pass purchasing decisions, incentivizing more riders towards LinkPasses and away from bus-specific fares and passes.
iii. Expanded Reduced Fares are also expected to induce travel on bus and paratransit, "eating into" some of the induced demand that fare-free bus and paratransit had the potential to generate.

Full enrollment in and uptake of the Reduced Fares expanded in 2024 is expected to take up to 5 years. However, in the interest of providing conservative cost estimates for fare-free bus, the estimates below assume that the "ramp up" in expanded Reduced Fares enrollment is complete by FY2027.

A Note on Fare-Free 23 / 28 / 29 Service

A baseline projection of FY2027 ridership and revenue assumes fare-free service on Routes 23, 28, and 29 as a continuation of current MBTA policy. However, the agreement between the City of Boston and the MBTA only runs through February 2026, terminating before the start of FY27. In calendar year 2024, the City of Boston paid the MBTA more than $4.3 million to reimburse the costs of fare-free service on those three bus routes and in the associated RIDE service area.

Accordingly, the numbers presented below in Table 3 include $4.3 million per year to reflect the cost of continuing fare-free service on Routes 23, 28, and 29 in order to capture the full cost of systemwide fare-free bus service.

Table 3: 2025 Fare-Free Bus Cost Estimate (FY27 Projected Ridership with Full Ramp-Up of Expanded Reduced Fares)

	Low Estimate	High Estimate
Fixed Route Fare Revenue Loss	$41 million	$50 million
Additional Bus Operations Costs	$2 million	$15 million
Paratransit Fare Revenue Loss	$2.2 million	$2.2 million
Additional Paratransit Operations Costs	$27 million	$54 million (+ $9 million vehicle capital costs)
Total Annual Costs **(+ capital expenses)**	**$72 million**	**$121 million** **(+ $9 million vehicle capital costs)**

2.5 Challenges Inherent with Limited Route Fare-Free Bus

As detailed in the prior sections, the systemwide provision of fare-free bus services has potential to deliver positive impacts for MBTA riders. However, as noted in the previous section, the costs associated with such a policy are significant, currently estimated at between $72 and $121 million per year. The MBTA does not have the funding to bear these costs in its current fiscal situation, and the institution of a systemwide fare-free bus policy would require a long-term commitment of regularly recurring additional funding to the operations budget.

The provision of fare-free bus service on a limited route-by-route basis – either on a "FTA pilot" basis of shorter than six months or on a slightly longer-term basis – is less beneficial to riders than a systemwide policy and introduces additional complexities and challenges, as described in the following subsections.

Utility of Additional Pilots

The MBTA and City of Boston fare-free bus program on Routes 23, 28, and 29 has been in operation in various formats for more than three-and-a-half years. This program has received national attention[17] and has clearly demonstrated the potential impacts that the provision of fare-free bus service can have on key measures of transportation access such as ridership, affordability, travel time, and passenger experience. The City of Boston has published two program reports analyzing these impacts and plans to publish additional analyses when the program concludes.[18]

Given the extensive time and resources devoted to the 23 / 28 / 29 program and the findings gathered from the experience, the utility of *additional* limited-duration pilots selected on a route-by-route basis is up to debate. What additional questions or new areas of research are not addressed or explored by the 23 / 28 / 29 program but would be addressed by new fare-free bus pilots in the MBTA service area? Would additional "pilots" be designed as tests of a new idea or functionality before rolling it out more broadly, or would they operate as a method of delivering the benefits of fare-free bus to additional riders on more bus routes without a novel research purpose?

If the former, it is not clear what utility additional pilots would serve above-and-beyond the value of the existing 23 / 28 / 29 program. If the latter, then additional fare-free bus routes would not be "pilots" in the traditional transit planning sense of the term, and would amount more to a partial step in the direction of *systemwide* fare-free bus service.

Geographic Equity

The City of Boston has funded the 23 / 28 / 29 program using federal ARPA dollars, reimbursing the MBTA a total of more than $10.9 million for service from March 2022 through January 2025. In a time of constrained fiscal resources in the post-COVID era, especially at the local government level, many municipalities do not have this level of funding available to fund fare-free bus routes.

A significant issue with providing fare-free bus service on a route-by-route basis is the geographic equity challenges that such a practice raises. No matter what organization is funding a particular fare-free route – be it a municipality or business group or anything else – the localized nature of bus routes means that *geography* will be the determining factor as to which bus riders benefit and which do not. One given municipality may have the funding available to sponsor a fare-free route within its borders while another municipality – potentially one with a higher share of bus riders or low-income riders or riders of color – may not have this funding. This risks creating an inequitable situation where otherwise similar bus riders in different parts of the MBTA service area are expected to pay different fares due to reasons other than the characteristics of the trip or mode itself.

Rider Communication and Consistency of Rider Experience

The MBTA strives for consistency in its application of policy and communications to its riders. This includes the establishment and application of a consistent and easy-to-understand fare structure. Recent fare policy changes of the last five years have pursued a goal of fare tariff simplification, and further simplifications are being pursued through the transition to a new fare payment collection system that is envisioned to work across all modes.

Further pursuing a fare policy in which some number of bus routes are fare-free but the majority are not risks confusing riders and complicating the collection of fares across the broader system. This is especially true in areas

[17] *See, e.g.*, https://freakonomics.com/podcast/should-public-transit-be-free/
[18] https://www.boston.gov/sites/default/files/file/2022/03/Route28_Report_FINAL.pdf and https://www.boston.gov/sites/default/files/file/2023/03/Fare%20Free%20Mid%20Program%20Report.pdf

that may be served by both fare-free and regular fare bus routes, and for riders who may encounter both types of bus route across their travels. With each new fare-free route added, the challenge of communicating the bus fare structure to riders becomes increasingly difficult. And from a rider point-of-view, confusion can arise as to why they may be expected to pay on one route when they are not expected to pay on another. This undercuts the goal of a consistent rider experience across routes and poses challenges to enforcing fare collection on the routes that are not designated as fare-free.

Termination of Temporary Fare Reductions

As discussed in Section 2.3, the introduction of a new fare-free bus route is likely to "pass" an FTA-required equity analysis due to the demographic nature of bus ridership. Additional fare-free routes are also likely to be popular, especially if dedicated funding is provided. However, if the dedicated funding is not provided on a permanent basis and the fare-free service is planned to end, the actual termination of the program raises numerous challenges. As discussed in Section 2.3, any fare-free bus route that has run for more than 6 months must undergo and "pass" an equity analysis, be voted on and approved by the board, and be added to the MBTA tariff. The same steps are also required to end a fare-free bus program that has lasted more than 6 months. From an FTA regulatory perspective, the termination of a fare-free bus program is likely to be found to impose a disparate impact on riders of color and/or impose a disproportionate burden on riders with low-income and "fail" an equity analysis. Politically, it is difficult to remove a service feature that is popular to a segment of riders, no matter the cost of continuing to provide the feature. And from a rider experience and fare compliance perspective, the MBTA anticipates that it will be operationally challenging to reintroduce fares on a route that was previously fare-free and expect a high level of fare compliance.

Each of these challenges remains unresolved. The City of Boston, for instance, has the funding necessary to fund the 23 / 28 / 29 program through February 2026. When this program must end, the MBTA may learn how realistic and feasible it is to reintroduce fares on routes which were fare-free.

Role of the MBTA as a State Authority

As a public state agency of the Commonwealth of Massachusetts and a provider of regional transit services, the MBTA seeks to not consider municipal boundaries in its provision of service and determination of fares. The T serves more than 170 cities and towns across its bus, subway, ferry, Commuter Rail, and paratransit services, and also overlaps with and connects to the service areas of multiple Regional Transit Authorities. The MBTA charges fares for each of its respective modes across multiple municipalities, and no fares are tied directly to municipal boundaries.[19]

The MBTA's *Fare Policy*[20] is not tied to municipal boundaries to avoid issues of geographic inequity. The addition of more fare-free bus routes with prices potentially set by the coincidence of what municipalities they run through would erode this principle, and work against the greater regional mission of the MBTA as a state authority and regional transit provider.

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[19] MBTA's Commuter Rail pricing is distance-based. The City of Boston, for example, has some Commuter Rail stations far enough from the urban core that they fall outside of Zone 1A while neighboring cities such as Cambridge, Medford, Malden, and Chelsea have Commuter Rail stations close enough in to downtown that they are categorized as Zone 1A. Municipalities such as Newton, Quincy, and Braintree are home to light and heavy rail stations that charge subway fares as well as Commuter Rail stations that are far enough out to fall outside of Zone 1A.

[20] MBTA Fare Policy, https://cdn.mbta.com/sites/default/files/2017-09/About%20the%20T/MBTAFarePolicy12_21_2015.pdf

2.6 MBTA Conclusion on Fare-Free Bus Pilot Feasibility

In consideration of all the information provided above, it is the MBTA's conclusion that:

1. Systemwide fare-free bus service has the potential to provide several material benefits to riders, improving transit accessibility, increasing ridership, and reducing congestion; and
2. Route-specific and limited-time fare-free bus "pilot programs" are unsustainable and not recommended by the Authority as an initiative to pursue.

Route-specific pilot programs are geographically inequitable, difficult to communicate, and work against MBTA goals of providing equitable and consistent transportation across the Authority's entire service area. The intended short-term nature of fixed-duration programs also generates challenges when the time comes for the programs to end, risking the creation of unfunded initiatives that remain costly beyond the programs' intended sunset dates.

Any future fare-free bus service expansions should be designed and implemented to serve the entire bus network, not limited to specific routes chosen on a municipality-by-municipality or similar basis. Additionally, given the cost of systemwide fare-free bus services (approximately $72 - $121 million per year) and the limited funding sources available to the MBTA, any additional expansions of fare-free bus service should be accompanied by permanent, dedicated funding that avoids the risk of leaving the MBTA with unfunded service commitments in the future.

3 Pilot Program Implementation Design

As concluded in the previous section, the MBTA's view is that limited route-specific fare-free bus programs are unsustainable and are not recommended as an initiative to pursue. Efforts to sponsor fare-free bus service, to the extent additional funding is available, are recommended to be applied on a systemwide basis.

However, in the event additional fare-free bus routes are established, these programs could follow the template of the City of Boston's program for bus Routes 23, 28, and 29 with respect to data collection and MBTA cost reimbursement.

3.1 Data Collection and Cost Reimbursement

All MBTA bus vehicles are equipped with legacy CharlieCard and cash fareboxes, new next-generation Charlie fare validators, GPS tracking, and additional data collection technologies. All but the oldest bus vehicles in the MBTA fleet are equipped with Automated Passenger Counters (APC) that use optical sensors to count and log vehicle boardings and alightings. Collectively, these technologies continuously track fare payments, passenger boardings, vehicle location, travel time, and other metrics.

The MBTA is also continuously collecting records of all trips taken on The RIDE, including origin and destination, amount paid, and other data fields.

The agreements between the City of Boston and the MBTA for fare-free service on Routes 23, 28, and 29 leverage this continuously collected data to calculate reimbursement payments from the City of Boston to the MBTA to sponsor fare-free travel. Historic farebox, transfer, and APC data was analyzed to calculate average $-per-boarding fare paid by passengers on the three respective bus routes. On the RIDE, a "baseline" of projected RIDE trips in the service areas of the three bus routes was established to project future RIDE usage assuming that fares continued to be charged.

Building on these calculations, the MBTA bills the City of Boston each month for free trips provided on Routes 23, 28, and 29, and for free RIDE service provided in the catchment area of the bus routes. These bills include the following cost categories:

1) Bus Fare Revenue Loss: Free boardings by bus route (as measured by APCs) multiplied by the calculated historic average $ per boarding by bus route.
2) RIDE Fare Revenue Loss: Standard ADA RIDE fares multiplied by the "baseline" expected RIDE trips provided fare-free in the affected service areas.
3) RIDE Induced Operating Cost: Induced RIDE trips (actual trips minus baseline trips) multiplied by average RIDE trip length (in hours) and average $-per-hour marginal cost of providing RIDE service.
4) Administration Costs: Fixed monthly cost of MBTA data analysis, processing, and other administrative expenses.

Note that change in bus operating expenses for fare-free Routes 23, 28, and 29 are considered to be *de minimis* for those specific routes and are excluded from the City of Boston's reimbursement payments.

This data collection, cost calculation, and reimbursement approach could potentially serve as a template to be applied to other bus routes.

In the event that a fare-free route crosses municipal boundaries and multiple municipalities wish to share the costs of that route, the MBTA could provide municipality-specific bus passenger boarding and RIDE data. This would allow each municipality to pay for the portion of trips along the route that start within its boundaries.

4 Potential Evaluative Criteria

The Massachusetts FY 2025 Final Budget includes seven different "evaluative criteria for potential [fare-free] route selection," listed below:

> *(a) whether a municipality has identified a route for a fare free pilot program;*
> *(b) opportunities for increased ridership;*
> *(c) increased service accessibility to low-income individuals;*
> *(d) opportunities for increased reliability of on-time performance due to dual-door boarding;*
> *(e) potential cost savings arising from elimination of contracted farebox equipment and enforcement personnel;*
> *(f) opportunities to reduce or eliminate rider and driver altercations; and*
> *(g) geographic equity;*[21]

As detailed in Section 2.6, a conclusion of this report's fare-free bus feasibility study is that it is the MBTA's view is that limited route-specific fare-free bus programs are unsustainable and are not recommended as an initiative to pursue.

However, if the MBTA were to pursue additional fare-free routes, the seven evaluative criteria listed above could potentially be informative to varying degrees. Other additional potential evaluative criteria include:

a) Cost of providing fare-free service (*e.g.*, along the four cost channels as described in Section 2.4); and
b) Transfer behavior exhibited by riders (*i.e.*, the likelihood that riders on a route will transfer to rapid transit or another bus route).

Relevance of Evaluative Criteria to Systemwide Fare-Free Bus

In addition to potentially informing fare-free route selection on a route-by-route basis, many of the proposed evaluative criteria could also potentially inform the merits of fare-free bus service on a systemwide basis. An analysis of the costs and benefits of fare-free bus service would be incomplete, for example, without acknowledgement of the cost of fare collection on bus vehicles.

The following sub-sections explore and address the evaluative criteria that are relevant to the merits of fare-free bus on a systemwide level and explore the extent to which they are informative of such a policy.

Opportunities for Increased Ridership

A decrease in the price of bus transportation is expected to lead to greater demand for the service, and this is especially the case when a fare goes to zero. However, given the constrained resources available to public transit agencies such as the MBTA on both the capital and operating budgets, it is important to weigh the ridership benefits of fare-free bus service against the potential ridership benefits of spending the same funding in an alternative manner. While a thorough examination of the potential ridership benefits of alternative funding priorities is outside of the scope of the current study, it is well established that riders respond to other factors such as trip frequency, crowding, reliability, and transit facilities and amenities in addition to cost.[22]

[21] Massachusetts FY 2025 Final Budget at 1595-6369. https://malegislature.gov/Budget/FY2025/FinalBudget
[22] *See, e.g.*, https://transitcenter.org/wp-content/uploads/2019/02/TC_WhosOnBoard_Final_digital-1-1.pdf document pages 49 – 63.

Increased Service Accessibility to Low-Income Individuals

Potential fare-free bus policies do increase service accessibility for low-income individuals on bus trips that do not include transfers to rapid transit. However, such policies do not increase service accessibility for bus trips that do include transfers to rapid transit, or for public transit trips taken on any other mode. The MBTA prioritizes a "people-based" approach to fare affordability over a "location-based" or "mode-based" approach, favoring delivering fare reductions to riders as determined by their individual need rather than by the vehicle or route that they ride.

The MBTA's commitment to this approach is evidenced by the expansion of Reduced Fares to Income-Eligible riders that was launched in Fall 2024. This Reduced Fares expansion – alongside previously existing Reduced Fares for riders with disabilities, seniors, and students – provides riders at or below 200% of the Federal Poverty Level with credentials that provide discounts of at least 50% off full fare for all MBTA modes, including bus but also subway, commuter rail, and ferry. The 2024 expansion of Reduced Fares also applied to paratransit for the first time, providing Senior and Income-Eligible users of The RIDE with Reduced Fares on that mode.

A "people-based" approach to fare affordability has the potential to deliver greater savings to the riders who need it most while maintaining a consistent and uniform fare structure across modes, allowing the savings to be utilized along the entirety of a rider's journey, agnostic of the mode of travel.

Opportunities for Increased Reliability of On-Time Performance Due to Dual-Door Boarding

As described in Section 2.2, City of Boston research shows that fare-free bus service on Routes 23, 28, and 29 resulted in minimal vehicle speed changes, as faster boarding and shorter dwells on fare-free routes were offset by more frequent stops and dwells.

Additionally, the MBTA is in the process of moving to a new fare collection system that will significantly change the way riders interact with fare payment technology. Rather than all riders boarding at the front door of the bus and queuing to pay their fares one-at-a-time at a single farebox, the future system will include multiple fare readers mounted at each door, with all doors opening for passenger alightings and boardings at all stops. This future system also accepts contactless payments – eliminating some of the need to "top up" CharlieCards – and includes plans for an expansion of retail locations and curbside vending machines where riders can load cash onto fare media, allowing cash payment to move offboard of the vehicle. These fare collection technology improvements are designed to achieve all-door boarding and shorten dwells while still maintaining fare collection.

Opportunities to Reduce or Eliminate Rider and Driver Altercations

Another change planned alongside the MBTA's move to all-door boarding (as discussed above) is a shift in the responsibility for fare enforcement from the bus operator to a new team of Fare Engagement Representatives. This will take drivers out of the business of enforcing fares, allowing them to focus on operating their vehicles without having to worry about rider payment. The Fare Engagement Representatives who will take over the role of encouraging fare compliance are trained in areas such as youth engagement, de-escalation tactics, and cultural sensitivity. While perhaps the primary benefit of the move to all-door boarding will be faster trip times and shorter dwells, this change in operator duties is also designed to reduce or eliminate rider and driver altercations and shift that risk to a dedicated team better trained and positioned to handle any potential conflicts.

Cost Savings from Elimination of Contracted Fare Collection Equipment and Enforcement Personnel

In the very long-run, the elimination of fare collection from bus vehicles would result in material cost savings with respect to fare collection technology and equipment. However, due to the contractual structure of the MBTA's fare collection technology and the agreements the Authority has with its vendors, stopping the collection of fares on buses would lead to only minimal fare savings in the near or medium terms. The MBTA has entered into contractual commitments for its fare collection vendors to install, operate, and maintain fare collection equipment at MBTA stations and on vehicles into the 2030s, with additional contractual measures in place to potentially continue the maintenance of this installed equipment even further into the future. Every light rail and bus vehicle in the MBTA fleet already has new validators installed. The costs to design the new system have also already been spent or are contractually committed to be spent. Uninstalling existing equipment or "pulling the plug" on a system that the MBTA has committed to pay to for would amount to throwing out the good after the bad with respect to the relationship between upfront costs and return on investment over time.

Unlike the costs of the MBTA's fare collection equipment, the cost of the new Fare Engagement Representatives slated to take over the responsibility for fare inspection and compliance are not "sunk." A systemwide fare-free bus program would allow the Fare Engagement Representatives already hired to focus their efforts on the Green Line and would prevent the need for future Fare Engagement Representatives to be hired. A curtailment of future hiring of this manner could save the MBTA approximately $2.9 million per year for each 16-person cohort of Fare Engagement Representatives not hired in the future.

5 Community Advocacy Organization Consultation

In preparing this report, MBTA staff members actively consulted with members of the community advocacy organizations listed below:

- Action for Equity
- Allston-Brighton Health Collaborative
- Boston Center for Independent Living
- Conservation Law Foundation (CLF)
- Fenway Community Development Corporation
- LivableStreets Alliance
- Massachusetts Budget and Policy Center (MassBudget)
- TransitMatters
- Transportation for Massachusetts (T4MA)

MBTA staff held three Community Advocacy Organization Consultation sessions to discuss this study, share updates, and solicit feedback. A rich variety of topics, concerns, and suggestions were raised by participants of these three consultation sessions. These points have either been addressed and incorporated[23] into the previous sections of this report or are outside the scope[24] of the present study. The MBTA is deeply appreciative of the time and effort of our partners in this work, and the staff thank them for the time and energy put into guiding this work product.

[23] *E.g.*, addressing the cost of fare collection technology, or recommending methods for how municipalities could share the costs of a free route.

[24] *E.g.*, addressing the climate impacts of fare-free bus, or determining where the funding could originate to support a fare-free system.