

The MBTA's Looming Bus and Green Line Fare Evasion Crisis

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Introduction

On October 7, 2021, Governor Charlie Baker appointed five members to the newly-created Massachusetts Bay Transportation Authority (MBTA) Board of Directors that was statutorily established on July 29, 2021 to succeed the MBTA Fiscal and Management Control Board (FMCB) in administering MBTA finances and operations.¹ The Governor's appointments bring the board to its full statutory complement of seven members, including the statutorily-designated Secretary of Transportation and an appointee of the MBTA Advisory Board. The fully-constituted board begins its tenure faced with a difficult policy decision, one the FMCB left unresolved after months of deliberation and public testimony when its tenure expired on June 30, 2021: what should be done to prevent an expected \$25–30 million surge in fare evasion on MBTA buses, the Green Line, and Mattapan trolley line when the MBTA's automated fare collection system (AFC 2.0) goes into operation in 2023.

AFC 2.0 is a major component of the MBTA's \$8 billion² Fiscal Years 2022–2026 Capital Investment Plan (CIP), with a total capital cost of \$783.44 million, the fifth costliest of all individual projects in the CIP, trailing only the Green Line Extension at \$2.12 billion, Red Line/Orange Line Infrastructure improvements at \$1.07 billion, South Coast Rail Expansion at \$917.37, and Green Line Fleet Replacement at \$799.97 million.³

Once fully implemented, the new system will allow T riders to use account-based contactless fare cards, bank-issued debit and credit cards, and cell phone apps that are replenishable either online or at a broadly expanded network of MBTA fare vending machines in stations, retail locations, and some busy bus stops. The system aims to make it easier for riders to purchase and use interoperable electronic tickets seamlessly on all MBTA transit modes, including subway, trolley, commuter rail, bus, ferry, and paratransit. The new system will also facilitate a host of new options in ticket pricing, including the possibility of distance-based, age-based, income-based, and multimodal fare pricing.

By facilitating cashless tap-and-go boarding at both front and rear doors of buses and Green Line vehicles, boarding times are predicted to be shortened by as much as a quarter, speeding up trip times by 10 percent.⁴ According to an analysis presented by MBTA staff to the FMCB, as explained herein, the policy of all-door boarding also has a downside. Because a commuter will be able to board MBTA buses, trolleys, and Green Line vehicles from the rear door, out of sight of the driver, without tapping-on at the electronic ticket reader, all-door boarding will increase the likelihood of fare evasion.

The contactless fare card reader technology that will be used to facilitate all-door tap-on boarding on MBTA buses, Green Line and Mattapan trolleys, and on all other MBTA modes beginning in 2023 is a product of Cubic Transportation Systems, one of the MBTA's vendors for AFC 2.0. On June 10, 2020, the MBTA executed a 3,083-page public-private partnership agreement with Boston AFC 2.0 OpCo LLC (OpCo), a consortium of Cubic Transportation Systems and John Laing AFC HoldCo Corp., to replace the agency's antiquated Charlie Card fare collection system.⁵ In addition to a three-year period for design and installation of AFC 2.0 hardware, IT, and back-office operations, the contract provides for 10 years of annual payments totaling \$212.1 million for operation and maintenance performed by OpCo,⁶ including options for two five-year extensions.⁷

One of the main selling points of AFC 2.0 was its promise of delivering substantial fare evasion savings. According to the Federal Transit Administration's (FTA's) profile of the MBTA's AFC 2.0 project, "cost savings predicted during the initial 10-year operational phase... include fare evasion savings of \$35 million."⁸

But in April 2021, MBTA General Manager Steve Poftak and his staff told the FMCB that fare evasion could potentially increase by \$25 to \$30 million per year above current levels when the MBTA transitions to all-door boarding on its bus, Green Line, and trolley lines in 2023 unless the T undertakes effective enforcement measures to combat it. They recommended that the control board implement significant penalties for fare evasion and hire at least 80 to 100 civilian enforcement staff to verify fare payment on board T commuter vehicles and issue citations to fare

All-door boarding will increase the likelihood of fare evasion.

evaders. Staff recommended that fines be established at \$50 for first, second, and third offenses and \$100 for fourth and subsequent offenses. To incentivize fare violators to heed the citations, Poftak and the MBTA staff recommended that they include a notice to recipients that failure to pay or appeal two or more citations would result in non-renewal of motor vehicle licenses by the Massachusetts Registry of Motor Vehicles.⁹

Poftak and the MBTA staff are not alone in projecting increased fare evasion with all-door boarding. In 2016, the Transportation Research Board investigated the revenue impact of allowing all-door boarding during rush periods on the MBTA's Green Line. The study used inspectors and researchers on board two-car Green Line trains and estimated a fare evasion rate of 22 percent.¹⁰

Despite serious concerns about the potential for increased fare evasion on MBTA buses, Green Line cars, and Mattapan trolleys, the MBTA has seemingly found a way to improve fare collection on another mode. The most promising component of the AFC 2.0 fare evasion initiative is the one planned for its commuter rail system, which Keolis, the MBTA's commuter rail operator, has estimated to cost as much as \$30 million a year in lost revenue.¹¹ The new system will require commuters to tap on and tap off at fare gate turnstiles to enter and exit the MBTA's three busiest commuter rail stations, South Station, Back Bay, and North Station, at which approximately 90 percent of trips either initiate or terminate. Currently, no MBTA commuter rail stations have fare gates. At all outlying commuter rail stations, commuters will tap on at electronic fare ticket readers before boarding the train. The outlying stations will not have gated boarding areas.

The lack of gated boarding areas at outlying stations will almost certainly result in some fare evaders failing to tap-on at origination stations, but because commuters will be required to tap-off at fare gates to exit the platforms at South Station, Back Bay, and North Station, it is expected that fare evasion will be substantially reduced for the 90 percent of commuter trips originating or terminating at these three busy stations. Because fare gates are not planned for outlying stations, a residual vulnerability is that in-bound commuters not destined for gated stations at South Station, Back Bay, or North Station could depart the train without having paid a fare.

Likewise, fare evasion will be reduced on outbound commutes originating at South Station, Back Bay, or North Station, because riders will have to tap-on at a gated station to board the train. A residual vulnerability is that an out-bound commuter boarding at one of these gated stations could tap-on there with an inexpensive ticket for a nearby station but depart at a more expensive distant one.

AFC 2.0's promising tap-on, tap-off fare evasion prevention strategy that is planned for commuter rail is not replicated for the Green Line, buses, or Mattapan trolleys. Those modes do not include a tap-off component, only a tap-on upon boarding at any door. As explained later, a substantial percentage of Green Line commuters begin or end their commutes at closed stations. The MBTA should study the feasibility of using the same strategy of tap-off entry and exit at closed stations that it plans for commuter rail on all modes to reduce fare evasion caused by all-door boarding.

Fare evasion on commuter rail

In a report entitled *Tackling Fare Evasion on Commuter Rail*, Keolis said a survey of 1,655 customers conducted on March 1–2, 2015 found that 15 to 20 percent of passengers were not paying the correct fare for their journey.¹² Of these, 3 percent of commuters had no fare collected, 5 percent had incorrect fares collected, 6 percent used an invalid ticket, and another 6 percent refused to show the ticket, costing the system as much as \$35 million annually.¹³ At the same meeting, Keolis reported the results of its Fall 2015 Customer Satisfaction Survey of more than 7,000 customers, which included a question about how often fares are collected. Sixty percent reported that fares were collected all the time, 37 percent said most of the time, and 3 percent responded some of the time.¹⁴

Commuter rail fare collection currently involves collecting paper tickets from a station booth or buying an online ticket on a phone app, which must then be manually inspected by a train

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conductor after boarding. Manual ticket collection may have been practical in the early 1900s, but today the prospect of boarding a train through only one door at a low-level platform, climbing steep steps onto the train and fumbling for a paper ticket to prove to the conductor that you've paid for the trip is cumbersome and outdated. A fast, modern boarding, ticketing, and fare collection system would expedite the process for customers and increase MBTA revenue. Over time, more revenue from a modernized system would contribute to a better-funded commuter rail system. The alternative is to let system ridership and revenue drop, which would exacerbate both congestion on metropolitan Boston roadways and the MBTA's fiscal challenges.

New hardware and payment methods will undoubtedly improve data-gathering capacity. However, some enforcement problems will remain. The current proposal for on-board enforcement under AFC 2.0 is that "hand-held devices will be used on board to check validity of fare media at random. Passengers may be asked to present proof of payment."¹⁵ Similar devices are currently being used on the commuter rail to check tickets purchased through an app.

The MBTA should evaluate the cost of sequentially enclosing or fencing and gating at least some higher-volume commuter rail station platforms as time and funds allow. Existing platform access arrangements at some suburban commuter rail stations, such as Dedham Corporate Center, are highly conducive to this retrofit (see Figure 1). In comparison, the London Overground has fenced and gated all stations, which has reduced the number of inspection staff required and the incidence of fare evasion, ultimately lowering operating costs and increasing revenue (see Figure 2). Multiple turnstiles or fare gates per station enable payments before accessing the platform, similar to how most subway stations in Greater Boston operate (see Figure 3). These elements eliminate the need to check tickets on the train and allow passengers to access all doors and speed up boarding.

A fast, modern boarding, ticketing, and fare collection system would expedite the process for customers and increase MBTA revenue.

Figure 1: Current Dedham Corporate Center Commuter Rail Station¹⁶

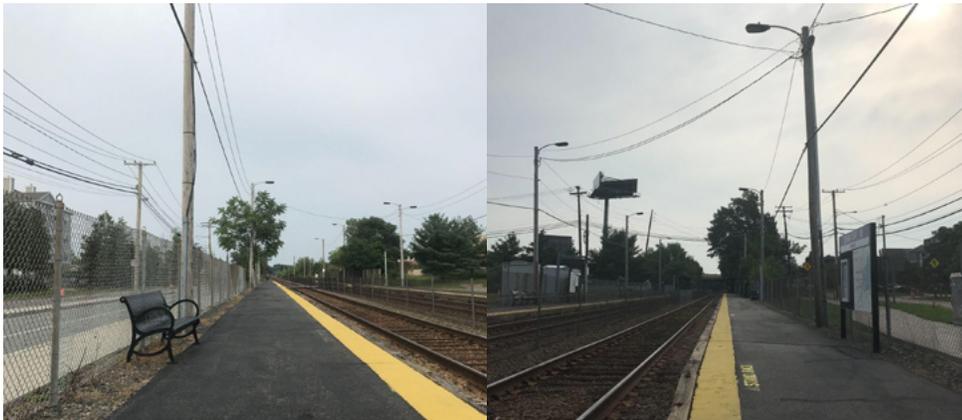


Figure 2: Photos of London Overground New Cross Gate station platform access control¹⁷



Figure 3: Blue Line Station at Orient Heights, East Boston¹⁸

Such an approach could simultaneously mitigate fairness concerns about increasing fines for fare evasion on the region's subway and bus networks. As transit activists are quick to point out, the fine for evading commuter rail parking fees is \$1, compared to as much as \$300 for evading a subway fare, despite the fact that only 7 percent of commuter rail passengers are low-income, compared to 26 percent of subway riders.¹⁹

However, obstacles to achieving controlled platform environments at commuter rail stations are pervasive across the system. At low-ridership suburban stations, installing fare gates may prove prohibitively expensive given the low additional revenue potential from cracking down on fare evasion. This problem is compounded by the slow return to pre-COVID ridership levels on the commuter rail compared to other forms of Boston-area transit.²⁰ Many suburban stations also have several points of access with lengthy stretches of platform fronting on surface-level parking lots, necessitating much more fencing and more turnstiles than narrow, underground transit stops.

It's imperative that the MBTA be choosy about where to implement these fare collection changes. Selecting only stations with the most passengers for retrofitting with fare gates and fencing may be of limited efficacy, as conductors cannot tell which station a given passenger boarded the train at and thus must check each passenger's ticket regardless. While the FMCB's 2016 data suggest that commuter rail offers the most potential for cracking down on fare evasion, to maximize revenue the MBTA should prioritize doing so on branches in which ridership is returning comparatively quickly after COVID-19. This will inevitably require updated data on ridership and fare evasion rates by mode. The ultimate goal should be that entire commuter rail lines have controlled-access platforms, which would increase MBTA revenue, reduce operating costs and enable faster service.

Fare evasion on the Green Line

The MBTA's 2016 study, *Fare Collection Strategy—Green Line*, estimated that Green Line fare evasion amounted to \$1.3 to \$4.5 million annually, attributable mostly to rear door boardings at 53 surface stops during peak commuting periods.²¹ The MBTA concluded that fare evasion was far less at the Green Line's 13 gated stations, where commuters must swipe at ticket gates before gaining access to the platform. The MBTA reported that 81,574 boardings take place at surface stops on the Green Line on average weekdays, while 87,420, or around 52 percent, are at gated stations in the urban core.²²

During off-peak periods, MBTA policy calls for front door boarding only via the fare box located at the front door of each vehicle. Drivers have discretion, however, to allow all-door boarding during off-peak periods when necessary to avoid delays, so long as an announcement is made asking rear-door passengers to use the fare box.

Obstacles to achieving controlled platform environments at commuter rail stations are pervasive across the system.

During peak periods, all-door boarding is allowed, accompanied by announcements encouraging farebox use, but crowded vehicles may limit passengers' ability to navigate to the farebox. Thus, a complicating factor for AFC 2.0 is that all-door boarding, to be allowed on the Green Line and buses, will both speed up passenger trips and make fare evasion easier, especially in crowded vehicles.

The MBTA's 2016 study suggests that fare evasion is not as serious a problem on the Green Line as on commuter rail, even though there's some evidence that Green Line fare evasion has been vastly underestimated in the past. For example, a 2016 Central Transportation Planning Staff (CTPS) study concluded that Green Line fare evasion amounted to \$1.6 to \$1.9 million annually. However, the MBTA suggested later in 2016 that fare evasion could amount to as much as \$4.5 million, depending on the share of rear-door passengers who have prepaid passes. The pass holder factor is important because those with prepaid passes have paid for their trip despite not having swiped a card at the fare box. It's also possible that in past studies examining Green Line fare evasion, commuters were influenced by the presence of the official carrying out the study to make their way forward to the fare box, thus biasing the results.

Previous MBTA reporting of annual Green Line ridership has been questionable, which also raises concerns that the T's fare evasion estimates may be too low. For example, the MBTA reported to the FTA that 60,838,627 unlinked passenger trips had occurred on the Green Line between July 2014 and June 2015.²³ Yet in a report entitled "Potential MBTA Fare Changes for FY2017," CTPS reported 46,915,412 unlinked passenger trips on the Green Line during the same July 2014 to June 2015 period.²⁴ It's unclear whether the 14 million additional riders reported by the MBTA were included in prior fare evasion estimates.

All this is to say that more precise and, importantly, post-COVID data on fare evasion is a prerequisite for Green Line fare collection reform. The current fare collection proposal to speed up boarding is for all-door boarding with "tap-on" ticket readers on all doors. A large number of inspectors would need to be hired and equipped with hand-held devices to validate tickets on board and prevent fare evasion. This significantly increases operating costs—perhaps by more than the amount that would be recouped from reduced fare evasion.

On the Green Line, the AFC 2.0 "tap and go" multi-door boarding system would rely heavily on peer pressure to force people to tap on when boarding, with random staff inspections. Peer pressure has varying degrees of success and should be avoided where infrastructure and technology can be used. Researchers like Alessandro Buccioli at the University of Verona in Italy have shown that even with enforcement, people, especially young males, have a tendency to avoid paying their fares, and that peer pressure is an insufficient deterrent.²⁵

The MBTA should consider the feasibility of equipping the 13 underground Green Line stations with tap-on, tap-off fare gates to reduce fare evasion. A majority of passengers boarding at surface stops on the Green Line would be captured at these points.

If the MBTA determines that Green Line commuters should tap out at the beginning and conclusion of a trip at a closed station, as is being contemplated for commuter rail and other subway lines, it should also evaluate whether it would be cost effective to install such a system on some components of the Green Line, such as the D branch, where fare gates on fenced platforms may be an option. A much more nuanced study of the various Green Line branches and stations/stops is needed to analyze the opportunities for installing fixed infrastructure, such as fare gates, that eliminate the need for an army of inspectors with validation equipment. The E branch, for example, may need a very different approach than the D branch, as a portion of the route is in mixed traffic.

Fare evasion on buses

The MBTA's *Fare Collection Strategy—Green Line* report also estimated there is "\$1.0–\$2.4 million per year" in fare evasion on more than 170 bus routes. The MBTA's estimate of 1 percent fare evasion on buses is particularly questionable, considering that fare evasion on New York's

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The AFC 2.0 "tap and go" multi-door boarding system would rely heavily on peer pressure to force people to tap on when boarding.

MTA buses was recently reported at 22 percent, Washington D.C.'s Metrobus system was 14 percent, and San Francisco's BART bus system was at 8 percent.

And cities with significantly lower fare evasion rates usually have harsher enforcement mechanisms. In Paris, the fare evasion rate for buses is 11 percent, according to the local transit agencies. According to the New York Times, "the Paris transit system has 1,200 staff members dedicated to the problem and hands out about a million fines each year."²⁶ In London, the fare evasion rate is just 1.5 percent, but fare evaders could be fined up to \$1,300.²⁷

Comparing the figures, it is difficult to determine the accuracy of the MBTA's fare evasion studies. The Green Line and bus figures seem very low compared to the commuter rail estimates. It is likely that drivers allow some passengers on buses without paying, and rear-door bus and Green Line boardings during congested periods often lead to fare evasion unless the rider has a monthly pass. It may not be desirable to have bus drivers enforce fare collection more stringently, as confrontations between drivers and passengers over fares already account for the majority of assaults on bus operators.²⁸

At the same time, the lost fare revenue associated with rear-door boarding is not easily circumvented with fencing and gating, as MBTA bus routes are well-integrated with the regional public road network.

The confluence of these factors has, in part, led some observers to advocate for eliminating fares on buses entirely,²⁹ especially since MBTA bus passengers tend to have lower incomes than those on the commuter rail and Green Lines.³⁰ The MBTA will technically have the opportunity to employ income-based fares once AFC 2.0 comes on line in 2023, owing to the account-based element of its IT design. In 2019, the FMCB reviewed a study of the subject presented by MBTA staff that concluded that income-based fares would be technically possible but would require partner agencies for eligibility determination, customer service upgrades, staffing, and a back-end connection to partner agencies.³¹ At a meeting on May 10, 2021, MBTA staff told the FMCB that it is continuing to work on implementation feasibility if funding is made available for a low-income fares program.³² The biggest obstacle to implementing income-based fares is the MBTA's need for revenue to pay for growing system-wide expenses.

A sobering reassessment

As mentioned previously, the Federal Transit Administration (FTA) website has a detailed description of the MBTA's AFC 2.0 project that concludes: "cost savings predicted during the initial 10-year operational phase... include fare evasion savings of \$35 million." In recent months, the prediction that AFC 2.0 will result in \$35 million in fare evasion savings has undergone a sobering reassessment.

On April 20, 2021, the MBTA general manager and his staff concluded that fare evasion could potentially increase "quite dramatically," by \$25 to \$30 million per year above current levels if the T does not hire at least 80 to 100 civilian enforcement staff to issue fines on buses and Green Line vehicles of \$50 for first, second, and third offenses and \$100 for fourth and subsequent offenses.³³

The MBTA general manager and staff also recommended that the T put muscle behind its fare evasion fines by utilizing the authority given to it by the state legislature in Section 7(e) of Chapter 383 of the Acts of 2020.³⁴ Chapter 383 reduced fare evasion fines to not less than \$10 or greater than \$250, to be determined by the MBTA. It also gives the MBTA the authority to notify the Registry of Motor Vehicles of commuters who have two or more unresolved fare evasion citations, which could trigger drivers license non-renewal.³⁵ Before Chapter 383, fare evasion was subject to fines of \$100 for a first offense, \$200 for a second offense, and \$600 for a third or subsequent offense with notification to the registrar of motor vehicles of two or more unpaid or unadjudicated fines to trigger non-renewal of motor vehicle licenses.³⁶

MBTA General Manager Steve Poftak told the FMCB that setting the new fines too low would compromise the T's ability to deter fare evasion and require a significant investment in enforcement to catch violators. "I have concerns that at a significantly reduced level we're going

The MBTA's estimate of 1 percent fare evasion on buses is particularly questionable, considering that fare evasion on New York's MTA buses was recently reported at 22 percent.

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to have some difficulty enforcing this, and a lot of pressure to raise the head count around fare verification to a level that may not be feasible,” Poftak told the board.³⁷

The MBTA estimates that the annual cost for fare evasion field staff would be \$10–\$12 million and that this investment, coupled with the enforcement threat of non-renewal of motor vehicle licenses, could reduce potential fare evasion losses on bus and surface Green Line by roughly \$14 to \$22 million per year. Reducing the fine to \$25 could require a team twice as large to limit evasion by the same amount, T staff warned.

The FMCB voted to submit proposed regulations to the Massachusetts Secretary of State and conduct a hearing on April 15, 2021 to solicit public comments. The proposed fare evasion regulations included non-criminal \$50 fines for the first, second and third offense and \$100 for subsequent offenses, issuable by civilian fare verification teams, and backed up by non-renewal of motor vehicle licenses after two unpaid or unadjudicated fines.³⁸

Following the public hearing on the proposed regulations, the FMCB met on May 10, 2021 and reviewed the public comments. With respect to the enforcement mechanism, staff reported, “Having heard the concerns of our riders, the MBTA is no longer proposing the marking of licenses for non-renewal due to unpaid citations in this round of regulations. We will reevaluate the citation process as we move forward, and may include RMV in the regulatory drafting in the future.”

An MBTA staff presentation to the FMCB at the May 10, 2021 meeting stated: “Lowering fines below \$50 would create a significant revenue risk when the MBTA moves to all-door boarding on bus and surface Green Line in 2023.” Staff asserted that “\$50 is the lowest fine that we expect would provide an effective deterrent under future all-door boarding.” In addition, lowering fines would necessitate a verification team with 80–100 field staff riding onboard T vehicles, which would raise costs by another \$10–12 million per year, according to MBTA estimates.

On May 24, 2021, the FMCB discussed proposals to lower the fine but did not vote to either approve or disapprove them. The staff presented proposed revised regulations to drop the FMCB’s previously proposed \$50 fines for first through third offenses to \$25 and drop its \$100 fines for fourth and subsequent offenses to \$50. MBTA staff told the FMCB at the meeting, “a fare verification team of 80 people would yield an inspection rate of 5 to 7 percent, meaning the typical passenger would be checked only once every 20 rides.”³⁹ The revised draft regulation also proposed to eliminate the only real enforcement element that had been included in its previously proposed regulations, i.e., license non-renewal.⁴⁰ As a result, the proposed revised regulations would not have included any effective enforcement provision, despite the fact that looming “decisions associated with all door boarding on buses and surface Green Line are expected to increase fare evasion.”⁴¹

State House News reported on the May 24, 2021 meeting with the headline: “MBTA can’t settle on new fare evasion penalties.”

By not reaching a consensus on fare evasion penalties and enforcement mechanism of non-renewal of licenses, the FMCB effectively left the matter to be decided by its successor board, the MBTA Board of Directors.

By Pioneer Institute’s estimate, even if the MBTA institutes and enforces the \$50 fine system that MBTA staff estimates would reduce the expected annual increase in fare evasion by \$14–22 million from the T’s base-case estimate of \$25–\$30 million, the result would still be an \$8–11 million increase in losses due to fare evasion, plus an annual enforcement cost of \$10–12 million. Based upon MBTA staff’s estimates, the net cost, including paying for on-board inspectors, would be \$18–\$23 million in combined revenue losses and enforcement expenses per year.

If the T staff is correct that the MBTA would need to spend roughly twice as much (\$20–24 million for on-board inspectors) for enforcement if the board sets the fine at \$25, the net cost, including combined revenue losses and inspector expenses, would be \$28–\$35 million per year. This would exceed the T’s base-case estimate of evasion losses of \$25–\$30 million if the MBTA instituted all-door boarding with no on-board enforcement.

The T missed a crucial opportunity to offload some of the burden of fare enforcement onto OpCo when it signed the June 2020 AFC 2.0 contract. Until April 2021, the agency’s public

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position was that AFC 2.0 would help *reduce* fare evasion, leaving them ill-prepared for the magnitude of increased costs associated with alleviating fare evasion, especially on the Green Line. It's also unclear if the T's current staffing expense estimates for enforcing fares truly capture the long-term pension and benefits obligations that would be created for the agency to the extent that MBTA police would participate along with civilian enforcement officers. Given that, as of 2020, the MBTA's pension fund is only 57% funded, it's worth avoiding taking on additional future liabilities if at all possible.⁴²

The FMCB's tenure as MBTA overseers expired by statute on June 30, 2021. As the newly created MBTA Board of Directors begins its tenure, its options with respect to fare evasion fines are easily understood because they are spelled out clearly in statute. As explained earlier, the state legislature enacted Chapter 383 of the Acts of 2020, signed by Governor Baker on January 15, 2021, providing the MBTA with the following authority to issue and enforce non-criminal citations and fare evasion fines:

1. Authorized the MBTA to employ civilian personnel to issue warnings and noncriminal citations.
2. Authorized the MBTA to assess a fare evasion fine of not less than \$10 or greater than \$250 as established by regulations of the Massachusetts Bay Transportation Authority.
3. Authorized the MBTA to report to the RMV the names and addresses of MBTA customers with at least two unpaid and unresolved fare evasion citations and directed the registry to not renew that person's license or right to operate a motor vehicle under chapter 90.⁴³

In some U.S. transit agencies, fare avoidance fines are enforced in civil court; in others they are adjudicated in criminal court. In still others the transit agency temporarily bars the commuter from using the transit system; and in some, state departments of revenue withhold tax refunds and lottery agencies withhold lottery winnings to recoup unpaid fare evasion fines. Following the MBTA's abandonment of its one authorized enforcement tool, license non-renewal, fare evasion fines are procedurally unenforceable, since the MBTA lacks the legal means to compel payment. Even if the MBTA later decides to utilize license non-renewal, it is a weak enforcement tool since more than one-third of transit users in the U.S., 35 percent, and almost half of bus transit riders, 44 percent, did not have a driver's license in 2017, according to the American Public Transportation Association.⁴⁴

Data from other cities further illuminates the need for more effective fare evasion penalties. In San Francisco, thousands of people were ticketed for violations on the BART system in 2019, but nearly 90 percent of those who got a ticket have not paid the fine.⁴⁵ In St. Paul, Minnesota, the corresponding figure was 97.4 percent in 2018 and 2019.⁴⁶

Conclusion

The MBTA will likely face a fare evasion crisis when it transitions to all-door boarding on buses, the Green Line, and the Mattapan trolley in 2023. General Manager Poftak and MBTA staff have sounded warnings about the potential for a \$25–30 million spike in fare evasion costs when the new AFC 2.0 system is implemented unless the MBTA Board of Directors institutes meaningful, enforceable penalties for fare evaders. Thus, Pioneer Institute makes the following recommendations for managing the AFC 2.0 contract and related fare evasion procedures going forward:

1. The MBTA Board of Directors should undertake a comprehensive analysis conducted by an independent third party to estimate the extent to which fare evasion levels will rise when all-door boarding begins on the Green Line, buses, and the Mattapan trolley in 2023. The analysis should examine fare evasion rates, fare evasion fine levels, and enforcement mechanisms of other public transit districts with bus, light rail, and trolley transit modes.
2. The MBTA Board of Directors should avoid implementing a fare evasion strategy on buses, the Green Line, and the Mattapan trolley that costs more to implement than it is reasonably expected to save in fare revenue. Costs should include those of the MBTA, including

The MBTA would need to spend roughly twice as much (\$20–24 million for on-board inspectors) for enforcement if the board sets the fine at \$25.

The MBTA Board of Directors should make an informed estimate of the cost of utilizing a tap-in/tap-out system on Green Line closed stations

installation and maintenance of AFC 2.0 electronic ticketing devices on board vehicles and fare verification staff, as well as the costs of other state agencies such as the Registry of Motor Vehicles.

3. The MBTA Board of Directors should make an informed estimate of the cost of utilizing a tap-in/tap-out system on Green Line closed stations, where fare gates could serve as an additional fare evasion deterrent.
4. The MBTA should evaluate the fare-collection cost and benefit of sequentially enclosing or fencing and gating at least some higher-volume outlying commuter rail station platforms as time and funds allow, requiring commuters to tap-on when entering the boarding area and tap-off when exiting.
5. The MBTA Board of Directors should reexamine the MBTA's estimate of 1 percent pre-pandemic fare evasion on buses, considering that fare evasion on New York's MTA buses was recently reported at 22 percent, Washington D.C.'s Metrobus system was 14 percent, and San Francisco's BART bus system was at 8 percent.

As transit ridership counts remain volatile and public health measures tenuous during COVID-19, it is extremely difficult to resolve the tradeoffs involved in reforming fare evasion policies on the MBTA. Fare evasion is not a victimless crime, as it entails less money for maintenance, operations, and capital investments to further serve the transit riders who do pay.

The future viability of Boston transit depends on stabilizing the MBTA's finances for the long-term by proactively addressing the fare evasion concerns created by AFC 2.0.

Endnotes

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Mission

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Success for Pioneer is when the citizens of our state and nation prosper and our society thrives because we enjoy world-class options in education, healthcare, transportation and economic opportunity, and when our government is limited, accountable and transparent.

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