



Massachusetts Bay Transportation Authority

Proposed Fare Tariff Changes for FY 23 A&F Subcommittee Meeting

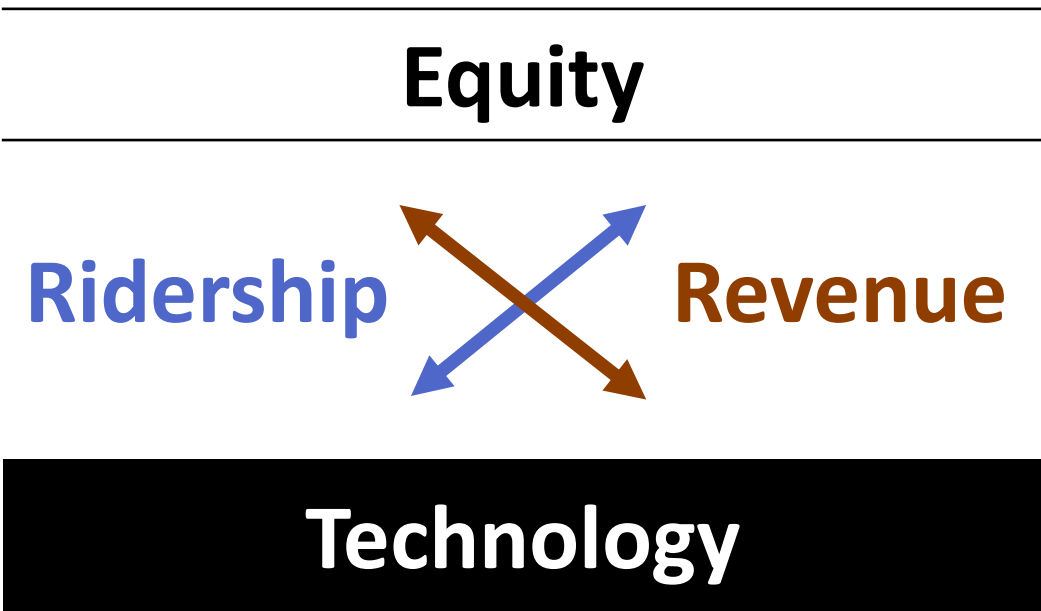
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Fare Policy Decision Making

- **Technology:** Fare collection technology determines feasibility/options at any given time
- **Equity:** Fare increases and decreases need to be equitable from a system-wide perspective (across all MBTA modes)
- **Ridership and Revenue:** There is nearly always a short-term tradeoff—fare changes that grow ridership lose fare revenue



FMBC statement of fare policy objectives (Dec 2015):

- *raise revenue*
- *improve service and customer experience*
- *advance social, equity, environmental, and regional economic goals*



Fare Changes FY 23: Overview

The proposed changes, outlined below and detailed in the following slides, target 3 key goals:

- 1. Reduced Fares:** Increase equity by filling gaps in our existing fare structure for Reduced Fare riders
- 2. Ridership:** Minimize revenue implications in the face of Covid and budget uncertainties, while increasing ridership in the recovery where possible
- 3. Simplify:** Simplify the logic of our tariff rules and transition toward the rules that will be in place under AFC2.0



Fare Changes FY 23: Summary Overview

The proposed changes target **3 key goals**: Supporting **Reduced Fares** programs, **Increasing Ridership**, and **Simplification** of fare rules.

Annual Impact of Proposed Fare Changes - 2023, Recovery Scenario 1		
	Ridership (000s)	Revenue (000s)
Reduced Fares:		
Expanding Monthly Passes to all modes for Reduced Fare Riders	+2 to +9	(\$118) to (\$144)
New 7-day LinkPass for Reduced Fare Riders	+1 to +5	(\$210) to (\$250)
Allowing Reduced Fare LinkPass to be Valid on 1A and Inner Harbor Ferry	Minimal	Minimal
Increasing Ridership:		
Lower Price for 1-day LinkPass from \$12.75 to \$11	+5 to +23	(\$269) to (\$328)
Permanent mTicket 5-Day FlexPasses on Commuter Rail	+11 to +33	(\$687) to (\$884)
Simplification:		
Second Transfers on Subway/Bus and Between Express Routes	+44 to +102	(\$316) to (\$413)
Total Impact	+61 to +165	(\$1,513) to (\$1,913)

Defining Title VI Equity Analysis

- It is MBTA policy to evaluate major service changes and fare changes, in accordance with Title VI of the Civil Rights Act and the FTA's guidance. Fare changes cannot have a Disparate Impact on minority riders or a Disproportionate Burden on low-income riders
- A Disparate Impact or Disproportionate Burden is found if the average fare decrease for minority or low-income riders is $<0.9x$ the average decrease for all riders, or if the average fare increase for minority or low-income riders is $>1.1x$ the average increase for all riders.
- All the proposed changes are decreases in fares, such that the ratio of price change for Minority or Low-Income Riders to All Riders **must be greater than 0.9x**.
- Central Transportation Planning Staff (CTPS) was contracted to complete this Title VI Equity Analysis.



Preliminary Equity Findings of Proposed Changes

- CTPS has performed a preliminary analysis, which will be updated with the final recommendations after the public comment period.
- All the proposed changes are decreases in fares, such that the ratio of price change for *Minority or Low-Income Riders* as compared to *All Riders* **must be greater than 0.9x**.
- Note that while the results below are presented individually and in aggregate, the equity analysis is only considered on an aggregate basis by the FTA.

CTPS Disparate Impact/Disproportionate Burden Ratio Analysis		
Fare Change	DI Ratio ¹	DB Ratio ²
Expanding Monthly Passes to all modes for Reduced Fare Riders	0.09x	0.10x
New 7-day LinkPass for Reduced Fare Riders	1.83x	3.42x
Allowing Reduced Fare LinkPass to be Valid on 1A and Inner Harbor Ferry	0.00x	0.00x
Lower Price for 1-day LinkPass from \$12.75 to \$11	3.19x	4.25x
Permanent mTicket 5-Day FlexPasses on Commuter Rail	0.50x	0.11x
Second Transfers on Subway/Bus and Between Express Routes	2.13x	2.33x
Aggregate Fare Tariff Change	0.90x	1.12x

¹Average Fare Change for Minority Riders / Average Fare Change for All Riders

²Average Fare Change for Low-Income Riders / Average Fare Change for All Riders

Timeline & Next Steps

- January:** Proposed Fare Changes will be presented to full MBTA Board
Public Comment Opens
- February:** Staff will conduct Public Outreach, informally and formally
Promoting Public Meeting on **February 10, 2022 6pm**; and
Public Hearing **February 17, 2022 at 6pm**
- March:** Public Comment will close on **March 3, 2022**
Staff will collate all comments, make any modification based
on feedback, and with CTPS will finalize the Equity Analysis
Full Board will be asked to vote on Propose Fare Changes
- July:** Changes are designed to go into effect on **July 1, 2022**



Appendix



Using Recovery Scenarios

- Throughout the pandemic, we have analyzed expected outcomes and compared actual ridership and revenue to three recovery scenarios. To date, the recovery has been trending between Scenarios 1 & 2. Ridership and revenue have overachieved Scenario 3 (our most pessimistic scenario) significantly.
- We continue to use these same Scenarios. We are not updating the scenarios at this time because:
 - The recovery has not deviated materially from the existing scenarios
 - Surveyed riders do not suggest we are at or near a “new normal” of travel patterns that could intelligently inform new scenario development
 - The changing variants make it difficult to narrow or change our scenario ranges *with any conviction*



Scenarios & Fare Change Analysis

- Internal MBTA analysis of these fare changes is based on Recovery Scenario 1 (our most optimistic recovery scenario) and, where noted, Scenarios 1 & 2.
- Given the higher ridership in Scenario 1, revenue and ridership impacts appear more significant under this Scenario. It is important to note, however, that even with larger impacts from the changes, Scenario 1 is a “better” outcome for the MBTA overall as more ridership increases fare revenue.

Recovery Scenarios - Percent of Pre-COVID Ridership Systemwide					
	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Scenario 1	72%	89%	93%	95%	98%
Scenario 2	57%	78%	82%	84%	87%



Reduced Fares Overview

As a reminder, the MBTA offers Reduced Fares (typically ~50% of Full Fares) to certain groups. Many of the tariff changes add to the set of passes and access available for these riders.

- **Seniors (65+)**: Present a valid ID at the CharlieCard Store and receive a Senior CharlieCard
- **Persons with Disabilities**: Apply for the Transportation Access Pass (TAP), which is valid for 1 or 5 years, depending on judgment of the disability
- **Middle and High School Students**: For students in grades 5-12, participating schools distribute the M7 Student CharlieCard (M7) or Regular Student CharlieCard (S-Card); students can also show valid student ID in some instances
- **YouthPass**: Low-income riders ages 18-25, administered through participating municipal partners



Expanding Monthly Passes to all modes (CR, Ferry, and Express Bus) for Reduced Fare Riders

Explanation

Currently, frequent reduced fare riders on the commuter rail, ferry, and express bus pay by trip; they are unable to access the value and convenience afforded by our monthly pass products. This proposal would offer a full set of reduced fare monthly passes, including Zone, Interzone, and FlexPasses, at approximately 50% of full fare pass prices

Goal

Increases equity by filling in a gap in our reduced fare product offering. By only offering one-ride reduced fare options, we know we are disadvantaging lower-income riders from obtaining the benefits of bulk purchasing.

Implications

Scenario	Ridership (000s)	Revenue (000s)*
1	+2 to +9	(\$118) to (\$144)
2	+1 to +6	(\$87) to (\$106)

*Note: we continue to vet the assumptions around revenue loss from these new products. Due to fare collection on the commuter rail these estimates rely more heavily on survey data and may continue to shift before final presentation to the board.



Adding a New 7-day LinkPass for Reduced Fare Riders

Explanation

This proposal creates a new product for reduced fare riders, a 7-day LinkPass priced at \$10 This completes the set of LinkPasses to create parity between Reduced and Full fares. The full fare 7-day LinkPass is priced at \$22.50. This product complements the Reduced Monthly LinkPass (\$30) and Reduced Single Ride (\$1.10 Subway, \$0.85 Bus)

Goal

Increases equity by filling in a gap in our reduced fare product offering.

Gives reduced fare riders the value and convenience of bulk purchasing in a range between single rides and monthly passes, even if they do not have the money for a full monthly pass at the beginning of the month.

Implications

Scenario	Ridership (000s)	Revenue (000s)
1	+1 to +5	(\$210) to (\$250)
2	+1 to +5	(\$195) to (\$233)



Additional accepted modes for Reduced Fare

LinkPass cardholders: Adding Zone 1A and Inner Harbor Ferry

Explanation

Currently, a Reduced LinkPass is only available on a CharlieCard, and not on a printed CharlieTicket to allow for visual validation by Commuter Rail conductors. Along with the “Expanding Monthly Pass on All Modes,” we are working with the AFC1.0 team on a fare media solution to allow Reduced Fare Riders to have a visually validated pass in addition to the reduced fare CharlieCard.

Goal

Increase consistency of product pricing and access for reduced fare passes.

There is no reason for the current distinction between a LinkPass and a Zone 1A pass, given our pricing structure (where Zone 1A costs the same as subway). This change continues to bridge that gap, an improvement that will be final with the AFC2.0 system.

Implications

Scenario	Ridership (000s)	Revenue (000s)
1	Minimal	Minimal
2	Minimal	Minimal



Lower 1-day LinkPass Price to \$11

Explanation

This proposal lowers the price of the 1-day LinkPass from \$12.75 to \$11.00

The current price has the highest pass multiple in the system; at \$11, the pass pays for itself with 5 subway trips in 24 hours

Goal

Increases ridership by encouraging more riders to buy passes with free marginal trips

Increases equity by reducing the price of a product popular with low-income & minority riders

Implications

Scenario	Ridership (000s)	Revenue (000s)
1	+5 to +23	(\$269) to (\$328)
2	+4 to +21	(\$242) to (\$295)



Permanent 5-Day FlexPass on Commuter Rail

Explanation

The FlexPass (5, 24-hour commuter rail passes for 10% off the price of 10 one-way trips, available on mTicket) is currently a pilot fare product. This proposal would make it a permanent feature of the fare structure, including Zone, Interzone, and Reduced Fare versions.

Goal

Encourages commuter rail ridership and provides a product that “bridges the gap” between one-way, single-ride tickets, and monthly passes for riders who work hybrid.

Implications

Scenario	Ridership (000s)	Revenue (000s)
1	+11 to +33	(\$687) to (\$884)
2	+8 to +23	(\$479) to (\$616)



Second Transfers on Buses and Between Express Routes

Explanation

Our current fare structure allows at most one transfer between bus and/or subway, with one recent addition — CharlieCard riders can currently transfer from Bus to Subway to Bus. This proposal would standardize the sequences to allow all combinations of second transfers involving Bus and/or Subway. In addition, this proposal would also allow for transfers between Express Bus routes.

Goal

Simplifies a complexity in our transfer policy. Newly possible combinations include bus-bus-subway, subway-bus-bus, and express bus-express bus.

Implications

Scenario	Ridership (000s)	Revenue (000s)
1	+44 to +102	(\$316) to (\$413)
2	+41 to +97	(\$295) to (\$386)



Assumption Utilized

Analysis is based on the scaling of pre-pandemic and mid-pandemic data to full year, recovery scenario ridership levels. In general, we assume the direct impact of price changes, the impact of elasticity, and some behavior changes (for example pass or mode changes based on new comparative pricing).

Elasticity Assumptions			
	Low	Medium	High
Monthly Passes on all modes for Reduced Fare Riders	(0.05)	(0.15)	(0.25)
New Reduced Fare 7-day LinkPass	(0.05)	(0.15)	(0.25)
Reduced LinkPass Valid on 1A and Inner Harbor Ferry	(0.05)	(0.15)	(0.25)
Lower 1-day LinkPass Price from \$12.75 to \$11	(0.05)	(0.15)	(0.25)
Permanent mTicket Flex Pass	(0.10)	(0.20)	(0.30)
2nd Transfers on Bus + Transfers Between Express Routes	(0.15)	(0.25)	(0.35)

CTPS Analysis uses ridership and demographic data from the 2015 - 2017 rider census (ie pre-pandemic) and 2019 AFC tap data and applies this to the FY22 fare tariffs, to create a ridership/revenue model that they believe is appropriate but is not the actual ridership/revenue combination from any historic year. Their analysis does not include the impact of elasticity, per FTA guidelines.



Commuter Rail Pass Multiples

While advocates have encouraged us to consider reducing Commuter Rail Pass Multiples (i.e. the number of single rides after which a monthly pass holder breaks even), we do not believe this is the appropriate time to consider changes because:

- We believe that low commuter rail pass usage and ridership is driven by work from home and limited commutes, not the price of passes.
- Surveys of office workers demonstrate a wide delta between current levels in office work (and related commute travel) and expectations around the “new normal” that will arise post-Covid. Given that we have not reached steady state, we believe it is premature to react to travel patterns.
- As noted, we view the 5-Day FlexPass as a bridge product between single ride and monthly passes for hybrid workers.

