

May 24, 2021

Fiscal and Management Control Board

Lynsey Heffernan

Andy Stuntz

May/June Fare Transformation FMCB Presentations



May 10th: Near-Term

- Update on reduced fare modernization and means-testing challenge
- Comparing fare equity strategies
- Discussion on fare evasion regulations
- Vote on mid-year tariff changes (Youth Pass, Outer Express)

May 24th: Medium-Term

- Fare strategy and promotions during transition to new normal
- Means Tested Fares
 update
- Vote of Fare Evasion Regulations

June 7th: Longer-Term

- **Efficiencies** of Fare Transformation project
- Future revenue opportunities after Fare Transformation complete

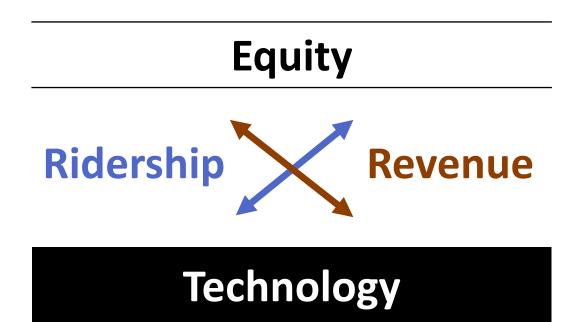
Fare Strategy and Promotions

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 <u>system-wide</u> perspective (across all MBTA modes)
- Ridership and Revenue: There is nearly always a short-term tradeoff fare decreases to grow ridership may reduce overall revenue

FMCB statement of fare policy objectives (Dec 2015):

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



Fare Strategy Through the COVID-19 Recovery and Fare Transformation Implementation

	Pand	lemic		Т	ransi	tion					N	ew No	rmal					
	Fare pilots Lynn, Brockton, Y Pass, Senior onl		otions f	ny fare or the	m t	Implement decisions on FY23 and Fare Transformation changes made during the transition Routine analysis, proposals, decisions, and implementation												
Policy	2021 tariff changes Youth Pass, Outer Express Bus Fare evasion decriminalization & regulations Consider fare promotions for the transition out of the			th Pass, Outer Express Bus e evasion decriminalization gulations sider fare promotions for transition out of the			01	of selected fare changes after tec Single-Ride Passes Reduced Fares Pass Programs						•				
	2020 2021		Fare Transformation) 2022					2023				2024						
	Spring Summer Fa	all Winter	Spring	Summer	Fall	Winter	<mark>Spr</mark> ing	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	
Technolo	Ogy FY22 Fare Changes Youth Pass and Outer Express Bus		Fare Transformation Phase 2 Upgrades CharlieCards in fare vending machines, new tappable CharlieTicket			Cha <u>Opp</u> char pass	FY23 Tariff Changes Opportunity to change fares and pass prices within current technology			e 4 – B Vay Fare payr parding c	Drmatio us and ment, all- on bus/GL. change nsfer rules		Fare Transformation Phase 5 – Commuter Rail Use one card on all modes. <u>Opportunity</u> to change Commuter Rail transfer rules			er ·		

Considering Fare Promotions During Transition

- Potential goals
 - Appreciation for current riders / essential workers
 - Welcoming riders returning to in-person activities
 - Attracting new riders to try the MBTA
 - Note: Primary drivers of ridership this fall will be the level of in-person activities, service levels, and perceived safety
- Most feasible option: Free day(s) with no fare collection
 - A weekday, a holiday, a weekend, a week, one day each month...
 - Relatively simple technical implementation, but still large-scale communication and customer service effort
 - Current fare technologies and the active project to upgrade fare vending machines limits our ability to implement any temporary *discounts* on bus and subway this fall (including pass discounts)

Free Day(s) Considerations

1. Equitable access to promotional fares

- Free day(s) provide the same benefit across all modes
- Early marketing could ensure all riders had opportunity to benefit
- In practice, most monthly pass-holders would still purchase passes and would not benefit

2. Timing

- May require flexibility/options—timeline for full economic reopening and resulting changes in ridership patterns are uncertain
- Selection of specific day(s) depends on goals and affects impacts

		AU	GL	JST	Г			SE	PT	EN	ABE	ER			C	C	то	BE	R			Ν	0	Έ٨	٨BI	ER	
S	м	т	w	т	F	S	S	м	т	w	т	F	S	s	м	т	w	т	F	s	S	м	т	w	т	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2		1	2	3	4	5	6
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
29	30	31					26	27	28	29	30			24 31	25	26	27	28	29	30	28	29	30				

Free Day(s) Considerations

3. Potential ridership impacts

- On free day(s), risk of crowded conditions and negative customer experience
 - Tolerance for crowding this fall is unknown—will vary across riders
 - With <u>pre-COVID</u> ridership and crowding standards, +5-15% bus ridership would have increased "crowded passenger minutes" by +44-129% (from 2% to 3-4% overall), with variation by route
- Longer-term ridership impact of free day(s) is uncertain, but hopefully positive

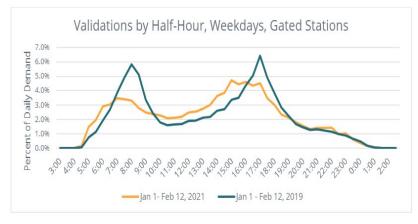
4. Costs

- Fare revenue loss—average weekly fare revenue this fall could be up to \$8 million
 - Loss potentially mitigated by any longer-term ridership gain
- The RIDE operating costs to serve additional demand on free day(s)
- Marketing and additional customer service staffing

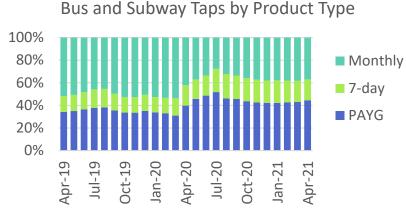
Monitoring and Analyzing Fare Recovery

- Travel patterns, fare product and program use, and rider demographics may shift significantly through the recovery
- OPMI, CSP, and Policy teams will be tracking movement in rider segments and assessing potential implications for fare strategy
 - E.g. have changes in travel frequency altered the ridership/revenue tradeoff for setting pass prices relative to per-ride fares?
 - E.g. are fares for any trip types less competitive or less equitable than they were pre-COVID following shifts in travel patterns or demographics?

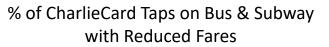
Travel patterns (frequency, time/day, mode)

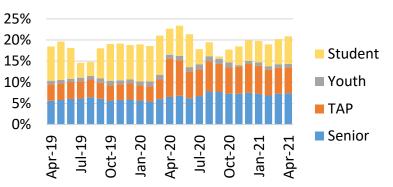


Fare product and program use



Demographics





Developing Fare Proposals for 2022 and Beyond

- Staff are taking a broad look at fares and developing proposals for fare pilots and changes to implement at key milestones over the next few years
 - Potential future mid-year (July) fare tariff updates
 - Bus Network Redesign implementation
 - Fare Transformation Phase 4—bus and subway
 - Fare transformation Phase 5—Commuter Rail
- Proposals will be influenced by the Fare Transformation technology timeline and the balance of ridership, revenue, and equity goals at each milestone
 - Past fare increases have considered ridership and equity but have prioritized raising short-term revenue to balance the operating budget
 - A fare proposal focused more on ridership or equity might be revenue-neutral or revenuenegative (at least in the short run)
- Proposals will be informed by analysis and public input
 - Monitoring and analysis of fare recovery
 - Commuter Rail Fare Study (March 2020)
 - Fare Transformation fare rules outreach (May 2021)

Commuter Rail Fare Study (March 2020)

- Identified areas where Commuter Rail fares could be improved
 - Fares may be unaffordable for low-income populations throughout the system who do not have access to existing reduced fare programs.
 - A large gap has developed between the Zone 1A fare and the Zone 1 fare.
 - Round trips that enter or leave Zone 1A but have low parking costs or other transit options are priced too high to compete effectively with lower-cost alternatives.
- Made recommendations consistent with current fare principles that could be implemented in the next few years
 - Complete the ongoing feasibility study of means-tested fares.
 - Smooth the current jump between the Zone 1A fare and the Zone 1 fare.
 - Develop a pilot proposal for reverse-commute and off-peak fares.

MBTA Commuter Rail Fare Study

March 2020

Prepared by the MassDOT Office of Performance Management and Innovation

Rail Transformation Fares

- 2020 Commuter Rail Fare Study made recommendations that could be implemented within next few years and did not directly address longerterm Rail Transformation fares
- With additional information about Rail Transformation service concepts and potential phasing, longer-term fare options and strategies can be explored
 - Rappaport Fellow will be helping to develop road map this summer
 - Any proposal to lower Commuter Rail fares (short or long term) needs to be part of a package of fare changes that is equitable from a system-wide perspective

Fare Equity and Title VI

- Fare changes, either increases or decreases, are assessed for equity implications from a system-wide perspective, based on FTA guidance and our own DI/DB policy
 - Fare changes affecting only one mode are still assessed based on impacts as compared to all riders on the entire MBTA system
 - Beyond short-term pilots, decreases in fares on our Commuter Rail system would need to combined with corresponding equity-enhancing changes to our fares for low-income riders and riders of color to pass a Title VI equity analysis

Fare Transformation Fare Rules Outreach

- Currently in the middle of public outreach on fare rules for Fare Transformation
- Three focuses:
 - Changes to fare cards in the new fare system
 - Potential changes to transfer rules
 - Ideas for future fares, products, and integrations
- Using online feedback form to collect public input on different principles/strategies for setting fares and different "fare concepts" for the future
- Two virtual public meetings this week (May 25th and 27th)
- Will be using input to improve the Fare Transformation technology roll-out and to prioritize fare structure ideas for analysis and potentially proposal

Public Feedback Form: Which fare concepts would you most like to see in the future at the MBTA?

- Standardize and simplify transfer discounts between MBTA services
- Different fares for trips at peak times and during off-peak times
- Different fares on weekdays and the weekend
- Different fares for shorter and longer trips on bus and/or subway
- Different fares for "reverse-commute" trips (outbound in the morning and inbound in the evening)
- Fewer fare zones or different zone fares on Commuter Rail
- Reduced fares based on income
- Additional rolling-period passes, such as a 3-day or 30-day pass
- Additional passes for reduced fare riders (e.g. Student 7-day LinkPass or Senior Monthly Commuter Rail pass)
- Discounted products for riders who use the MBTA every week but not enough to buy a 7-day Pass or Monthly Pass
- Eliminate passes and implement fare capping, where you pay for each ride until you reach a spending cap and then ride free for the rest of the day, week, or month
- New MBTA passes that include parking at MBTA stations
- Integrate fare payment between the MBTA and bikeshare
- Integrate fare payment between the MBTA and ride-hailing services

Means Tested Fares Update

Cost Estimates at Full Scale

Program Scope

Eligibility for new MTF Riders

- 1. Adults between the ages of 26 and 64;
- Enrolled in a state/federal benefits program (e.g., SNAP, MassHealth);
- 3. Live within MBTA service area;
- 4. Not eligible for one of the MBTA's existing reduced fare programs.

*Assume in some future state, the Youth Pass could be subsumed into this program.

- Highly variable based on 1) selected eligibility threshold and 2) rider uptake and enrollment;
- Once the above is determined, full costs to administer a program must include:
 - 1) Fare revenue loss on all modes
 - 2) Operational costs on "some" modes
 - 3) Administrative costs, for both MBTA and future partner(s)
- The following slides assume a 200% Federal Poverty Level (or state/federal program with similar income threshold), and a high ridership uptake.

Program Scope

Projected Administrative Expenses

Expense	Estimated Annual Cost
Partner (CBO) Administration & Staff	\$1-2 million
MBTA wages & benefits	\$800K
Software	\$200k
Card stock (new & replacements)	\$100K
Evaluation	\$100K
Professional/vendor services (Marketing)	\$200K
Total	\$2.4-3.4 million

- Annual administrative expense for full scale program estimated between \$2 and \$4 million per year
- We do not have complete estimates for up-front/one-time administrative implementation costs at this time—we assume same as annual cost (\$2-4 million)

Costs Assuming 200% FPL and High Enrollment

Mode	Ridership Estimates	Annual Fare Revenue	e Loss	Operation	nal & Capital Costs			
Bus and Rapid Transit	69,000 riders +/- 20,000 (2.5-4.5% increase)	\$32.8 million +/- \$9.5 million	5	Depends on crowding: Up to \$18-24 million operating Up to \$22-31 million new buses (\$2-3 million annual replacement)				
Commuter Rail and Ferry	1,500-3,300 riders	\$2.1 million		Minimal				
The RIDE	230,000-415,000 additional trips (17- 30% growth)	\$2.6 million		\$5.1-9.3 r	4 million operating nillion new vehicles million annual replacement)			
		<u>B</u>	No Ao us & RT	lded Service	Including Added Bus & RT Service			
Annual Revenue Los	SS	c r	\$28-47	million	\$28-47 million			
+ Annual Operating	Costs	\$	22-34 r	nillion	\$42-61 million			
+ Administrative Co	sts (Partnership and MB	TA staffing):	\$2-4 n	nillion	\$2-4 million			
Total Estimated Ani	nual Impact:	\$	52 - 85	million	\$72-112 million			
Up-front program ir	mplementation and capit	tal (one-time)	\$7-13 r	nillion	\$29-44 million			

Program Scope

Implementation Timeline

- As a first step toward full scale program, technical implementation of a pilot depends on:
- FMCB approval
- Partner confirmation
- Program design/development, including the start-up of technical and non-technical activities
- Contracting certain program functions.

Initiation	FMCB considers pilot proposal
+3 months	MBTA confirms partnership(s) and administrative processes for Pilot
+6 months	Pilot program design and implementation
+9 months	Pilot program implementation (after Reduced Fares System launch)
+2 years	Full scale rollout on Bus/Subway (after Fare Transformation Phase 4)
+3 years	Full scale rollout on CR (after Fare Transformation Phase 5)

- 12-18 months, with a participant's eligibility lasting for the duration of the pilot program (irrespective of if their benefits eligibility is lost while in the pilot).
- Leverage and expand upon the MBTA's existing reduced fare infrastructure to launch as quickly as possible.
- Apply the current reduced fare discounts, including issuing program participants pre-encoded reduced fare CharlieCards to confer benefits.
- Valid for reduced fares on bus, subway, and the Commuter Rail.
- Operate within the technological boundaries of the current Automated Fare Collection (AFC) system.
- Be simple for customers to access and utilize.
- Include a pilot evaluation.

Pilot Program

Partnership Models

- 1. Regional Community-based Organization (CBO) Partner Network
- 2. MBTA Centralized with HHS Support



Pilot Program

- Partner-heavy approach; assumes limited assistance from state agency
- Community-based organizations accept primary responsibility for:
 - Income verification/eligibility determination
 - Brick and mortar facilities and phone services for customer support
 - Outreach/communication about program eligibility and enrollment
 - In-person intake (in addition to processing online applications)
- MBTA responsible for:
 - Providing partner access to online Reduced Fares System (RFS)
 - Managing supply chain of fare media and card deactivations
 - External/internal staff training and technical assistance



Option 2: MBTA Centralized w/HHS Support

- MBTA-heavy approach; assumes support from HHS
- HHS notifies beneficiaries of their eligibility, including instructions on how to apply online or in-person and unique applicant code
 - API between MBTA and HHS systems to confirm enrollment in benefits program
- MBTA vendor fulfills and sends new/replacement cards
- Mail-based system for outreach and fulfillment

HHS sends **letters to** eligible beneficiaries Eligible individual submits online application

Data match w/HHS systemt to confirm eligibility MBTA vendor fulfills & mails new/replacement cards to eligible individuals MBTA maintains Call Center & CharlieCard Store for customer support

Proposed Regulations

Regulatory Process

- Staff filed proposed regulations with the Secretary of State, and held a hearing as required under law with the public.
- In response to public feedback and FMCB discussion, staff made several revisions to the proposal and are now requesting that the FMCB vote to finalize our draft regulations.
 - The MBTA is no longer proposing the marking of licenses for non-renewal due to unpaid citations in this round of regulations
 - The MBTA is proposing revised citation/fine amounts (next slide)
- Once approved by the board, the final regulations will be filed with the Secretary of State and will take effect after publication in the Massachusetts Register.

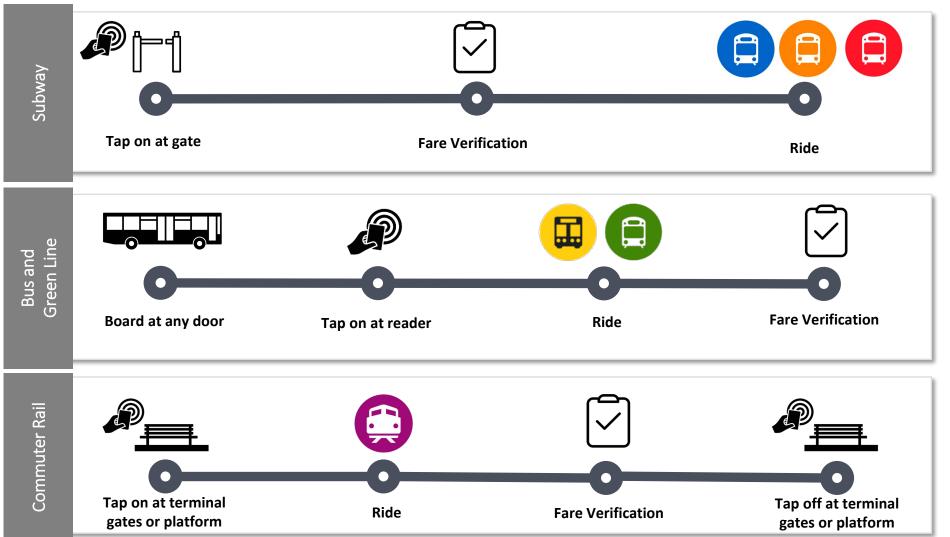
Proposed Fines

- MBTA staff propose a differentiation of citation amount based on mode
 - Local Bus, Rapid Transit, Commuter Rail Fairmount Line, and Inner Harbor Ferry (Charlestown Ferry)
 - First, second, and third offense: \$25
 - Fourth and subsequent offense: \$50
 - Express Bus, Commuter Ferry, and all other Commuter Rail lines
 - First, second, and third offense: \$50
 - Fourth and subsequent offense: \$100
- Before and following implementation of all-door boarding and fare verification in 2023, we will review citation levels for any adjustments

Future of Fare Verification, 2023 and beyond

Fare Transformation Phases 4 & 5: Tap Everywhere

You'll be able to use the same card to tap, no matter where you travel



30

In 2023 and beyond, what will Fare Verification look like?

- MBTA personnel will be equipped with a handheld device that can verify, in real time, if a rider has paid the correct fare for the service they are on.
- If a rider did not pay the proper amount, they would be issued a civil citation. All riders would be able to appeal. MBTA will review data and provide hearings.



- MBTA personnel will be required to check all riders on a vehicle to reduce discretion and bias.
- Goal is to have efficient and equitable fare verification process with data collected and released for public accountability.

Civilian Staff

- The MBTA proposed legislative changes to ensure that fare verification could be conducted by **civilian staff** in the future. MBTA has estimated that 80 field staff will be required for this role.
- The **Transit Police** will still be able to issue citations if they see someone evade a fare, but enforcement under all-door boarding on bus and light rail will largely shift to a new civilian workforce.
- MBTA fare staff will work in pairs, for their safety.
- When Fare Transformation rolls out to Commuter/Regional Rail all conductors and ferry operators will also be able to verify fares.

Inspection Design

- Fare verification staff will carry handheld readers.
- Riders will be asked to "tap" their cards to the device, similar to when they tapped to board the vehicle.
- The device will, in real-time, connect to the back-office to determine when/where the rider tapped and to ensure that they are currently on a mode for which they have paid.
- The device can also tell if any of the fare system hardware is malfunctioning within the MBTA system if someone was unable to pay.
- The new devices and back-end system will allow the MBTA to issue a warning before issuing a citation (subject to future regulations).
- MBTA staff are committed to educating our riders on Fare Verification before implementing this new system in 2023.





Upcoming Decisions & Considerations

Training

- The MBTA commits to ensuring that Fare Verification is done in a fair, equitable, and respectful manner.
- The MBTA also wants the first responsibility of Fare Verification staff to be customer service, as this will be a transition for everyone.
- We are thinking deeply about training and support for this role. Some training areas we have in mind include:
 - Customer Service
 - De-escalation
 - Implicit Bias
 - Safety Awareness

Efficient & Equitable Routing

- In the coming months, the MBTA will begin a process to determine equitable routing for the fare verification team to ensure that all riders have relatively similar rates of verification, whether they ride a busy route, or a travel by a less-busy route.
- Riders are not likely to have their fare media inspected on each of their trips.
- Ensuring equity in how we deploy our fare verification staff will require a deeper analysis of how to move the fare verification team across our system, while ensuring efficient scheduling.

Quality Control

- MBTA staff have planned for the addition of a Quality Control Analyst to constantly monitor the actions of the fare verification team, make adjustments in their schedules, provide additional training, and ensure a high quality user experience.
- Staff will also monitor rider complaints and issues, and work to resolve them as soon as possible.



Data Transparency

- MBTA is committed to transparency in reporting on warnings and citations.
- The recent Transportation Bond Bill included language proposed by the MBTA to require an annual report to the legislature on the issuance of warnings and citations.
- In the future, the MBTA will be able to report out, in the aggregate, on who received citations, when and where they received them, whether they received a warning, and whether they were appealed.

- In addition to allowing riders to submit appeals if they believe they were wrongfully cited, the MBTA will offer alternative means of payment for riders who cannot afford to pay their fine.
- The MBTA is learning from its peer agencies about initiatives to assist riders in applying for reduced fare programs, perform community service in lieu of payment, etc.



Board Vote on Fare Evasion Regulations

VOTED:

• To approve the draft fare evasion regulations attached hereto as Appendix A and to direct the General Manager or his designee to file such final regulations with the Secretary of State.



Appendix

Means Tested Fares: The RIDE

- We expect a 17% 30% increase to demand for customers eligible for reduced fare (approximately 230,000–415,000 additional trips, based on pre-Covid data)
- Due to this significant expected increase in demand, multiple risks exist to the implementation and timing of implementation of means testing for The RIDE that are not present for the fixed route
- To scale to this level, The RIDE will need to procure 100-175 new vehicles the first year of implementation and an additional 20-30 vehicles annually thereafter
- The RIDE will also need to renegotiate contracts with current designated service providers, including hiring approximately 300 new drivers and leasing two new facilities
- The RIDE's software would need to be connected to whatever database holds the customer reduced fare data

Means Tested Fares: The RIDE Revenue Impacts

- The fare discount assumed was 50% for both ADA and Premium service for approximately 75% of RIDE customers
- We calculated induced paratransit demand using CTPS estimates
- We used CY2019 data as the pre-Covid baseline for ridership (1.57 million DSP trips) and an FY21 average per-trip cost of roughly \$47 for DSPs
- Additional costs do not include cost of administering the means-tested fare program for the RIDE
- A number of initiatives (conditional eligibility, reducing/eliminating premium territory) may mitigate increases to cost associated with reduced fares

Means Tested Fares: The RIDE Impact Summary

- Ridership Estimate: 230,000 415,000 additional trips (17% 30% growth)
- Annual Fare Revenue Loss: \$2.6 million
- Operational Costs: \$20.5 \$32.4 million annually
- Capital Costs: \$5.1 \$9.3 million in year one, \$1.0 \$1.6 million annually thereafter



Means Tested Fares: Potential Fixed Route Service Impacts

- Means-tested fares would increase ridership on fixed-route services
 - At <200% FPL eligibility and high enrollment, estimated bus and Rapid Transit ridership increase of roughly +2.5-3.5% overall and +1.8-2.5% at peak times
 - Assumes increased rides follow similar time distribution as low-income riders in Rosenblum 2019 study
- In some cases increased ridership would be absorbed by existing fixed-route service with no additional cost
 - We assume Commuter Rail, ferry, and off-peak Rapid Transit could absorb the additional rides without increased crowding
- For bus and peak Rapid Transit, increased crowding could *potentially* be mitigated/avoided by increasing service (with long lead time for planning)
 - An increase of +1.8-2.5% in bus vehicles and service could cost \$22-31M in up-front vehicle procurement (\$2-3M annual replacement) and \$9-12M annual operating costs
 - Ability to increase peak Rapid Transit service and implications for capital and operating costs depend on Orange/Green/Red Line Transformation projects
 - An increase of +1.8-2.5% in Rapid Transit service (e.g. at peak shoulder times) could increase
 operating costs by +\$9-12M annually

Means Tested Fares: Potential Fixed Route Service Impacts

	Low	Mid	High	Notes
Ridership				
Increase in Avg Weekday Bus and Subway Journeys	+20,032	+24,113	+28,194	CTPS Systemwide Survey analysis scaled to US Census participation at <200% FPL and high enrollment, range from low of 49k participants to high of 69k participants
% Increase in Avg Weekday Journeys	+2.5%	+3.0%	+3.5%	% of approximately 800,000 daily bus and subway journeys
% Increase in Weekday Peak Journeys	+1.8%	+2.2%	+2.5%	Based on time distribution of overall and low-income ridership in Rosenblum (2019)
Bus Service				
Assumed % Increase in Bus Service	+1.8%	+2.2%	+2.5%	Assume similar proportion as peak ridership increase, applied to all times
New Buses	+20	+24	+28	Increase fleet from 1,100 current vehicles, proportional to service
1st Year Vehicle Capital Cost	+\$22,000,000	+\$26,400,000	+\$30,800,000	Assuming \$1,100,000 per vehicle
Annual Vehicle Replacement	+\$2,200,000	+\$2,600,000	+\$3,100,000	10% annual vehicle replacement
Change in Operating Cost	+\$8,700,000	+\$10,300,000	+\$12,000,000	Increase from NTD 2019 baseline of \$481M, proportional to service
Rail Service				
Assumed % Increase in Rail Service	+1.8%	+2.2%	+2.5%	Assume similar overall proportion as peak ridership increase
Change in Operating Cost	+\$8,900,000	+\$10,700,000	+\$12,400,000	Increase from NTD 2019 baseline of \$497M, proportional to service
Total Service				
Up-front vehicle procurement	+\$22,000,000	+\$26,400,000	+\$30,800,000	
Annual vehicle replacement	+\$2,200,000	+\$2,600,000	+\$3,100,000	
Annual operating cost	+\$17,600,000	+\$21,000,000	+\$24,400,000	