

Five-Year Operating Budget Pro Forma (FY22-FY26)

Fiscal and Management Control Board

March 8, 2021

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March Annual Pro Forma Summary

- Updating the most recent Five-Year Pro Forma projection from August 2020 for enhanced fare revenue scenario analysis, most recent sales tax estimates, new federal relief funds, and major capital projects
 - Five-Year Pro Forma projections have been updated at least annually to demonstrate the longterm spending and revenue impact of previously approved and upcoming decisions
 - Pro Forma numbers are modeled projections as FY22 spending and revenue estimates are still being reviewed as part of FY22 budget development

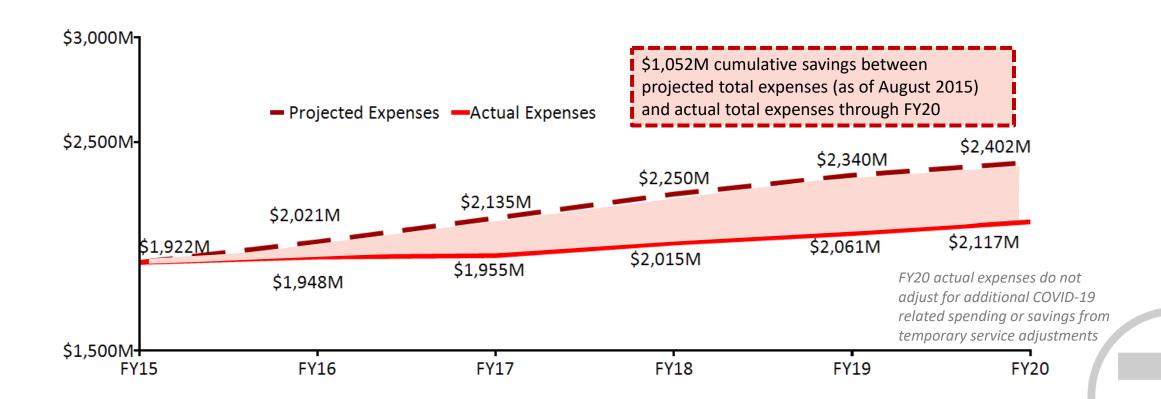


March Annual Pro Forma Summary

- Fare revenue losses expected to continue going forward: fare revenue losses realized since March 2020 due to the COVID-19 pandemic are projected to continue with a multi-year recovery of the economy towards ridership scenarios as presented to the FMCB on February 22, 2021
- COVID-19 has created significant budget gaps mitigated with one-time revenues in the short-term: proactively planning in FY21 through the Forging Ahead initiative combined with an infusion of federal relief funds create only a short-term solution with one-time revenues in FY22
- FY21 savings efforts have created a path to balance FY22, but COVID-19 has significantly increased future budget gaps: continuing to manage our spending growth and plan ahead for a sustainable future mitigates the budget challenges
- FY22 budget preview scheduled to be presented to the FMCB on March 22, with the preliminary budgeted submission to the FMCB scheduled for April 26
 - FY22 estimates for the budget preview may vary from FY22 modeled projections in the Pro Forma

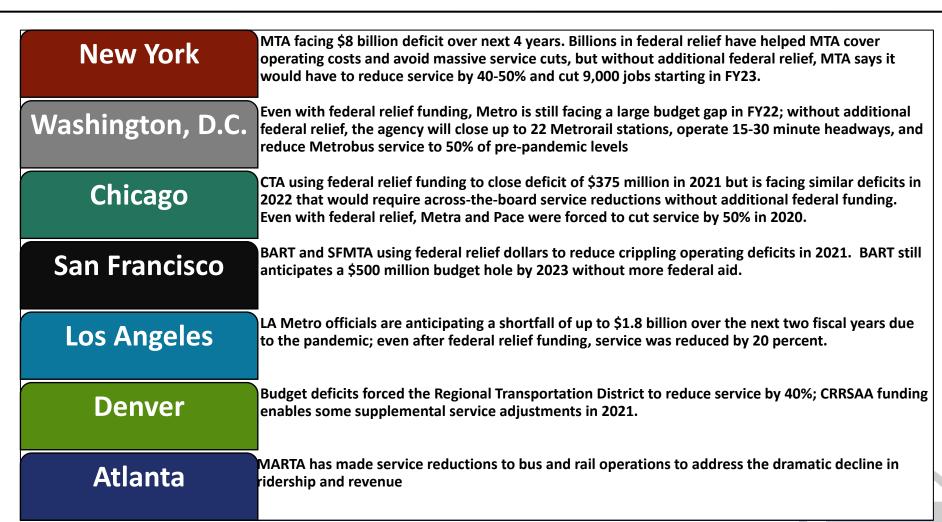
Results of Fiscal Management Since FY15

- Since FY15, with the guidance of the FMCB, \$1,052M in cumulative cost savings
- Actual annual cost growth of 2% since FY15, compared to the 5% projected



2021 Update on Peer Transit Agencies

- COVID-19 pandemic and loss of ridership and revenue is an issue across public transit systems
- Transit systems across the country are planning/have discussed personnel and/or service changes to respond to the financial challenges resulting from COVID-19 impacts



https://www.wsj.com/articles/mta-officials-weigh-whether-to-cut-new-york-city-subway-service-11614605421 https://www.nytimes.com/2021/02/18/nyregion/nyc-subway-bus-budget.html https://www.wmata.com/about/news/FY22-buget-public-comment.cfm https://www.rtd-denver.com/news-stop/news/rtd-makes-final-reductions-workforce-week-to-address-financial-impacts-of-pandemic https://www.rtd-denver.com/news-stop/news/funding-new-covid-19-relief-package-rtd-calls-all-bus-and-rail-operators-back-to

Summary of March Annual Pro Forma Assumptions – Revenue

All assumptions subject to FMCB review

- Fare Revenue: based upon the February 2020 ridership projections, forecast does not model a fare increase
- Sales Tax: FY22 state estimate (above the base revenue amount) plus 1.5% growth rate through FY25 and 2.0% growth rate in FY26
- Local Assessment: FY22 state estimate plus 1.5% growth rate through FY25 and 2.0% growth rate in FY26
- State Assistance: \$127M in state assistance level to FY21 budget, and FY22 H.1 Governor's recommendation
- All other revenue: Other income, state assistance, and federal assistance all assumed to be level, one-time revenues carried in year of receipt

Revenue Category (\$M)	CAGR FY23 - FY26
Fare Revenue	3.6%
Own Source Revenue	3.3%
Sales Tax	1.7%
Local Assessments	1.7%
Other Income	0.0%
State Assistance	0.0%
Federal Assistance	0.0%
Total Revenue	2.1%

Fare revenue growth ranges from 3%-10% based on the fare revenue scenario

FMCB Fare Increase Guideline Vote Language

- FMCB vote on December 14, 2020 tied future fare increases on bus and rapid transit to ridership and service levels
- "That the FMCB and its successor governing body shall not make fare increases to bus or rapid transit prior to the restoration of service hours and ridership numbers on all bus and rapid transit lines commensurate with Fall 2019 levels"
- Given current ridership projection scenarios, at this time no fare increases, otherwise in FY23 and FY25, are modeled in the March Annual Pro Forma projections
 - Previous Pro Forma presentation from August had modeled a 4.5% fare increase, this
 would generate additional net revenues of \$11M-\$18M in FY23 and \$15-\$20M in
 FY25 depending on the fare revenue scenarios in this model

Summary of March Annual Pro Forma Assumptions - Expenses

All assumptions subject to FMCB review

- Maintaining fiscal controls and achieving the projected annual 2.4% total expense growth (FY23-FY26) would be below the 3.4% annual growth realized historically prior to COVID-19 (FY09-FY19)
- Service Levels: Model assumes net service level savings for only commuter rail and ferry in FY22 only
- Capital Projects: Includes operating costs of major capital projects including Green Line Extension (GLX), South Coast Rail (SCR), Automated Fare Collection 2.0 (AFC 2.0), and new Red & Orange Line cars
- COVID-19 Expenses: \$58M in COVID-19 related expenses expected to end by the end of FY22 subject to latest public health guidance
- Headcount: Headcount increase only for aforementioned major capital projects and wages/overtime held level
- Debt Service: \$590M annual bond issuance assumed from FY22 FY25 and \$500M assumed in FY26
- All other spending: Consistent with Congressional Budget Office (CBO)
 estimates or historical actuals depending on the category

Expenses (\$M)	CAGR FY23 - FY26
Debt Service	2.9%
Regular Wages	0.1%
Commuter Rail	2.5%
Services	7.1%
Pension	5.8%
RIDE	2.5%
Healthcare	2.6%
Materials	2.4%
Contract Cleaning	1.6%
Overtime	0.0%
Ferry	1.0%
Fuel	1.8%
Total Expenses	2.4%

Projected Revenues: FY21 Carryover for FY22 Budget Gap

- \$605M in CARES Act relief in FY21 has been mitigating the budget challenge in FY21 to \$79M
- \$365M projected to be available for FY22, a \$51M increase from \$314M in December 2020
 - Added \$236M in CRRSAA relief funds in FY21
 - Reduced capital reallocation (due to CRRSAA funds) from \$380M total between FY21 and FY22 to \$201M with the full amount realized in FY22
 - Added \$21M in service level savings estimate based on 12/14 FMCB decision
 - Added \$35M in budget risks and potential deficiencies
- \$35M in additional risks and potential deficiencies in FY21
 - Similar to COVID-19 spending and overtime, other potential spending risks have been identified
 - These new risks been for previously unexpected costs or places where demand has exceeded initial estimates
 - These items are dynamic and are being routinely tracked and monitored, likely changing month to month

Description	FY21	
Figures in \$M		
Budget Gap without CARES Act Relief	-659	
CARES Act Relief	605	
Budget Gap (October Revision with transfers)	-54	
COVID-19 Spending	-13	
Overtime	-12	
Subtotal of Initial Risks	-25	
Budget Challenge (Gap + Initial Risks)		
***Capital Reallocation of Federal Formula Funds	0	
Capital Salaries	66	
Department/Programmatic	64	
Service Level Planning (Net)	21	
Subtotal of Forging Ahead Solves	151	
COVID Relief (CRRSAA)	236	
Sales Tax Upside & Acceleration Proposal	92	
Additional risks and potential deficiencies	-35	
Reserved Funds for FY22	365	

^{***}Table assumes \$201M applied in FY22

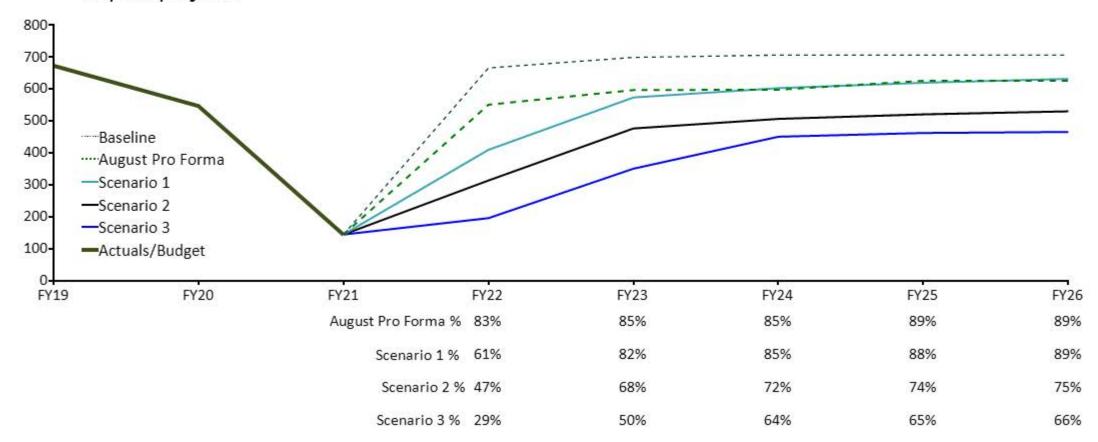
Projected Revenues: One-Time Funds in FY22

- \$665M in one-time revenues creating a path to balance in FY22, to be discussed on March 22
 - FY21 Carry-over Savings/Revenue: Combination of Forging Ahead Savings items and potential revenue upside to budget after accounting for risks
 - Capital Reallocation of Federal Formula Funds
 (Section 5307/5337): Planned capital funding
 reallocation to balance the operating budget and
 maintain service, reduced from \$380M following
 additional federal relief funds
 - Federal formula funds (Section 5307/5337)
 are a one-time or temporary solve to the
 operating budget as they have been historically
 programmed to the capital budget annually
 - CRRSAA Relief: \$65M of the \$301M estimated in CRRSAA funds in FY22
 - FEMA Reimbursement: \$34M in FEMA reimbursement revenue following an executive order in January 2021 increasing the reimbursement rate from 75% to 100%

Revenue Source	FY22 (\$M)
FY21 Carry-over Savings & Revenue	\$365M
Capital Reallocation (Section 5307/5337)	\$201M
COVID-19 Supplemental Relief (CRRSAA)	\$65M
FEMA Reimbursement	\$34M
One-time Revenue Total	\$665M

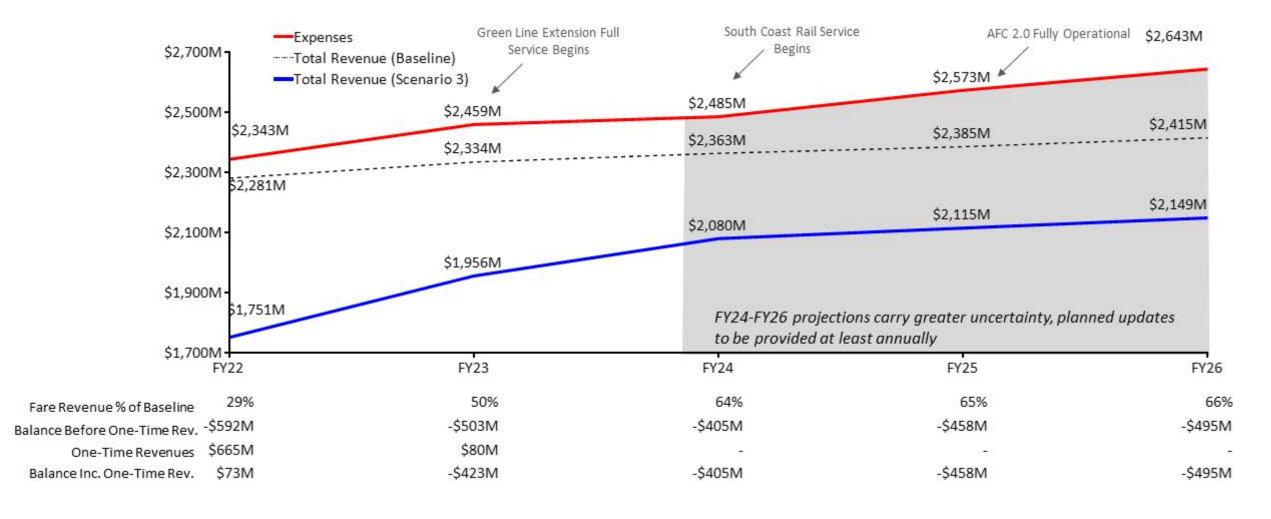
Fare Revenue Scenario Planning Update

- Actual fare revenue has dropped 79% between FY19 and FY21 budget estimates
- Even in the most optimistic scenario, projected fare revenue in FY26 is still below FY19 actuals
- In FY23, fare revenue scenarios estimate a shortfall range of 18%-50% below baseline
- Baseline calculations use FY20 budget estimates and adjust for structural changes the completion of capital projects



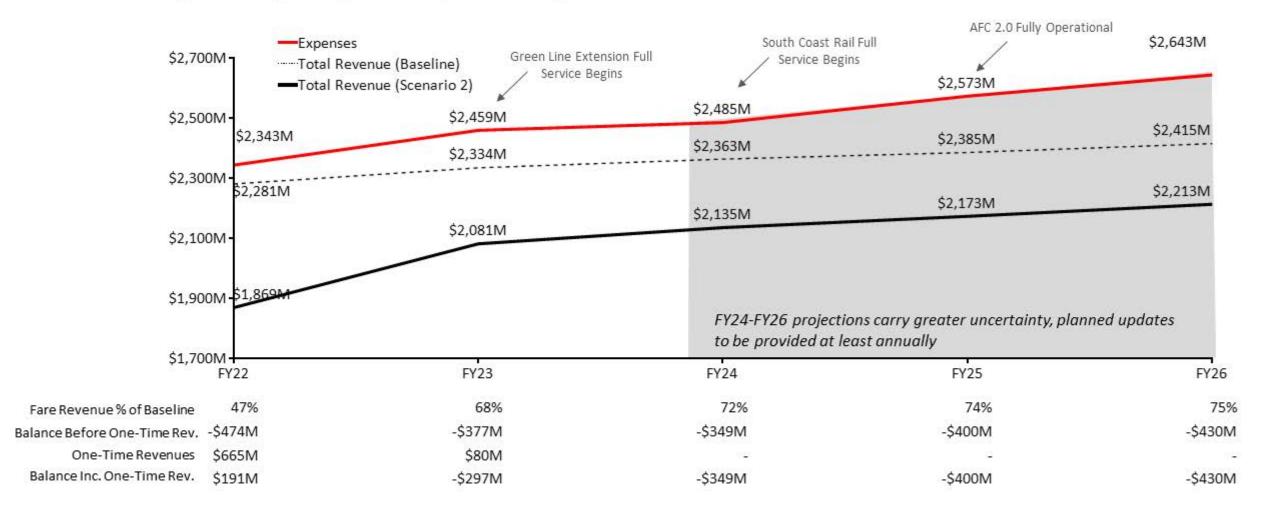
FY22-FY26 Budget Gap Outlook – Scenario 3

 In the modest scenario, FY23 budget gap cannot be mitigated with current levels of one-time revenues, sequestering savings, and capital funding reallocation



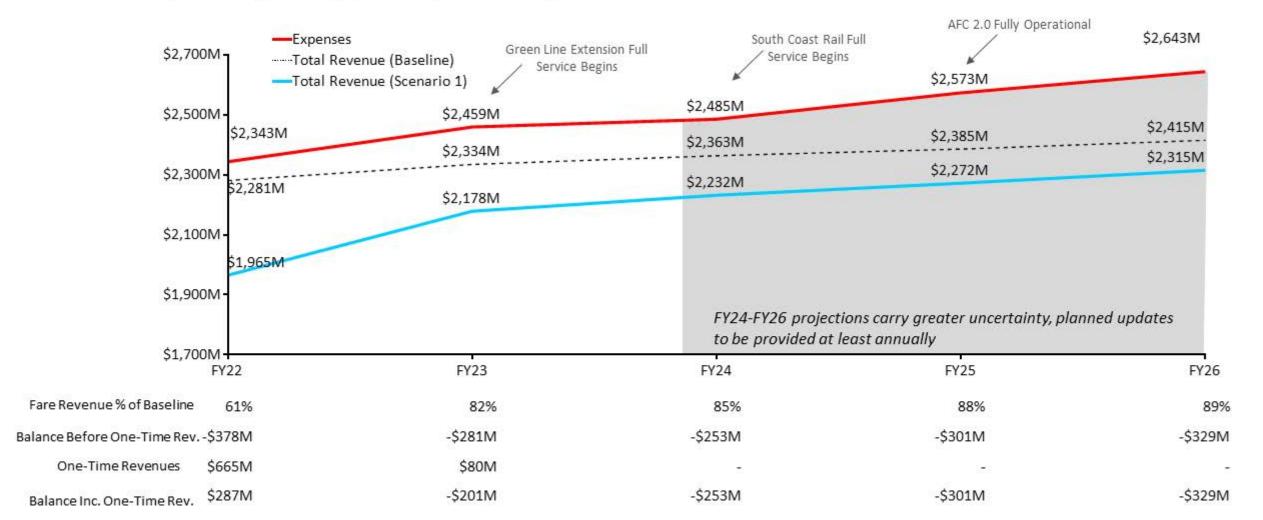
FY22-FY26 Budget Gap Outlook – Scenario 2

 In the middle scenario, FY23 budget gap cannot be mitigated with current levels of one-time revenues, sequestering savings, and capital funding reallocation



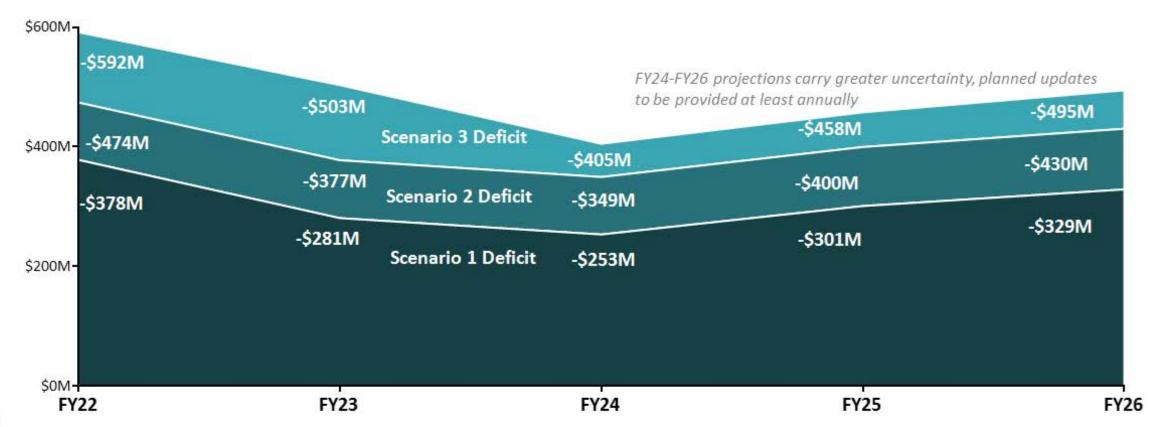
FY22-FY26 Budget Gap Outlook - Scenario 1

 In the most optimistic scenario, FY22 and FY23 budget gaps can be mitigated with one-time revenues, sequestering savings, and capital funding reallocation



FY22-FY26 Budget Gap Outlook

- Before one-time revenues, significant budget gaps continue into FY22-FY23 and beyond
 - FY22 and FY23 scenario deficit figures do not account for estimated one-time revenues
- Similar to FY21 planning for FY22, planning for the FY23 budget gap in FY22 would be a possible approach to mitigating the projected budget gap



Ongoing Efforts and New Opportunities for Long-Term Fiscal Sustainability

- Notable efforts currently underway to improve the future budget outlook
 - Enhancing own-source revenue streams like real estate and advertising
 - Managing the debt profile to minimize year-to-year variability
 - Hedging fuel prices to reduce risks from market fluctuations
 - Renegotiating management consulting / professional service contracts to better align with needs and scope of work
 - Pursuing operational efficiencies across the authority to contain costs through cross-departmental working groups
 - Targeted overtime savings initiative to rein in spending within budget benchmarks
 - Maximizing the allocation of COVID-19 resources to adhere to the latest public health guidance at the best possible rates
- New opportunities that could further mitigate future budget challenges
 - Monitoring additional round of federal relief funding and changes/updates to FEMA reimbursement guidance
- Maintaining fiscal controls and achieving the projected annual 2.4% total expense growth (FY23-FY26) would be below the 3.4% annual growth realized historically prior to COVID-19 (FY09-FY19)

Total Fare Revenue Scenario Upside and Risk

- The range of fare revenue scenarios create significant variability even when reviewing projections quarter-toquarter
- For example, \$44M in upside or risk between Scenario 2 (\$133M) and Scenario 3 (\$89M) for just Q1 and Q2 of FY22
 - Fare revenue would have to average 68% of baseline in Q3 and Q4 to make up this potential shortfall

• In FY21, October 2020 budget revision resulted in a \$44M fare revenue shortfall from budget projections

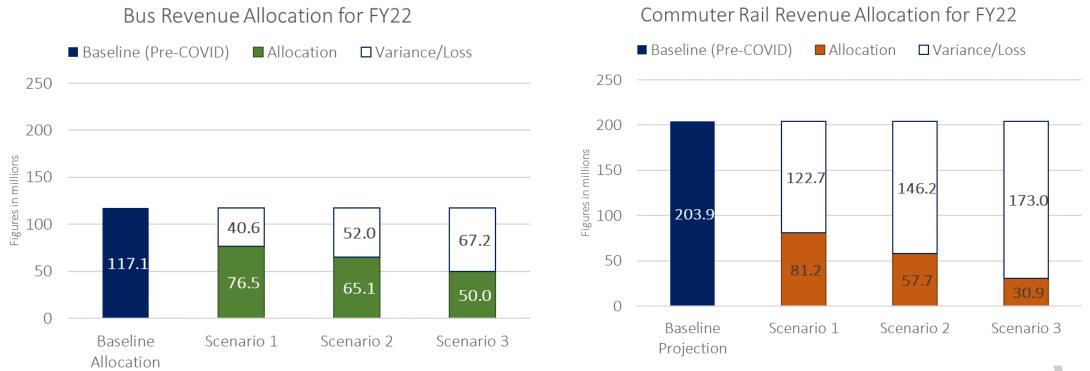
remedied through Forging Ahead planning

	Variance to	Fare Revenue	% of Baseline Fare	
	Scenario 3 in	Scenario 3 in Needed in Q3+Q4		
	Q1+Q2		in Q3+Q4	
Scenario 1	(86.0)	319.7	98%	
Scenario 2	(44.2)	223.8	68%	
Scenario 3	-	106.1	32%	

	FY22 Q1	FY22 Q2	FY22 Q1+Q2	FY22 Q3	FY22 Q4	FY22 Total
Baseline	171.2	166.1	337.3	159.2	168.3	664.8
Scenario 1	77.05	98.03	175.1	110.42	123.33	408.8
Scenario 2	60.36	72.88	133.2	82.43	97.22	312.9
Scenario 3	43.09	46.00	89.1	49.50	56.61	195.2

Modal Fare Revenue Upside and Risk Example

- Even in the most optimistic scenario, a full return of pre-COVID bus revenue (\$41M) would not offset minimum projected commuter rail revenue loss (\$123M)
- Modal revenue figures are allocations that can be calculated using multiple methodologies since fare revenue derives from fare products that may span multiple modes across the system
- Continuing to examine commuter/regional rail service and each transit mode to align with evolving ridership patterns and potential "new normal"



Policy Discussion for Budget Planning

FY22 budget preview currently under development for presentation on March 22

Fare revenue scenario model guidance

• FMCB feedback, considerations and/or policy direction regarding fare revenue scenario as the starting point for the FY22 budget preview

One-time revenues

 FY22 Budget preview will provide recommendation balancing fiscal sustainability, given projected budget gaps, safety staffing paused in FY21, service planning and any potential priority one-time expense. FMCB prioritization guidance and/or considerations

Other Feedback



Operating Budget Timeline

- FY22 budget development ongoing with key presentations over the next few months
 - March 8: FY23-FY26 outlook to demonstrate the potential long-term impacts of COVID-19 on the operating budget
 - March 22: FY22 budget preview of balance position and assumptions
 - April 26: Preliminary budget proposal, prior to the statutory deadline of May 15
 - June 7: Final budget approval presentation, prior to the statutory deadline of June 15

Appendix

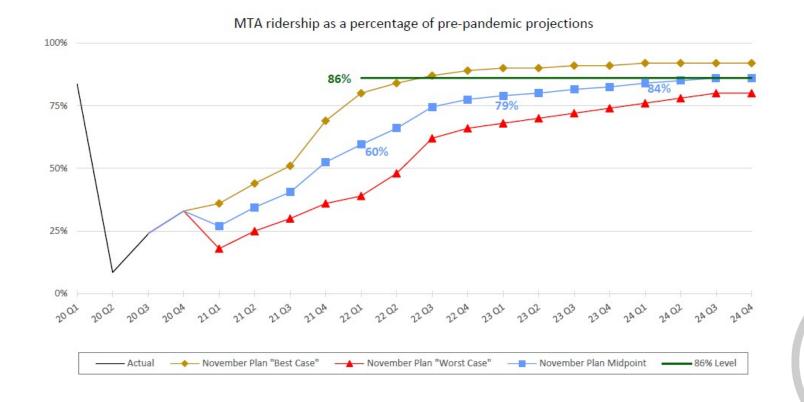


Projections Track other Transit Agencies

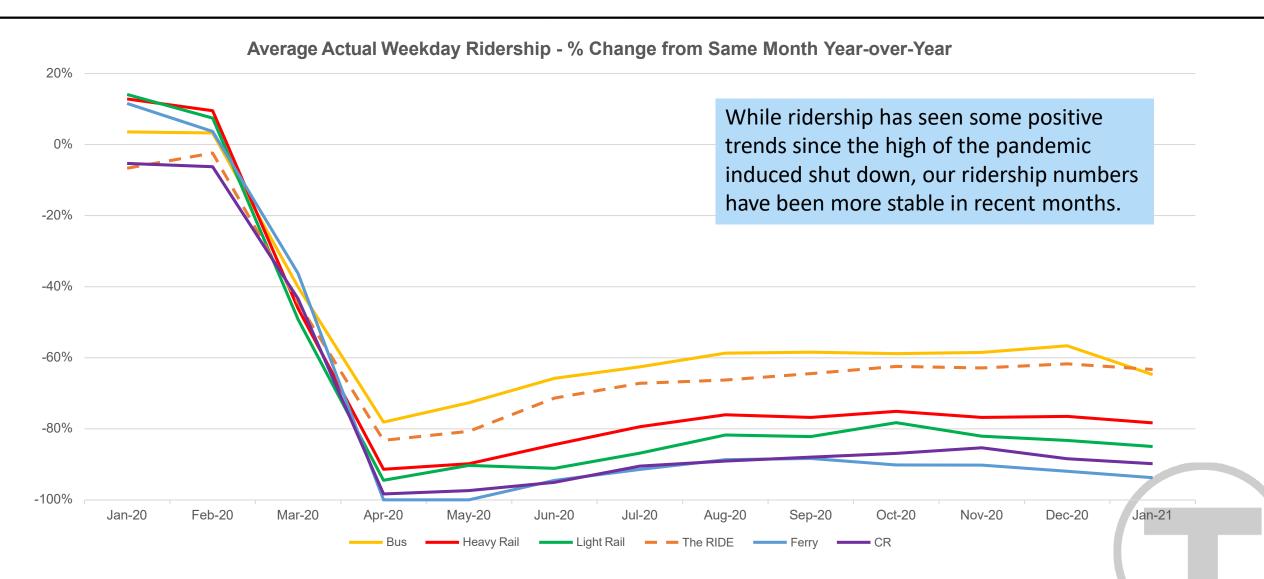


- McKinsey
 presented a
 February
 Financial Plan for
 MTA on February
 18, 2021
- Midpoint of their three projections leads to a 86% of pre-COVID ridership by the end of 2024

McKinsey projected the "new normal" ridership level between 80% and 92% of pre-pandemic levels by the end of 2024 (86% midpoint)

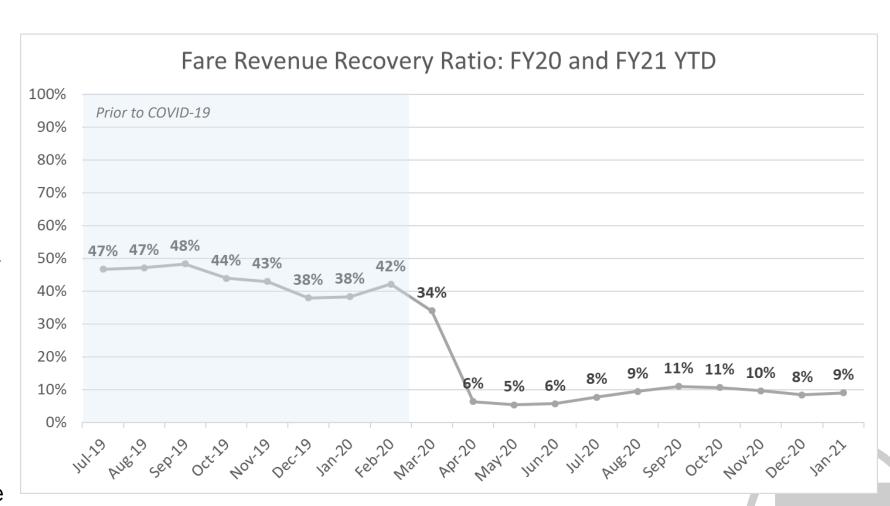


Recent Ridership Trends

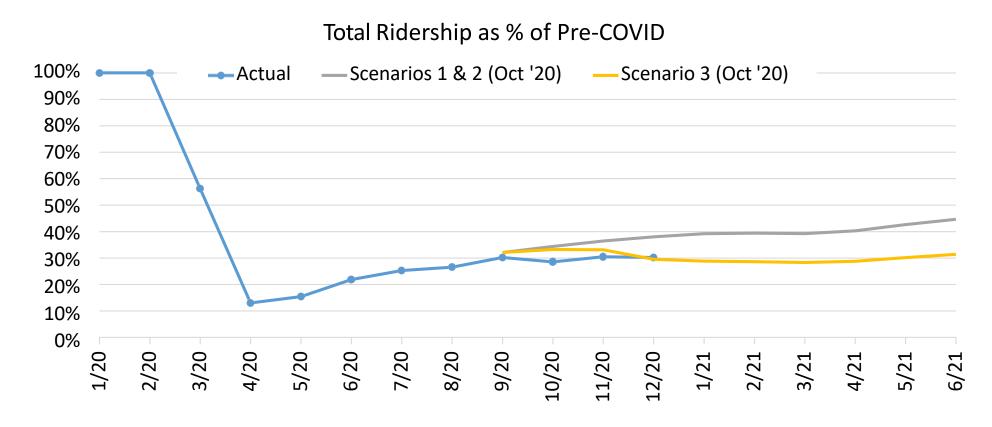


Fare Revenue Recovery Ratio Through January 2021

- Fare recovery ratio of 9% this month compared to 38% in January 2020
- Prior to COVID-19, fare revenue recovery ranged between 38%-48%
- In FY21, fare revenue recovery ranges between 5%-11%
- One-time CARES Act funding of \$605M in FY21 replacing fare revenue losses to balance the budget
- Fare revenue recovery shows the percentage of operating expenses supported with fare revenues

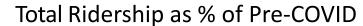


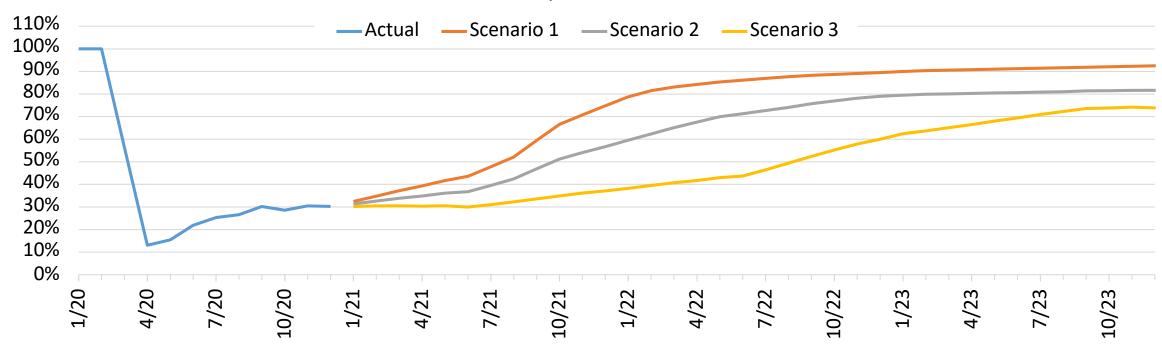
Ridership Projections: Actual vs. Oct 2020 Scenarios



- So far in FY21, ridership is tracking closely to Scenario 3 presented in October 2020
- Today, presenting updates to all three MBTA ridership scenarios

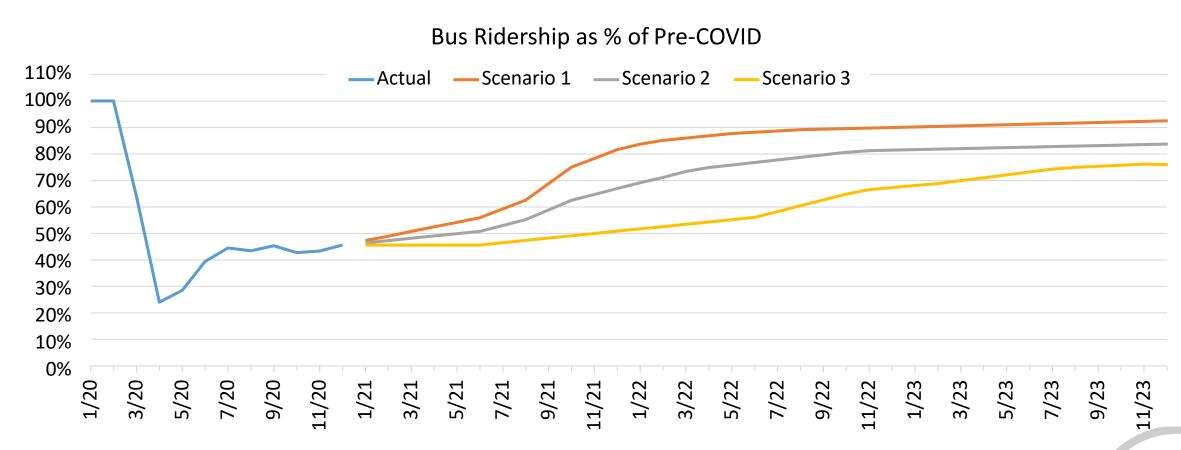
Ridership Projections: MBTA Ridership Implications





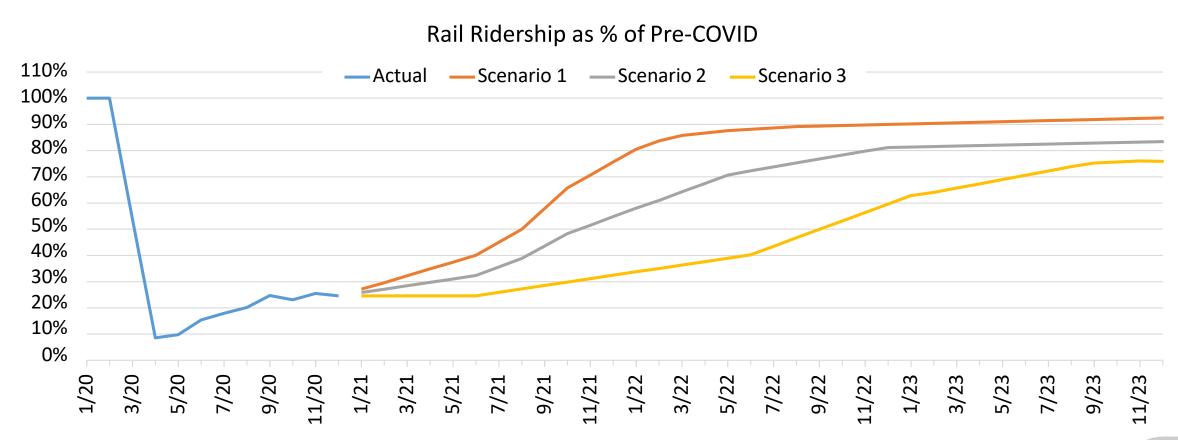
- MBTA ridership, interpreted in combination with VMT, economic, and telework assumptions, varies between scenarios in the "New Normal"
- The transitional phase varies more between scenarios, capturing more uncertainty about how overall tripmaking will translate to transit travel and MBTA ridership
- Scenarios 1 and 2 see a "boost" in ridership in Fall 2021; while Scenario 3 sees a longer span of growth

Ridership Projections: MBTA Ridership Implications (Bus)



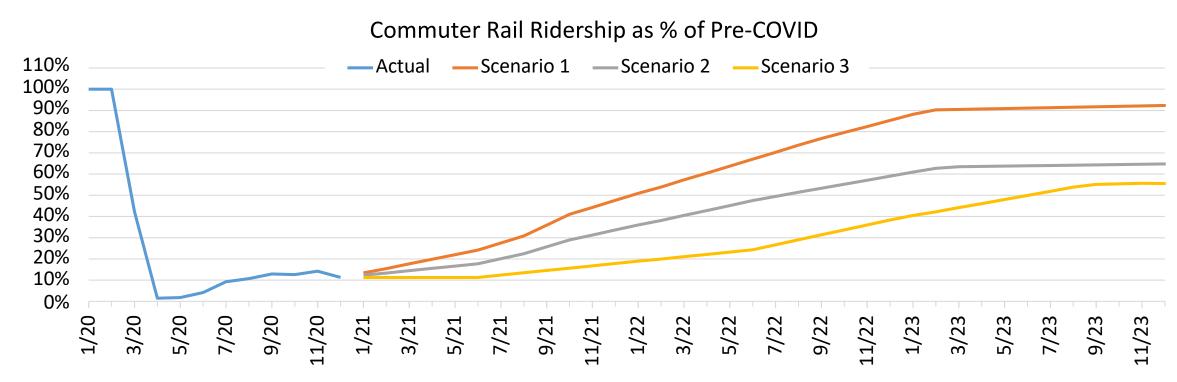
- Bus ridership is projected to recover to between 75%-100% of pre-COVID in the "New Normal"
- Both bus and rapid transit ridership see the boost in Fall 2021 in Scenarios 1 and 2 from returning students and teleworkers

Ridership Projections: MBTA Ridership Implications (Rapid Transit)



- Rapid transit ridership is also projected to recover to between 75%-100% of pre-COVID in the "New Normal"
- Both bus and rapid transit ridership see the boost in Fall 2021 in Scenarios 1 and 2 from returning students and teleworkers

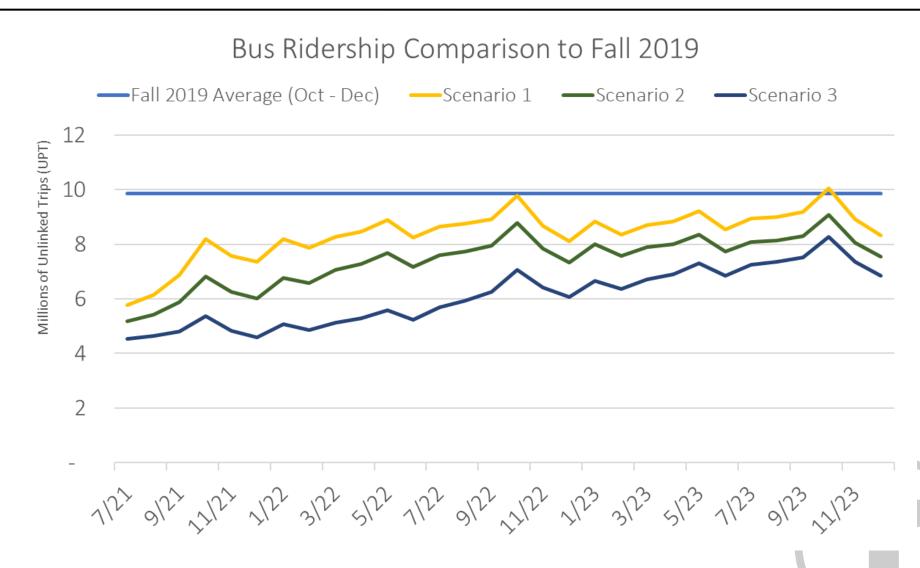
Ridership Projections: MBTA Ridership Implications (Commuter Rail)



- Commuter Rail ridership projections are substantially different: it is expected to recover to between 55%-100% of pre-COVID in the "New Normal"
- Where bus and rapid transit are expected to compensate for decreases in commute trips with other types of trips, Commuter Rail primarily services commute trips and is not expected to "make up" for those trips as much in scenarios with extensive telework (Scenarios 2 and 3)

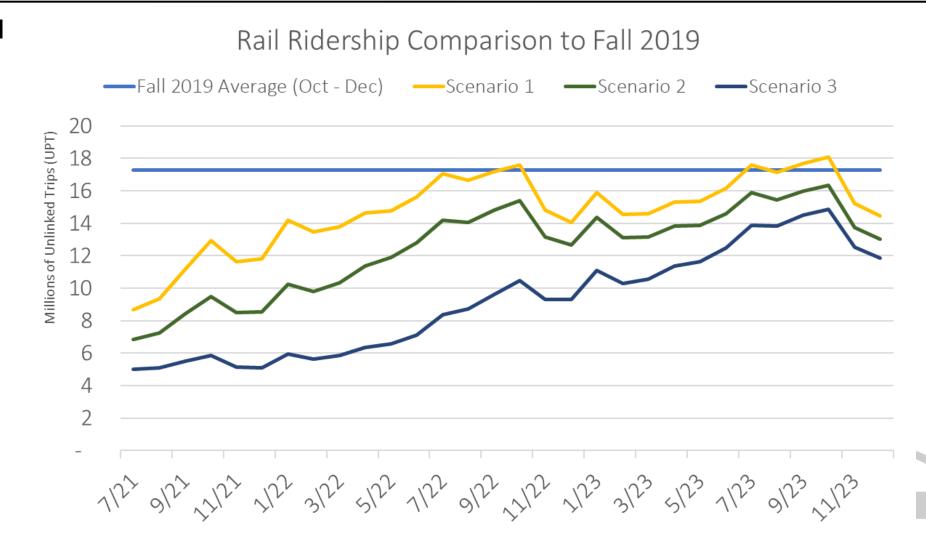
Bus Ridership Projections

- Scenario 2 and 3
 bus ridership
 projections through
 2023 estimated to
 be below Fall 2019
 levels
- Scenario 1 bus ridership projections exceed Fall 2019 levels for a brief period in Summer/Fall 2023 due to seasonality in ridership



Rail Ridership Projections

- Scenario 2 and 3 rail ridership projections through 2023 estimated to be below Fall 2019 levels
- Scenario 1 rail
 ridership projections
 exceed Fall 2019
 levels for a brief
 period in
 Summer/Fall 2022
 and again in 2023
 due to seasonality in
 ridership



Incorporating Forging Ahead Service Level Planning

- Range of \$17M-\$25M in net service level savings with a current estimate of \$21M
 - Range of \$19M-\$29M with current estimate of \$23.7M in gross estimated service level savings in FY21 based on 12/14 FMCB approved service changes to align service with ridership
 - Range of \$1M-\$4M with current estimate of \$2.6M in fare revenue impact based on budgeted fare revenue levels
- FY21 revised approach to forging ahead service planning has maximized savings estimates since Fall 2020
 - Added back service from initial approach based on customer feedback and public engagement
 - Accelerated service adjustments so that service levels are aligned with observed ridership
 - Fully accounts for wages and headcount savings since FMCB approval on 12/14 and the implications of that decision on planned hiring
- Savings estimates subject to change based on actual headcount and attrition

\$23.7M estimate in FY21 service level planning savings (gross)

\$2.6M estimate in fare revenue impacts

\$21.1M in service level planning savings (net)

Pro Forma Assumptions: Red and Orange Line Improvements

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
Pad and Oranga Lina	Revenue	-	-	-	-	-
Red and Orange Line	Expenses	\$.8M	\$1.0M	\$1.7M	\$2.2M	\$2.6M
Improvements	Net	-\$.8M	-\$1.0M	-\$1.7M	-\$2.2M	-\$2.6M

Orange Line

- 152 new Orange Line vehicles
- 32 more cars added to the fleet
- Project completion date by 2023

Red Line

- 252 new red line vehicles, 34 more cars added to the fleet
- First new Red Line train went into service on December 30, 2020
- Project completion date by 2024

Pro Forma Assumptions: Green Line Extension

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
Groop Line	Revenue	-	\$.8M	\$.9M	\$.9M	\$.9M
Green Line	Expenses	\$37.9M	\$40.8M	\$41.8M	\$42.8M	\$43.8M
Extension	Net	-\$37.9M	-\$40.0M	-\$40.9M	-\$41.8M	-\$42.9M

- \$37.9M in spending beginning in FY22
- Projected timeline for Medford & Union Square Branches is December 2021
- 19 new vehicles at peak service
- 150 new hires in Rail Maintenance, Vehicle Maintenance, Engineering & Maintenance
- 77 new hires in Transportation & Training
- 1 new maintenance facility
- 6 new stations
- 8 new miles of track



Pro Forma Assumptions: South Coast Rail

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
South Coast Rail	Revenue	-	-	\$5.1M	\$5.2M	\$5.4M
	Expenses	-	-	\$18.8M	\$19.2M	\$19.6M
	Net	-	-	-\$13.7M	-\$13.9M	-\$14.2M

- Revenue service ready by FY24
- Extends commuter rail service (Middleborough/Lakeville line) to Taunton, Fall River, and New Bedford that adds service to 9 existing stations and 6 new stations
- 26 trains daily in each direction for weekday service
- 2 additional layover and maintenance facilities
- 78 new hires



Pro Forma Assumptions: AFC 2.0

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
AFC 2.0	Revenue	-	-	-	-	-
	Expenses	-	-\$10.9M	-\$16.3M	-\$41.7M	-\$42.6M
	Net	\$.0M	\$10.9M	\$16.3M	\$41.7M	\$42.6M

- First full year of operation will be FY25
- Costs ramp up (training new hires, management costs, software/services costs to vendors) will begin in FY23
- 136 possible additional hires
 - FY23 80 potential fare inspectors to for bus and light rail
 - FY25 44 gate maintenance personnel assumed when AFC 2.0 is handed over to MBTA
 - FY25 12 MBTA contract management & oversight staff

Pro Forma Assumptions: Commuter Rail Extension

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
Commuter Rail	Revenue	\$65.6M	\$115.3M	\$132.5M	\$140.3M	\$144.0M
(PTC/ATC & South Coast Rail Included)	Expenses	\$488.7M	\$502.9M	\$516.9M	\$529.0M	\$542.2M
	Net	-\$423.1M	-\$387.6M	-\$384.4M	-\$388.7M	-\$398.2M

- \$488.7M in FY22, which reflects the recent extension agreement
- Including the 3.5% fixed cost increase for FY22, 3.0% for FY23 and FY24, and 2.5% for FY25
- Assumes all performance incentives met in each year



Pro Forma Assumptions: PTC/ATC

Project	Rev/Exp	FY22	FY23	FY24	FY25	FY26
	Revenue	-	-	-	-	-
PTC/ATC	Expenses	\$16.3M	\$16.9M	\$17.4M	\$18.0M	\$18.6M
	Net	-\$16.3M	-\$16.9M	-\$17.4M	-\$18.0M	-\$18.6M

- The safety technology monitors a train's location, direction, and speed in real time to prevent unexpected movements and collisions
- First full year of costs in FY22
- MBTA is in full compliance with Federal Railroad Administration (FRA) PTC regulations
- All 394 route miles of the MBTA's commuter rail lines have PTC in operation with the last segment was placed in service on August 15, 2020
- All MBTA commuter rail revenue vehicles have PTC equipment installed and fully operational
- Interoperability testing with tenant railroads (Amtrak, Pan Am, etc.) has been completed

August 3rd 2020 Pro Forma Summary

Numbers may change as all assumptions and variables are subject to revision as the authority receives new or updated information

- Projected budget gap of -\$308M in FY22 increasing to -\$468M in FY25
- FY22 budget gap generated from the loss of one-time revenue partially offset by estimated returns in fare revenue
- 2.2% annual revenue growth between FY22 and FY25
- 4.0% annual spending growth between FY22 and FY25

	FY21 - FY25 Pro Forma Summary				
	FY21	FY22	FY23	FY24	FY25
	Projection (\$M)	Projection (\$M)	Projection (\$M)	Projection (\$M)	Projection (\$M)
Fare Revenue	188	550	596	597	625
One Time Revenue	720	-	-	-	-
Other Operating Revenue	1,465	1,523	1,544	1,565	1,586
Total Revenue	2,373	2,073	2,139	2,162	2,211
Operating Expenses	1,776	1,814	1,896	1,954	2,020
Debt Service	523	499	555	561	587
Capital Salaries	66	68	69	71	72
Total Expenses	2,366	2,381	2,520	2,586	2,679
Remaining Balance	7	(308)	(380)	(424)	(468)

February 10th 2020 Operating Budget Revenue & Expense Forecast



August 3rd 2020 Linear Graph of Initial Pro Forma

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