



Massachusetts Bay Transportation Authority

Budget Update: FY22 Q4 Results

MBTA Audit & Finance Committee

September 15, 2022

Finance Team

FY22 Operating Budget Summary

- FY22 net revenues were \$816.2M with \$3,024.0M in total revenues and \$2,207.8M in total expenses
 - Without one-time federal funding, operating net revenue would be deficient \$131.8M
- Positive net revenues in FY22 add to the Operating Budget Deficiency Fund balance
 - Deficiency fund balance dedicated to mitigate the projected deficit in FY23 or FY24 and any other current or future obligations, per Board vote in June 2021

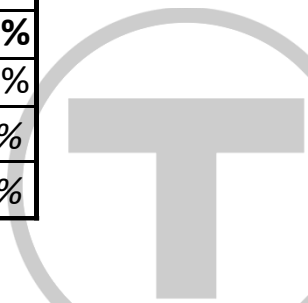
(\$M) Category	FY22 YTD Budget	FY22 YTD Actual	YTD Variance	YTD Variance (%)
Fare Revenues	200.2	322.3	122.1	61%
Own Source Revenue	45.5	60.1	14.6	32%
Non-Operating Revenues	2,525.8	2,641.6	115.7	5%
Total Revenues	2,771.5	3,024.0	252.5	9%
<i>Fare Recovery Ratio</i>	<i>11%</i>	<i>19%</i>	<i>8%</i>	<i>-</i>
Wages, Benefits and Payroll Taxes	899.2	837.6	61.6	7%
Non-Wage	987.8	896.4	91.4	10%
<i>Operating Expenses Subtotal</i>	<i>1,887.0</i>	<i>1,734.0</i>	<i>153.0</i>	<i>9%</i>
Debt Service	467.8	473.8	(6.0)	-1%
Total Expenses	2,354.7	2,207.8	147.0	7%
Net Revenues Before Transfers	416.8	816.2	399.4	49%
<i>Federal Relief Revenue</i>	<i>959.2</i>	<i>948.0</i>	<i>(11.1)</i>	<i>-1%</i>
<i>Net Revenues Without Relief Revenue</i>	<i>(542.4)</i>	<i>(131.8)</i>	410.6	-76%



Operating Budget Summary

- Q4 net revenues were \$165.0M with \$738.9M in total revenues and \$573.9M in total expenses
- Total revenues 6% favorable, total expenses 3% favorable for the quarter
- Fare revenue recovery ratio of 20% for the quarter, below the 42% ratio pre-pandemic but above the 12% budgeted

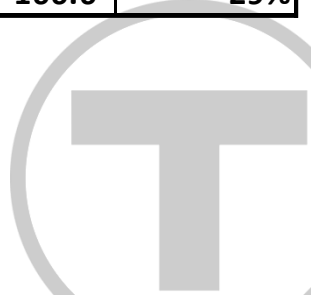
(\$M) Category	FY22 Q4 Budget	FY22 Q4 Actual	Quarterly Variance	Quarterly Variance (%)	FY19 Q4 Actual	\$ Variance (Relative to FY19 Q4)	%Variance (Relative to FY19 Q4)
Fare Revenues	58.1	91.8	33.7	58%	172.7	(80.9)	-47%
Own Source Revenue	15.5	19.8	4.3	28%	24.5	(4.7)	-19%
Non-Operating Revenues	620.7	627.3	6.6	1%	375.1	252.3	67%
Total Revenues	694.3	738.9	44.6	6%	572.3	166.6	29%
<i>Fare Recovery Ratio</i>	12%	20%	8%	-	42%	-22%	-
Wages, Benefits and Payroll Taxes	223.1	210.7	12.4	6%	187.0	23.7	13%
Non-Wage	246.0	248.1	(2.1)	-1%	219.5	28.6	13%
<i>Operating Expenses Subtotal</i>	469.1	458.8	10.3	2%	406.5	52.3	13%
Debt Service	124.1	115.1	9.0	8%	127.7	(12.6)	-10%
Total Expenses	593.2	573.9	19.4	3%	534.1	39.7	7%
Net Revenues Before Transfers	101.1	165.0	63.9	39%	38.1	126.9	333%
<i>Federal Relief Revenue</i>	218.7	182.6	(36.1)	-20%	-	182.6	0%
<i>Net Revenues Without Relief Revenue</i>	(117.6)	(17.6)	100.0	-85%	38.1	55.7	146%



Revenue Summary

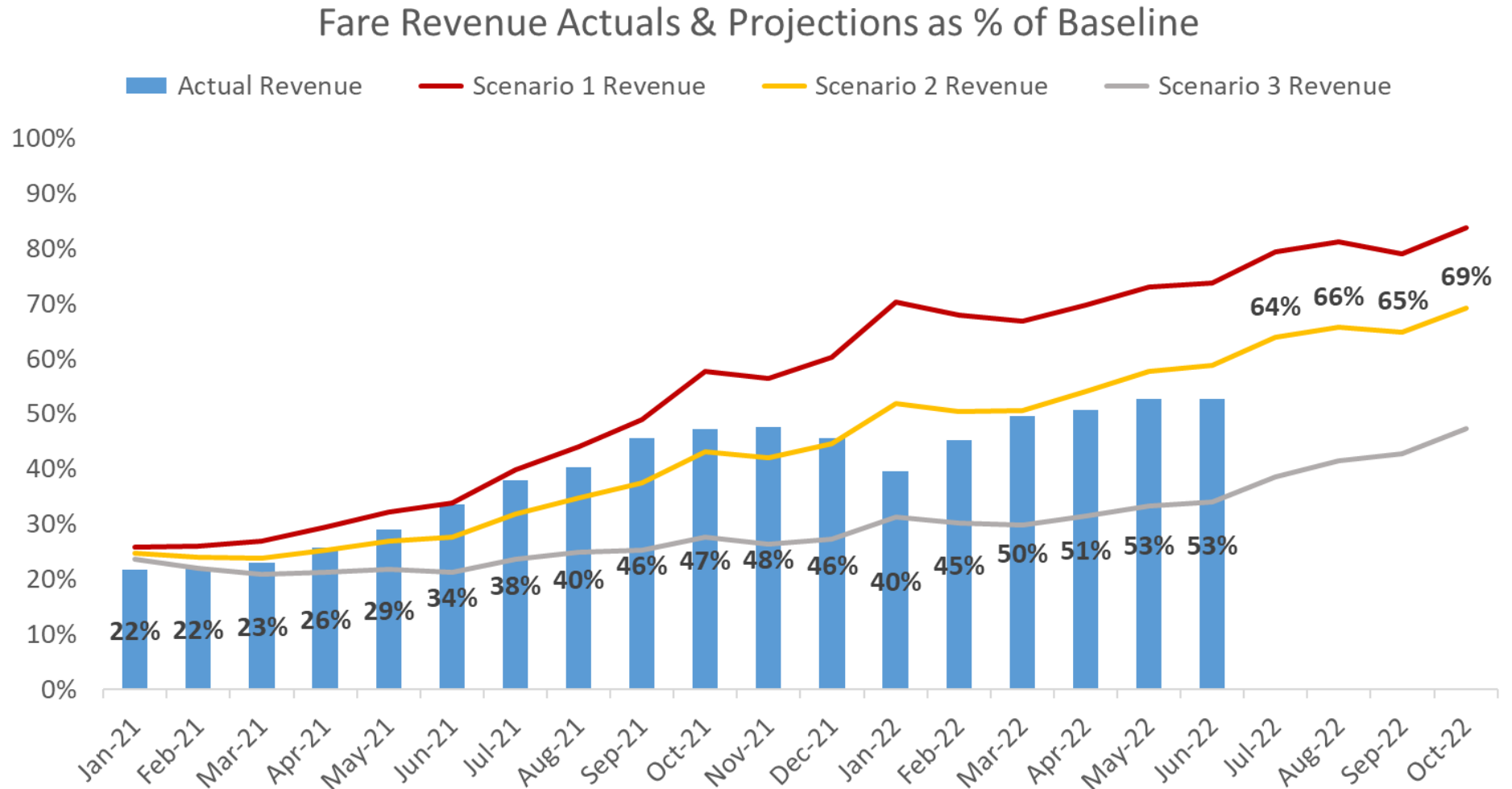
- **\$738.9M in total revenues** were \$44.6M favorable to budget for the quarter
 - Fare revenue and State Sales Tax revenue are the two largest revenue categories above budget for the quarter
- **Fare revenues favorable \$33.7M for the quarter** as ridership recovers and economy reopens
 - FY22 budget based on scenario 3 assumptions (lowest) while approved FY23 budget increases to scenario 2 assumptions
- **Sales tax revenue favorable \$32.9M for the quarter** as revenues outperform budget benchmarks
- **Own source revenues favorable \$4.3M for the quarter** primarily from parking revenue as the trend correlates with higher ridership
- **Federal Funds unfavorable \$36.1M for the quarter** due to drawing down federal funds earlier in the year

Revenue (\$M)	FY22 Q4 Budget	FY22 Q4 Actuals	Quarterly Variance (\$)	Quarterly Variance (%)	FY19 Q4 Actuals	\$ Variance (Relative to FY19 Q4)	% Variance (Relative to FY19 Q4)
Fare Revenues	58.1	91.8	33.7	58%	172.7	(80.9)	-47%
Advertising	3.7	5.2	1.5	41%	8.5	(3.3)	-39%
Parking	3.2	5.2	2.0	64%	10.1	(4.8)	-48%
Other	1.6	1.6	0.0	2%	2.1	(0.5)	-24%
Real Estate	7.0	7.7	0.7	10%	3.8	3.9	104%
<i>Own Source Revenue Subtotal</i>	15.5	19.8	4.3	28%	24.5	(4.7)	-19%
Total Oper. Revenues:	73.5	111.5	38.0	52%	197.2	(85.7)	-43%
State Sales Tax Revenue	316.0	348.9	32.9	10%	279.2	69.7	25%
Federal Funds	218.7	182.6	(36.1)	-17%	0.0	182.6	0%
Local Assessments Revenue	44.8	44.5	(0.3)	-1%	42.5	2.0	5%
Other Income	9.5	19.6	10.1	106%	21.6	(2.0)	-9%
State Assistance	31.8	31.7	(0.0)	0%	31.7	0.0	0%
Total Non-Oper. Revenues:	620.7	627.3	6.6	1%	375.1	252.3	67%
Total Revenues:	694.3	738.9	44.6	6%	572.3	166.6	29%



Fare Revenue Collection

- 53% of baseline revenue in June tracks below Scenario 2
 - 53% is the level with May actuals
- Since scenario modeling began, actuals have aligned with all three scenarios at different points in time



Spending Summary

- **\$573.9M in total expenses** were \$19.4M favorable to budget for the quarter
- **Regular wages \$8.7M favorable for the quarter** as hiring efforts ramp up to fill vacancies and new budgeted positions in a difficult job market
- **Overtime unfavorable \$4.3M for the quarter** mostly due to vacancies, employees on leave and early stages of FTA related safety work
- **Fringe benefits \$8.0M favorable for the quarter** as pension contribution rates remain level with last year, avoiding expected/budgeted increases
- **Materials and services \$3.4M unfavorable for the quarter** mostly in utilities and fuel costs as final quarter usually realizes higher spending
- **Purchased transit services \$2.2M favorable for the quarter** as the RIDE favorability offset by Commuter Rail fuel and extra work and services
- **Debt service \$9.0M favorable for the quarter** due to timing of principal payments
- **Actual COVID-19 spend is \$3.4M for the quarter, \$25.5M YTD** including cleaning and PPE

Expenses (\$M)	FY22 Q4 Budget	FY22 Q4 Actuals	Quarterly Variance (\$)	Quarterly Variance (%)	FY19 Q4 Actuals	\$ Variance (Relative to FY19 Q4)	% Variance (Relative to FY19 Q4)
Regular Wages	130.4	121.7	8.7	7%	109.2	12.5	11%
Overtime	9.4	13.7	(4.3)	-32%	12.1	1.7	14%
Wages Subtotal	139.8	135.4	4.4	3%	121.3	14.1	12%
Fringe	83.4	75.3	8.0	11%	65.7	9.6	15%
Materials & Services	83.7	87.2	(3.4)	-4%	69.2	18.0	26%
Insurance	6.4	7.3	(0.9)	-12%	7.3	0.1	1%
Commuter Rail	116.8	123.9	(7.2)	-6%	101.6	22.3	22%
RIDE	32.0	23.3	8.7	37%	23.8	(0.6)	-2%
LSS & Ferry	5.3	4.7	0.7	14%	15.6	(11.0)	-70%
<i>Purchased Transit Services Subtotal</i>	154.0	151.8	2.2	1%	141.1	10.8	8%
Financial Service Charge	1.8	1.7	0.1	4%	2.0	(0.2)	-11%
Total Operating Expenses	469.1	458.8	10.3	2%	406.5	52.3	13%
Debt Service	124.1	115.1	9.0	8%	127.7	(12.6)	-10%
Total Expenses	593.2	573.9	19.4	3%	534.1	39.7	7%



Deficiency Fund Balance, Potential Risks & Opportunities

- Approximately \$500M Deficiency Fund Balance to start FY23, which is expected to fully balance FY23 budget gap
- Offsets projected FY24 budget gap, depending on the degree of risks and opportunities realized in FY23

Potential Budget Risks/Exposures

- **Fare revenue** as estimates increase by 137% from the FY22 budget and assumptions improve from Scenario 3 to Scenario 2 projections
- **Fuel pricing** following record high prices from early Summer
- **Inflation** as the Boston area saw the CPI (consumer price index) rise by more than 7% over the last year

Potential Budget Opportunities/Favorability

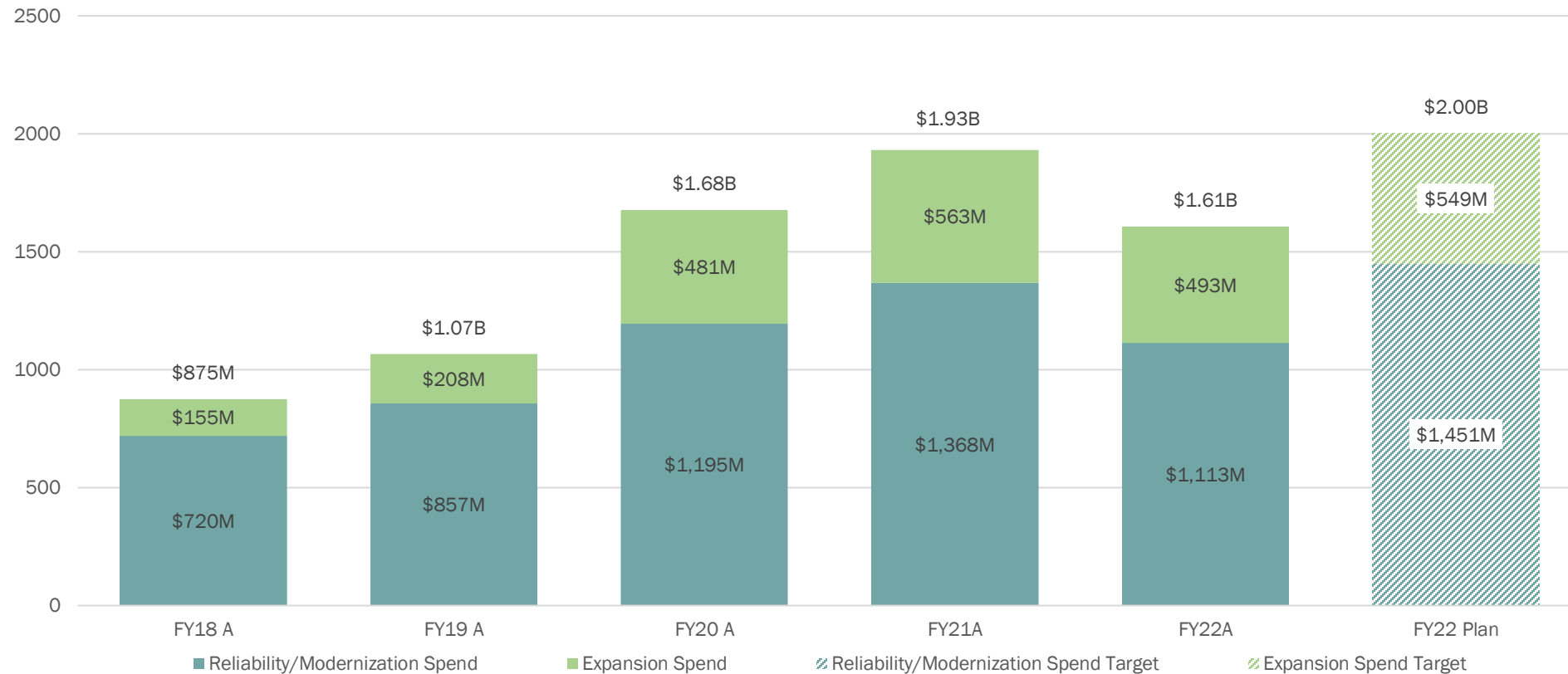
- **Sales tax revenue** if actual collections outperform state budget benchmarks
- **FEMA reimbursement** as delayed timeline for receiving funds has pushed expected revenue collections from FY22 into FY23
- **Wages & benefits** even with targeted investments for HR to hire and increase headcount as quickly as possible, the nationally challenging labor market will cause vacancies
- **Debt service** as the debt portfolio continues to be constructed on an ongoing basis to enhance stability and minimize year to year variances

Capital Program Review



MBTA Capital Investment by Fiscal Year

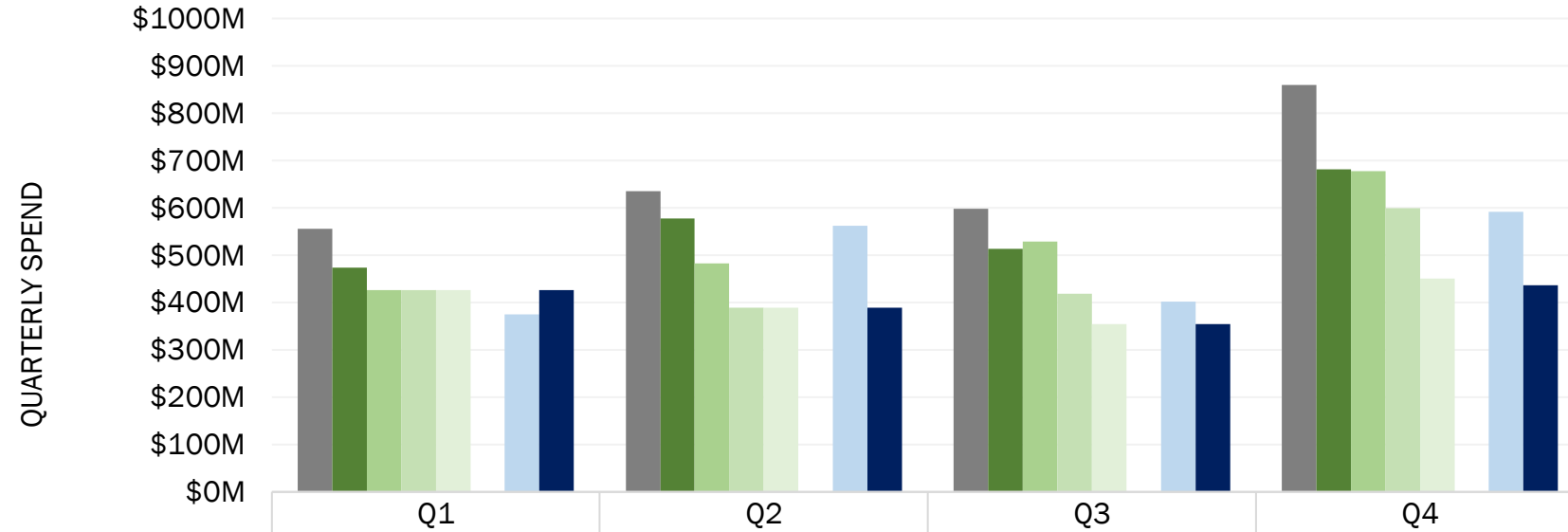
- The MBTA delivered \$1.61B of capital investments in FY22 compared to the Spend Target of \$2.0B
- Several macro factors, such as, supply chain issues and increasing prices hampered project delivery
- The MBTA spent a total of \$1.93B on capital investments in FY21. Compared to FY22, this is a year-over-year decline of \$320M or 17%



FY22 Quarterly Spend Overview

- Q4 spend was **\$436M**, coming in below PM's Q4 projections of **\$450.4M** by **\$14.4M** or **3.2%** and trailing CIP Programmed amount of **\$860.3M** by **\$424.3M** or **49.3%**
- Project Managers' Q4 FY22 (May) Projection was **\$1.62B**, \$1.03B below or 38.8% less than FY22 CIP programmed amount of **\$2.65B**, and \$626.5M or 27.9% less than Q1 FY22 (July) Projections of **\$2.25B**, and \$495.5 or 23.4% less than Q2 FY22 (Oct) Projections of **\$2.11B**, and \$214.2M or 11.7% lower than Q3 FY22 (Jan) projections of **\$1.83B**

Quarterly FY22 Actuals vs. FY21 Actuals & FY22 Benchmarks

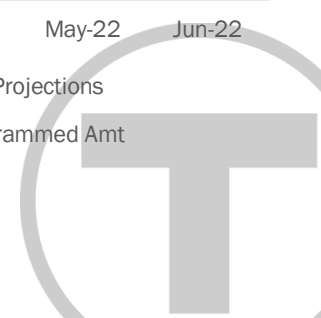
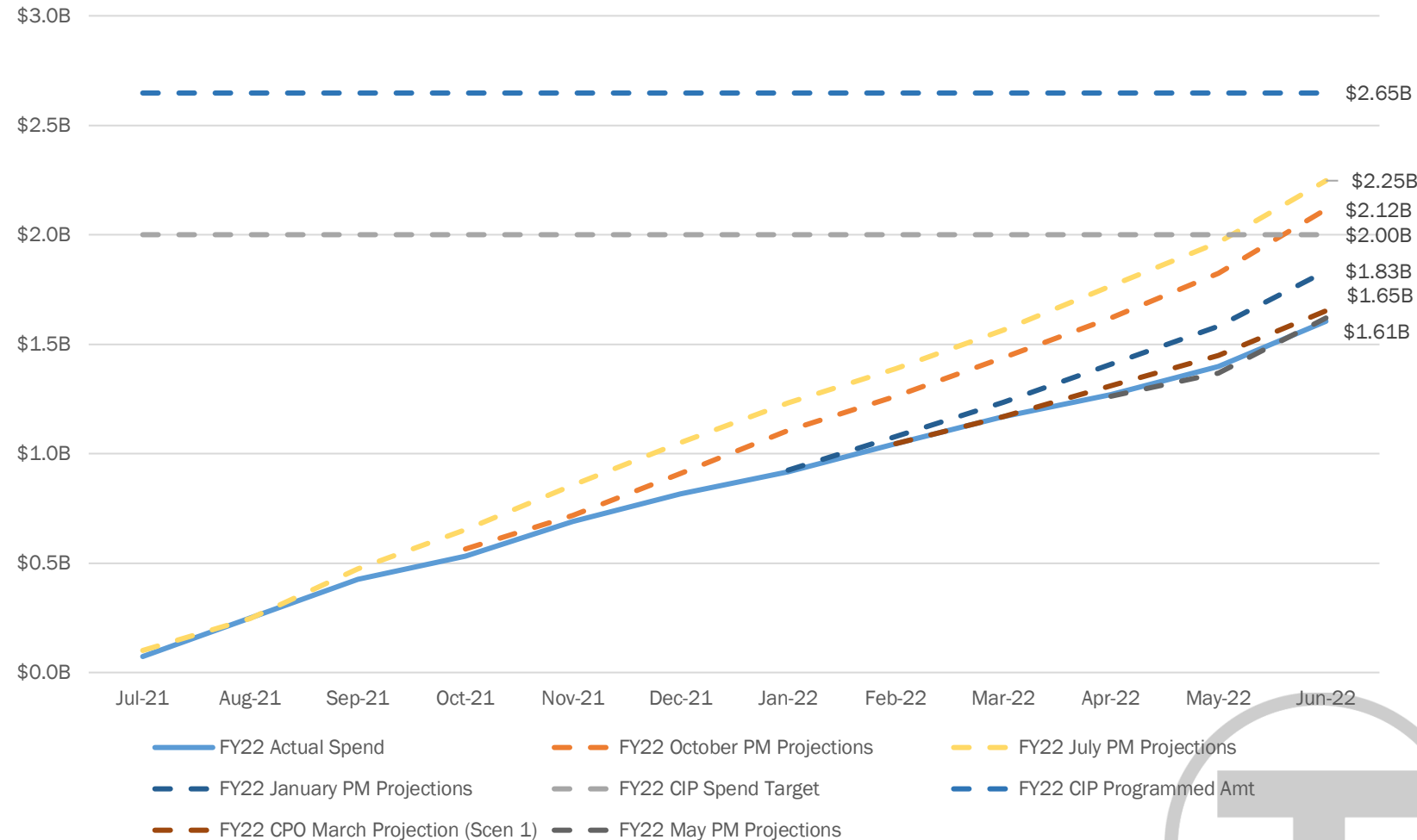


	Q1	Q2	Q3	Q4
■ FY22 CIP Programmed Amt	\$555.0	\$634.9	\$598.4	\$860.3
■ FY22 July PM Projections	\$474.1	\$577.5	\$512.9	\$682.0
■ FY22 October PM Projections	\$426.2	\$482.4	\$529.0	\$678.0
■ FY22 January PM Projections	\$426.2	\$389.4	\$419.0	\$599.7
■ FY22 May PM Projections	\$426.2	\$389.3	\$354.2	\$450.4
■ FY21 Actual Spend	\$374.9	\$561.9	\$401.6	\$592.1
■ FY22 Actual Spend	\$426.2	\$389.3	\$354.2	\$436.0

Note: CIP Programmed Amount converted from annual to monthly based on spread of July PM Projections.

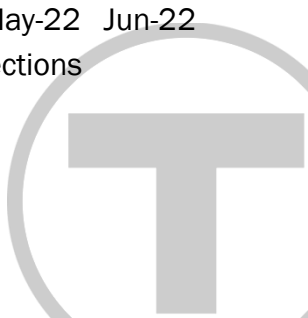
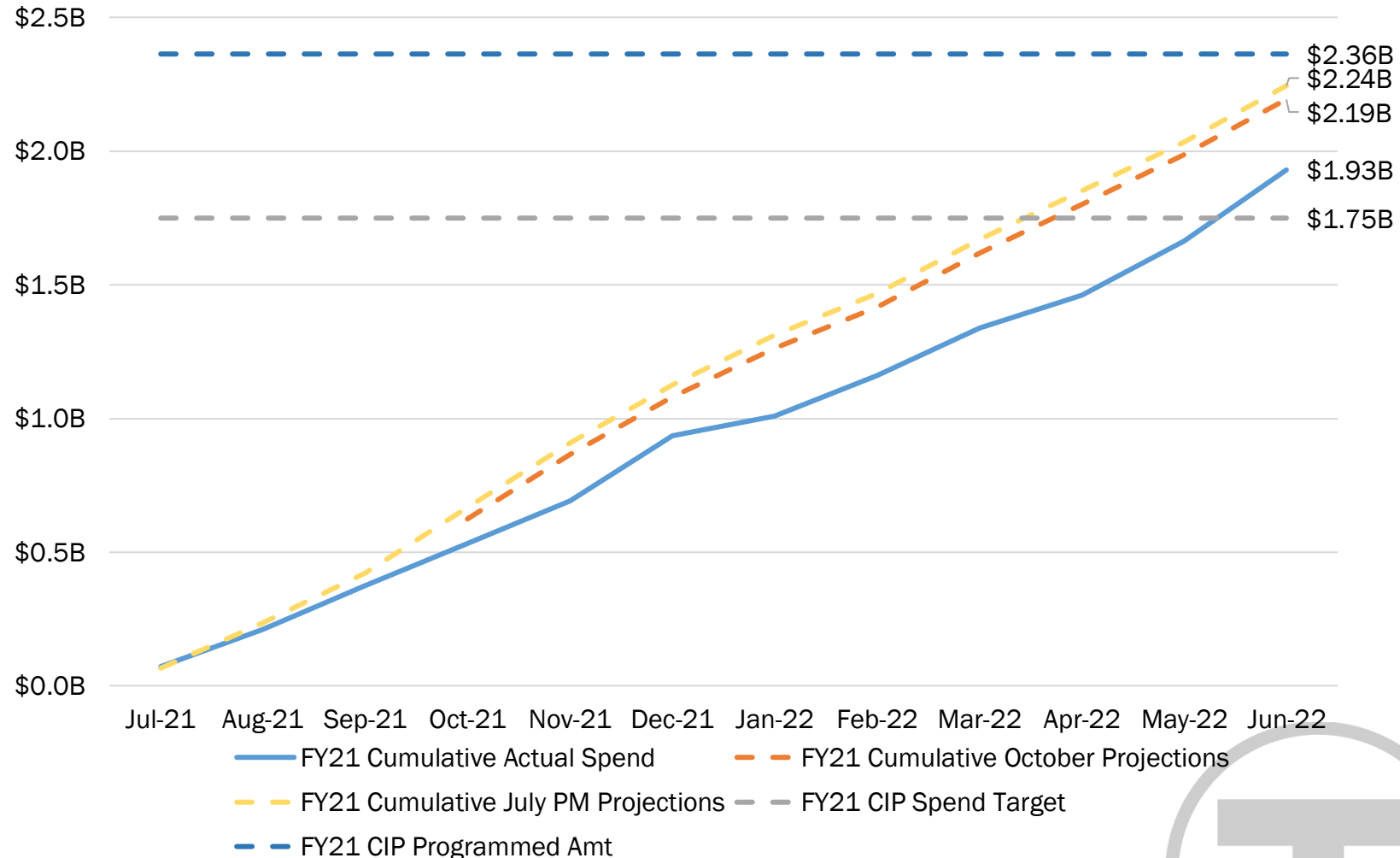
Cumulative Spend Overview FY22 YTD

- FY22 spend of **\$1.61B** came in, as expected, slightly below Q4 FY22 projections of **\$1.62B**
- PM's Q4 FY22 Projection was **\$1.62B**, \$1.03B below or **39%** less than FY22 CIP programmed amount of **\$2.65B** (submitted in Q3 FY21)
- FY22 spend is **\$1.61B**, which trails:
 - July PM Projections of **\$2.25B** by **\$640.9M** or **29%**;
 - October PM Projections of **\$2.12B** by **\$509.9M** or **24%**;
 - January PM Projections of **\$1.83B** by **\$228.6M** or **12%**,
 - and FY21 spend of **\$1.93B** by **\$324.8M** or **17%**
- April, May, and June actual spend was less than Q4 PM Projections by 3.2%.

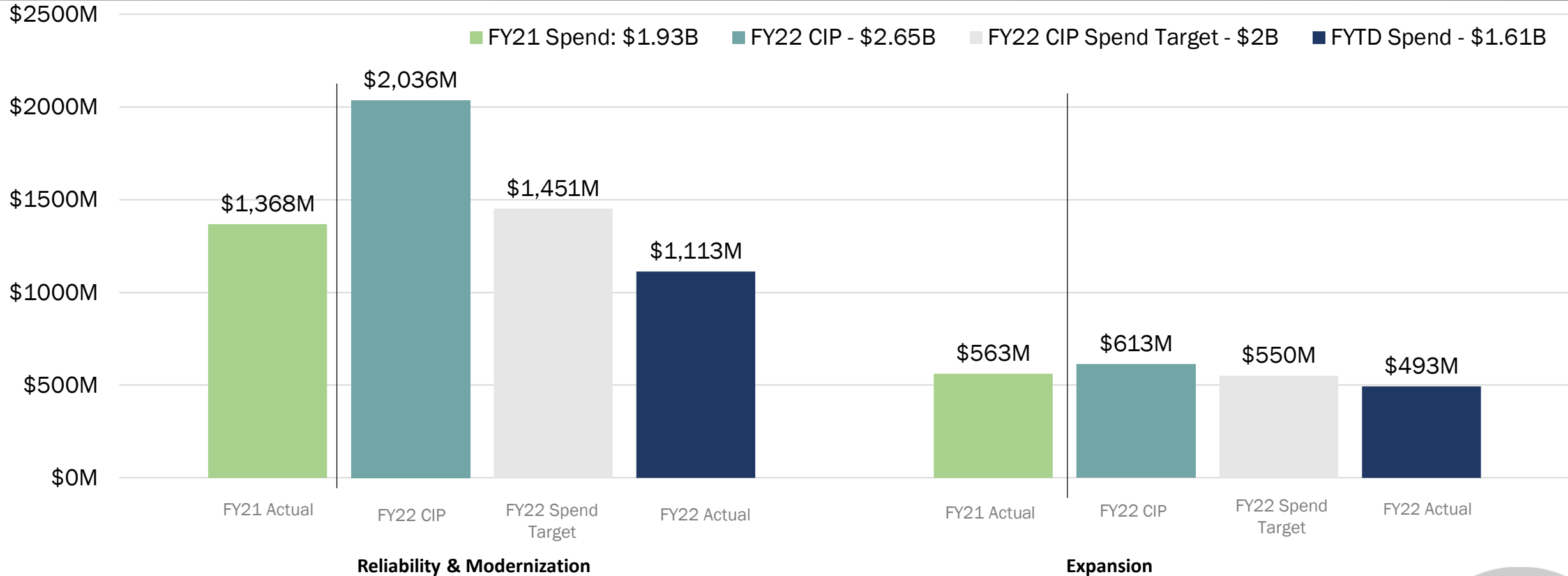


Cumulative Spend Overview – FY21

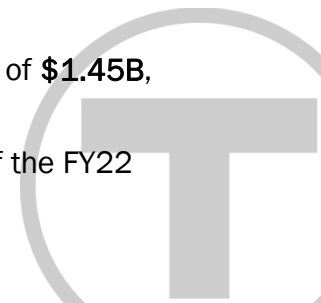
- Spend vs. the CIP followed a similar trend in FY21 as FY22
- FY21 spend was **\$1.93B**, which trailed the FY21 CIP programmed amount by **\$430M** or **22.2%**; July PM Projections by **\$310M** or **16%** and October PM Projections by **\$268M** or **13.9%**
- Cashflows received in Q2 FY21 that determined the CIP programmed amount were reduced by **\$119.1M** in July and another **\$50.1M** in October



Capital Spend by CIP Priority

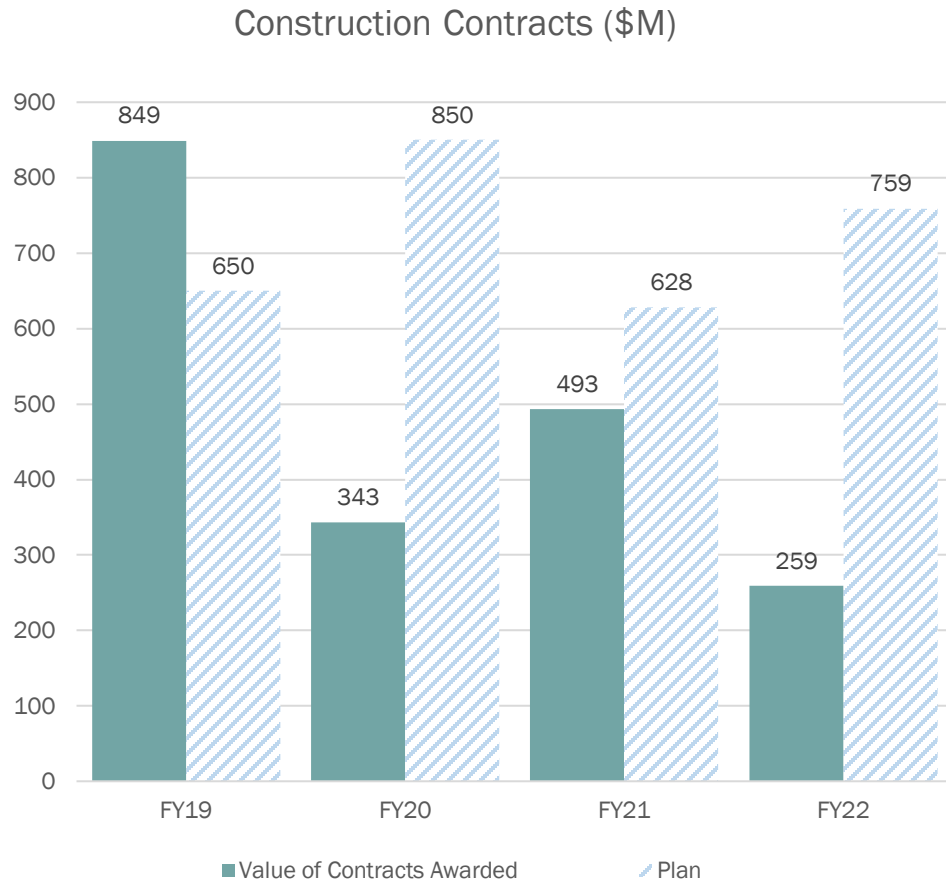


- FY22 Reliability & Modernization spending of **\$1.11B** lagged FY22 CIP by **\$923M** or **45.3%** with spend achieving **76.7%** of the FY22 CIP Spend Target of **\$1.45B**, but only **54.7%** of the Full FY22 CIP of **\$2.04B**
- FY22 spend for Expansion projects (GLX, SCR) totals **\$493M** and lags FY22 CIP by **\$120M** or **19.6%**. The Expansion projects spend reached **89.5%** of the FY22 Spend Target of **\$550M**, and **80.4%** of the Full FY22 CIP of **\$613M**.



Planned FY22 Construction Contract Awards

MBTA set an aggressive contract award plan for FY22 totaling \$759M



Planned Construction Contracts FY22			
Contract Description	Est. Value (M)	Actual Award	Variance
Quincy Bus Maintenance Facility	\$235	\$0	(\$235)
Fiber Optic Resiliency (CR) - (Design Build)	\$75	\$0	(\$75)
South Station Tower 1	\$56	\$0	(\$56)
Radio Upgrades (Design Build)	\$55	\$0	(\$55)
On- Call Track Repairs, III (RL/OL- System-wide Modernization)	\$50	\$38	(\$12)
Symphony Station Accessibility Improvements	\$48	\$0	(\$48)
Winchester Station Improvements*	\$47	\$47	\$0
Worcester Union Commuter Rail Station*	\$39	\$44	\$5
Dorchester Ave. Bridge*	\$24	\$22	(\$2)
On- Call Roofing Transit Facilities	\$24	\$23	(\$1)
Newton Highlands	\$18	\$0	(\$18)
Green Line Train Protection System Wayside Installation	\$11	\$14	\$3
On- Call Structures Repairs, III	\$10	\$11	\$1
Back Bay Stair Pressurization Phase - II	\$10	\$0	(\$10)
Route 18 Pedestrian Bridge	\$10	\$0	(\$10)
D Branch Platform Accessibility	\$9	\$0	(\$9)
Green Line Overhead Catenary System SGR	\$8	\$0	(\$8)
Alewife Garage Infrastructure/ Access Improvement	\$7	\$7	\$0
Quincy Bus Maintenance Facility- Early Action Demo	\$7	\$7	\$0
Duct Bank Repairs	\$7	\$8	\$1
SCR- Offsite Traffic Improvements	\$6	\$8	\$2
Red Line Wayfinding	\$3	\$0	(\$3)
AFC 2.0 Installation For Transit	\$0	\$30	\$30
Total	\$759	\$259	(\$500)

Capital Program | Key Project Milestones in FY22

FY22 Key Project Milestones: Heavy and Light Rail

✓ *Safety projects and initiatives*



Green Line Extension Union Square Branch opened on March 21 for passenger service

Green Line E Branch track replacement was finalized, renewing 2,500 feet of track ✓

Completion of Type 9 vehicle procurement, adding 24 new vehicles to the Green Line Fleet ✓

The Green Line Train Protection System reached 34% completion, including equipment design, vehicle and track installations to avoid train-on-train collisions ✓



Red and Orange Lines continued vehicle replacement (42 new vehicles in service), and upgrades to signals (46% completion on the Red Line) and traction power substations (78% completion on the Orange Line) ✓

Continued improvements and upgrades to Codman Yard (100% design) and Wellington Yard (93% complete)



Over 22 consecutive days, the MTA completed a series of critical work on the Blue Line, replacing 2,000 feet of track between Airport and Maverick stations ✓



Green Line Union Square Branch opens to passengers



Green Line Type 9 vehicles in service



Installing new track in Wellington Yard



Track, signal, and power upgrades on the Blue Line

Capital Program | Key Project Milestones in FY22

FY22 Key Project Milestones: Bus and Commuter Rail

✓ *Safety projects and initiatives*



New center-running bus lane on Columbus Avenue in Boston opened in October 2021 for passenger service

Modernization of Bus Facilities: groundbreaking at new Quincy Bus Facility. ✓

Harvard Square Busway Repairs completed, including new signage, lighting, and accessibility features for riders ✓



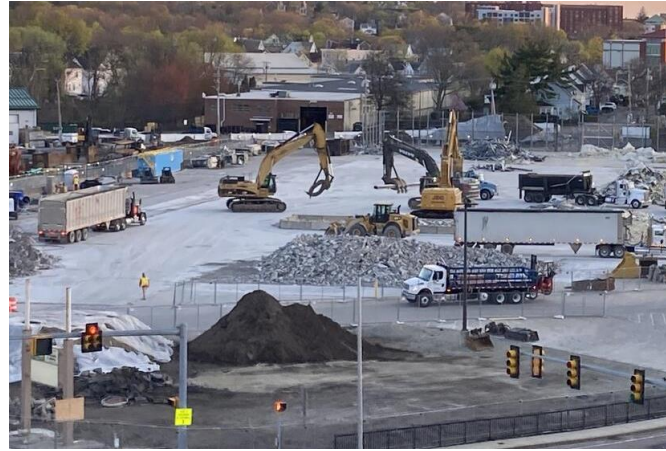
New, fully accessible Chelsea Commuter Rail Station opened in November 2021 for passenger service ✓

South Coast Rail achieved substantial completion of early action track, culvert, crossing, and bridge work

ATC Implementation on the North Side of the Commuter Rail, with installation and testing underway on the Newburyport/Rockport and Haverhill lines ✓

Procurement of 64 bi-level Commuter Rail coaches, with 4 cars arriving in June at Rochester Maintenance Facility ✓

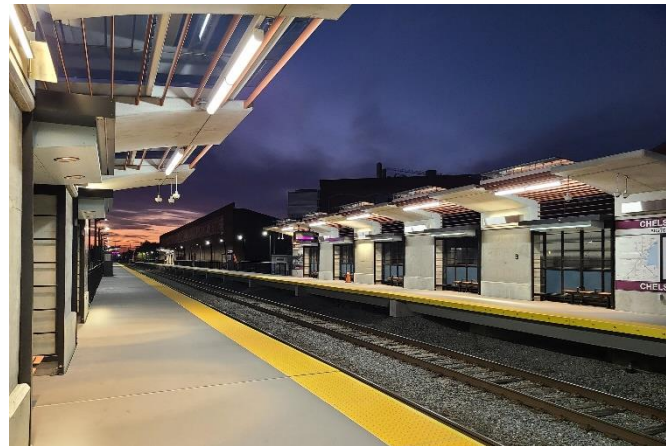
Gloucester Drawbridge Replacement construction underway. Single-track service to Gloucester and Rockport stations resumed in May 2022. ✓



Preconstruction work at new Quincy Bus Facility site



A route 29 bus at the new Columbus Ave bus lane



New, fully accessible, Chelsea Commuter Rail Station



New ties and track on the Gloucester Drawbridge

Appendix



FY23 New Safety Positions Budgeted

- At least 424 budgeted safety positions added since the FY20 budget
- 148 new budgeted positions specifically designated for safety in FY23
- 28 positions for transit facilities maintenance for mechanical and station inspections to avoid potential interruptions
- 26 positions for heavy rail to support rail yard safety, along with the additional training and testing of new Red and Orange Line vehicles
- 18 positions for rail maintenance for proactive inspections, implement additional QA/QC functions, improved cleanliness, tool calibration, and defective part replacements
- 15 positions for light rail yard safety and to prepare and support vehicles for revenue service for the Green Line Extension
- 11 positions for power systems maintenance to increase supervisory capacity, including vertical transportation contracts like escalators and elevators
- 10 positions for signals and communication maintenance including engineers to address the movement towards more advanced, specialized, technical nature of equipment
- 7 positions for engineering to manage and improve quality on all modes, including signal and tracks
- 5 positions for bus transportation for additional inspectors and supervisors
- Remaining 22 positions support efforts in and across multiple departments including Chief Operating Officer, Security Department, Safety Department, OCC & Training, and Maintenance of Way

Operations Safety

148
positions

\$15M in
annual
wages

FY22 Additional Safety Positions Budgeted

- **125 new budgeted positions for safety**
- 78 positions for system and vehicle maintenance, including system repairers and technicians
- 32 positions for transportation safety, including rapid transit motorpersons and bus supervisors
- 10 positions for operations planning and training, including dispatchers and supervisors
- 5 positions for security, including system administrators
- These additional positions improve transportation and system safety and reliability with the added benefit of reducing overtime

Operations Safety

125 positions

\$11M in
annual wages

FY21 Additional Safety Positions Budgeted

- **151 new budgeted positions for safety**
- New positions targeting three priorities:
 - Preventative maintenance inspections
 - Includes fire suppression systems, stand pipes, bridges, switch machines, catenary wires, and tracks
 - Overnight supervision
 - Respond to emergencies, manage overnight activities, and prepare for morning service
 - Training programs
 - Increase ride reports, employee training, performance reviews, audits, and course materials
- Full breakdown of positions by department/area:
 - 80 for system maintenance
 - 20 for transportation departments
 - 20 for safety department
 - 18 for vehicle maintenance
 - 13 among all other departments

**Operations
Safety**

151 positions

**\$12M in
annual wages**

FY23 New Safety Services Initiatives

- \$5.5M in new spending for the Quality Management System Program to establish quality control and quality assurance processes across an array of modes and assets to improve the safety and performance of service delivery

Elevator & Escalator Quality Assurance Program

- Site visits for observation, document review of existing assets, data analysis to identify issues, priorities, and opportunities

Systemwide Stair Inspections

- Establish asset management database requirements, review inspection procedure development and planning, assessment inspections, identify best practices, and prioritize repairs/replacement

Commuter Rail Safety Assessment

- Station walk-through and inspections, safety hazard review, and establishing asset management database requirements

Transit Infrastructure Inspections

- Complete visual inspections of revenue and non-revenue system, including up to 25 miles of commuter rail track, and capture issues across the system and prioritize findings

Rail and Bus Inspections

- Preventative maintenance audits on buses, light and heavy rail car data collection to capture, report, and analyze issues and trends

Ridership Scenario Planning and Assumptions

- Three scenarios developed by MassDOT planning & OPMI contemplating ridership growth, the current public health pandemic, and employer operations
 - Scenarios 1 and 2 assume a “boost” in ridership in Fall 2021; while Scenario 3 sees a longer span of growth
- Modeled projections consistent with McKinsey & Company Future of Work report from July 2021 and APTA report by EBP US, Inc. from January 2021 on vehicle miles traveled (VMT)
- Initial modeling completed in October 2020 with an update in February 2021
- Actuals observed since March 2021 have remained within the projected scenario ranges
- **FMCB approved FY22 budget based on Scenario 3 projections due to actual observed data at the time of FY22 budget development**

Scenario 1

Economic, demographic, and mobility patterns gradually return to mostly pre-COVID-19 conditions with slight increases in the number of teleworkers

Scenario 2

Travel patterns diverge as consumers and employees adopt to a new normal, especially in light of new and emerging remote meeting and e-commerce technologies

Scenario 3

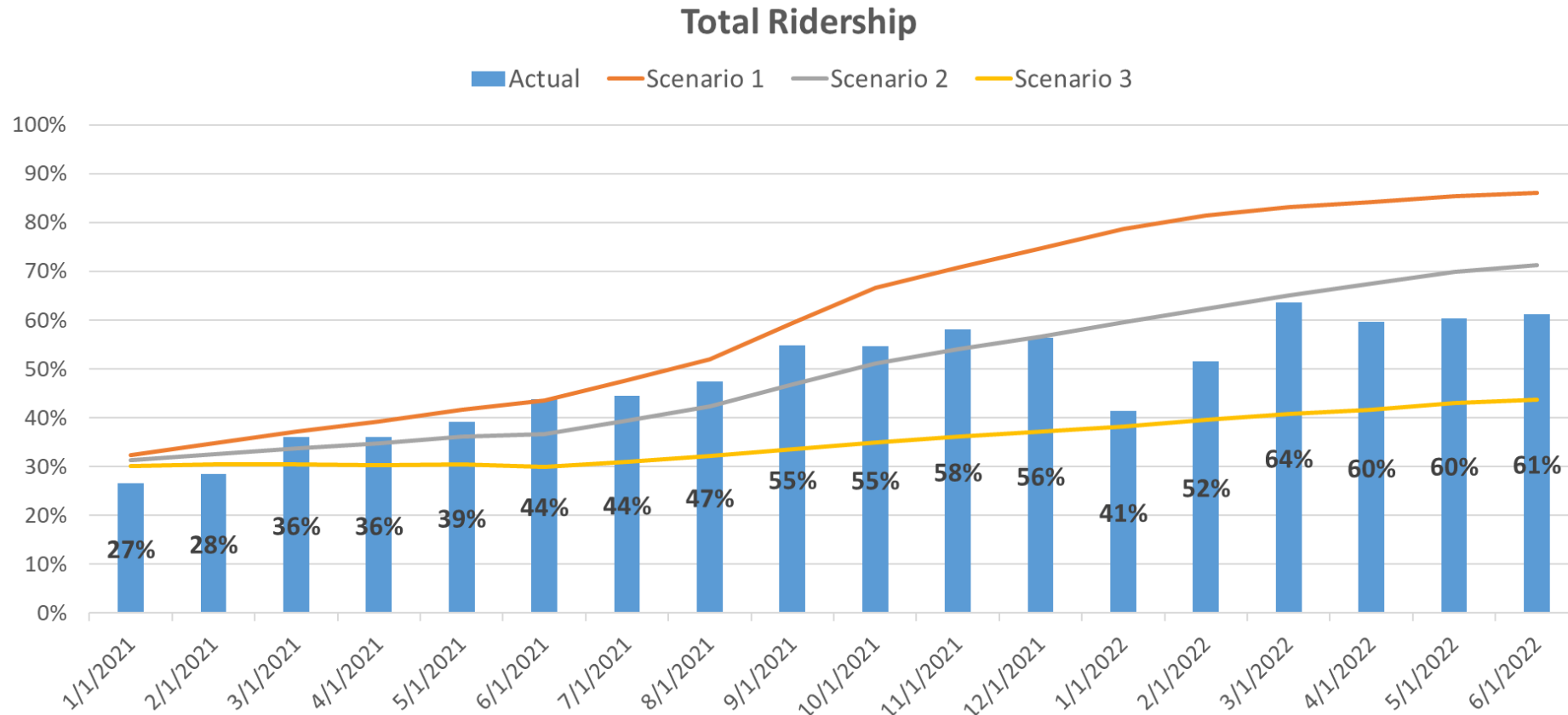
The economic impacts of COVID-19 have depressed travel and mobility, especially on the MBTA, and telecommuting is standard practice

**Fare revenue scenario projections to be updated as needed if actual observed ridership consistently deviates outside the projected range*



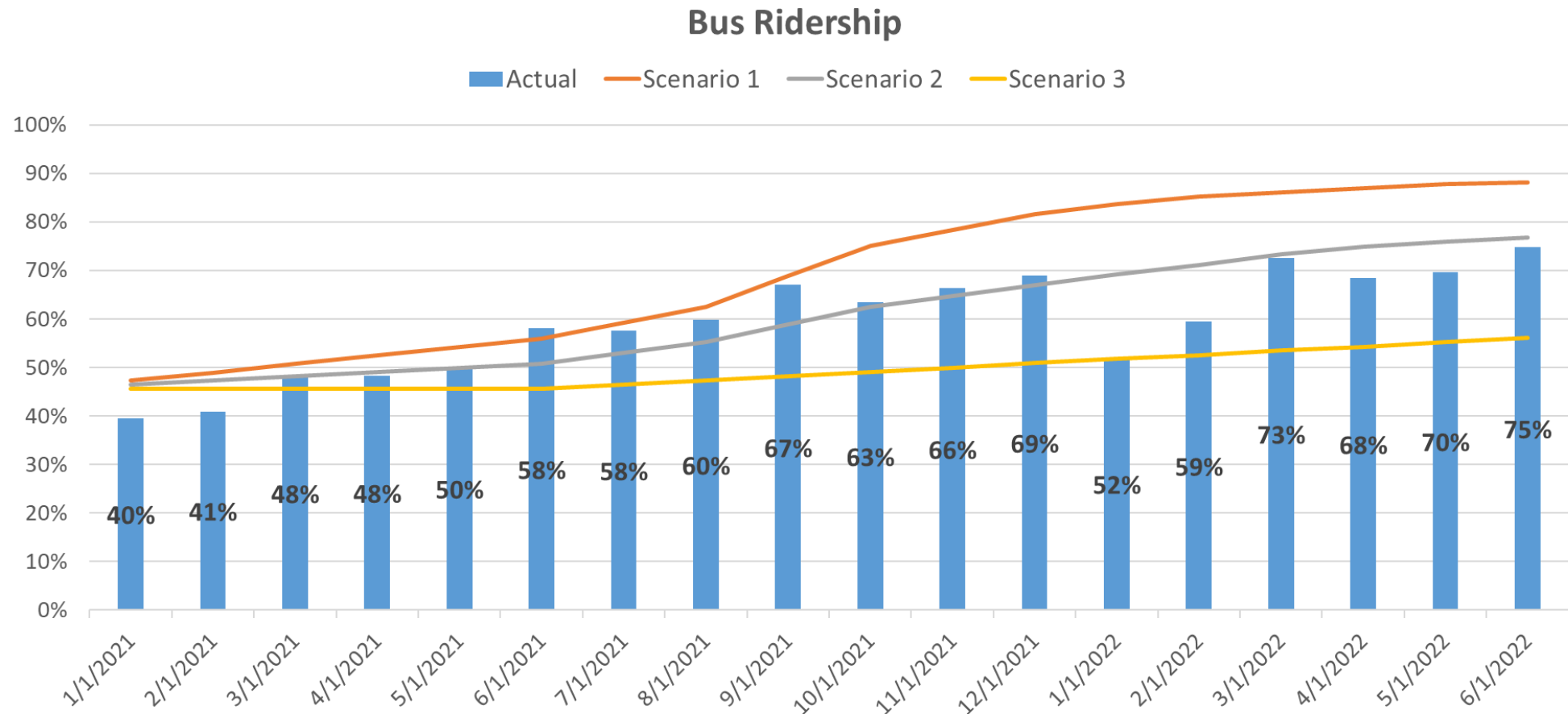
Total Ridership

- Total ridership increased to 61%, between Scenario 2 and Scenario 3



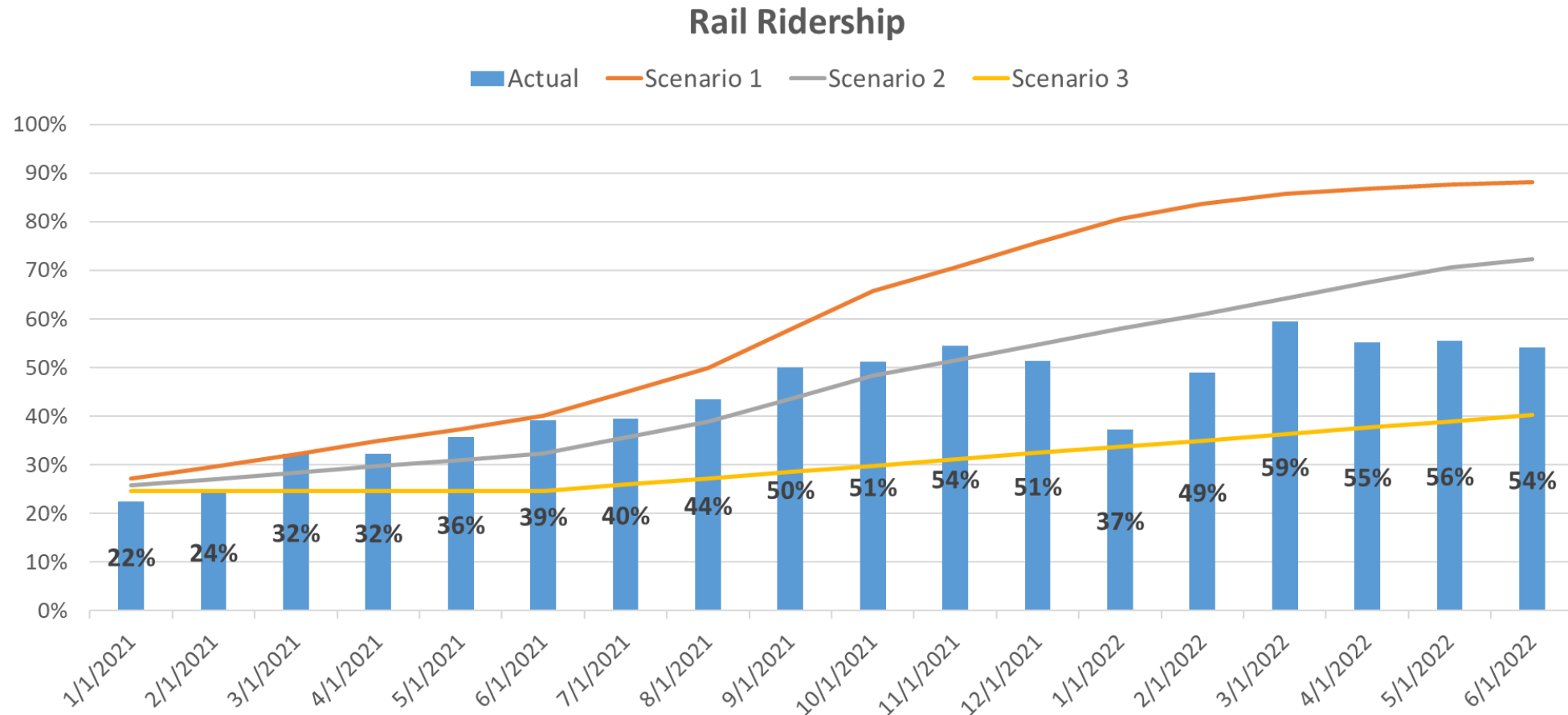
Bus Ridership

- Bus ridership increased to 75%, closest to Scenario 2



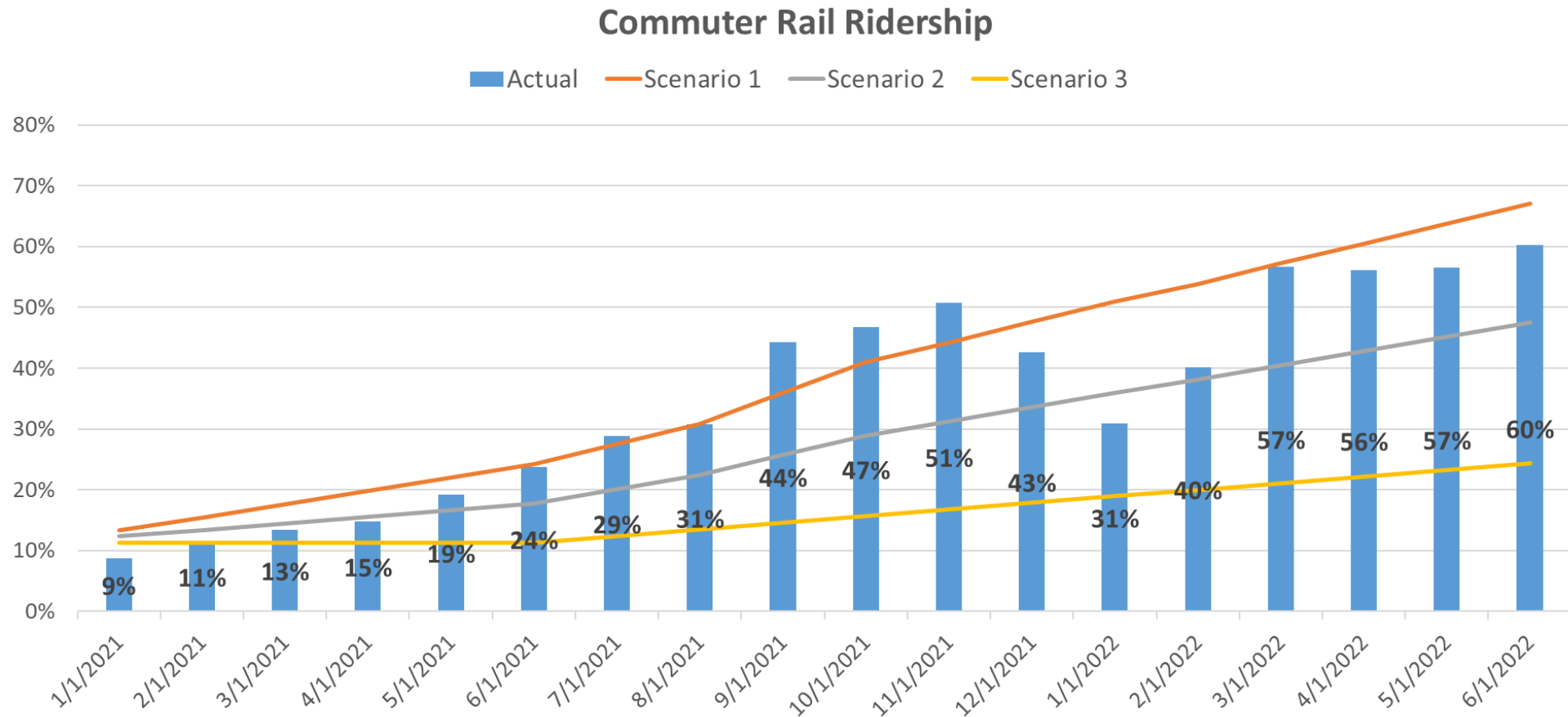
Rail Ridership

- Rail ridership decreased to 54%, between Scenario 2 and Scenario 3



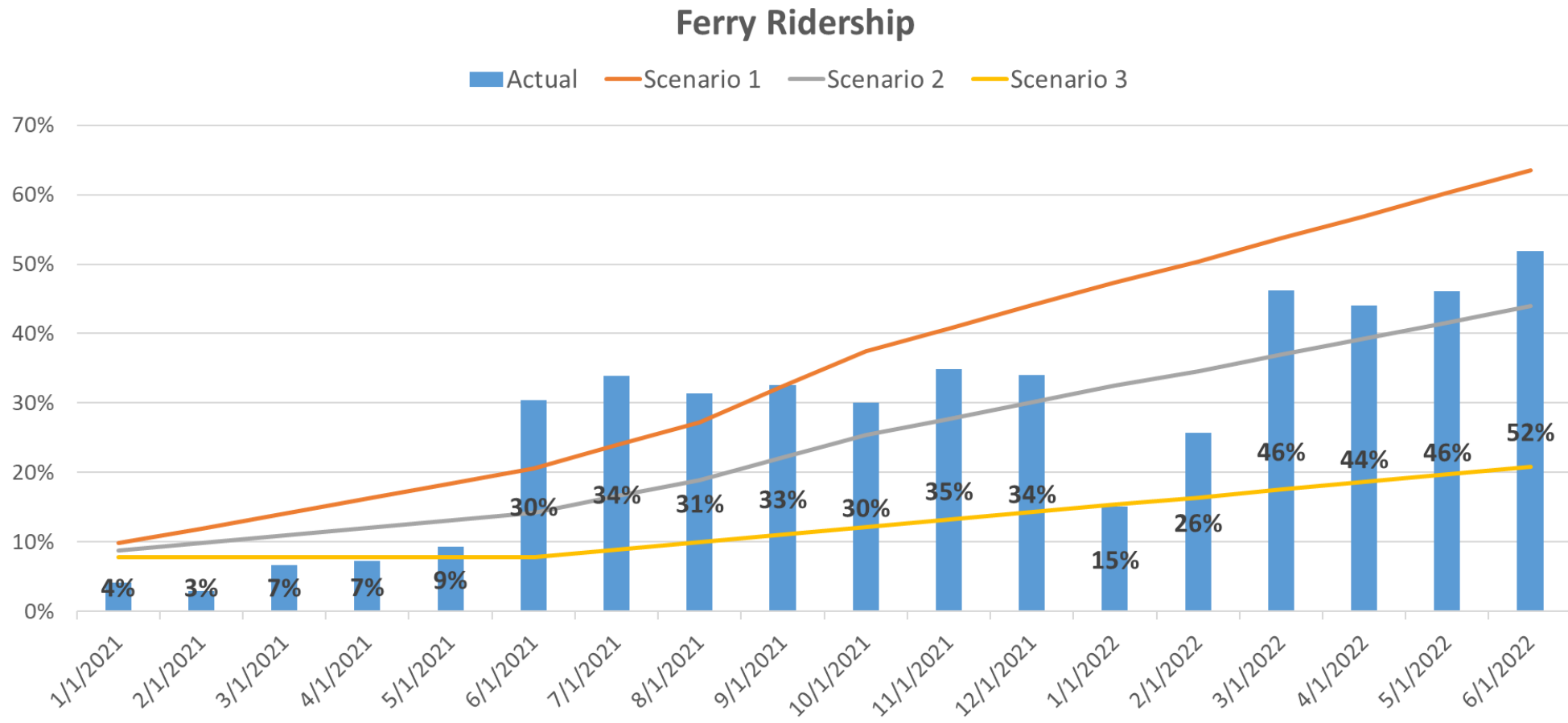
Commuter Rail Ridership

- Commuter rail ridership increased to 60%, between Scenario 1 and Scenario 2 projections



Ferry Ridership

- Ferry ridership increased to 52%, between Scenario 1 and Scenario 2



The RIDE Ridership

- The RIDE ridership has increased to 74%, closest to Scenario 2 projections

