



Massachusetts Bay Transportation Authority

Five-Year Operating Budget Pro Forma (FY20-FY24)

Fiscal and Management Control Board

February 10, 2020

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Introduction

- This Pro Forma is a 5 year financial model projecting FY20-FY24 operating budget.
- The Pro Forma is a tool to inform priorities, help shape policy decisions and guide short and long term budget decisions.
- The financial impact of initiatives and policy decisions are analyzed and incorporated into the Pro-Forma.
- The Pro Forma is calculated using the FY20 Budget as a starting point, impact growth rates are applied to each revenue & expense category based upon current assumptions.

The previously presented underlying assumptions are based on the best available data, including:

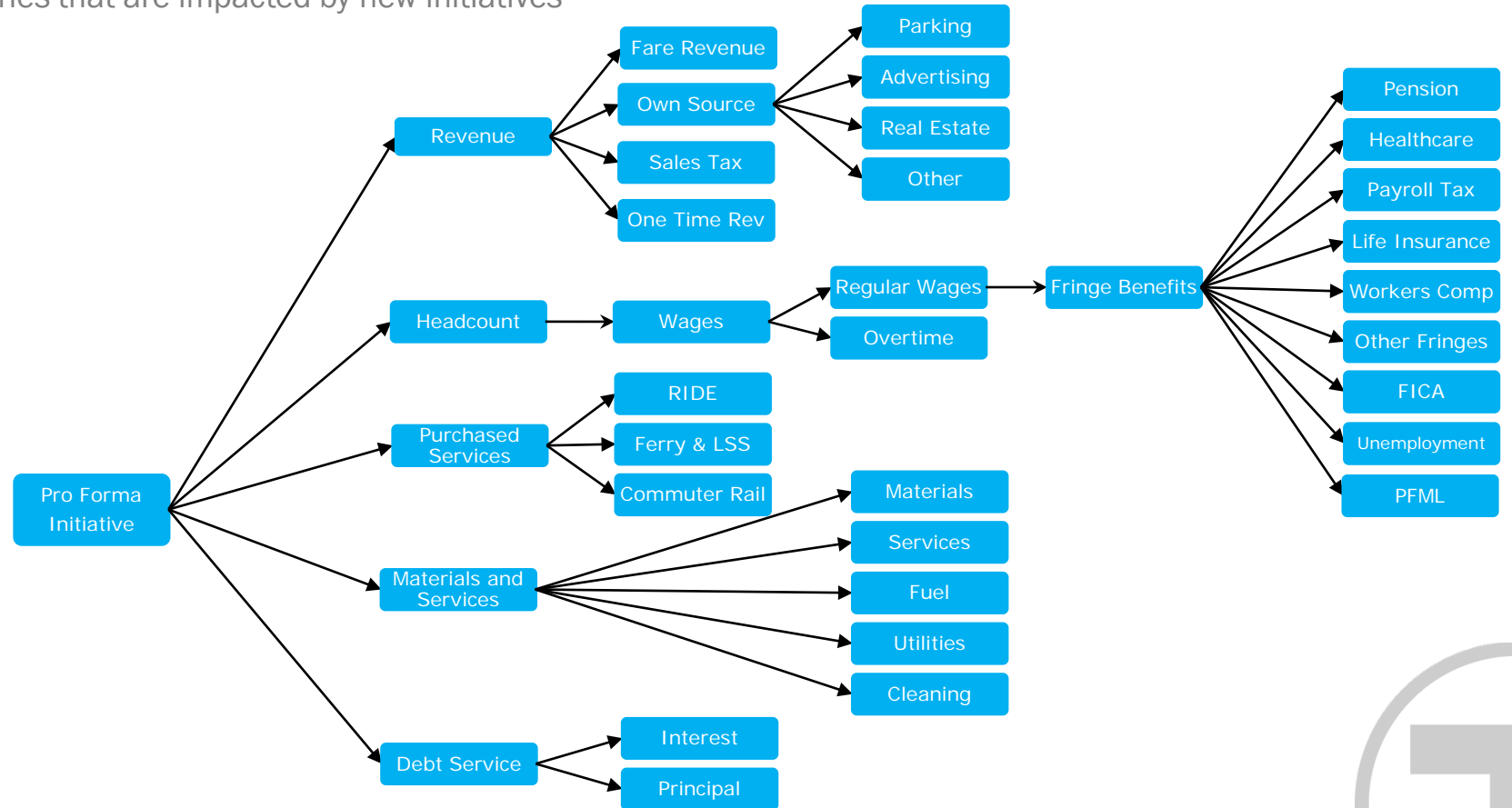
- Collective bargaining increases & Contracted services renegotiation dates
- Legislative and administrative decisions (federal safety standards, fare policy decisions, PMFL impacts, etc.)
- Historical revenue & expense growth
- Consumer Price Index (CPI) data
- The currently funded \$9.4B Capital Investment Plan (CIP) Potential, and the \$8.2B Projected Spending Target
- Current Capital Project Timelines
- Data to inform assumptions was and is collected through an extensive and on-going series of meetings with both capital and operating departments



Introduction: Operating Budget Components

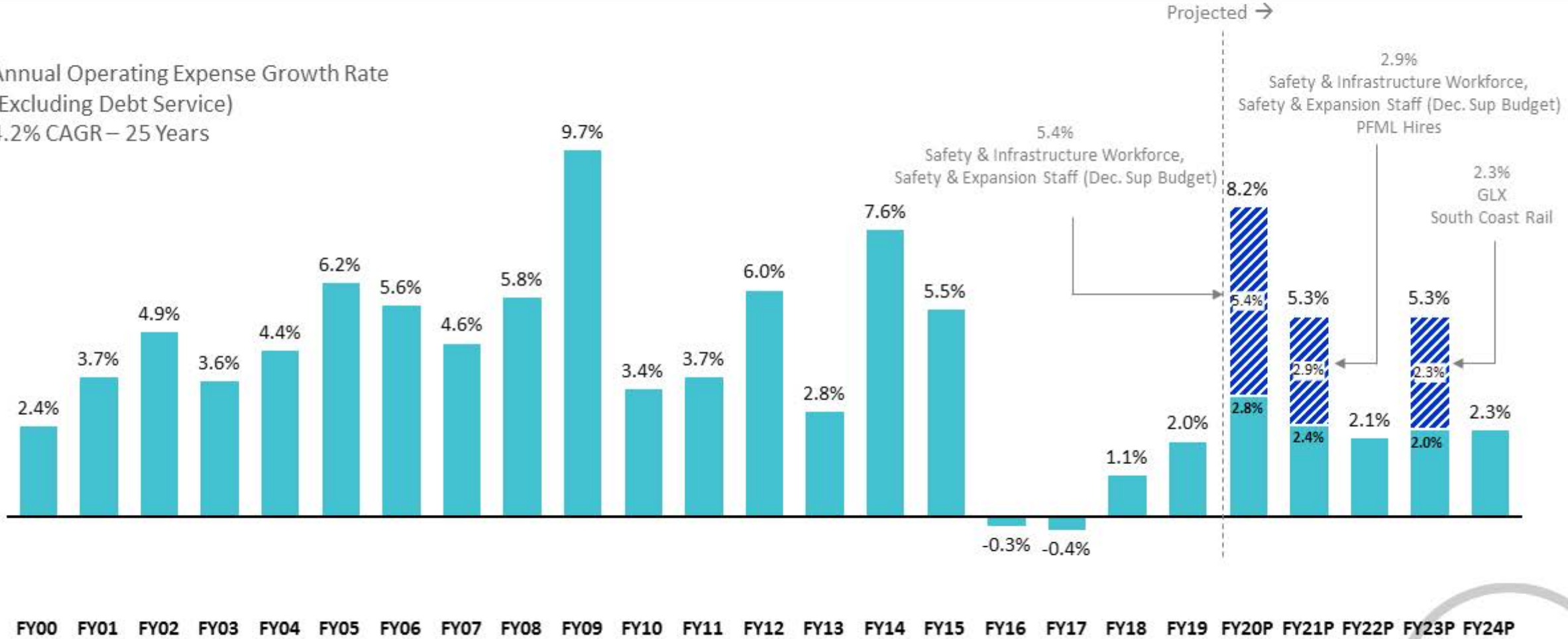
Cost Driver & Expense Category Flow Chart

Each cost driver has specific expense categories that are impacted by new initiatives

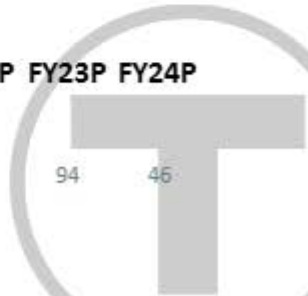


Operating Expense History and Growth Projection – 25 Years (Debt Service Excluded)

Annual Operating Expense Growth Rate
(Excluding Debt Service)
4.2% CAGR – 25 Years

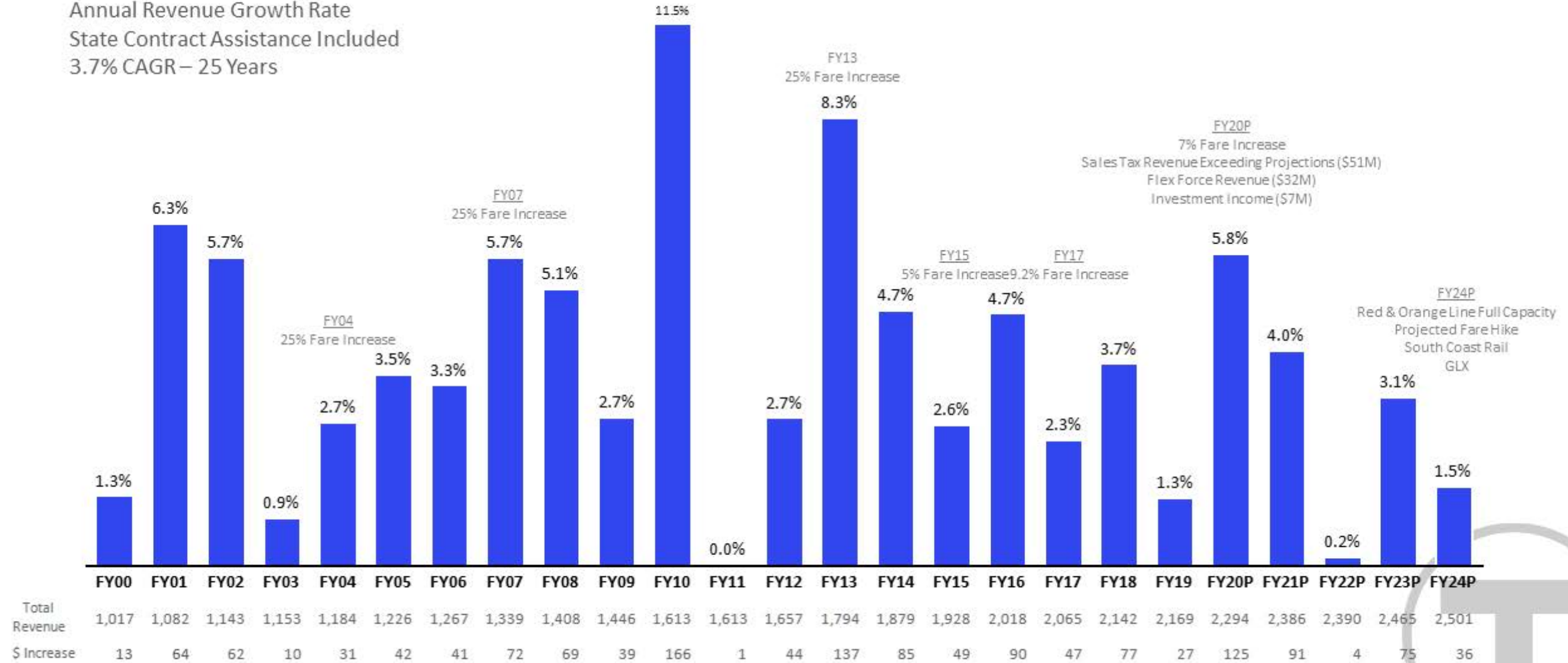


\$ Increase

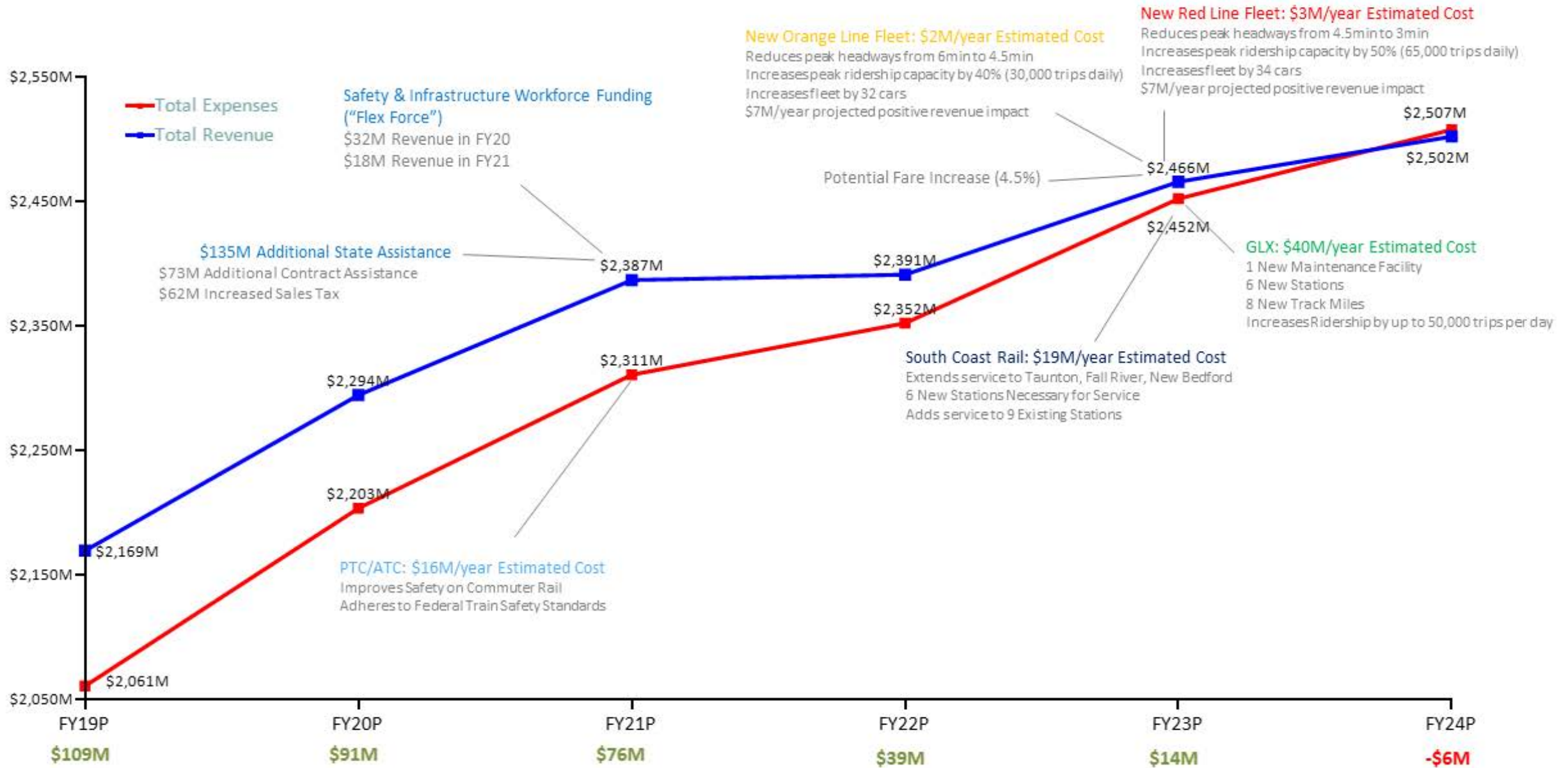


Revenue History and Growth Projection – 25 Years

Annual Revenue Growth Rate
 State Contract Assistance Included
 3.7% CAGR – 25 Years



Operating Budget Revenue & Expense Forecast



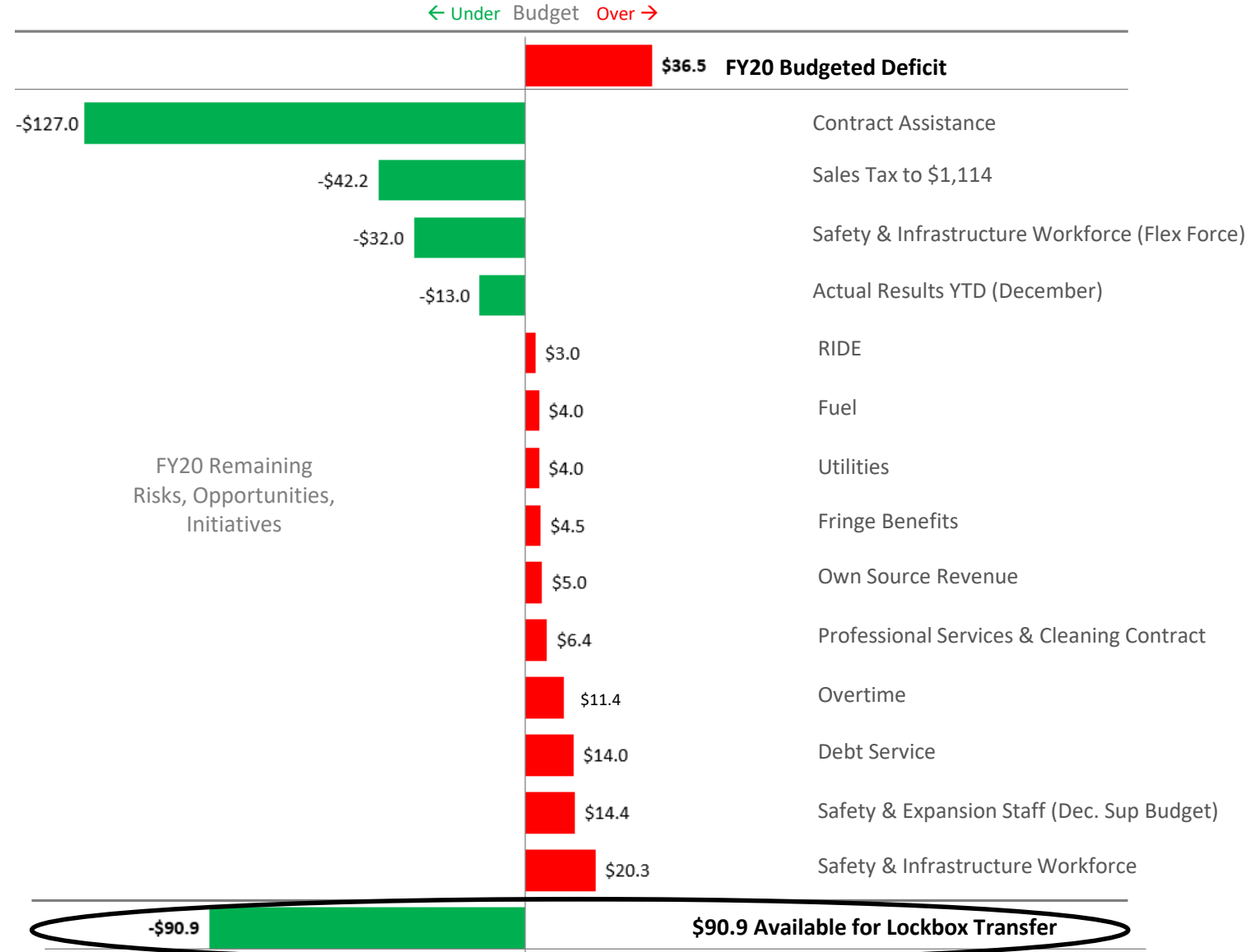
Amount available for lockbox includes capital salaries (target of \$90M/annual)

FY20 Projected Risks and Opportunities (Preliminary)

Favorable sales tax projections and YTD actual results projected to be offset by remaining risks

Historically, in Q2 and Q3 revenues drop and expenses rise

- Safety Panel recommendations, capital acceleration, professional services and increasing demands on operations departments and customer facing communications (E&M, CEX, CTD)
- Winter cold and snowfall is yearly risk and potentially a major expense driver, impacting fuel & utility, overtime and other costs
- RIDE \$3M trending unfavorable due to contract delays and lower than expected productivity improvements
- With \$13M one time real estate gain from South Station, Own Source Revenue is on target for \$100M
- Streamlined hiring processes and aggressive hiring targets projected to increase headcount related expenses
- Expenses and third party contracts have caught up with projected expenditure

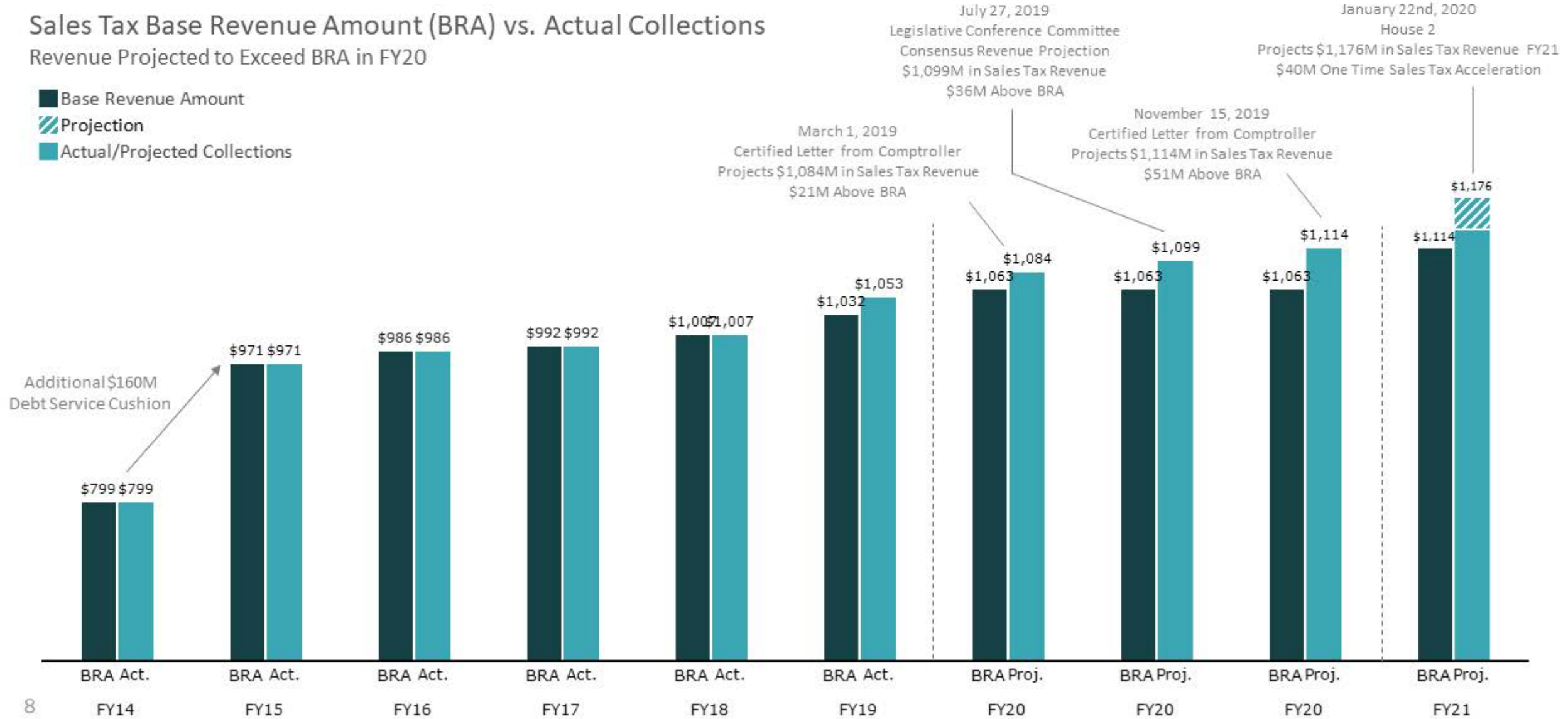


Revenue: Sales Tax Projections

Sales Tax Base Revenue Amount (BRA) vs. Actual Collections

Revenue Projected to Exceed BRA in FY20

- Base Revenue Amount
- ▨ Projection
- Actual/Projected Collections



Headcount: MBTA Net Hiring Summary YTD 1/23/2020

Historical

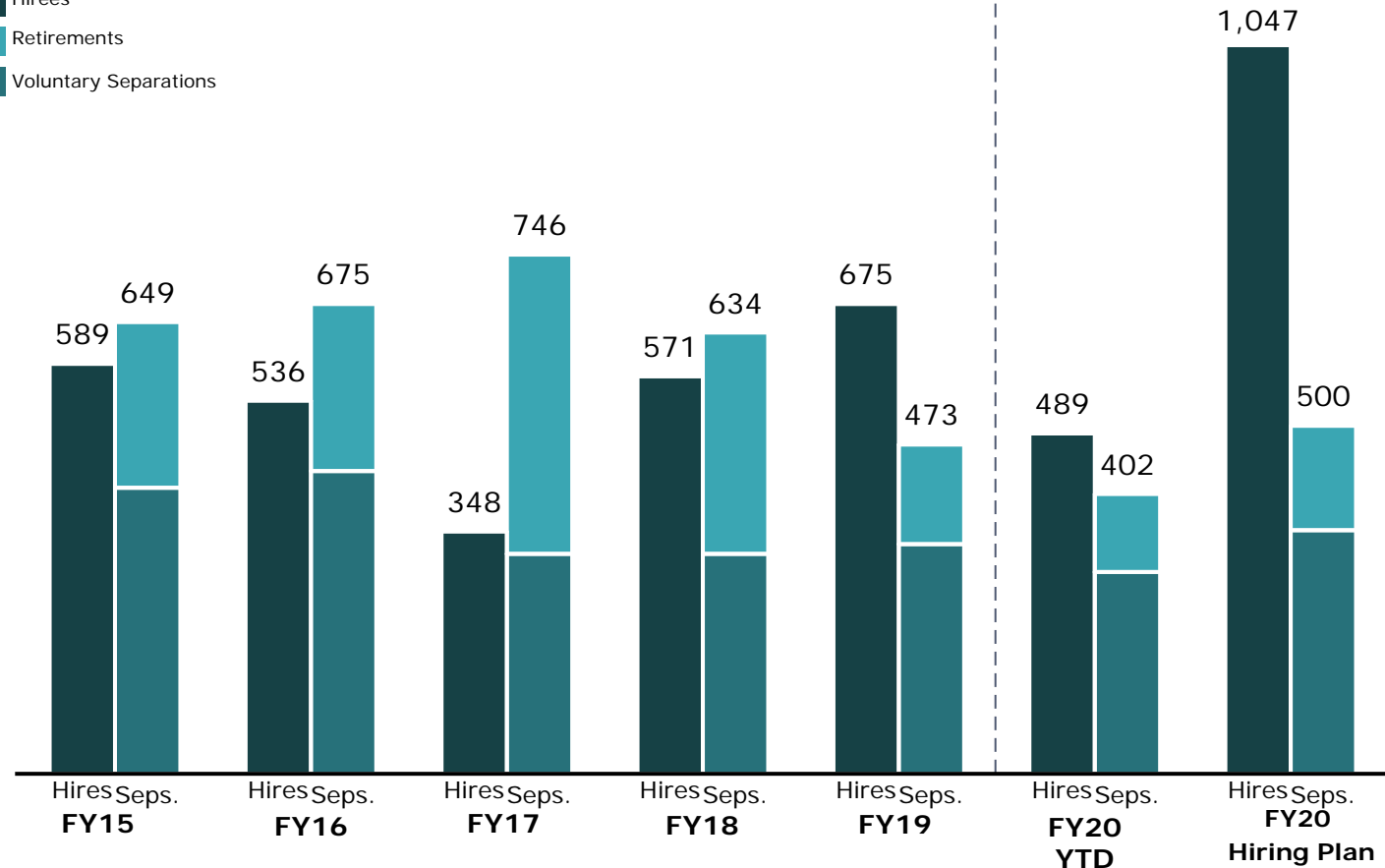
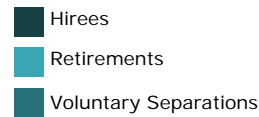
- Average Hires Per Year FY16 – FY19:
 - 544
- Average Separations Per Year FY16 – FY19:
 - 635
 - 274 Retirements
 - 361 Voluntary Separations

Going Forward

- Hiring rates have increased through a series of initiatives:
 - Dedicated recruiters for major departments
 - Employing third party firm to support capital employee hires
 - Working with ODCR and legal, HR is actively Streamlining hiring process
- In addition to hiring, HR has promoted 200+ employees internally

Hiring vs. Attrition

MBTA on Track to Meet Hiring Goals



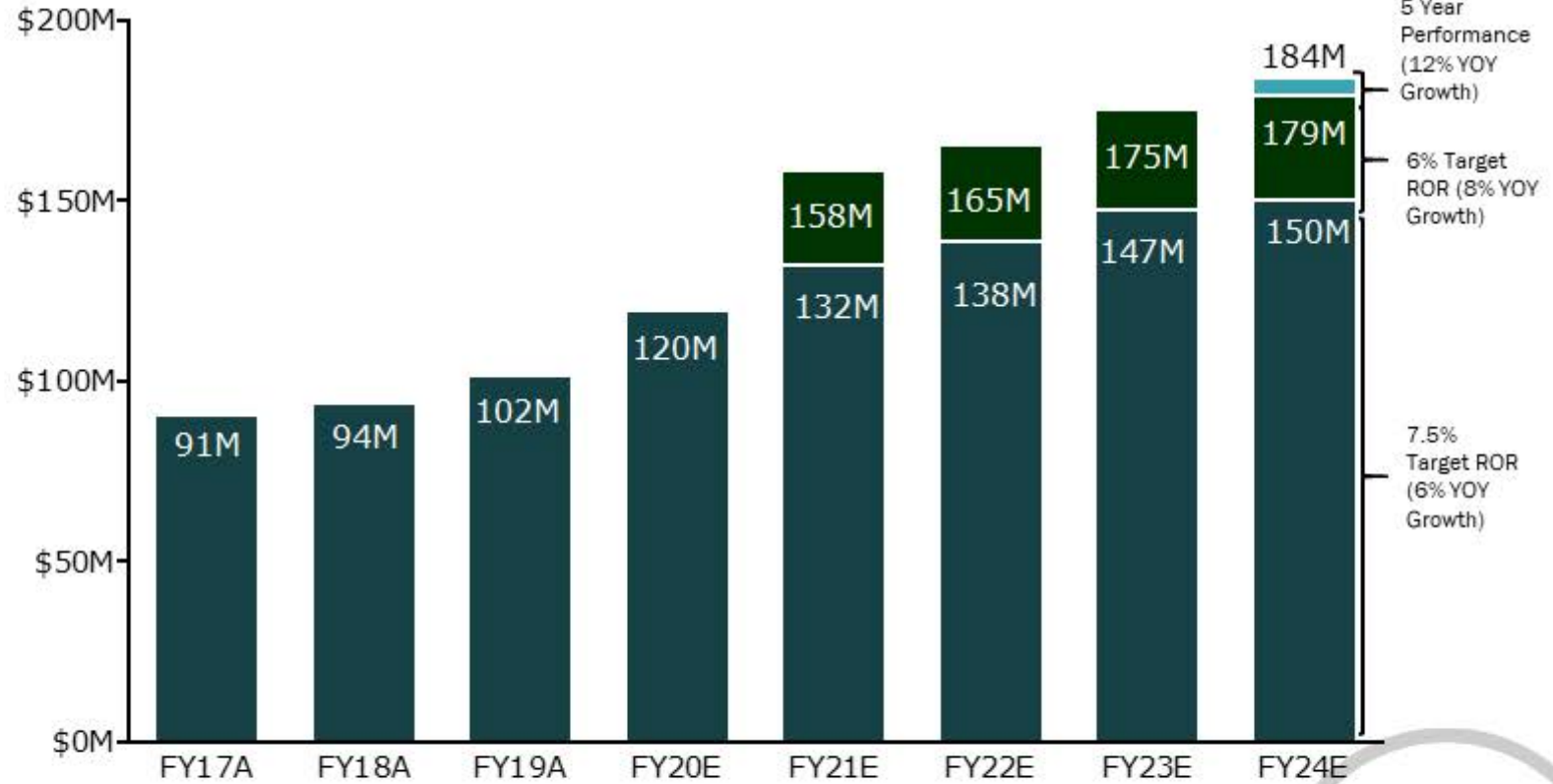
Pension Sensitivity

Pension Rate of Return

| Actual vs. Target Rate of Return | | | | |
|----------------------------------|-------|-------|------|------|
| | FY17 | FY18 | FY19 | FY20 |
| Target Rate of Return | 7.75% | 7.75% | 7.5% | 7.5% |
| Actual Rate of Return | 15.8% | -3.08 | TBD | TBD |

- Target Rate of Return on pension assets is 7.5%
- **Average Actual Rate of Return from FY15 to FY17 was 5.13%**
- A lower rate of return means increased employer contributions

Annual Pension Expense



*Flex Force presumed to be funded through legislative mandate

Next Steps

Through the FY21 operating budget process:

- Available on-going revenues will be reviewed to ensure safety/maintenance requirements and capital support priorities as well as expansion initiatives
- Inefficiencies and cost savings to be identified
- Any realized sales tax acceleration will support additional cost of capital acceleration and Lock box funding level of \$90M
- Targeted investments need to be considered in revenue generating departments (Commercial Strategies, Real Estate)

FY21 Budget Timeline:

- February – FY21 Operating Budget Preview
- March – Preliminary Vote
- April – Board Approval

Cost Control Efforts:

- MBTA must focus on pension risk as employer contribution rates increase
- Continuing analysis on overtime spending
- CAO to establish a cost control/performance management team
- CFO to establish & regularly report on a series of financial key performance measures

At end of FY20

- Presentation of year end results followed by update to pro forma



Appendix

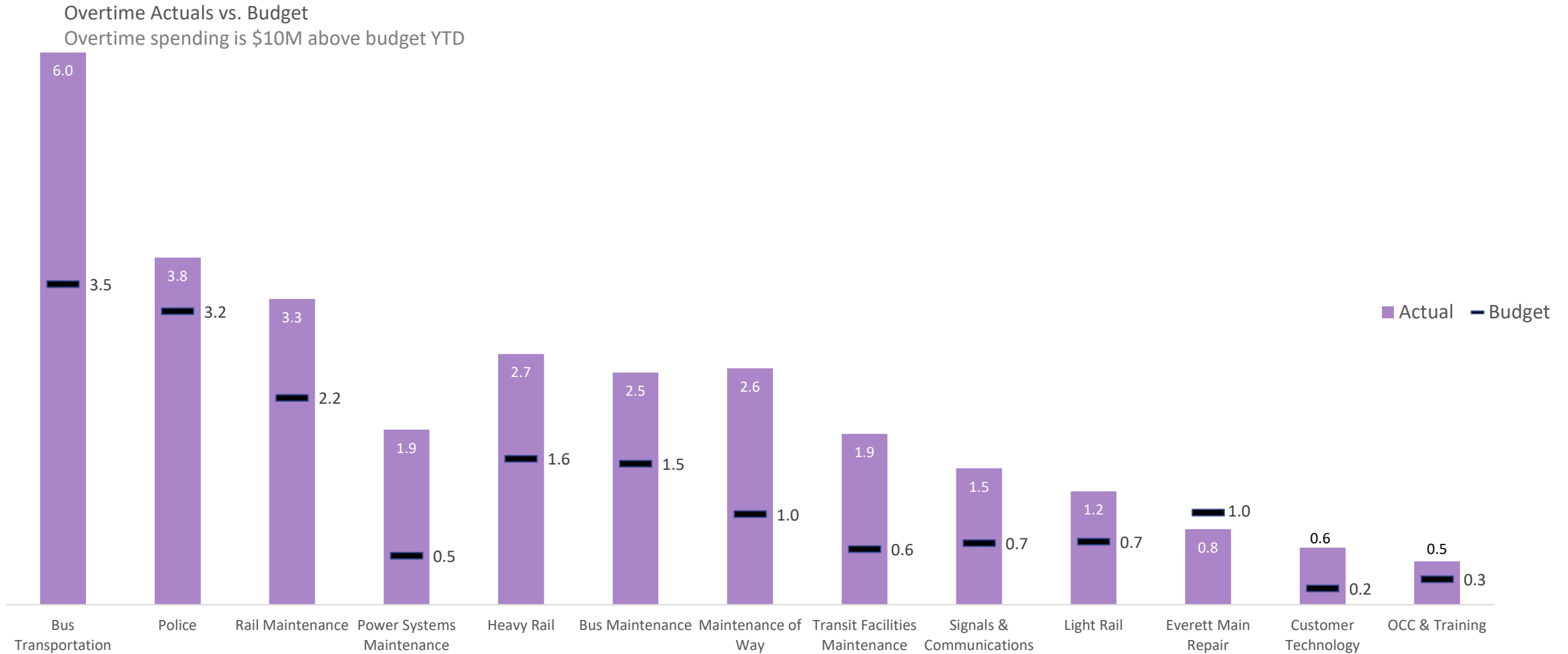


Revenue Categories

** South Station Air Rights Revenue Posted to Capital

| Revenue (\$M) | FY17A | FY18A | FY19A | FY20B | % of Budgeted Revenue | FY20 Forecast | FY21 Forecast | FY22 Forecast | FY23 Forecast | FY24 Forecast |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|-----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Operating Revenues | | | | | | | | | | |
| Revenue from Transportation | \$659.0 | \$661.1 | \$671.7 | \$696.8 | 31.5% | \$707.6 | \$712.3 | \$713.1 | \$755.9 | \$761.5 |
| Other Operating Revenues** | \$56.6 | \$88.1 | \$90.2 | \$111.3 | 5.0% | \$95.4** | \$97.1 | \$102.9 | \$106.9 | \$110.2 |
| Total Operating Revenues: | \$715.6 | \$749.2 | \$761.9 | \$808.1 | 36.6% | \$803.0 | \$809.4 | \$816.0 | \$862.8 | \$871.7 |
| <i>Fare Recovery Ratio</i> | <i>43.2%</i> | <i>42.8%</i> | <i>42.7%</i> | <i>42.8%</i> | | <i>41.6%</i> | <i>39.9%</i> | <i>39.1%</i> | <i>39.3%</i> | <i>38.7%</i> |
| Non-Operating Revenues | | | | | | | | | | |
| Dedicated Sales Tax Revenue | \$992.2 | \$1,006.8 | \$1,053.2 | \$1,063.0 | 48.1% | \$1,114.2 | \$1,136.5 | \$1,159.2 | \$1,182.4 | \$1,206.0 |
| Dedicated Local Assessments | \$164.0 | \$166.5 | \$170.1 | \$174.4 | 7.9% | \$174.4 | \$177.9 | \$182.5 | \$187.1 | \$190.8 |
| Contract Assistance | \$127.0 | \$127.0 | \$127.0 | \$127.0 | 5.7% | \$127.0 | \$200.0 | \$200.0 | \$200.0 | \$200.0 |
| Other Income | \$53.3 | \$92.9 | \$57.2 | \$37.4 | 1.7% | \$75.7 | \$61.9 | \$32.3 | \$32.3 | \$32.3 |
| Total Non-Operating Revenues: | \$1,336.50 | \$1,393.20 | \$1,407.50 | \$1,401.80 | 63.4% | \$1,491.30 | \$1,576.30 | \$1,574.00 | \$1,601.80 | \$1,629.10 |
| Total Revenues: | \$2,052.2 | \$2,142.3 | \$2,169.4 | \$2,209.9 | 100.0% | \$2,294.3 | \$2,385.7 | \$2,390 | \$2,464.5 | \$2,500.8 |
| <i>Revenue Recovery Ratio</i> | <i>50.4%</i> | <i>54.6%</i> | <i>52.0%</i> | <i>51.9%</i> | | <i>50.1%</i> | <i>48.8%</i> | <i>46.5%</i> | <i>46.6%</i> | <i>46.0%</i> |

December Year to Date Overtime Spending By Department \$12.3M Above Budget



FMCB actions to date have resulted in \$965M cumulative savings



Pro Forma 5 Year Snapshot YOY Growth %

| Revenue | FY20P | FY21 | FY22 | FY23 | FY24 | FY25 | FY26 | FY27 | FY28 |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|
| Revenue From Transportation | 5.3% | 0.7% | 0.1% | 6.0% | 0.7% | 5.2% | 0.0% | 4.6% | 0.0% |
| Own Source Revenue | 5.8% | 1.7% | 6.0% | 3.9% | 3.1% | 2.7% | 2.5% | 2.5% | 2.5% |
| Sales Tax | 5.8% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Local Assessments | 2.5% | 2.0% | 2.6% | 2.5% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Other Income | 32.4% | -18.2% | -47.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Contract Assistance | 0.0% | 57.5% | 0.0% | 0.0% | 0.0% | 0.0% | -36.5% | 0.0% | 0.0% |
| Total Revenue | 5.8% | 4.0% | 0.2% | 3.1% | 1.5% | 2.8% | -1.6% | 2.7% | 1.3% |
| Expenses | | | | | | | | | |
| Regular Wages | 8.0% | 7.1% | 2.6% | 8.4% | 2.6% | 2.6% | 2.5% | 0.0% | 5.1% |
| Overtime | 13.8% | -12.5% | 2.6% | 1.6% | 2.5% | 1.9% | 2.5% | 2.5% | 2.5% |
| Pension | 17.1% | 11.2% | 4.5% | 6.3% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| Health | 4.4% | 6.8% | -1.8% | 8.4% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| Workers Comp | 5.4% | 7.0% | -0.7% | 8.4% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| Other Fringes | 50.9% | 107.5% | -2.0% | 4.8% | 2.6% | 2.6% | 2.6% | 2.6% | 2.6% |
| FICA | 1.7% | 4.3% | -1.9% | 8.4% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| PFMLA | 0.0% | 3.4% | 2.6% | 8.4% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| Unemployment | 43.8% | 2.9% | 2.5% | 3.1% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Health & Welfare | 35.0% | -19.5% | 2.2% | 8.4% | 2.6% | 2.6% | 2.5% | 2.5% | 2.5% |
| Materials | 8.8% | 3.8% | 2.0% | 7.0% | 3.2% | 3.2% | 2.8% | 2.5% | 2.2% |
| Services | 16.6% | 15.0% | 3.7% | 4.1% | 2.2% | 2.1% | 2.1% | 2.2% | 2.1% |
| Fuel | -1.7% | -0.8% | 1.1% | 7.9% | 1.1% | 1.1% | 1.1% | 1.1% | 1.1% |
| Utility | 3.5% | -1.2% | -2.9% | 3.9% | -1.3% | -0.9% | -1.8% | -1.7% | -1.8% |
| Contract Cleaning | 11.9% | 3.2% | 2.6% | 2.1% | 1.9% | 1.7% | 2.0% | 2.1% | 2.1% |
| Risk Insurance | 47.9% | 2.2% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% |
| Injuries & Damages | 42.5% | 2.2% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% |
| Commuter Rail | 4.3% | 3.2% | 3.3% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% | 2.1% |
| RIDE | 0.2% | 0.0% | 0.2% | 3.7% | 2.5% | 2.2% | 2.9% | 5.4% | 2.6% |
| LSS | -5.6% | 1.2% | 2.1% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |
| Ferry | 5.4% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% |
| Financial Services | 4.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Total Op Ex | 8.1% | 5.0% | 2.2% | 5.3% | 2.3% | 2.3% | 2.3% | 1.7% | 3.0% |
| Debt Service | 3.3% | 4.4% | 0.3% | 0.6% | 2.0% | 1.0% | 3.8% | 1.8% | 0.6% |
| Total Expenses | 6.9% | 4.8% | 1.8% | 4.2% | 2.3% | 2.0% | 2.6% | 1.7% | 2.5% |



Parking Revenue Sensitivity Analysis

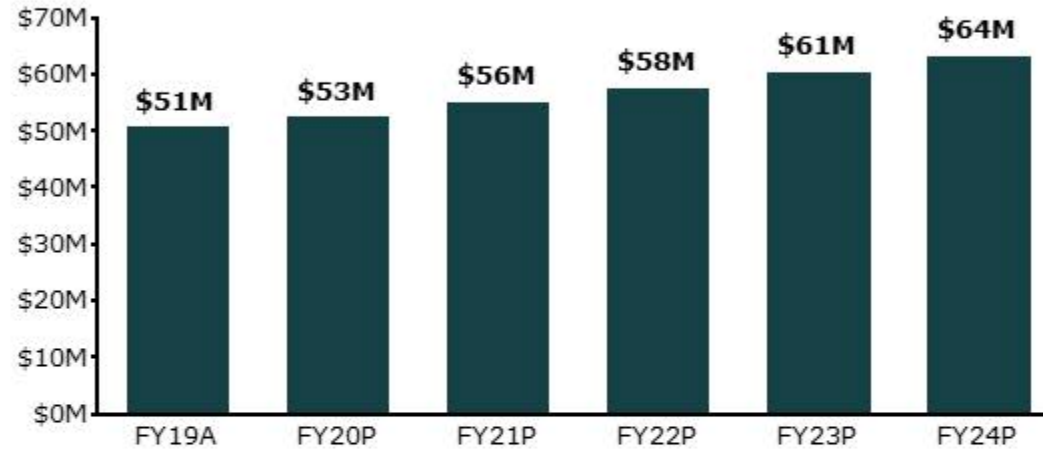
Committed Future Model Assumptions

- Capital Projects examined in the Pro Forma not expected to have a major impact on own source revenue

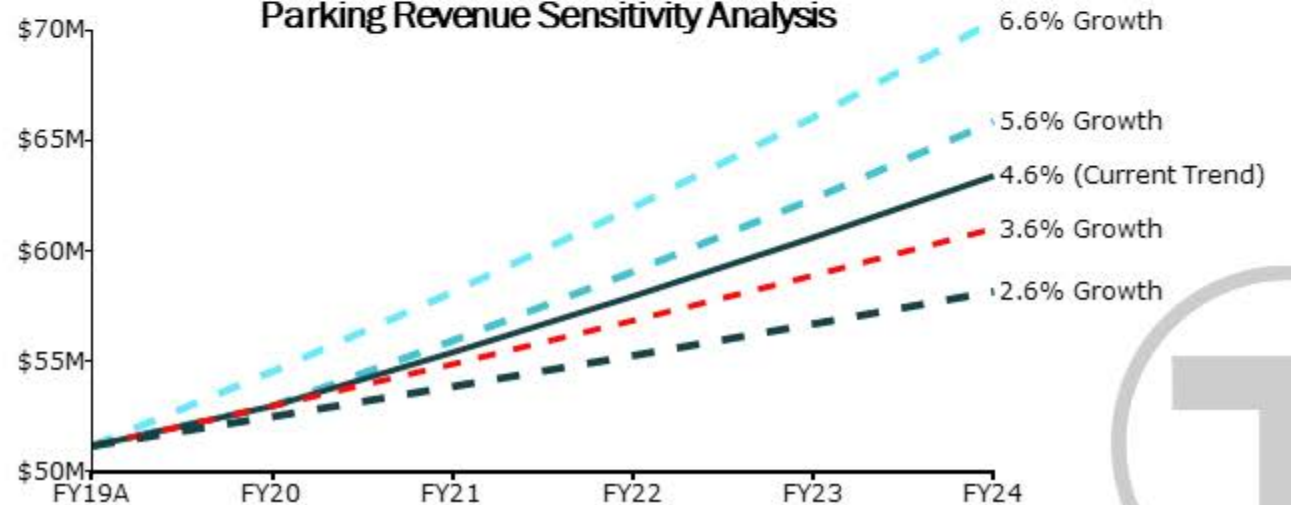
Sensitivity Analysis

- Average YOY Growth from FY17-FY19 was 4.6%
- An increase of 1%, to 5.6% YOY Growth through FY24 will result in a **\$5.9M cumulative increase in revenue**
- A decrease of 1%, to 3.6% YOY Growth through FY24 will result in a **\$5.8M decrease in cumulative revenues**

Parking Revenue Expected Growth



Parking Revenue Sensitivity Analysis



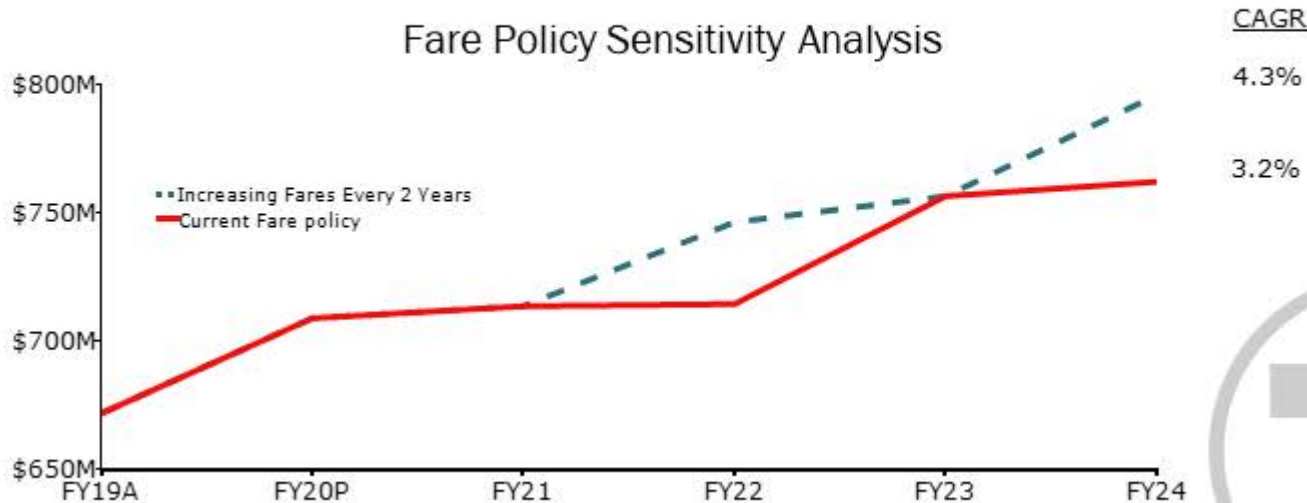
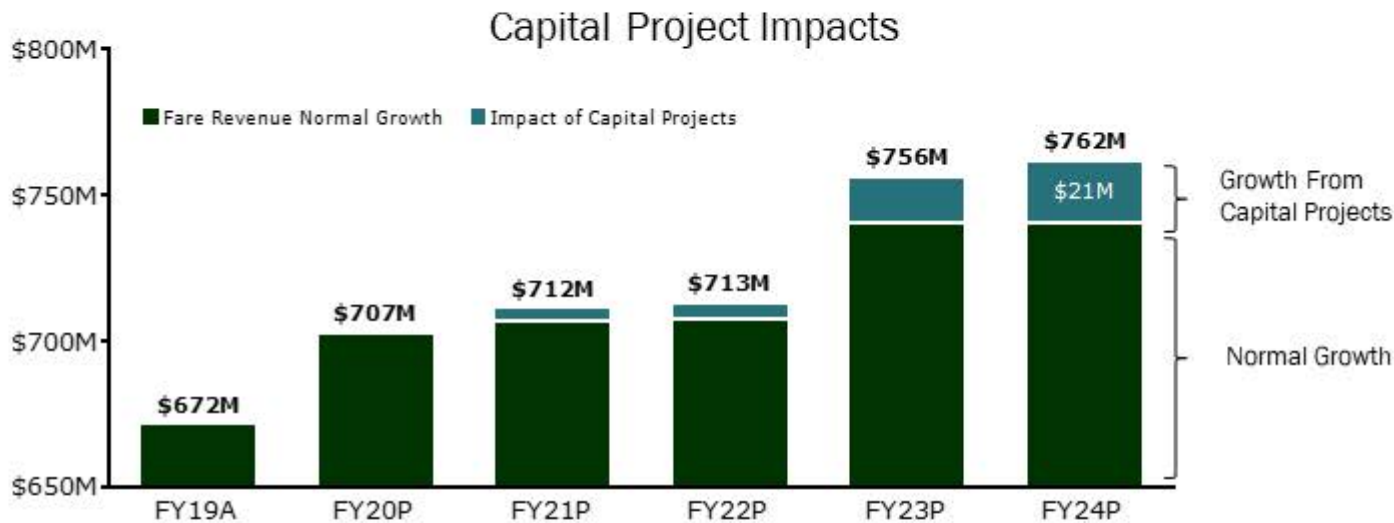
Capital Program and Fare Policy Impacts on Revenue

Committed Future Model Assumptions

- +4.5% fare increases assumed in FY23, FY25, and FY27 in line with current FMCB policy
- Assumes capital projects completed according to current projected schedules
- Fare policy decisions will be a key driver (means tested fare adjustments not included)

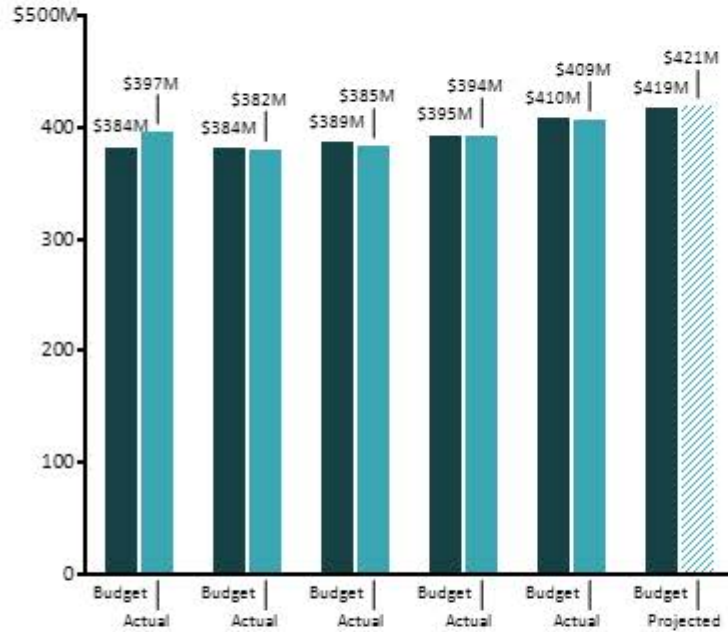
Sensitivity Analysis

- All scenarios assume fare increases of 4.5%, but at different frequencies
- Fare increases every 2 years (FY22, FY24)
 - Cumulative additional revenues vs. current projection (FY21-FY24): **\$65.7M**

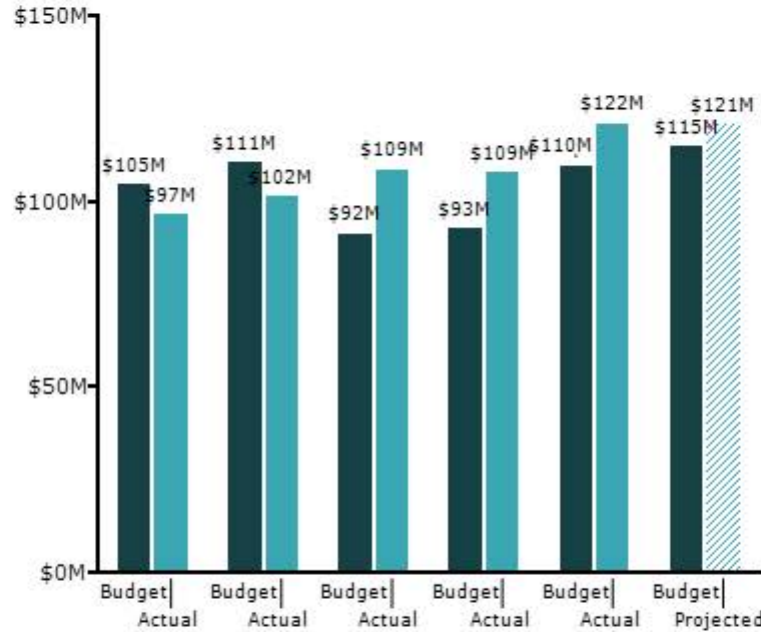


Purchased Services Expenses vs. Budget

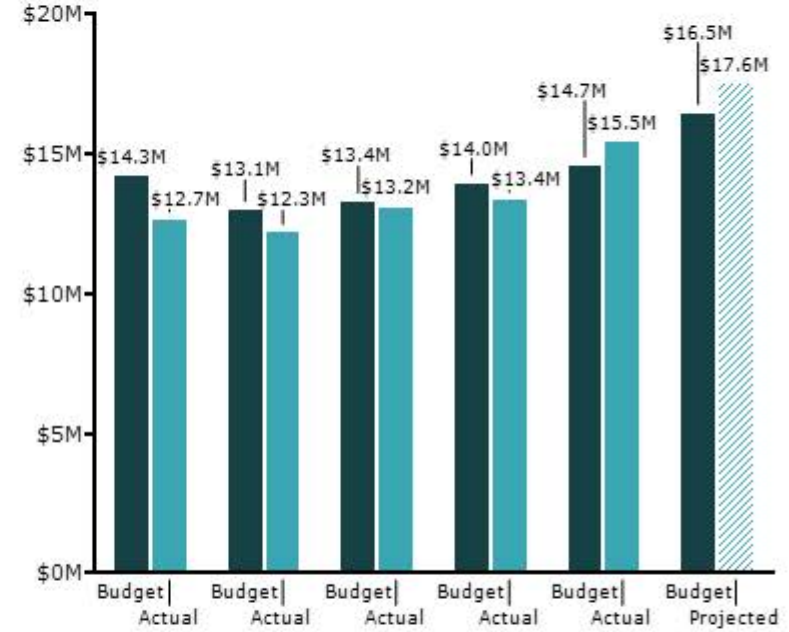
Purchased Commuter Rail Expenses



The RIDE



Ferry



| Fiscal Year | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 |
|-------------|-------|------|------|------|------|------|
| Variance | \$13M | \$2M | \$4M | \$1M | \$1M | \$2M |

| Fiscal Year | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 |
|-------------|------|------|-------|-------|-------|------|
| Variance | \$8M | \$9M | \$17M | \$15M | \$11M | \$6M |

| Fiscal Year | FY15 | FY16 | FY17 | FY18 | FY19 | FY20 |
|-------------|--------|--------|--------|--------|--------|--------|
| Variance | \$1.6M | \$0.8M | \$0.2M | \$0.6M | \$0.8M | \$1.1M |

➤ FY20P based on Q1 actuals (\$104.9M).

- Weather was a mitigating factor in FY15
- Aggressive cost savings targets from FY17 - FY19
- FY20P based on Q1 actuals (\$30.3M)

➤ FY20P based on Q1 actuals (\$4.4M).

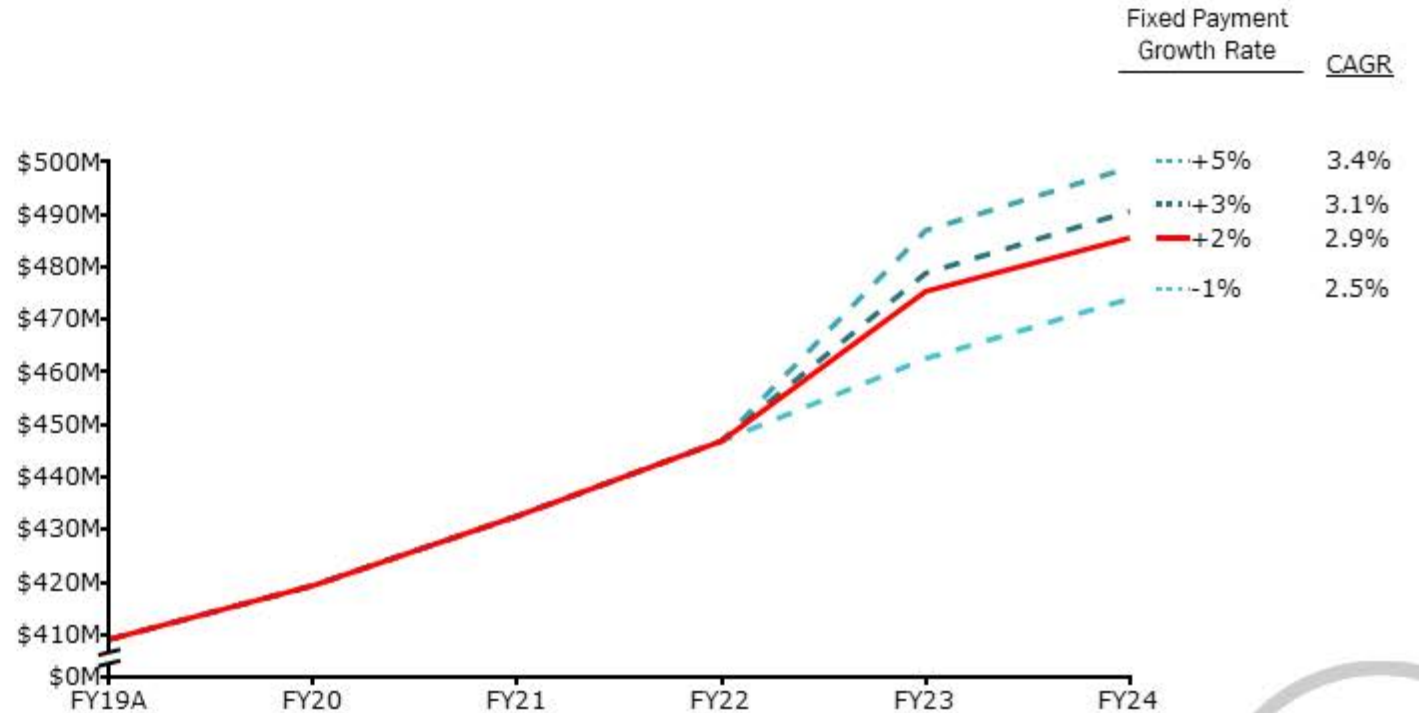
Commuter Rail Cost Sensitivity Analysis

Sensitivity Analysis

- The Commuter Rail payment has 4 components
 - Fixed Payment
 - Fuel
 - Extra Work & Services
 - PRIAA
- The current 2% growth rate is based on contracted increases (Fixed Price), historical extra work & services inflation rates, and National Fuel Price Projections
- One Variable was examined for this analysis: change in Fixed Rate Growth after contract expires at end of FY22
 - +2% Fixed Rate Growth (Current Trajectory)
 - -1% Fixed Rate Growth
 - cumulative difference in expenses (FY23-FY24): **+\$24.4M**
 - +3% Fixed Rate Growth
 - cumulative difference in expenses (FY23-FY24): **-\$8.5M**
 - +5% Fixed Rate Growth
 - cumulative difference in expenses (FY23-FY24): **-\$25.0M**

Fixed Payment Sensitivity Analysis

South Coast Rail, PTC/ATC, and Contract Changes happen in FY23

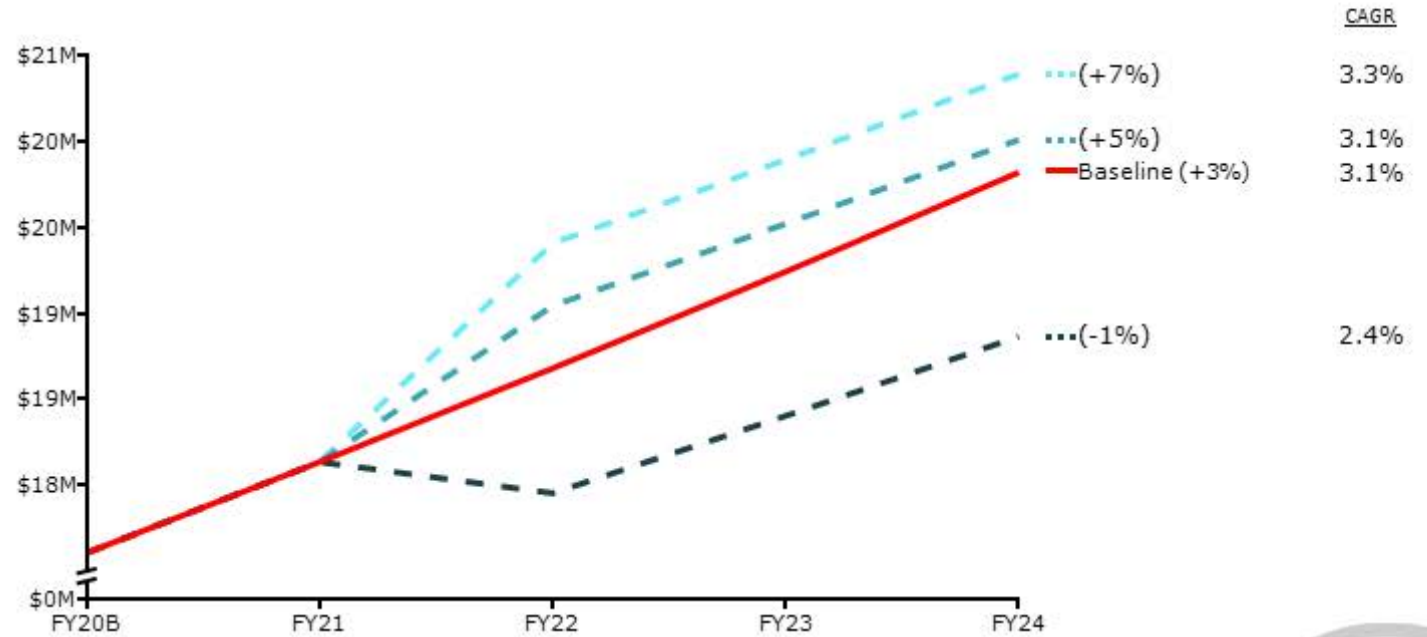


Ferry Sensitivity Analysis

Sensitivity Analysis

- Contract expires June 30th, 2023
- Baseline scenario assumes 3.0% p.a. growth
- Sensitivity analysis evaluates 3 alternative scenarios about FY22 contract growth vs. FY21
 - -1.0%
 - cumulative difference in expenses (FY22-FY28): +\$2.5
 - +5.0%
 - cumulative difference in expenses (FY22-FY28): -\$0.8M
 - +7.0%
 - cumulative difference in expenses (FY22-FY28): -\$2.0M
- All 3 scenarios assume 2.5% p.a. growth in subsequent years

Ferry Sensitivity Analysis

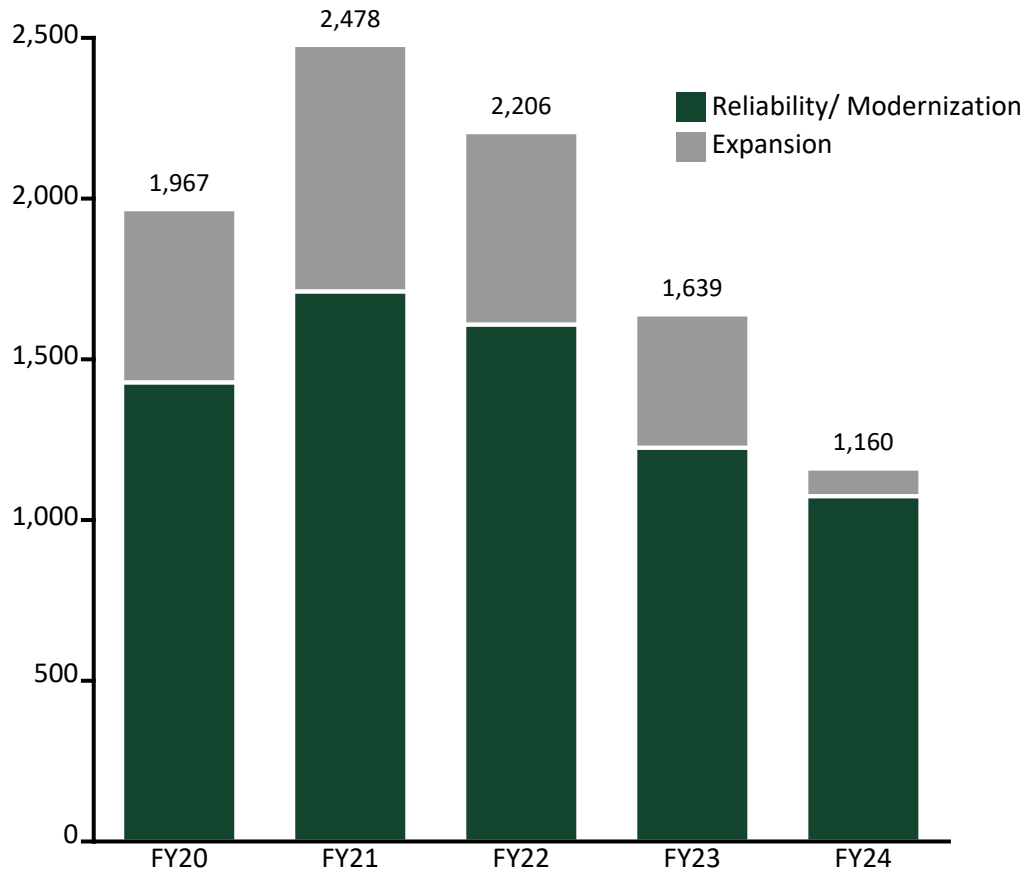


Alignment Between FY20-24 CIP and Spending Targets

FY20-24 CIP as programmed

\$9.4B Capital Investment Plan

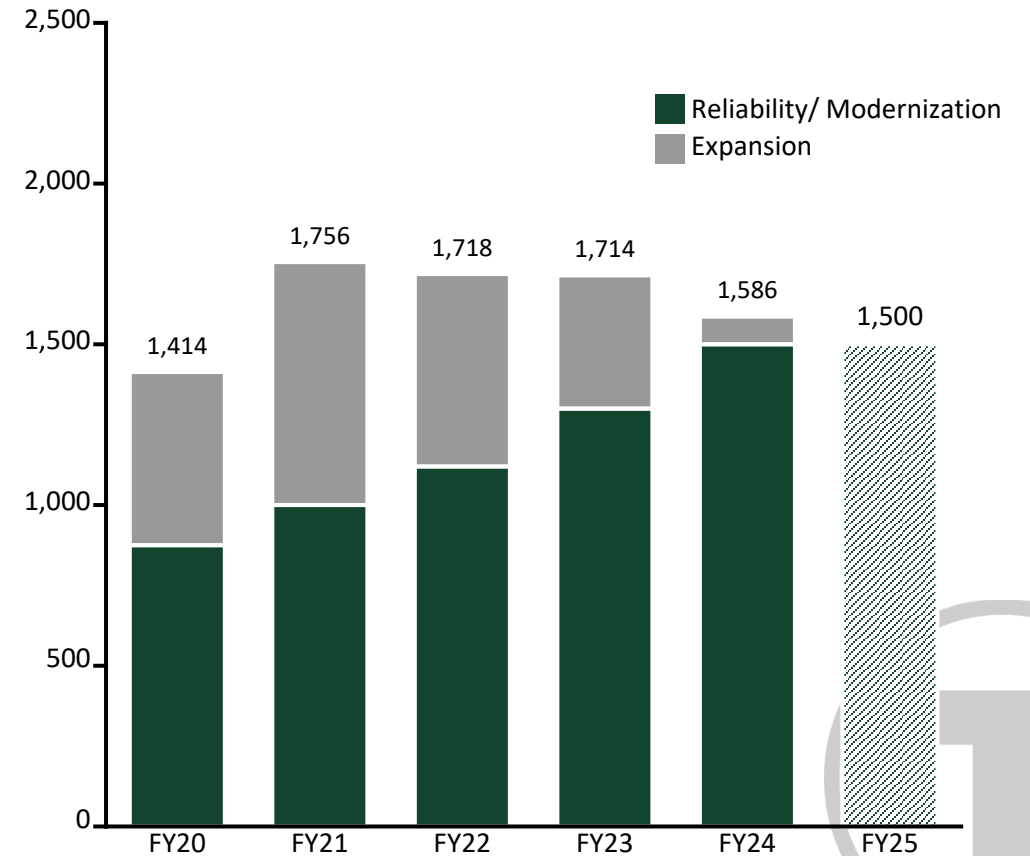
\$9.4B funding is available from FY20-FY24 and programmed through the CIP to specific projects based on anticipated cash flow forecasts from project managers. This Plan is reflected in the Pro Forma.



FY20-24 Spending Targets

\$8.2B Spending Target

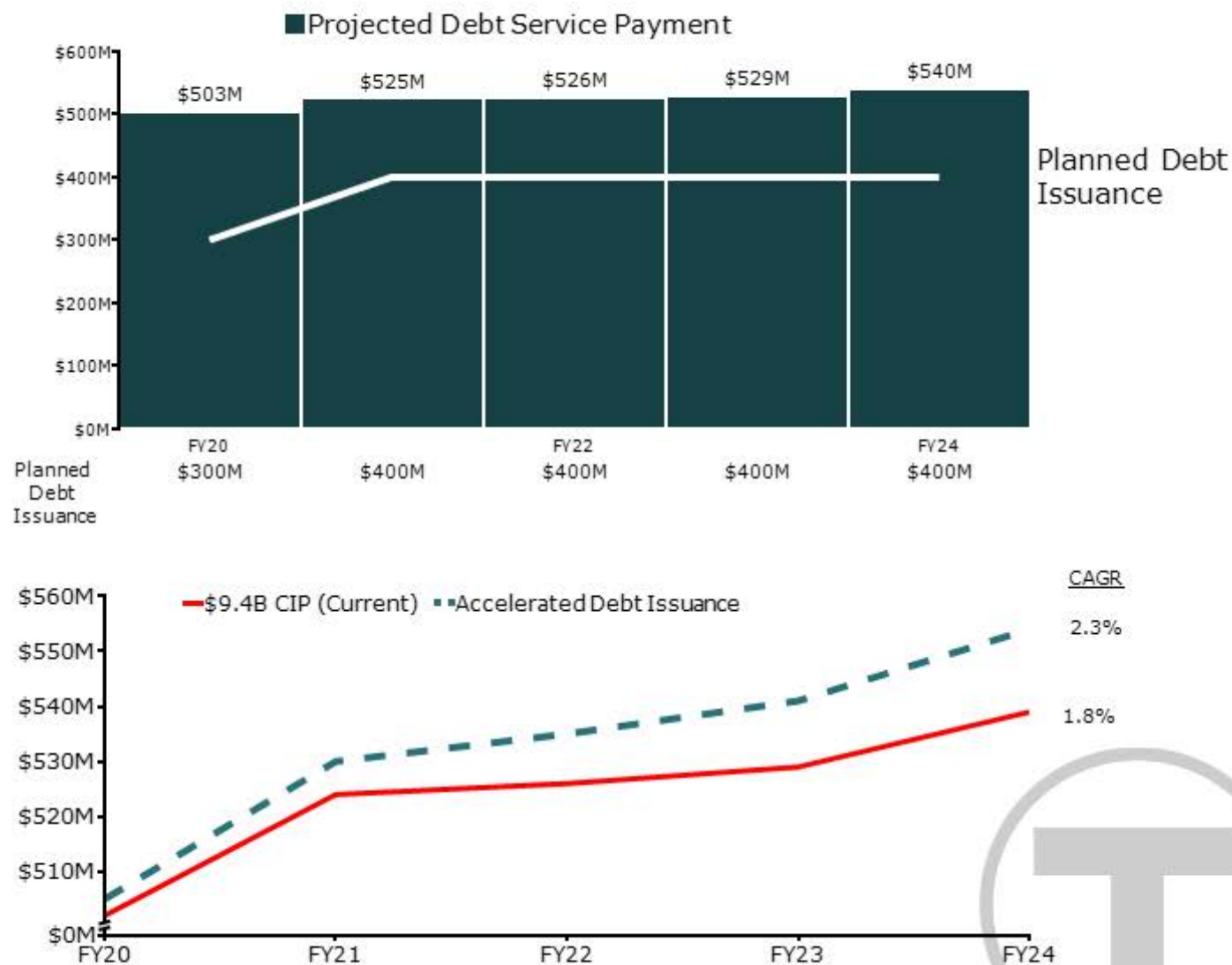
Although \$9.4B is available and programmed, the MBTA set more conservative spending targets to reflect a more realistic ramp-up as the agency builds capacity to execute. If the full \$9.4B is not spent by FY24, funds will carryover into FY25.



Project Implementation Impact – Accelerating Debt Issuance

Committed Future Model Assumptions

- Accelerating Debt Issuance by \$100M/year will add ~\$6M/year to debt service payment
- No Debt was issued in FY19



Capital Project Fare Revenue Impact Assumptions

Fare Recovery Ratio By Project - First Full Year of Operation

First Full Year of Revenue/Expenses

Red Line Cars

| Fiscal Year | FY23 |
|----------------------|---------------|
| Revenue | 7,108,765 |
| Expenses | 3,000,601 |
| <i>Fare Recovery</i> | <i>236.9%</i> |

Orange Line Cars

| Fiscal Year | FY24 |
|----------------------|---------------|
| Revenue | 4,300,669 |
| Expenses | 1,665,201 |
| <i>Fare Recovery</i> | <i>258.3%</i> |

Green Line Extension

| Fiscal Year | FY23 |
|----------------------|-------------|
| Revenue | 1,025,463 |
| Expenses | 40,617,826 |
| <i>Fare Recovery</i> | <i>2.5%</i> |

South Coast Rail

| Fiscal Year | FY23 |
|----------------------|--------------|
| Revenue | 9,441,493 |
| Expenses | 18,767,590 |
| <i>Fare Recovery</i> | <i>50.3%</i> |

Cumulative Project Totals

| Fiscal Year | FY23-FY24 |
|----------------------|--------------|
| Revenue | 21,876,391 |
| Expenses | 68,064,830 |
| <i>Fare Recovery</i> | <i>32.1%</i> |

- The Fare Recovery Ratio of Capital Projects measures the percent of operating expenses which will be covered by fare revenues
 - $\text{New Revenues} / \text{Operating Expenses} = \text{Fare Recovery Ratio}$
 - A low ratio indicates that new expenses are much greater than new revenue
- New Red & Orange Line Cars have high fare recovery ratios because only small changes to our existing maintenance & transportation operations are required
- GLX has a low recovery ratios because a large amount of new infrastructure is required for operation
- Cumulatively, new projects will drag down our current fare recovery ratio
- Debt impact not reflected in numbers

