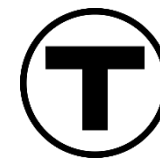




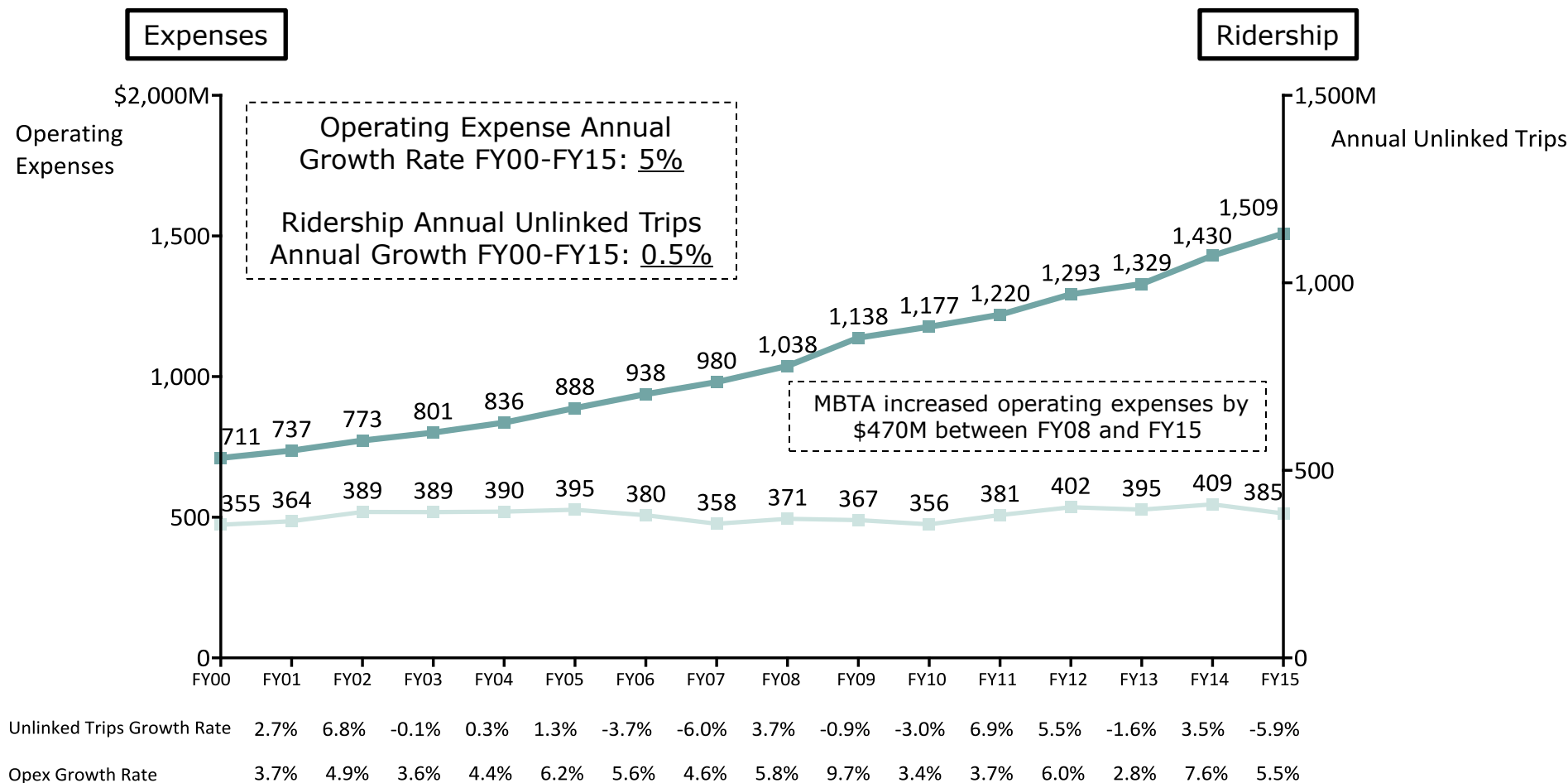
**Massachusetts Bay
Transportation Authority**

MBTA FY18 Sensitivity Analysis: Operating Expense Growth Scenarios

March 20, 2017



Historic Mismatch Between Operating Expense Growth and Ridership

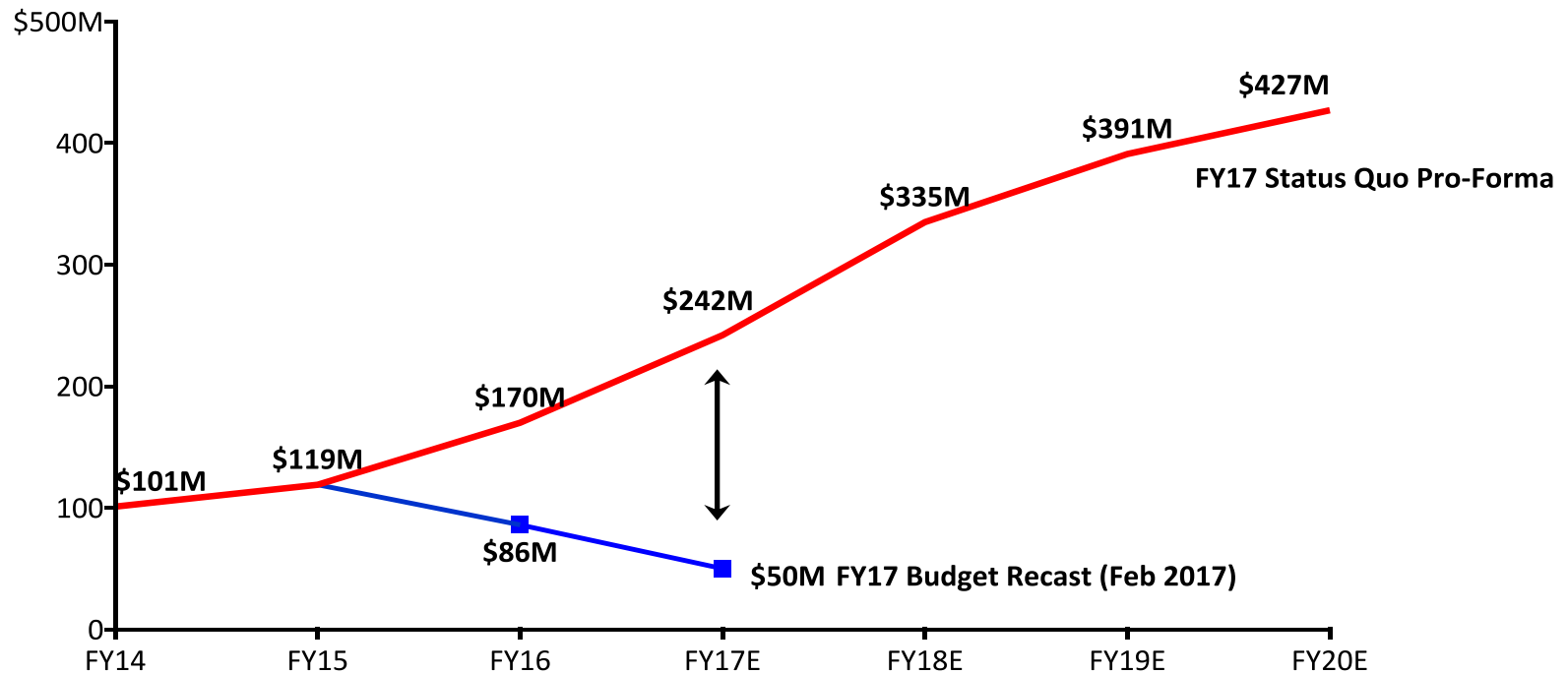


NOTE: FY14 and FY15 unlinked trip are internal MBTA figures and subject to revision.

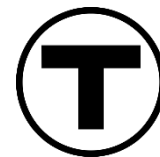


Early results positive: FY17 projected operating deficit reduced to \$50M

Structural deficit



Source: MBTA management in process of recasting FY18-FY20.
Operating Deficit does not include additional state assistance of \$155M in FY16 or \$187M FY17 (forecast)



Draft Sensitivity Analysis Assumptions: FY18E to FY22P

Revenue

- Statutory increases in Base Revenue Amount (BRA) and Local Assessments
- Fare increase of 7% in Jan19 and Jan21 (capped by MA legislature)
- Own-source revenues grow to \$100M+ in FY22; no “one-time” revenues assumed
- Additional State Assistance excluded from operating budget

Operating Expenses

- Wage & Fringe assumptions include:
 - › Headcount remains flat, except for FY19 transfer of capital employees to operating budget
 - › Terms of Boston Carmen’s Union (L589) 12/19 agreement
- MBTA pension contribution constant at 18.0% of payroll, per current actuarial required annual contribution
- RIDE call center fully operational leading to cost efficiencies
- Warehouse/Cash Collection/Call Center/Police Dispatch fully implemented
- Materials/Services/Supplies expense built from the bottom up based on executed contracts and purchase orders

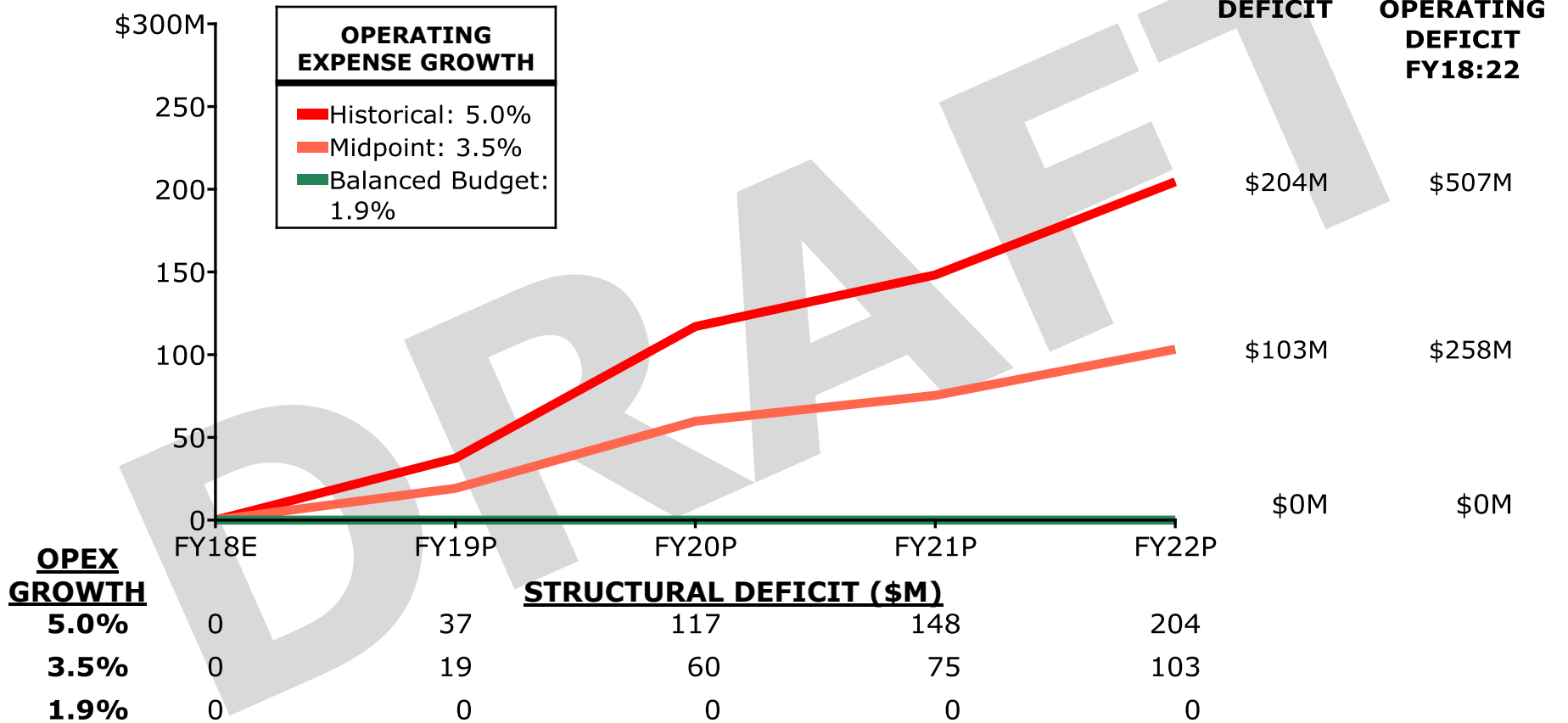
Debt Service

- Debt service payments derived from amortization tables
- Assumes additional \$600M in debt issuance for CIP
- Assumes \$450M of debt issuance for TIFIA and RIFF financing for Positive Train Control



FY18E to FY22P: FY18 BALANCED BUDGET

Projected Annual Structural Deficit (\$M)

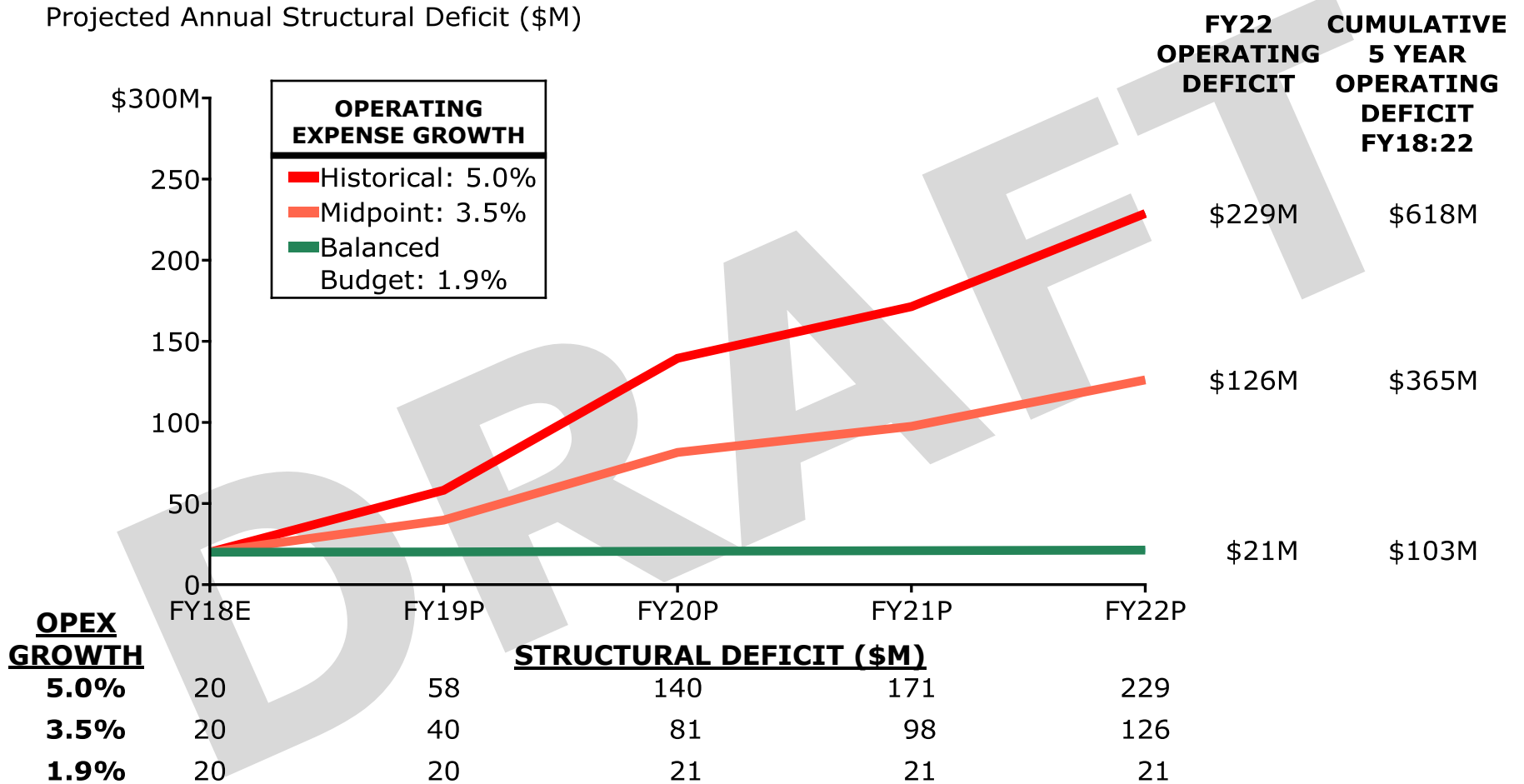


Note: Structural deficit does not include Additional State Assistance



FY18E to FY22P: FY18 \$20M STRUCTURAL DEFICIT

Projected Annual Structural Deficit (\$M)

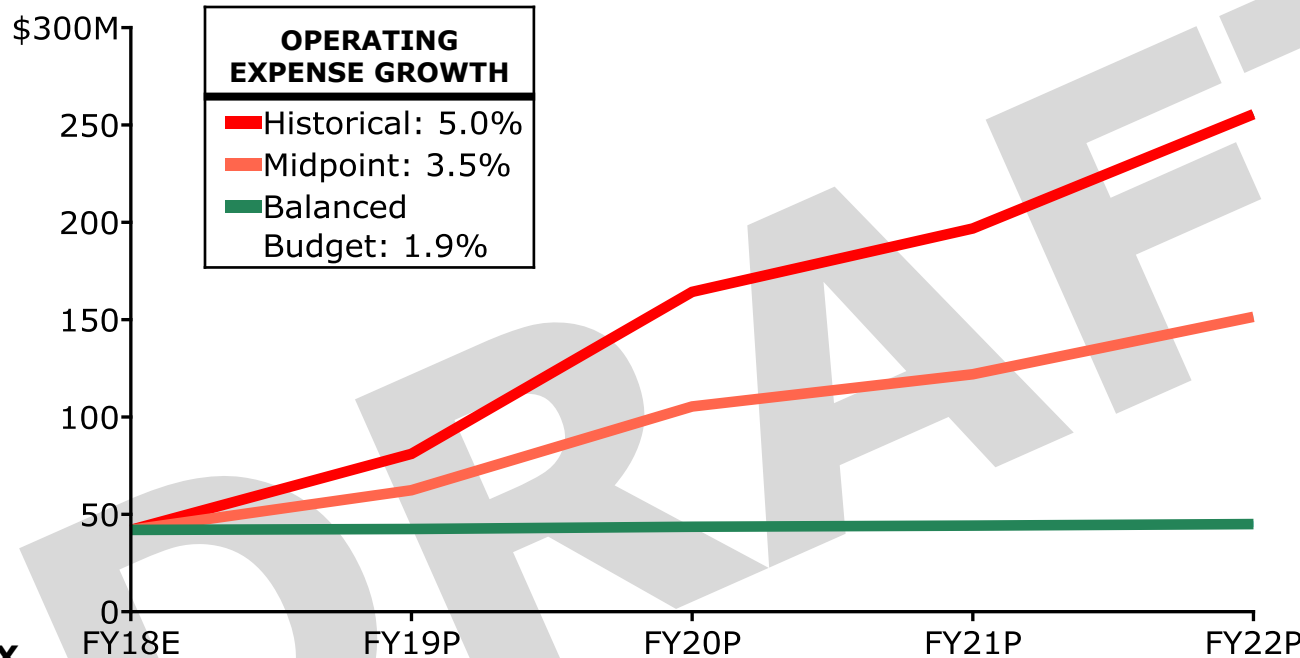


Note: Structural deficit does not include Additional State Assistance



FY18E to FY22P: FY18 \$42M STRUCTURAL DEFICIT

Projected Annual Structural Deficit (\$M)



FY22 OPERATING DEFICIT

CUMULATIVE 5 YEAR OPERATING DEFICIT FY18:22

\$256M

\$740M

\$151M

\$483M

\$45M

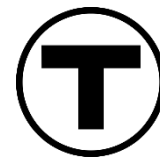
\$217M

OPEX GROWTH

STRUCTURAL DEFICIT (\$M)

5.0%	42	81	164	197	256
3.5%	42	62	105	122	151
1.9%	42	42	44	44	45

Note: Structural deficit does not include Additional State Assistance



#1 Risk To Future Balanced Budgets is Rising Pension Costs

- MBTA currently contributes 18.0% of payroll to the retirement fund
 - › Any increase in this contribution will impact the MBTA's ability to balance its budget and control operating cost growth
- Required annual payroll contribution will likely grow rapidly over the next 10 years given current funded status and expected low return environment
 - › MBTA has \$1.5B in assets and is projected to pay \$2.1B in benefits over the next 10 years
 - » ~\$600M will need to be funded by a combination of investment returns and contributions
 - » If investment returns over next 10 years are low, higher MBTA contribution rates will be required to maintain asset base and pay benefits
- Despite rising contributions, the health of the retirement fund is likely to deteriorate
 - › Retirement fund is currently 63% funded (~\$940M unfunded liability)
 - › Improving the funding ratio is challenging because benefit payouts have exceeded contributions by ~\$90M in recent years
- As a result, rising pension costs are potentially the largest threat to balanced budgets in the coming years