MBTA FY18 Sensitivity Analysis: Operating Expense Growth Scenarios

March 20, 2017
Historic Mismatch Between Operating Expense Growth and Ridership

Operating Expense Annual Growth Rate FY00-FY15: 5%

Ridership Annual Unlinked Trips Annual Growth FY00-FY15: 0.5%

MBTA increased operating expenses by $470M between FY08 and FY15

Unlinked Trips Growth Rate
- FY00: 2.7%
- FY01: 6.8%
- FY02: -0.1%
- FY03: 0.3%
- FY04: 1.3%
- FY05: -3.7%
- FY06: -6.0%
- FY07: 3.7%
- FY08: -0.9%
- FY09: -3.0%
- FY10: 6.9%
- FY11: 5.5%
- FY12: -1.6%
- FY13: 3.5%
- FY14: -5.9%

Opex Growth Rate
- FY00: 3.7%
- FY01: 4.9%
- FY02: 3.6%
- FY03: 4.4%
- FY04: 6.2%
- FY05: 5.6%
- FY06: 4.6%
- FY07: 5.8%
- FY08: 9.7%
- FY09: 3.4%
- FY10: 3.7%
- FY11: 6.0%
- FY12: 2.8%
- FY13: 7.6%
- FY14: 5.5%

NOTE: FY14 and FY15 unlinked trip are internal MBTA figures and subject to revision.
Early results positive: FY17 projected operating deficit reduced to $50M

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)

- **Operating Expense Growth Growth**
  - **Operating Expense Growth**
    - Historical: 5.0%
    - Midpoint: 3.5%
    - Balanced Budget: 1.9%

- **Operating Deficit**
  - FY22 Operating Deficit: $204M
  - Cumulative 5-Year Operating Deficit FY18: $507M

- **Structural Deficit ($M)**
  - FY18E: 0
  - FY19P: 0
  - FY20P: 0
  - FY21P: 0
  - FY22P: 0

Note: Structural deficit does not include Additional State Assistance

Draft for Discussion & Policy Purposes Only
FY18E to FY22P: FY18 $20M STRUCTURAL DEFICIT

Projected Annual Structural Deficit ($M)

<table>
<thead>
<tr>
<th>OPEX GROWTH</th>
<th>FY18E</th>
<th>FY19P</th>
<th>FY20P</th>
<th>FY21P</th>
<th>FY22P</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0%</td>
<td>20</td>
<td>58</td>
<td>140</td>
<td>171</td>
<td>229</td>
</tr>
<tr>
<td>3.5%</td>
<td>20</td>
<td>40</td>
<td>81</td>
<td>98</td>
<td>126</td>
</tr>
<tr>
<td>1.9%</td>
<td>20</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>21</td>
</tr>
</tbody>
</table>

STRUCTURAL DEFICIT ($M)

<table>
<thead>
<tr>
<th></th>
<th>FY22 OPERATING DEFICIT</th>
<th>CUMULATIVE 5 YEAR OPERATING DEFICIT FY18:22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical: 5.0%</td>
<td>$229M</td>
<td>$618M</td>
</tr>
<tr>
<td>Midpoint: 3.5%</td>
<td>$126M</td>
<td>$365M</td>
</tr>
<tr>
<td>Balanced Budget: 1.9%</td>
<td>$21M</td>
<td>$103M</td>
</tr>
</tbody>
</table>

Note: Structural deficit does not include Additional State Assistance

Draft for Discussion & Policy Purposes Only
FY18E to FY22P: FY18 $42M STRUCTURAL DEFICIT

Projected Annual Structural Deficit ($M)

<table>
<thead>
<tr>
<th>OPERATING EXPENSE GROWTH</th>
<th>FY22 OPERATING DEFICIT ($M)</th>
<th>CUMULATIVE 5 YEAR OPERATING DEFICIT FY18:22 ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical: 5.0%</td>
<td>$256M</td>
<td>$740M</td>
</tr>
<tr>
<td>Midpoint: 3.5%</td>
<td>$151M</td>
<td>$483M</td>
</tr>
<tr>
<td>Balanced Budget: 1.9%</td>
<td>$45M</td>
<td>$217M</td>
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</tbody>
</table>

**OPEX GROWTH**

- **5.0%**
  - FY18E: 42
  - FY19P: 81
  - FY20P: 164
  - FY21P: 197
  - FY22P: 256

- **3.5%**
  - FY18E: 42
  - FY19P: 62
  - FY20P: 105
  - FY21P: 122
  - FY22P: 151

- **1.9%**
  - FY18E: 42
  - FY19P: 42
  - FY20P: 44
  - FY21P: 44
  - FY22P: 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