

**Massachusetts Bay
Transportation Authority**

Capital Review and Long Term Plan

5/6/2019



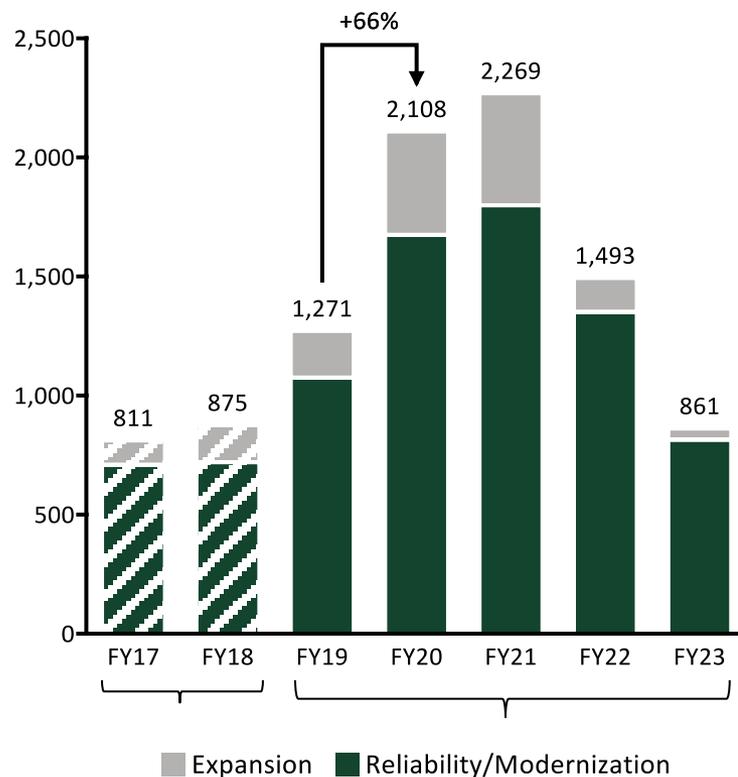
Finding 1: MBTA needs to add capacity

- Hiring a Chief of Capital Program
 - Single Point of Accountability for Reliability and Modernization Capital Spending
 - Will manage 22 departments with capital spending
- Capital Hiring Initiative
 - Building up to current budgeted number
 - Adding 80 FTEs to capital
 - Seeking to beat the attrition issue
- Addressing Bottlenecks: Flaggers, Signal Maintainers, Power Maintainers
 - Promoting a class of flaggers
 - Keeping E&M staffed
 - Beginning training for long-term needs



Finding 2: Current CIP Programming appears infeasible to execute and counter to long term goal of 15 year burndown of backlog

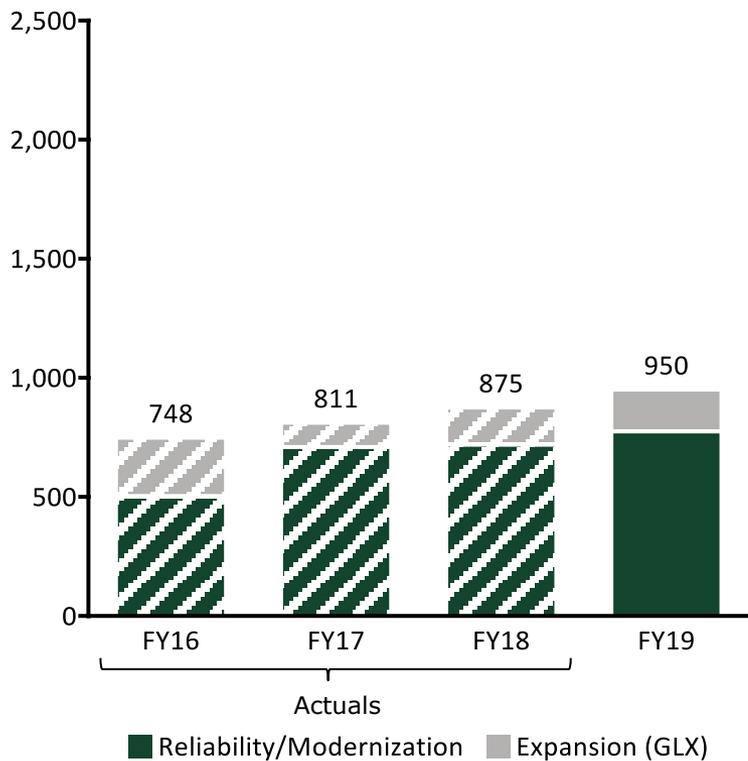
**FY19-23 MBTA CIP
Cash Flow/Sources as programmed
(in millions)**



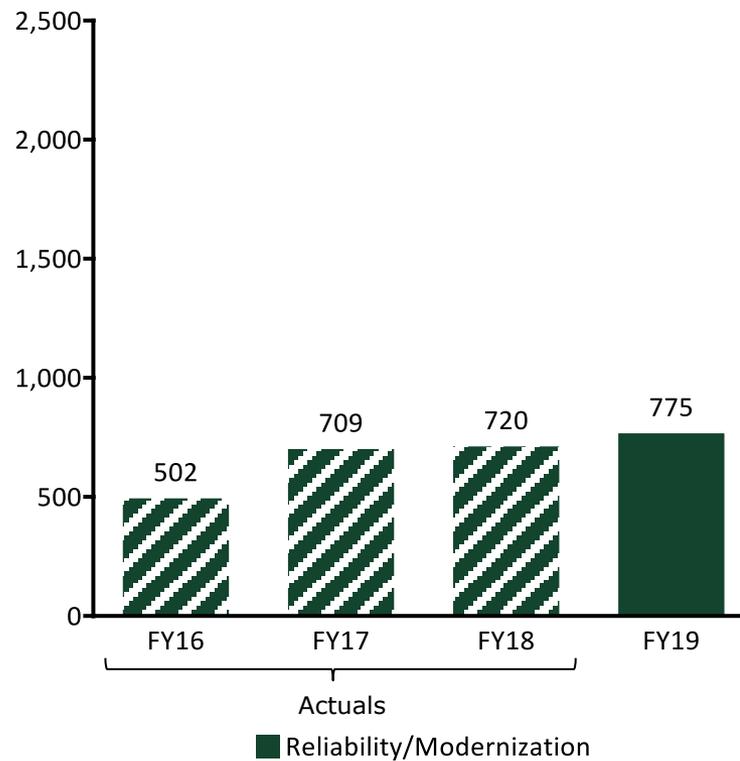


Finding 3: Current CIP Programming appears infeasible to execute and counter to long-term goal of 15 year burndown of backlog

MBTA Capital Spending FY16-19
All categories
(in millions)



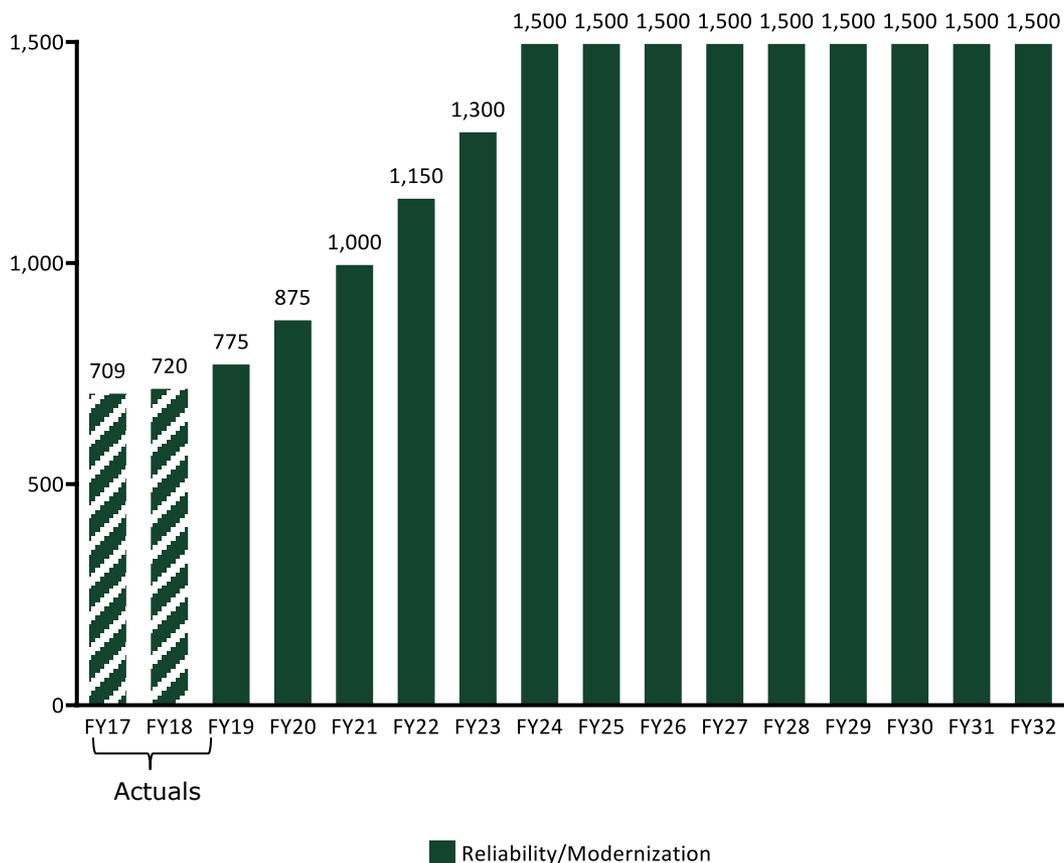
MBTA Capital Spending FY16-19
Reliability/Modernization only
(in millions)





Outcome: Rebaselined Long-Term Capital Plan; Consistent with FMCB goals

Long Term Capital Plan (FY17-32)
(dollars in millions)



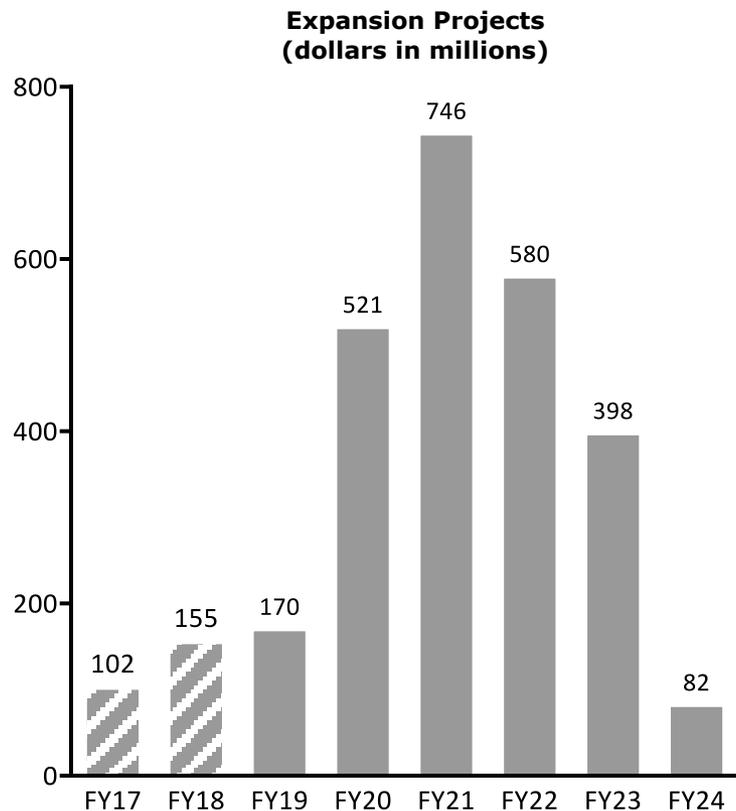
Highlights:

- Rebaselined plan assumes a more gradual ramp-up to \$1.5B annual non-expansion investment
- Reduces MBTA debt needed in CIP window, preserving capacity for the outyears
- Total investment will eliminate today’s backlog and allow for targeted modernization
- Includes full funding for both GLX and South Coast Rail
- Reflects more realistic curve as capacity grows



Finding 4: Near-term Expansion Projects could mask shortcomings in reliability and modernization spending

- Rebaselined plan includes full funding for long-standing commitments to complete the Green Line Extension and South Coast Rail



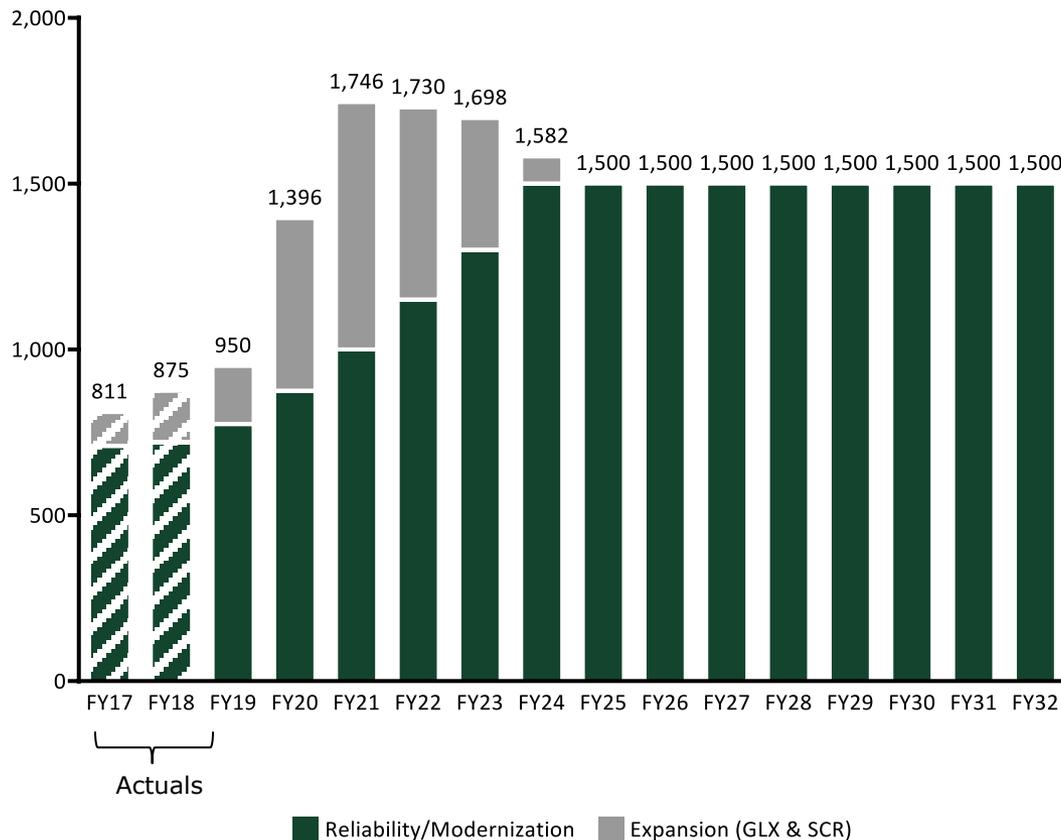
Notes:

- GLX is on schedule and on budget – will spend \$400M+ in FY20 and FY21
- South Coast Rail fully funded by Commonwealth; will be incorporated in the FY20-24 CIP
- MBTA will assume responsibility of South Coast Rail and build a management team to deliver the project
- As GLX and South Coast Rail are concluded, additional expansion projects may be considered, consistent with the Expansion Policy and available funding



Outcome: Rebaselined Long-Term Capital Plan; Consistent with FMCB goals

Long Term Capital Plan (FY17-32)
(dollars in millions)



Highlights:

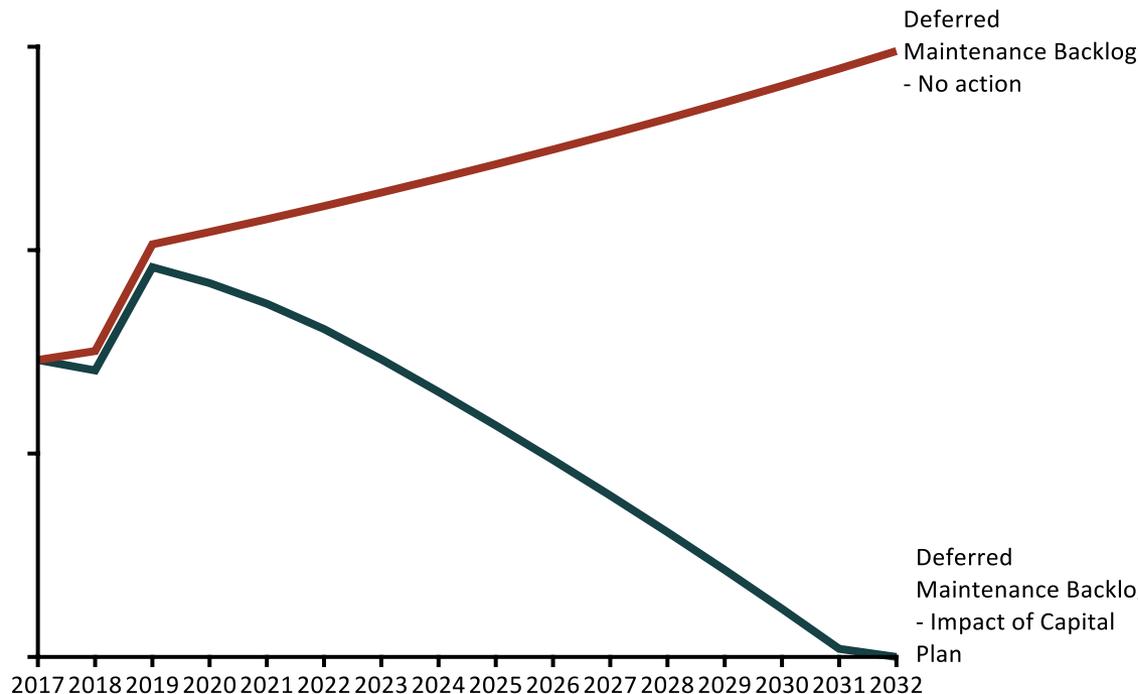
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Finding 5: Plan will eliminate deferred maintenance and replacement backlog by 2032

- Rebaselined plan will eliminate today's deferred maintenance and replacement backlog by 2032 and allow for targeted modernization

Impact of capital plan on backlog



Notes:

- Curve is illustrative only – actual replacement schedules and capital investment are uneven
- Reflects 3% annual inflation
- Assumes a proportion of SGR investment is for non-backlog modernization (e.g. capacity, safety, resiliency, tech)
- If long-term capital plan is executed, **today's** backlog can be eliminated by 2032



Finding 6: AFC 2.0 Schedule Is Being Revised

- Cubic is unlikely to meet the current schedule.
 - Currently negotiating an achievable, integrated schedule.
- AFC 2.0 has major policy items that require board and stakeholder input.
- Contract allows MBTA to cure these issues and no payments will occur until vendor delivers the purchased product.
- Will require AFC 1.0 to be left in place for an additional period.



Finding 7: Process Improvements will improve execution

- Formal Oversight by GM and Chief of Capital Program
 - Fiscal Year Kickoff and Review for FY20 New Projects
 - Bimonthly Review for all Projects
- Build Robust Scheduling Function
 - Utilize Diversions More Efficiently
 - Ensure Support Services Are Available
 - Sequence Projects Properly
 - Identify Areas for More Impactful Diversions
- Small Project Tracking by CCP
- Deep Dives into Materials Procurement and Professional Services



Finding 8: Explain Utility of Projects to Customers in Plain Language

- Current language is internal facing and based on project descriptions
 - “Door Pressurization” versus “Clean Air in the Back Bay Lobby”
- Campaign being developed to discuss massive capital effort and explain benefits of each project to customers
- Early positive response to social media threads explaining weekend maintenance tasks
- Needs to be extended across the system and distribution channels



Objectives for Long-Term Capital Plan

- Key Challenges
 - Possible miss on FY19 Reliability/Modernization spending
 - Capital Need is higher
 - Reliability/Modernization Spending is not growing fast enough
- Good news
 - We are building the Team
 - Gradual increase in Reliability/Modernization over time can get us to the right level
 - Spending plan is fully funded through the life of the CIP
- Great news:

Rebaselined spending plan will meet FMCB goal to eliminate backlog within 15 years (by 2032)