

**Massachusetts Bay  
Transportation Authority**

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## **Capital Review and Long Term Plan**

**5/6/2019**



## Finding 1: MBTA needs to add capacity

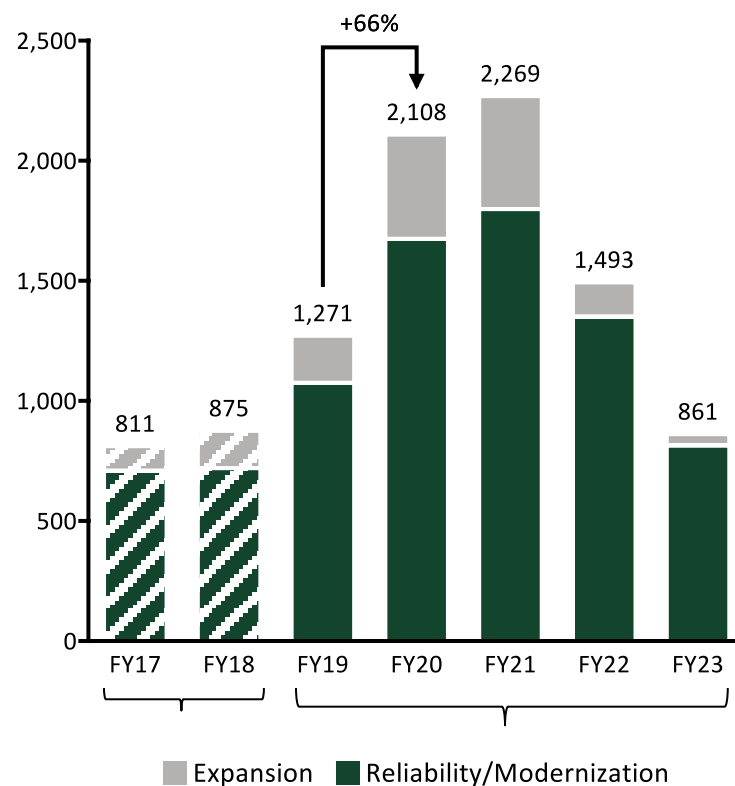
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- Hiring a Chief of Capital Program
  - Single Point of Accountability for Reliability and Modernization Capital Spending
  - Will manage 22 departments with capital spending
- Capital Hiring Initiative
  - Building up to current budgeted number
  - 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

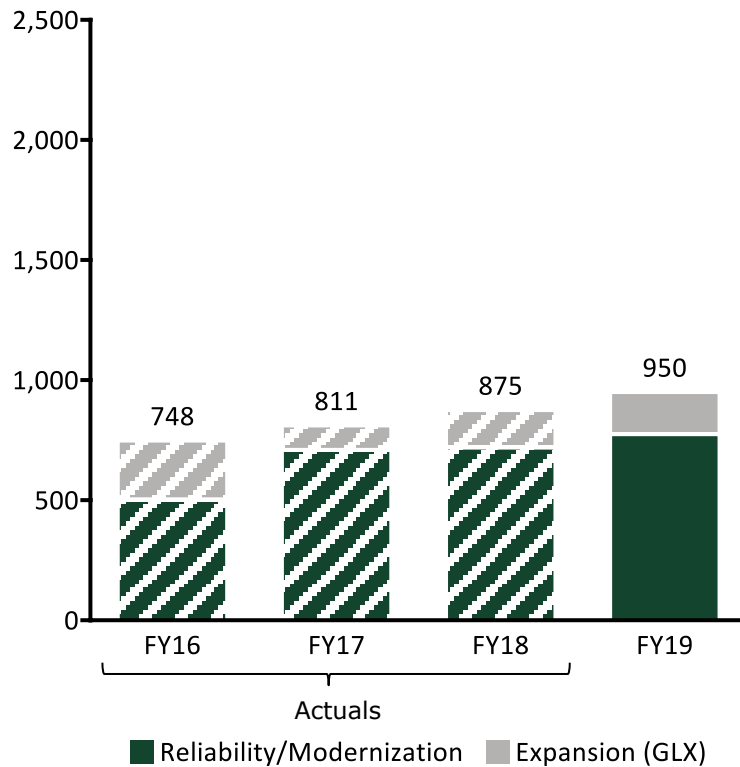
**FY19-23 MBTA CIP**  
Cash Flow/Sources as programmed  
(in millions)



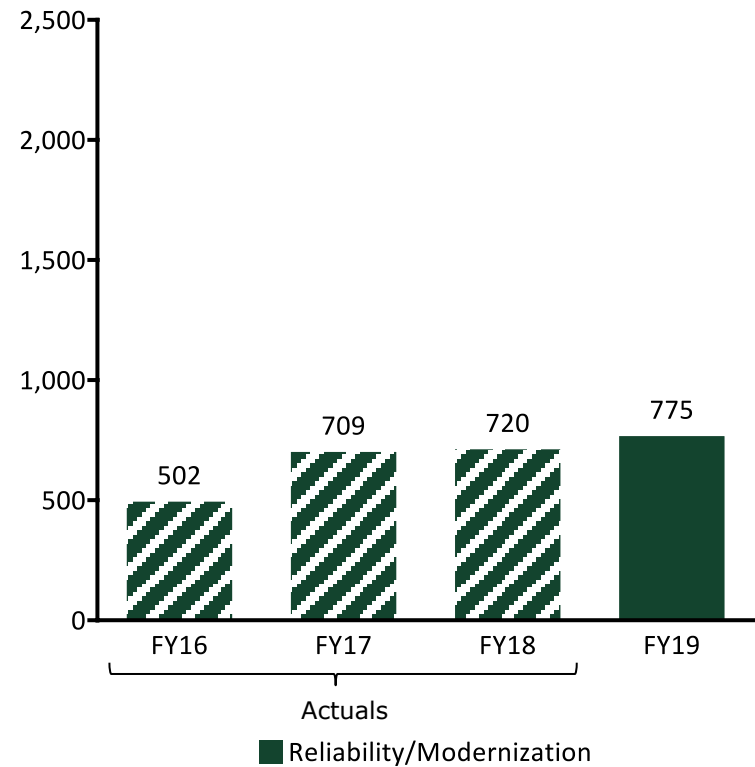


## Finding 3: Current CIP Programming appears infeasible to execute and counter to long-term goal of 15 year burndown of backlog

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



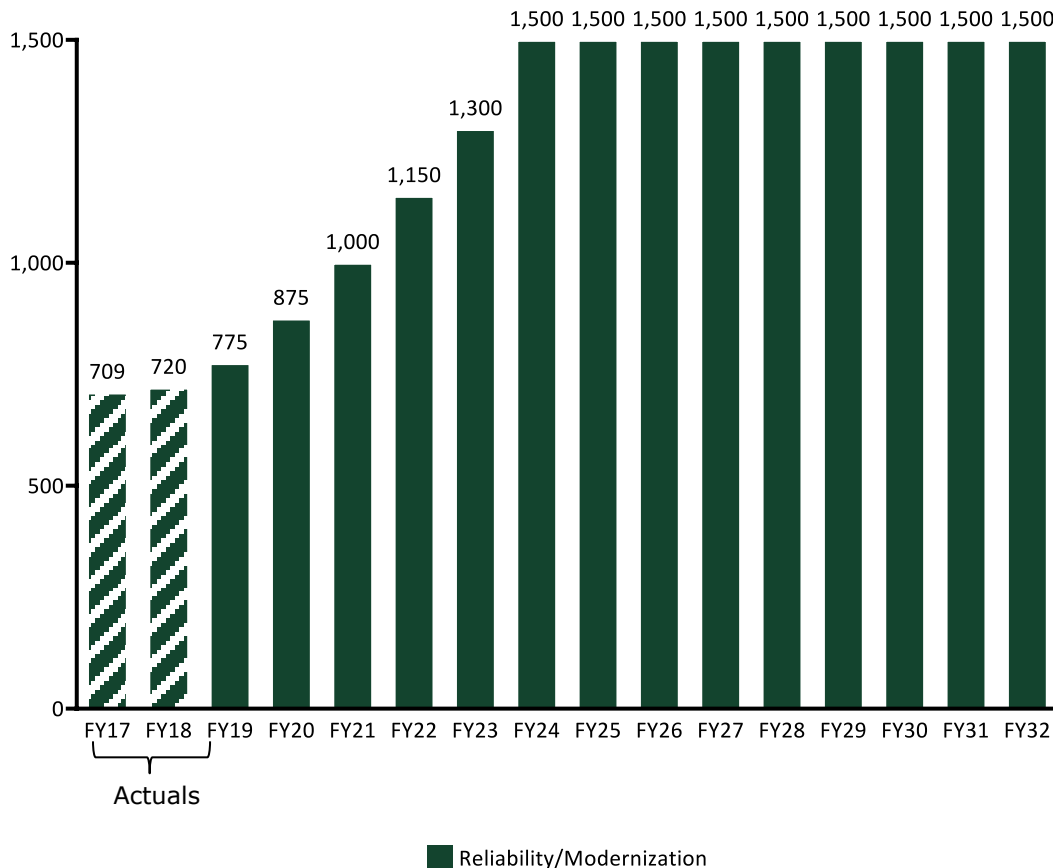
**MBTA Capital Spending FY16-19**  
**Reliability/Modernization only**  
**(in millions)**





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

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



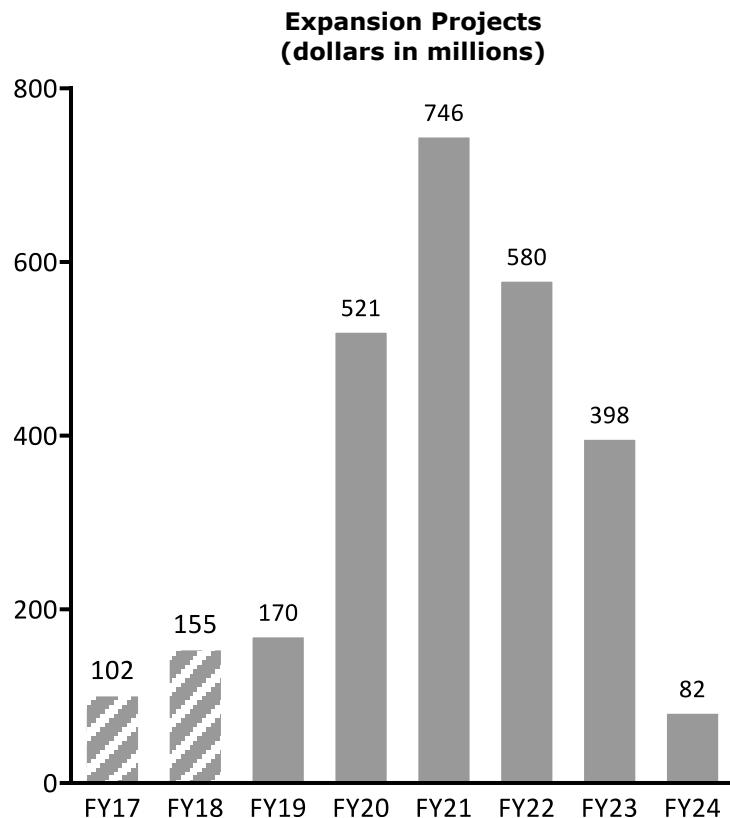
### Highlights:

- 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



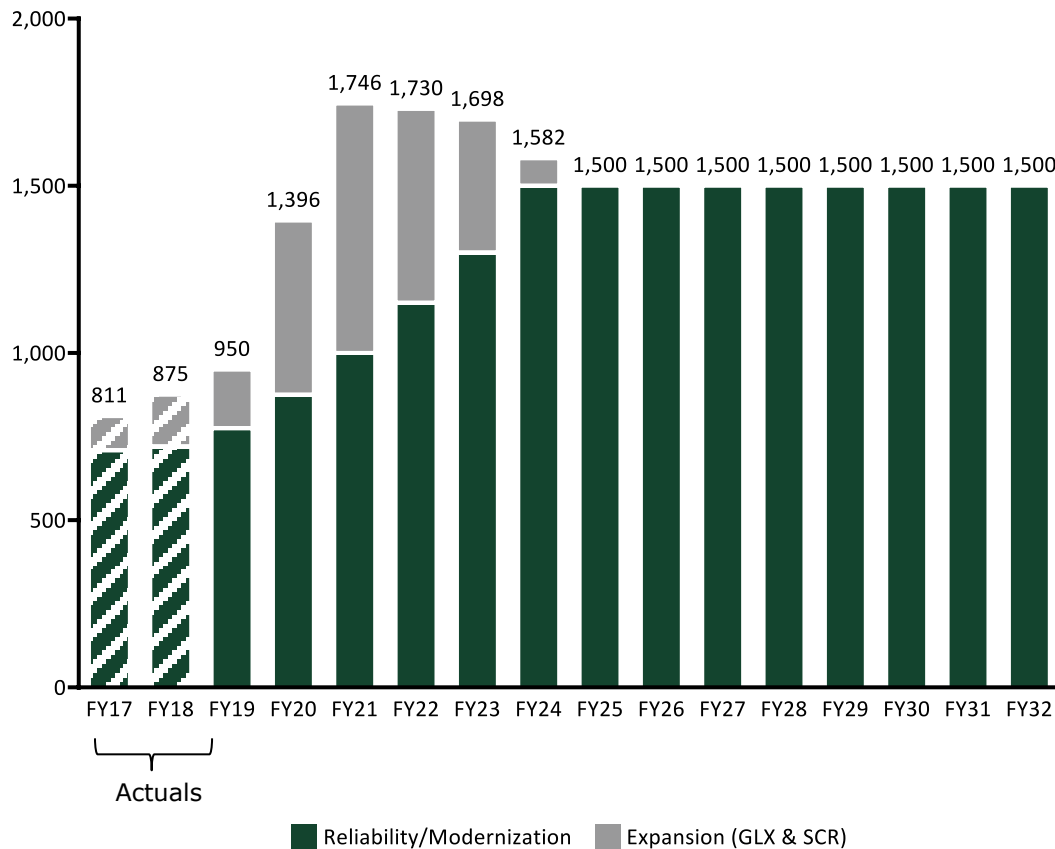
### Notes:

- 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:

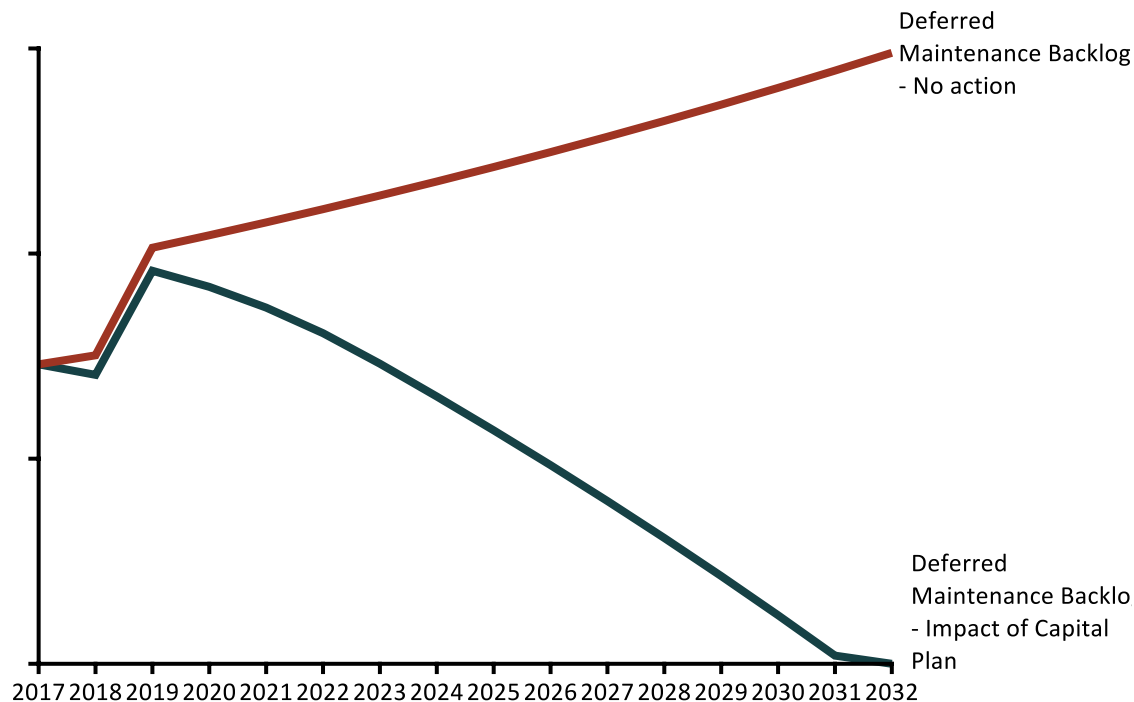
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## Finding 5: Plan will eliminate deferred maintenance and replacement backlog by 2032

- 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

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- 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**

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- 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

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- 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

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- 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)**