



**Massachusetts Bay  
Transportation Authority**

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## **CIP Discussion: Commuter Rail Stations with Partial Construction Funding**

**May 7, 2018**



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## The Policy Issues

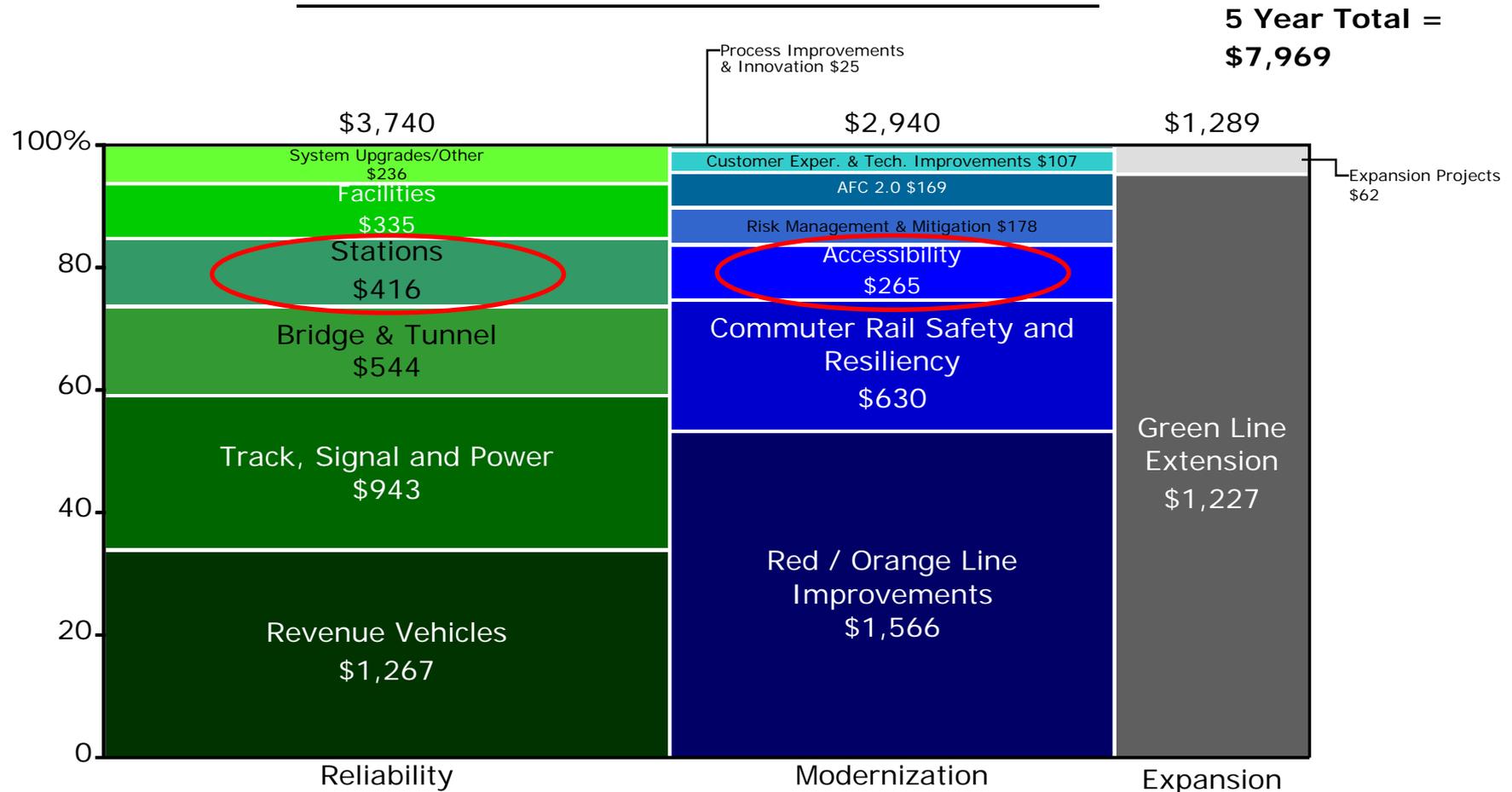
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- In general, the FY19-23 CIP focuses investment on revenue vehicles, track, signal, and power infrastructure, and major programs
  - Station reconstruction dollars need to be carefully prioritized
- CIP generally programs either design only or full construction cost
- For two longstanding Commuter Rail station projects, programmed funding is insufficient for station construction
- Staff seeks board input on policy for whether and when it is appropriate to carry only partial construction costs



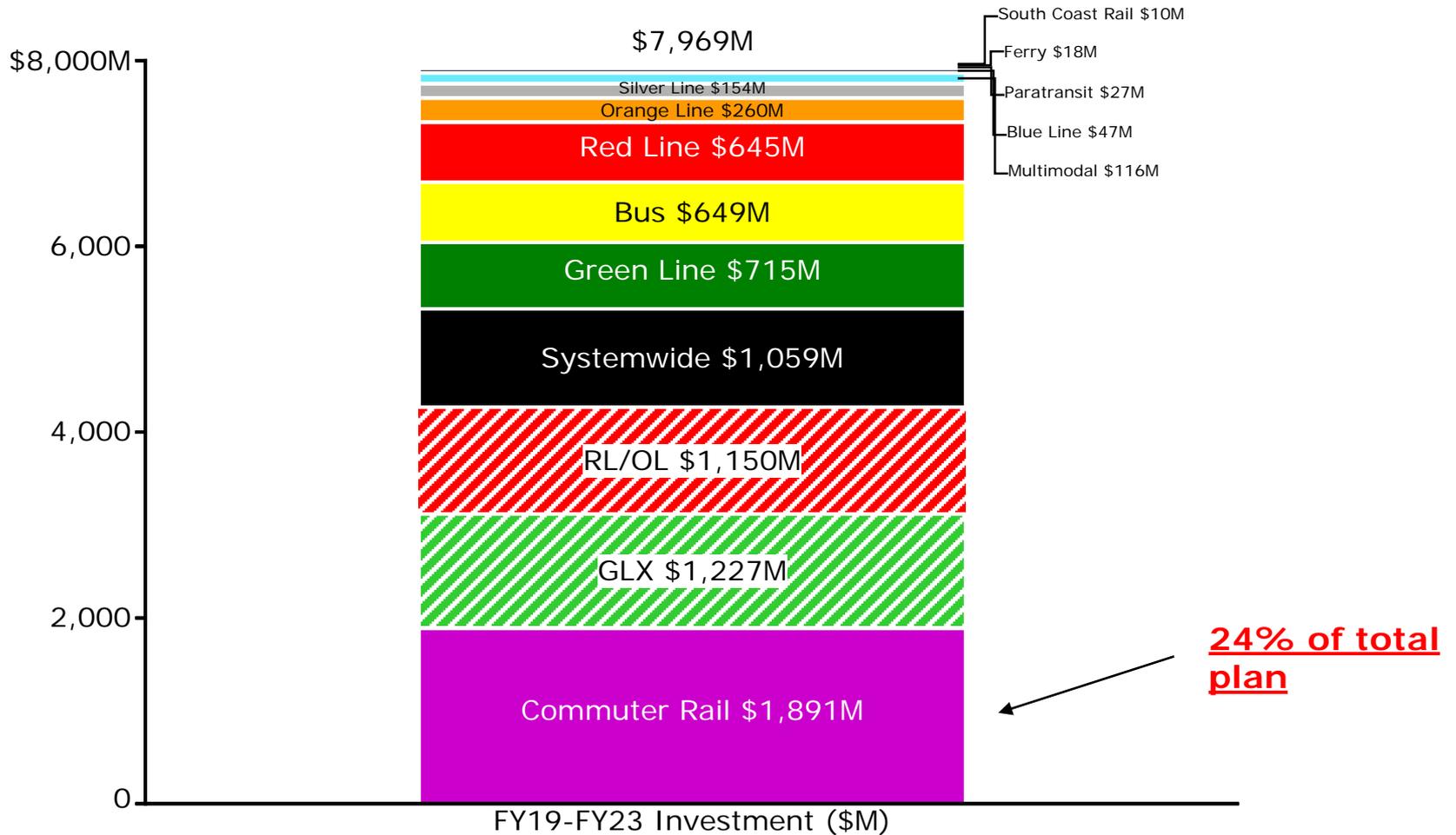
## Draft FY19-23 CIP allocates ~\$680M for Stations and Accessibility across all modes

FY19-23 CIP Spending by Priority and Program  
(\$million)





## Draft FY19-FY23 invests \$1.9 billion in Commuter Rail projects out of \$8 billion total





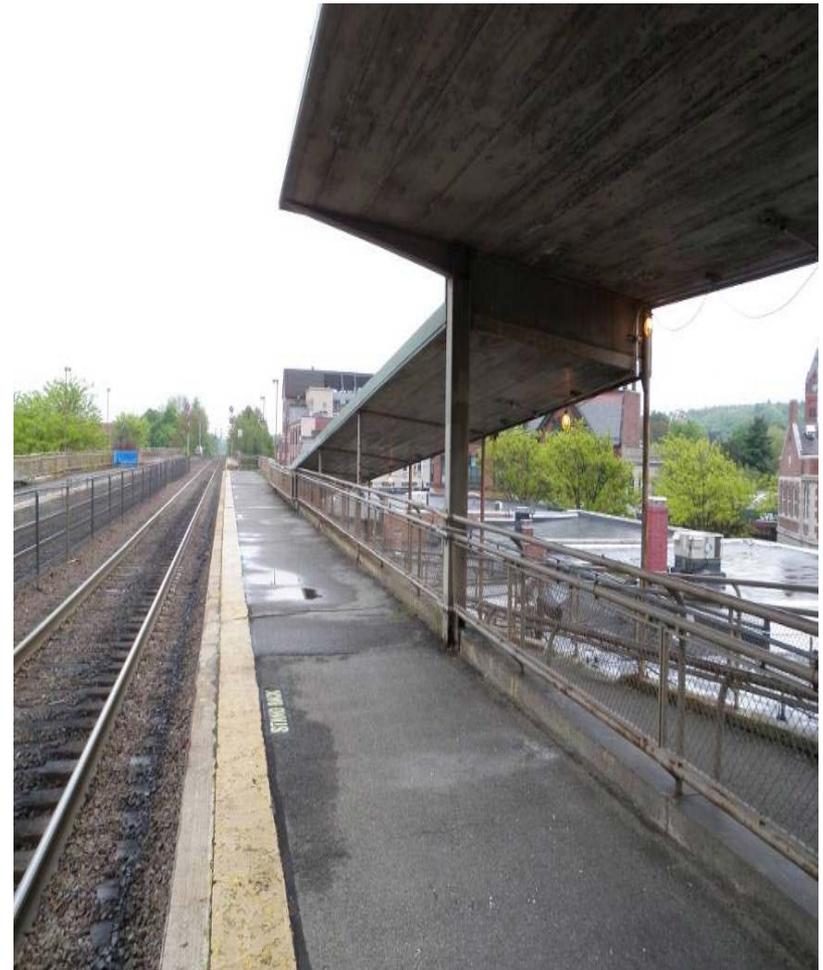
**Draft FY19-23 CIP: Commuter Rail Station Projects (only station-specific)**

CIP Program	Project	Phase	FY19-23 CIP	Total Funding
Stations	Ruggles Station Upgrade	Design and Construction	\$31.6M	\$39.4M
Stations	Winchester Station	Design and partial construction	\$33.0M	\$34.6M
Stations	Lynn Station Phase II	Design and construction	\$33.1M	\$33.1M
Stations	Back Bay Station Ventilation	Design and Construction	\$25.4M	\$26.9M
Accessibility	Newton Commuter Rail Stations	Design and partial construction	\$19.5M	\$21.5M
Accessibility	Mansfield Station	Design and Construction	\$8.5M	\$13.1M
Stations	Worcester Union Station Design	Design only	\$2.9M	\$3.0M
Accessibility	Natick Center Station Accessibility	Design only	\$1.8M	\$2.2M
Stations	South Attleboro Station Improvements	Immediate needs	\$1.0M	\$1.2M
<b>Total, Commuter Rail Station Projects</b>			<b>\$156.9M</b>	<b>\$175.0M</b>



## Winchester Center Station Overview

- The existing Station, built in the 1950's, consists of approximately 600-foot long, low-level asphalt platforms accessed by four concrete ramp structures.
- The MBTA currently runs 26 inbound and 23 outbound Lowell/Haverhill Line trains on a typical weekday
- The Line also serves Amtrak intercity trains with approximately 5 northbound and 5 southbound trains on a typical weekday as well as on weekends and holidays.
- Ridership at the Winchester Center Station was measured at 789 inbound boardings (on a typical weekday).





## Winchester Center Station Project Proposal: Overview

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- Design for capital improvements to Winchester Center Station has been included in the MBTA CIP since FY 2012.
- The primary driver for Winchester Center Station reconstruction is to replace the platforms and ramps, which have undergone multiple temporary repairs to maintain the safe operation of the station
- However, any substantial capital investment necessitates full compliance with ADA and MAAB requirements, including high-level platforms and accessible ramps/elevators
- Furthermore, the station is located on a 40-foot high viaduct through the town center within a limited right of way used by freight as well as MBTA, resulting in challenging construction conditions



## Winchester Center Station Project Proposal: Project Elements

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- Proposed Winchester Center Station project would include:
  - New Platforms: Two 724-foot long ADA-compliant high-level platforms for level boarding
  - Access ramps and elevators: Four new elevators and ramps to replace existing ramps that are not ADA-compliant
  - Station platform canopies: 300-foot long glass and steel canopies on both inbound and outbound platforms
  - Lighting, signage, wayfinding: New lighting system to improve security, visibility, and passenger comfort; new porcelain enamel signage on platforms and walkways
  - Station amenities: Benches, schedule cases, trash receptacles, bicycle racks, maintenance shed, variable message signs, a public address system, emergency police call back system, closed circuit television cameras and landscaping
  - Gauntlet track for wide freight rail operated by Pan Am Railways and STRACNET



## Winchester Center Station Funding History

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### Winchester Center Station has been in the MBTA CIP since FY2012:

- FY12-16 CIP: Project funded for design only at **\$1.0M**
- FY13-17 CIP: Project funded for design only, increased to **\$1.3M**
- FY14-18 CIP: Project funded for design only at \$1.3M
- FY15-19 CIP: Project funded for design only at \$1.3M
- FY16-20 CIP: Project funded for design only \$1.3M
- FY17-21 CIP: Project funded for design and construction, increased to **\$34.8M**
- FY18-22 CIP: Project funded for design and construction at \$34.8M
- FY19-23 DRAFT CIP: Project funded for design and construction at \$34.8M

*Based on change from original scope and revised estimates, moving forward with the current design as proposed would require a total project budget of **\$53.8M***



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## Winchester Center Station Funding Options

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### Funding Options:

- A. Maintain existing funding **(staff recommendation)**
  - Advance design services for new scope with goal of reducing construction costs (~\$5M);
  - Once design is complete, consider programming construction funding in subsequent CIP
- B. Repurpose existing funding for ongoing repairs; defer accessibility upgrades and station improvements except for required safety repairs
- C. Reallocate funding from another project or program to advance the Winchester Center Station project through construction at \$53.8M project cost
- D. Seek third party contributions or partnership to fill budget gap

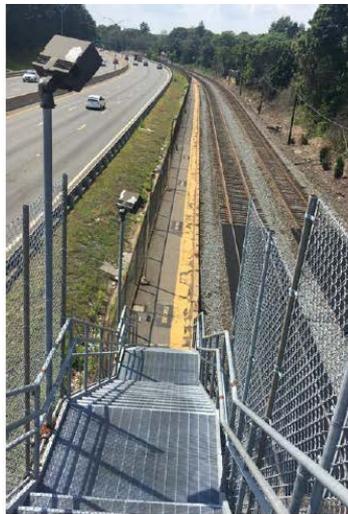
**Under all options, MBTA and Keolis will continue to monitor and maintain the safe operation of Winchester Center Station**



## Newton Stations Overview

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- Auburndale, West Newton, and Newtonville are inaccessible, low level, single side platforms adjacent to I-90
- MBTA currently runs 12 inbound and 14 outbound Worcester Line trains on a typical weekday; ridership for all three stations is approximately 900 weekday boardings
- Planning and design for accessibility improvements to Auburndale Station has been funded in the MBTA CIP since at least 2009.



Auburndale



West Newton



Newtonville



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## Newton Stations Proposal

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- In early 2017, the MBTA decided that the three Newton Commuter Rail Stations should be evaluated together, given the interdependencies within this corridor and operational impact of the Auburndale design
- An analysis of the 100% design for Auburndale identified that the recommended interlocking at CP-10 would have degraded service for the entire Worcester Line
- Looking across all three stations, MBTA consultants recently completed a Conceptual Design and Operations Analysis to identify and evaluate alternatives for station design and related infrastructure:
  - Alternative 1: Single Side Platform (MBTA preferred approach)
  - Alternative 2: Double Side Platform
  - Alternative 3: Center Island Platform
- Constructing all three Newton stations together would cost at least **\$46M**



## Newton Stations Funding History

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### **Auburndale Station has been in the MBTA CIP since at least FY2009:**

- FY09-13 CIP: Auburndale Station Improvements Study funded at \$7.9M
- FY10-14 CIP: Auburndale Station Improvements Study funded at \$7.9M
- FY11-15 CIP: Auburndale Station Improvements Study funded at \$7.9M
- FY11-15 CIP: Auburndale Station Improvements Study funded at \$7.9M
- FY12-16 CIP: Auburndale Station funded within \$19.7M “Accessibility Improvements”
- FY13-17 CIP: Auburndale Station funded within \$25.7M “Accessibility Improvements”
- FY14-18 CIP: Auburndale Station funded within \$25.7M “Accessibility Improvements”
- FY15-19 CIP: Auburndale Station funded within \$30.3M “Accessibility Improvements”
- FY16-20 CIP: Auburndale Station Accessibility – Design funded at \$3.5M
- FY17-21 CIP: Auburndale Station Design and Construction funded at \$21.5M
- **FY18-22 CIP: Funds repurposed for three Newton Commuter Rail Stations at \$21.5M total; initial study funded at \$500k**
- FY19-23 DRAFT CIP funds Newton Commuter Rail Stations at \$21.5M

*Newton Stations “Alternative 1” design and construction would require a total project budget of **\$46M***



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## Newton Stations Funding Options

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### Funding Options:

- A. Maintain existing funding **(staff recommendation)**
  - Advance all three stations to 100% design
  - Once design is complete, consider programming construction funding in subsequent CIP
- B. Reallocate funding from another project or program to fully fund construction for Newton Stations Alternative 1
- C. Seek third party contributions or partnership to fill budget gap
- D. Defer Newton Stations improvements project until full construction funding is identified



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## Policy questions

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1. Draft FY19-23 CIP program sizes support relatively limited station improvements, in favor of aggressive investment in vehicles and infrastructure.
  - *Should FY19-23 CIP program sizes be reallocated to allow for more investment in MBTA stations?*
2. Currently, the CIP includes two legacy projects with partial funding to allow design or planning to advance even though full funding for construction is not yet identified.
  - *Should the MBTA continue to carry partial funding for specific legacy projects or program either design only or all costs for projects in the CIP?*
3. The MassDOT/MBTA third party contributions policy is focused on potential expansion projects with localized benefits, rather than more traditional state of good repair or accessibility projects.
  - *Should the MBTA seek municipal contributions or partnerships to fund station improvements and other SGR/modernization projects? Should projects with potential third party funding be prioritized over other projects?*