



Massachusetts Bay Transportation Authority

General Manager's Remarks

Fiscal and Management Control Board

December 4, 2017



Agenda

- Bus Service Overview
- Capital Projects Update
- Capital Dashboard Update



Bus Service Overview

- Two key takeaways:
 - We need better bus service
 - We need more bus service



Bus Service Overview

- On average weekday, more than 360,000 customers ride the bus
- More than 30 bus routes run at 90 percent capacity or above, during peak periods
- Some improvements made where possible:
 - Routes 7 and 9
- Other routes pose greater challenges for improvements



Bus Service Overview

- Challenges:
 - Competing for space in mixed traffic, during peak
 - Competing with TNCs during off peak
 - Space constraints – Albany and Quincy



Bus Service Overview

New strategy: Smart, safe, and flexible bus service

Strategic focus areas:

- Smarter routes
 - Upgraded garage facilities
 - Buy-in for designated bus lanes
 - Expanded bus network, more capacity, increased frequency
 - Executed within our financial means
 - Keep up with our customers' needs as they continue to change
-



Paving at Banks Place & Oak Grove Station



Scope

- New paving and marking for Banks Place and the Bus Loop at the Oak Grove Rail Station in Melrose and Malden.

Public Benefit

- Clear markings for motor vehicles
- Less wear and tear on bus fleet

Schedule

- Phase 1: November 18 – November 26, 2017

Construction Cost

- \$375,000





Green Line Signals: Reservoir & Riverside



Scope

- New signal system along D-branch
- 6.5 miles new catenary and signals
- Replace eight signal houses
- Extensive power upgrade along D-branch

Public Benefits

- Safety
- Improved System Reliability
- Reduced downtime during failures

Schedule

- Service diversions will be scheduled in coordination with Green Line track and power programs, beginning in 2018

Construction Cost

- \$40 million

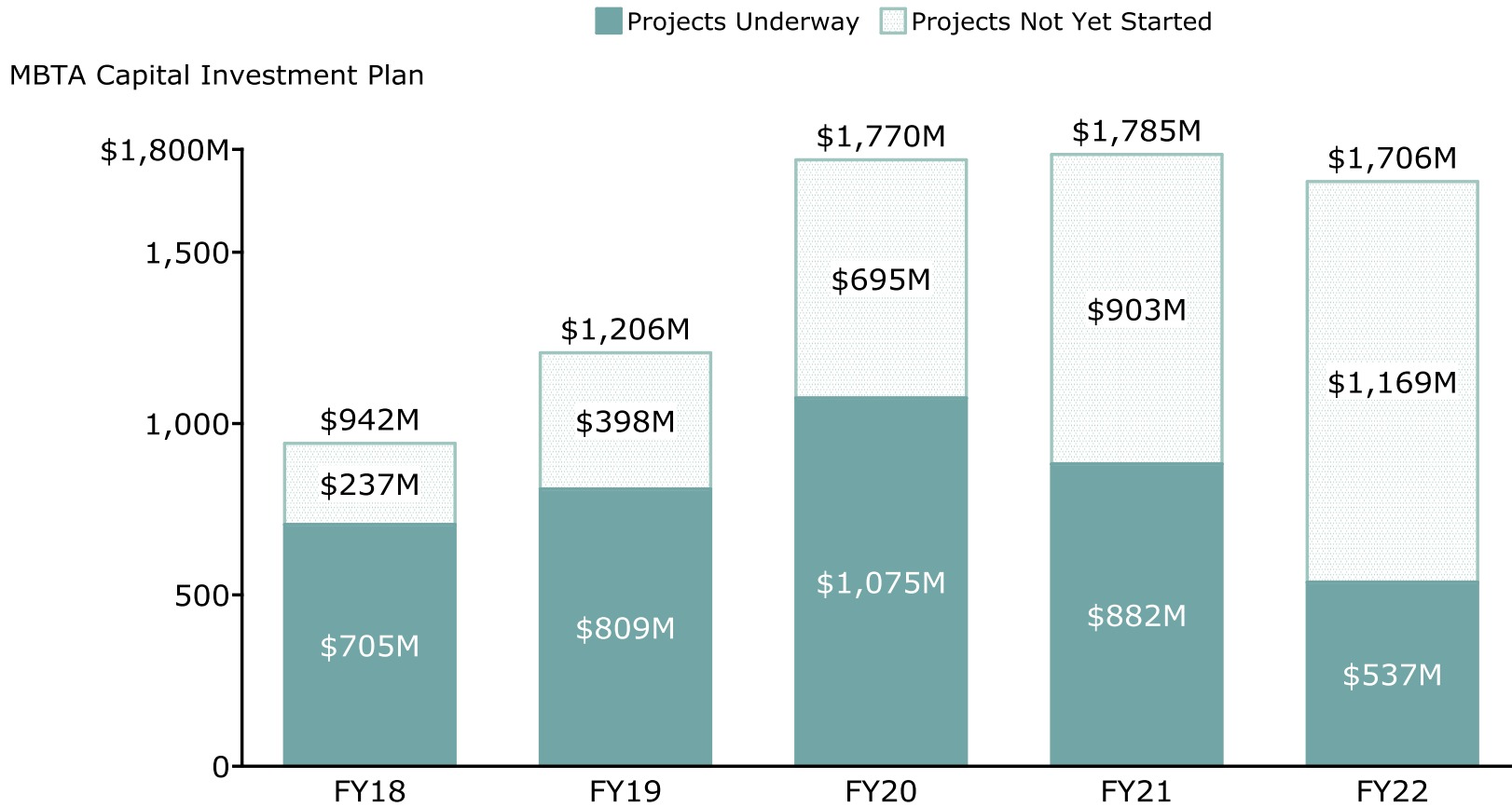


Capital Project Pipeline – major upcoming contract awards in FY18

Project Name (✓ = Awarded this year)	Engineer's Estimate (\$M)	Project Name (✓ = Awarded this year)	Engineer's Estimate (\$M)
Revenue Vehicles		Stations	
Green Line Type 10 (Design)	TBD	South Shore Garages	\$85M
Track, Signal, & Power		✓ Parking & Paving (On-Call)	\$22
Reservoir to Riverside Signal Improvements	\$39M	Harvard Busway	\$15
✓ Commuter Rail Tracks, Ties, Switches (On-Call)	\$24	Fenway Portal	\$9
Transit Track and Tie Replacement (On-Call)	\$25	Back Bay Ventilation, Package 1	\$3
Franklin Double Track	\$25	Knowledge Corridor Canopies	\$3
✓ Red Line Test Track	\$21	Facilities	
Commuter Rail Right of Way Improvements	\$20	Roofing Repairs (On-Call)	\$45
Power Improvements (On-Call)	\$20	North Side Operations Control Center	\$28
Systemwide Transformers Phase 2	\$20	Facility Improvements (On-Call)	\$25
Orange Line Direct Fixation	\$15	Accessibility	
Green Line Grade Crossings	\$15	Quincy Adams Elevators	\$8
SCADA System Upgrades	\$5	Bus Stop Accessibility Improvements	\$5
Bridge & Tunnel		Park Street Elevator	\$3
Bridge Bundle D/B	\$102	Federal Programs / Mandates	
✓ Gloucester Drawbridge Replacement	\$57	Green Line Train Protection	TBD
Orange Line Tunnel Repairs	\$25	System Upgrades / Other	
Tunnel Repairs (On-Call)	\$10	Expansion	
Bridge Repairs	\$10	✓ Green Line Extension Design / Build	\$1,080
Capacity & System Improvements		Chelsea Commuter Rail Station (Silver Line Gateway)	\$22
✓ AFC 2.0 Systems Integrator	TBD	TOTAL	
Red / Orange Line Signal Upgrades	\$185	\$2,267M	
Wellington Yard Rebuild	\$105		
Cabot Yard & Maintenance Facility Improvements	\$191		



Overview of projects underway – FY18-FY22 Capital Investment Plan (CIP)



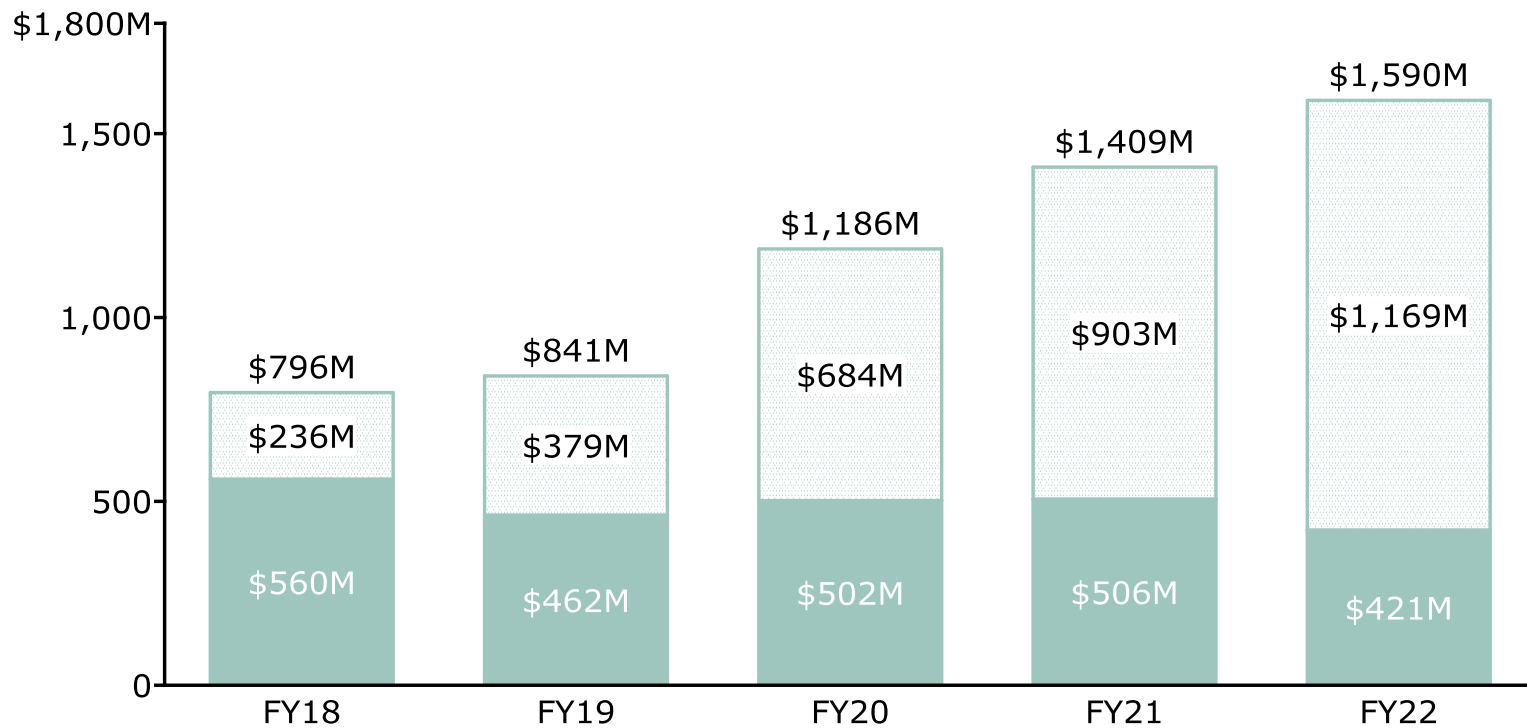
Note: Projects underway are defined as projects with any actual cash spent to date.



Overview of projects underway – FY18-FY22 Capital Investment Plan (CIP) SGR Projects Only

SGR Projects Underway SGR Projects Not Yet Started

MBTA Capital Investment Plan

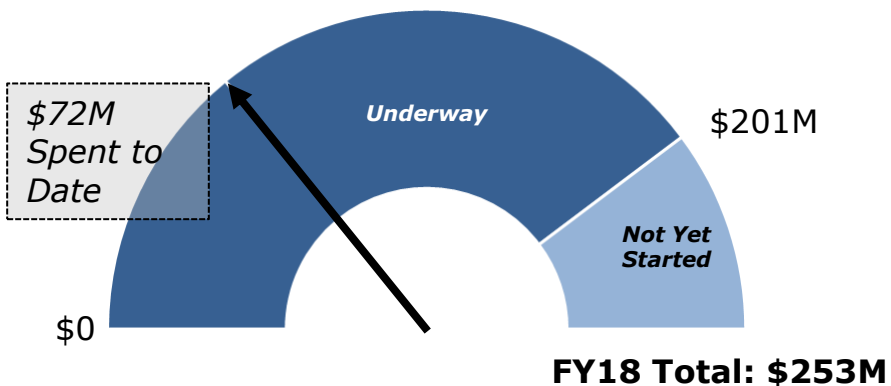


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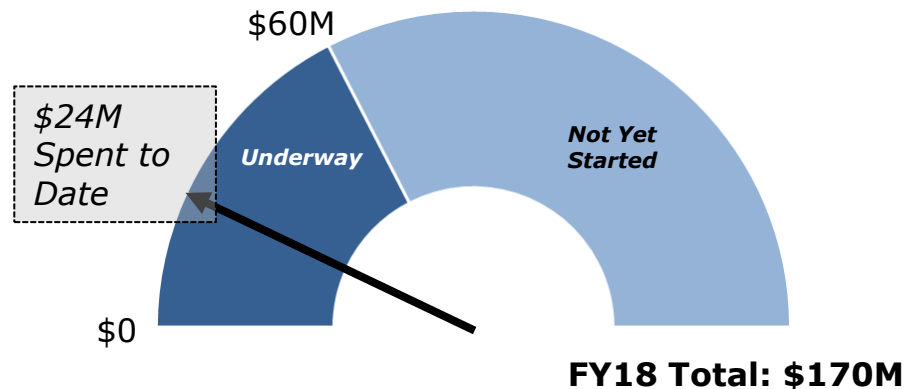


FY18 Progress by Program

Revenue Vehicles



Track, Signal, & Power



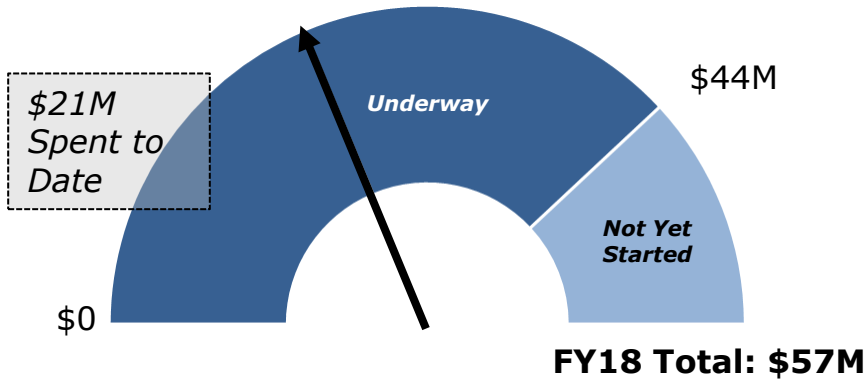
Project Name	FY18 Spend Estimate
Red/ Orange Line Vehicles	\$71.5M
New Flyer 325 Bus Procurement	32.4M
Green Line #7 Car Midlife Overhaul	23.7M
Kawasaki Coaches Overhaul	22.2M
Overhaul of 155 Option New Flyer Buses	14.0M

Project Name	FY18 Spend Estimate
Signal Program - Red/Orange Line	\$8.7M
Energy Efficiency	5.7M
Commuter Rail Track, Ties, Switches (On-Call)	5.1M
Systemwide Transit Tie Replacement (On-Call)	4.3M
Orange Line Traction Power Upgrade	4.3M

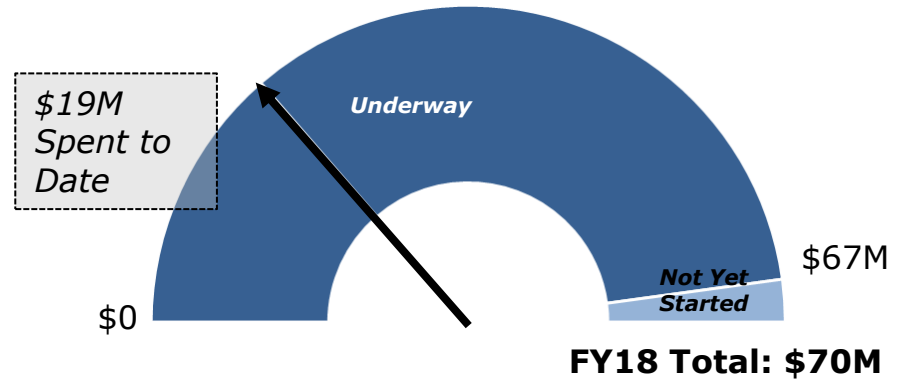


FY18 Progress by Program

Bridge & Tunnel



Capacity & System Improvements



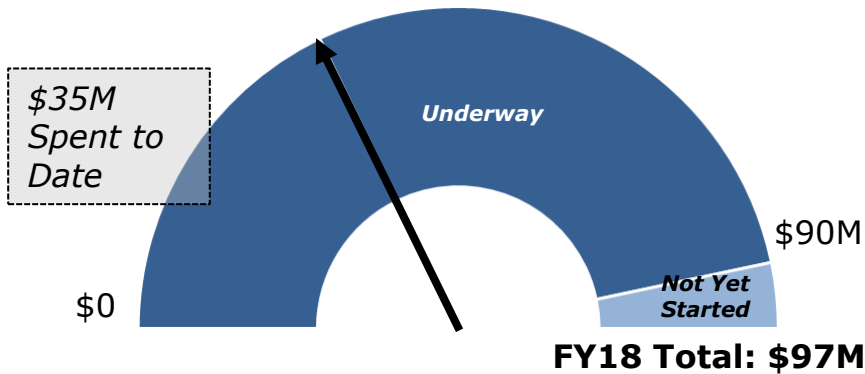
Project Name	FY18 Spend Estimate
Merrimack River Bridge	\$9.9M
Beverly Drawbridge Rehab	6.4M
MassDOT Longfellow Bridge Rehab	6.4M
Tunnel Rehab	5.7M
Bridges - Design	5.6M

Project Name	FY18 Spend Estimate
Red Line / Orange Line Infrastructure Improvements	\$60.2M
AFC 2.0	7.2M
Franklin Double Track & Signal	2.1M
Key Bus Route Improvements	0.6M
Green Line - Real Time Tracking	0.3M



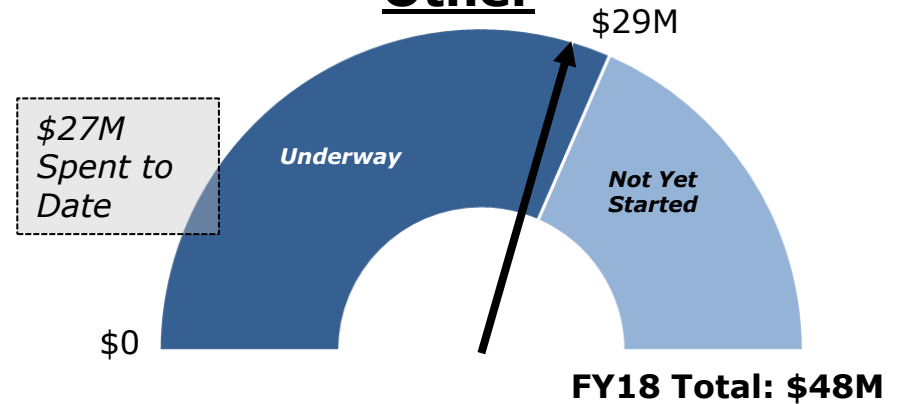
FY18 Progress by Program

Federal Programs & Mandates



Project Name	FY18 Spend Estimate
Commuter Rail Positive Train Control	\$88.6M
Green Line Train Protection	6.7M
Homeland Security Funds	1.3M

System Upgrades & Other

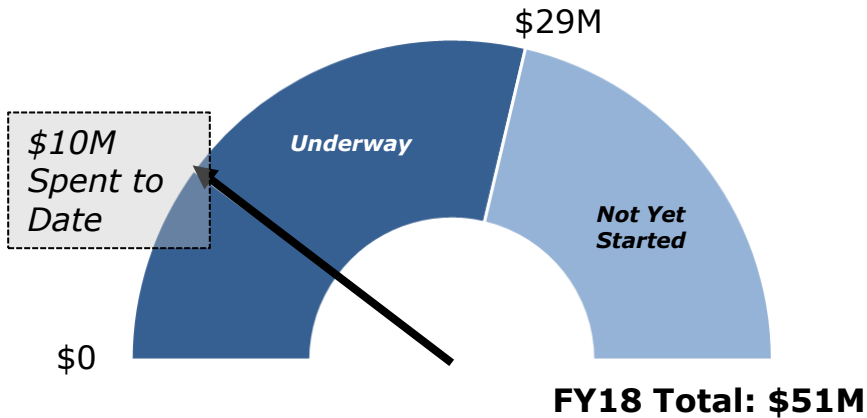


Project Name	FY18 Spend Estimate
Charlestown Bus - Seawall Rehab	\$7.7M
Workforce Modernization Program	6.1M
Commuter Rail Misc. Equipment (Winter Resiliency)	4.9M
System-Wide Radio	4.1M
Hastus Upgrades	3.3M



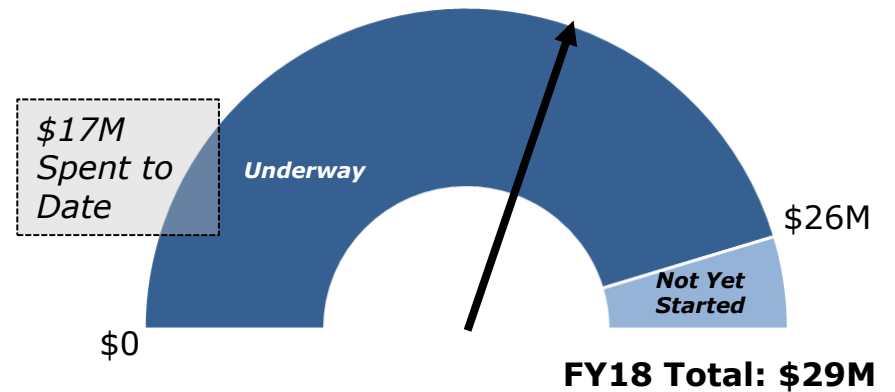
FY18 Progress by Program

Stations



Project Name	FY18 Spend Estimate
Wollaston Station / Quincy Center Garage Demolition	\$10.3M
Parking Lot Paving - On-Call	8.9M
Ruggles Station Upgrade	7.9M
Braintree and Quincy Adams Garage Rehab	6.1M
Commonwealth Ave. Stations Access	4.9M

Facilities

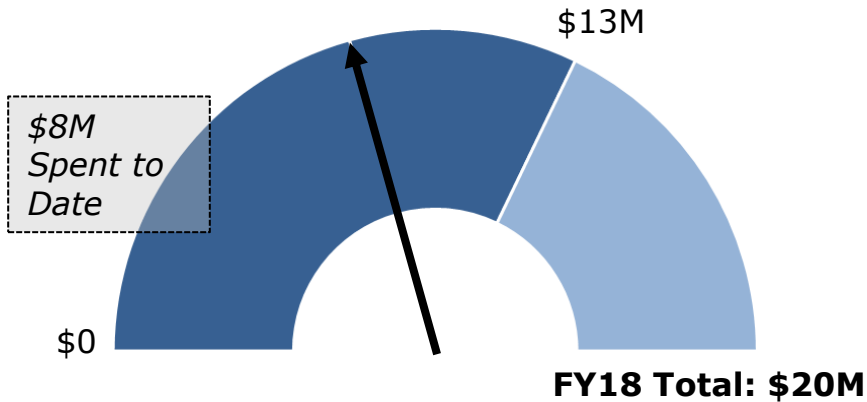


Project Name	FY18 Spend Estimate
Everett Bus - Flowfill Repairs	5.1
Facility On-Call	4.7
Commuter Rail - Mechanical Infrastructure Improvements	3.1
Facility Roof Replacements	2.6
Cabot Maintenance Facility - PCB Remediation	2.5



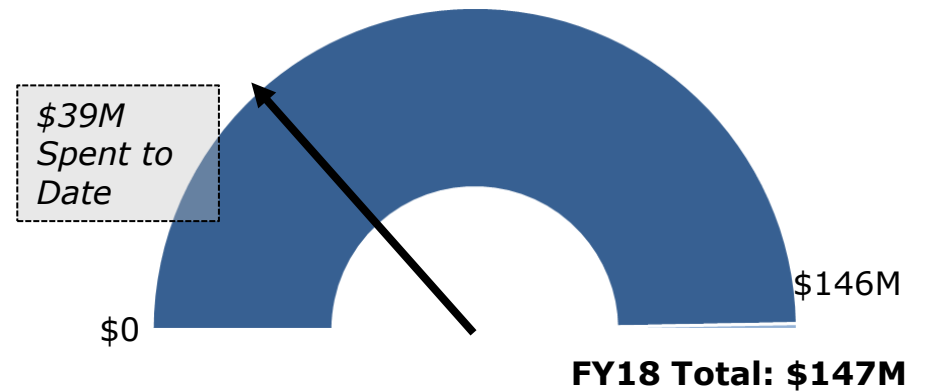
FY18 Progress by Program

Accessibility



Project Name	FY18 Spend Estimate
Elevator Program	\$3.1M
Newton Highlands Green Line Station Accessibility Project	2.2M
Mansfield Station Accessibility	2.0M
Accessibility Improvements	1.8M
Commuter Rail Mini-High Platform Repairs	1.5M

Expansion



Project Name	FY18 Spend Estimate
Green Line Extension	\$130.0M
Fairmount Line Improvements (Blue Hill Ave. Station)	9.3M
Wachusett Extension	3.1M
Boston Landing	2.3M
Silver Line Gateway - Phase 2	0.8M