



# Why the T's repair backlog bill has grown so rapidly

E-MAIL

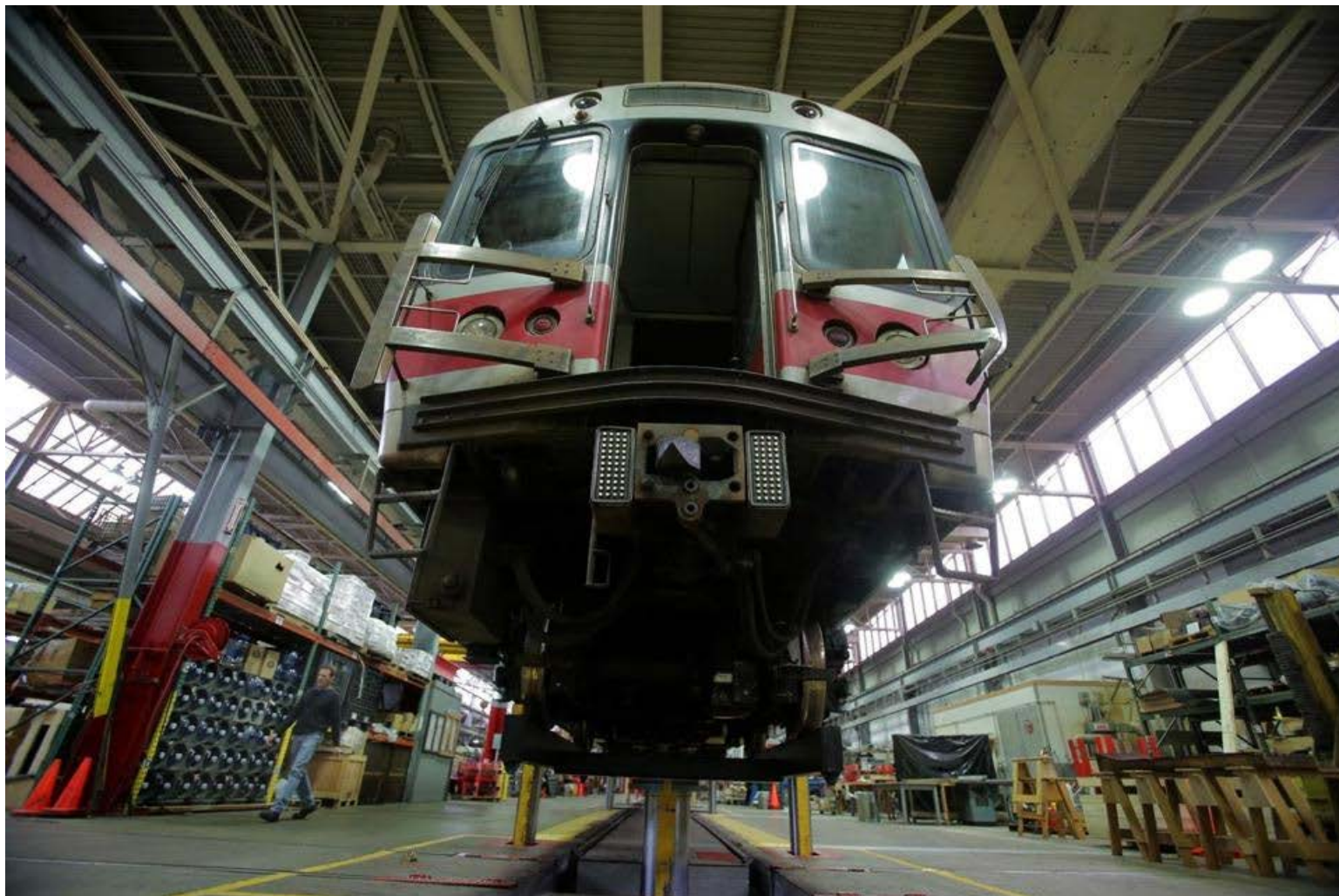
FACEBOOK

TWITTER

GOOGLE

LINKEDIN

14



LANE TURNER/GLOBE STAFF

**A worker walked past a Red Line train awaiting repairs at the MBTA maintenance facility in South Boston in April.**

**By Matt Rocheleau**

GLOBE STAFF SEPTEMBER 22, 2015

A broken bus here. A clunky train there. Pretty soon it adds up — big time.

The estimated fixup costs for the MBTA system have skyrocketed.

As recently as 2009, the agency estimated its backlog of repairs was \$3.1 billion. As of a few weeks ago, it had more than doubled to a startling \$7.3 billion, and the T noted that the number is likely not done rising.

So why has the T's repair bill surged, and why do officials believe the tab will keep growing?

Part of the reason is fairly straightforward. The system is getting older, requiring more repairs and replacements, and the T has often spent too little on repairs to reduce the backlog.

However, there are other, less-obvious factors: The agency has been adding to its to-do list as the result of an ongoing effort to document everything it owns. And it has sometimes changed the way it crunches the data.

### **The inventory database**

The project of cataloguing the value, condition, age, life expectancy, and repairs needed for every single piece of equipment and property began in 1999. The evolving data is used to generate the repair cost estimate.

“If you could miraculously fix everything today, that’s what it would cost,” said T general manager Frank DePaola. “We’re not letting anything unsafe run in our system. [But] we could have more reliable service if we could reduce that backlog.”

As of 2006, the database contained records for more than 2,400 assets worth \$12.4 billion. But the database has grown to list upwards of 230,000 assets, worth \$23.8 billion.

Many are entirely new additions to the database, while others are more detailed breakdowns of assets that were already tracked.

The advertisement is for the Institution for Savings, a financial institution. It features a green and white color scheme. The main headline reads "Great Rate. Don't Wait." in a large, bold, serif font. Below this, it states "Loans up to \$2 Million. No Points\*!" in a smaller font. A prominent feature is a green box containing two interest rates: "3.750% LIBOR rate" and "3.788% APR". Below these rates, it specifies "30-Year Fixed Rate Residential Mortgage". At the bottom of the ad, there is a logo for the Institution for Savings, which includes a small illustration of a building and the text "INSTITUTION FOR SAVINGS" and "BUILDING STRONGER COMMUNITIES TOGETHER SINCE 1820." A small "Click here for more information." button is also present.

For example, instead of just listing a T-owned bridge as a single asset, the agency several years ago began listing components — such as the substructure, superstructure, and deck elements — as separate assets.

The T acknowledges that the database still does not include all the assets the agency owns, particularly components of the commuter rail system.

More items still need to be added, and other items will be broken out into more detail — both of which are likely to cause the T's repair bill to increase further.

## A look at how the T's repair backlog has changed over time

Date	Backlog value	Assets in database	Value of all assets	Overall condition of assets (based on 1-5 scale)	Need to spend to maintain backlog
Aug 2015	\$7.3 billion	230,000	\$23.8 billion	3.02	\$472 million
Mar 2015	\$6.7 billion	146,000	\$21.5 billion	3.05	N/A
2009	\$3.1 billion	95,000	\$11.3 billion	3.07	\$694 million
2006	\$2.7 billion	2,400	\$12.4 billion	N/A	\$470 million
2003	\$2.7 billion	N/A	N/A	N/A	\$450 million
1999	\$3.2 billion	N/A	N/A	N/A	\$505 million

**SOURCE: Massachusetts Bay Transportation Authority**

## Underspensing

Another reason for the growth in the repair estimate has been that the T hasn't kept pace with the need for repairs.

Since 1999, the T has regularly estimated it should spend at least \$450 million and as much as \$694 million to simply maintain its state of repair.

But the T has often failed to meet its repair spending targets.

Since fiscal year 2009, the agency has spent an average of \$392.6 million annually on repairs.

For the current fiscal year, which began at the start of July, the T is budgeted to spend \$665.7 million

on repairs, officials said. But to eliminate the repair backlog, the T estimates it would need to spend an average of \$765 million per year for 25 years.

What's more, the T's calculations are in today's dollars and don't account for inflation, meaning the amount the agency will ultimately pay will be even higher.

### **New accounting methods**

The estimated repair costs listed on the database have also fluctuated because the T has made changes in how it assesses the condition of its assets — or simply taken a second look at them.

For example, the backlog of repairs needed for buses increased from an estimated \$101 million several months ago to the current \$538 million because the agency revised the formula it uses to try to project how quickly equipment will decay

On the other hand, the T's estimate for the cost of repairs to subway signal equipment stands at \$309 million, which is about \$1 billion lower than what the agency estimated several months ago.

The remarkable paper decline occurred because the T did a new review of its subway signal equipment and found much of the equipment to be in better condition than previously thought.

### **The MBTA's repair backlog tally has changed dramatically since March**

The agency's repair backlog database has added thousands of new items and undergone major changes.

Type of asset	Backlog value as of August	% change in backlog value since March
Revenue vehicles	\$3,321,196,510	26%
Bridges	\$260,358,863	-67%
Signals	\$1,032,839,147	-25%
Stations	\$391,030,220	53%
Facilities	\$496,808,627	4%
Track/ROW	\$1,189,339,256	290%
Power	\$288,508,404	-38%
Parking	\$102,323,335	-41%
Communications	\$35,259,153	1004%
Technology	\$78,564,313	-40%

Tunnels	\$93,375,000	289%
Non-revenue vehicles	36,910,500	9%
Fare collection	\$9,004,519	2019%
Elevators & Escalators	\$7,620,000	-67%
Total	\$7,343,137,847	10%

**SOURCE: Massachusetts Bay Transportation Authority**

## **A bill that could get even higher**

Officials aren't sure how far beyond \$7.3 billion the estimate will go.

"That's hard to answer, given the size, age, and complexity of the system," said Thom Dugan, senior director of the agency's capital budget.

He noted that even when all of the T's assets are added to the database, there will still be constant updates to account for deterioration, repairs, and the acquisition of new property, in addition to potential changes to how the data is crunched.

"An asset management database is something you never finish," Dugan said.

Maintaining and updating the database itself isn't cheap either.

The T between fiscal years 2013 and 2015 spent \$113,000 of its own money and another \$474,000 in federal dollars to enhance the database.

## **Not alone**

All that said, the MBTA is far from the only transit agency in the country with a big, growing repair backlog.

"We're an older system, so I think if you went to other older systems like New York City and Chicago, you'd have a similar backlog," said DePaola.

The Federal Transit Administration's most recent estimate of the nationwide repair backlog, calculated in 2013, was \$85.9 billion, up from \$77.7 billion in 2011, a spokesman for the agency said.

In April, the administration's acting Administrator Therese McMillan testified before Congress that

not enough money is being spent nationally to reduce the repair bill or to even hold it steady. She said the backlog is growing at a rate of \$2.5 billion annually.

Matt Rocheleau can be reached at [matthew.rocheleau@globe.com](mailto:matthew.rocheleau@globe.com). Follow him on Twitter [@mrochele](https://twitter.com/mrochele)

Get [Today's Headlines](#) from the Globe in your inbox:

[Privacy Policy](#)

SHOW 14 COMMENTS

WIN TICKETS TO



**The Globes** **VIEWING PARTY**  
The Boston Globe

Erie Pub - 10/1 at 6pm  
 T's Pub - 10/1 at 9pm  
 Tony C's in Somerville - 10/2 at 7pm  
 Luxury Boxx - 10/2 at 10pm




## Top 10 Trending Articles

Most Viewed

Most Commented

Most Shared

Patrick Kennedy reveals family's struggles with alcohol in n...

Before she was Baby Doe

Rob Gronkowski more than a fun-loving goof

Sanders draws big crowds in Massachusetts campaign swing

Nick Cafardo | Sunday Baseball Notes: For baseball's wild-c...

Dan Shaughnessy: Red Sox are in an awkward spot with Joh...

---

MY ACCOUNT

**Ben Volin | Sunday Football Notes: Is the early part of the ...**

MANAGE MY ACCOUNT

DOWNLOAD CUSTOMER SERVICE APP  
**A revolution rattling the world of organ music**

---

**Nick Cafardo | On Baseball: Red Sox' big-money players ha...**

SOCIAL  
FACEBOOK

**For Red Sox, a contending team can emerge from disappoint...**

GOOGLE+

CONTACT

HELP

FAQS

GLOBE NEWSROOM

ADVERTISE

MORE

NEWS IN EDUCATION

ARCHIVES

PRIVACY POLICY

TERMS OF SERVICE

TERMS OF PURCHASE

YOUR AD CHOICES

WORK AT BOSTON GLOBE MEDIA

---

© 2015 BOSTON GLOBE MEDIA PARTNERS, LLC

---

---