MBTA SCORECARD

NOVEMBER 2009

MESSAGE FROM THE GENERAL MANAGER

Dear reader,

Thank you for reading the MBTA ScoreCard. This ScoreCard reflects the MBTA's commitment to safe and reliable transportation and its goal of being transparent and accountable.

At the MBTA we are constantly working to improve the quality of the service we deliver to our customers. With this ScoreCard we now publish the same performance metrics that we use internally to measure our progress towards meeting our service quality goals.

This month we feature a **Spotlight on bus emissions**, including the benefits that have been realized by new, better vehicle purchases and a new regular testing program.

We also report on the following key areas:

- **Ridership:** How many people ride the MBTA's services every day? How does ridership break down by type of service?
- **On-Time Performance:** How often are different MBTA services on time? How does the MBTA measure what's on time and what isn't?
- **Infrastructure:** Good track maintenance is vital to safe and fast subway service. What condition are the MBTA's tracks in?
- **Dropped Trips:** Does the MBTA run all the trips that are scheduled? Why might a trip not be run? What percentage of the scheduled trips run on my bus route or subway line?
- **Vehicle Reliability:** How reliable are the MBTA's buses and trains? Does the MBTA have enough vehicles ready to run its service every day? What is the MBTA doing to maintain and improve its vehicles?

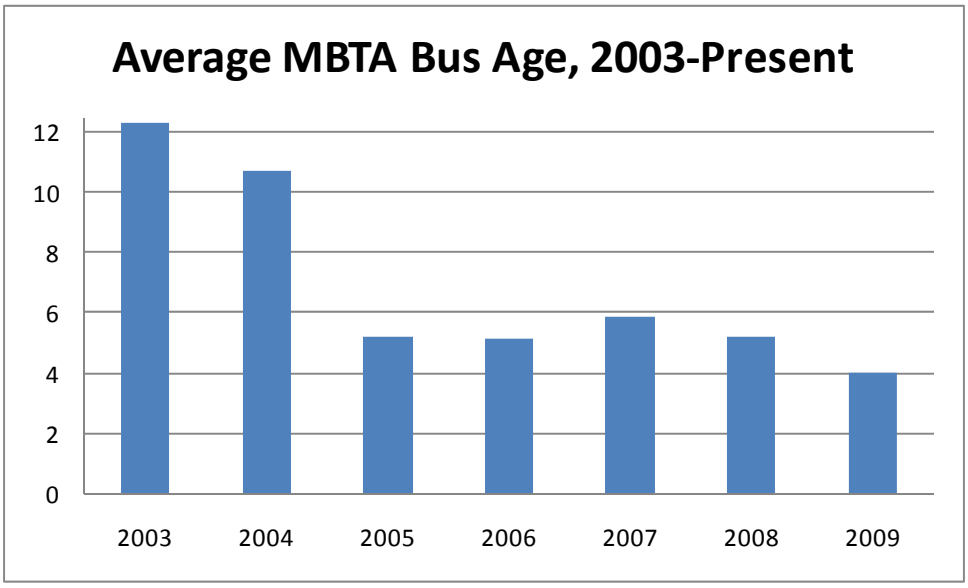
This report is for you, and as always your feedback is very important to us. How can we make it better? Please email us with comments and suggestions at scorecard@mbta.com. Thank you for taking the time to read the ScoreCard, and we look forward to providing more information on our performance in the future.

William Mitchell
Acting General Manager

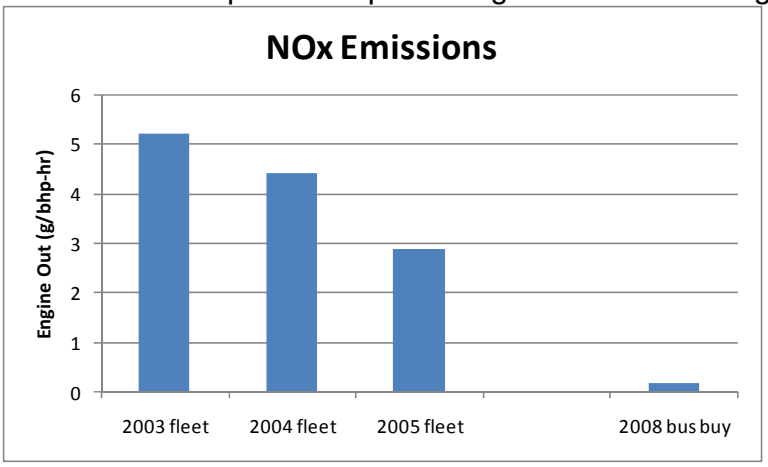
SPOTLIGHT ON EMISSIONS

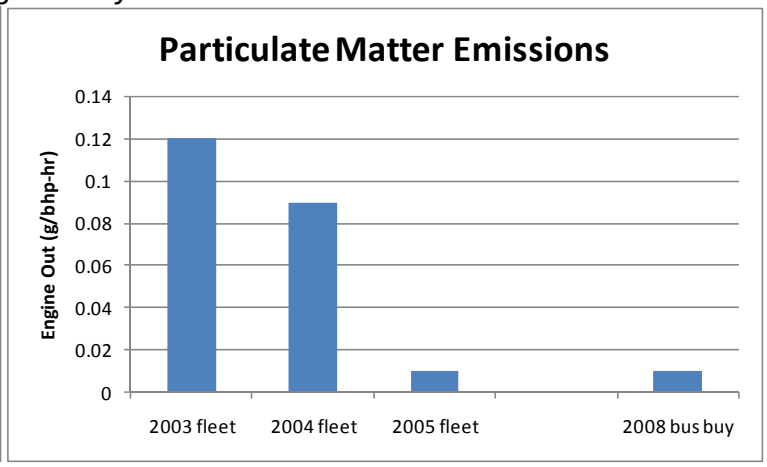
The MBTA has worked to reduce emissions on multiple fronts. Some, such as the purchase of new buses including buses powered by Compressed Natural Gas (CNG) and Emissions-Controlled Diesel (ECD), are visible to the customer. Others, like the move to ultra-low sulfur diesel fuel and regular emissions testing for every bus, are not. These combined efforts have reduced emissions dramatically, including a more than 44% reduction in emissions of oxides of nitrogen and a 92% reduction in particulate matter.

In 2003 the average MBTA bus was more than 12 years old. Since then the MBTA has been systematically retiring them and replacing them with new, environmentally friendly buses, making its 1,000-bus fleet progressively younger over time. Today the average MBTA bus is just four years old. Over time vehicle purchases are scheduled to keep the average fleet age below 8 years.



The first 300 of these new buses are powered by clean-burning compressed natural gas. 32 are specialized diesel-electric and the remainder are Emissions-Controlled Diesel (ECD). The ECD buses' engines are certified to a low level of oxides of nitrogen (NOx), 2.4 g/bhp-hr, and have a filter that reduced particulate matter by more than 90%. They are run using ultra-low sulfur diesel fuel for reduced sulfur content. Compared to the buses they replace, each ECD bus saves one ton of NOx emissions every three years. Not all old buses were retired, but those kept in service were rebuilt and retrofitted with particulate filters, and were also moved to the new ultra-low sulfur diesel fuel. The MBTA continues to push the envelope with its 2008 vehicle purchase producing its lowest-emitting buses yet.





SPOTLIGHT ON EMISSIONS

In addition to buying clean vehicles and using clean fuel, the MBTA implemented a program to test buses regularly to make sure they're running as clean in their last year of service as they are in their first. This program started in 2007. Each bus is tested three times a year using a Remote Sensing Device (RSD). Buses are driven at a predefined speed past a sensor that shines an infrared and ultraviolet light into its exhaust. Different compounds absorb different wavelengths of light; the device analyzes the wavelengths of light that pass through the exhaust and uses that to identify the exhaust's contents. This process provides tracking of more types of emissions, and more accurately, than equipment built into the buses themselves.

A bus is driven past the Remote Sensing Device for emissions testing. A transmitter mounted on the right shines infrared and ultraviolet light through the bus exhaust. The light bounces off a mirror on the left and back to a sensor on the right.

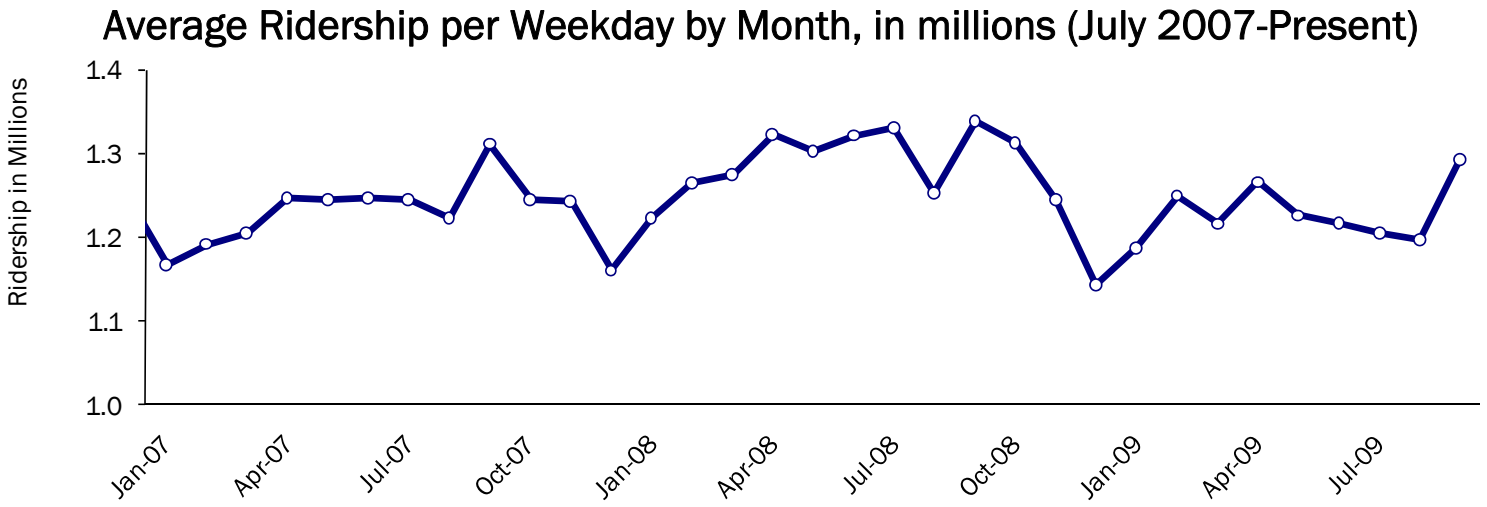
This technology is efficient enough that the MBTA can exceed requirements by testing each bus three times a year. Using this technology the MBTA is also able to exceed state regulations by testing for four different kinds of emissions:

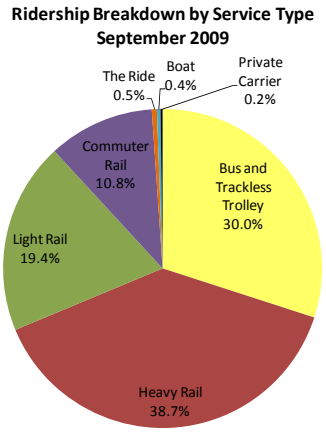
- Particulate Matter (PM)
- Oxides of Nitrogen (NOx)
- Hydrocarbons (HC)
- Carbon Monoxide (CO)

If a bus's exhaust is outside the accepted range of any of these emissions, the bus is immediately pulled from service and is not run again until the problem is fixed. Correct emission levels have been kept by following the manufacturers maintenance schedules:

Percentage of buses that passed emissions testing				
5/19/09-9/10/09				
Emission	CNG buses	Diesel buses	ECD buses	**Total**
PM	100.0%	100.0%	100.0%	**100.0%**
NOx	96.6%	99.1%	100.0%	**98.6%**
HC	96.6%	100.0%	99.7%	**98.6%**
CO	100.0%	100.0%	100.0%	**100.0%**

RIDERSHIP REPORT





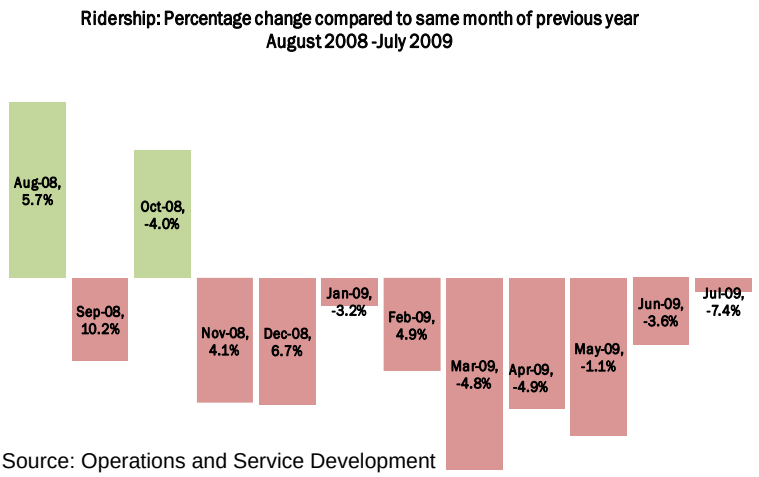
Increasing ridership is always a goal at the MBTA. There are many factors that impact ridership, including the economy, gas prices, and quality of service. In the summer and fall of 2008, a spike in gas prices caused a similar spike in ridership as more people looked to save money by riding the T. In 2009 the economic slowdown meant people were taking fewer trips for work or shopping, and ridership declined slightly.

Ridership measures the average number of trips taken on MBTA services each weekday. It represents "unlinked trips," the most common way to measure transit ridership, which counts every time any customer boards an MBTA vehicle. For example if a customer takes the bus to Harvard Square and transfers to the Red Line there to go downtown, that would count as two unlinked trips, one on a bus and one on heavy rail.

Bus and subway ridership is estimated based on CharlieCard or CharlieTicket or cash transactions on MBTA fareboxes and faregates. A certain percent is then added to account for people who ride without interacting with that equipment (like those who transfer within downtown subway stations, those who show their passes to an inspector, or children). That percentage is calculated based on periodic studies and ridership counts conducted in-person. Currently, not every farebox is emptied and scanned each day, so even though ridership information is collected electronically it's not immediately available at the end of the month. However, the MBTA's goal is to have daily counts available from the Automated Fare Collection (AFC) system in the future.

Before the MBTA finished installing its new Automated Fare Collection system in January 2007, bus and subway ridership were based on pass sales and the money and tokens collected from fareboxes and turnstiles. Less data was collected and it was not always easy to assign numbers to one month or the next, so the data collected after January 2007 is more precise than the data collected before it.

Commuter rail and boat ridership is from counts made of every trip by the Conductor and the ferry operator, respectively. Paratransit ridership (THE RIDE) is based on the service's reservation and scheduling system.



Source: Operations and Service Development

RIDERSHIP REPORT

Derivation of Average Weekday Ridership, Sept. 2009 Data

Bus and Trackless Trolley:

Transactions from fareboxes and faregates	346,076
Allocate shared gate entries (South Station) (from survey)	3,062
Children, Evasion, Rear Door, Flash Passes:	
- Farebox transactions (add 9.8%)	33,632
- Faregate transactions (add 3.7%)	220
Ungated transfers at South Station (from survey)	4,060
Total Unlinked Passenger Trips	**387,051**

Heavy Rail (Red, Orange, Blue)

Transactions from faregates	386,570
Allocate shared gate entries (Park Street, etc.) (from survey)	-4,353
Children, Evasion (add 3.7%)	14,142
Ungated transfers (from survey)	104,044
Total Unlinked Passenger Trips	**500,403**

Light Rail (Green, Mattapan)

Transactions from fareboxes and faregates	145,199
Allocate shared gate entries (Park Street, etc.) (from survey)	1,290
Children, Evasion, Rear Door, Flash Passes:	
- Faregate transactions (add 3.7%)	3,559
- Farebox transactions (add 33.0%)	16,603
Ungated Transfers (from survey)	84,271
Total Unlinked Passenger Trips	**250,922**

THE RIDE	**6,690**
Commuter Rail	**139,087**
Water Transportation	**4,755**
Private Carrier Bus	**2,521**

ALL MODES

Total Unlinked Passenger Trips per Weekday	**1,291,428**

ON-TIME PERFORMANCE REPORT

On-time performance measures how closely the service ran to the schedule, as experienced by the customer. Many factors affect on-time performance. Some, like mechanical problems or speed restrictions, are within the MBTA's control. Others, like medical emergencies and delayed freight trains blocking commuter rail traffic, are not. Regardless of the cause the MBTA strives to work around problems, minimize delay, and maximize on-time performance.

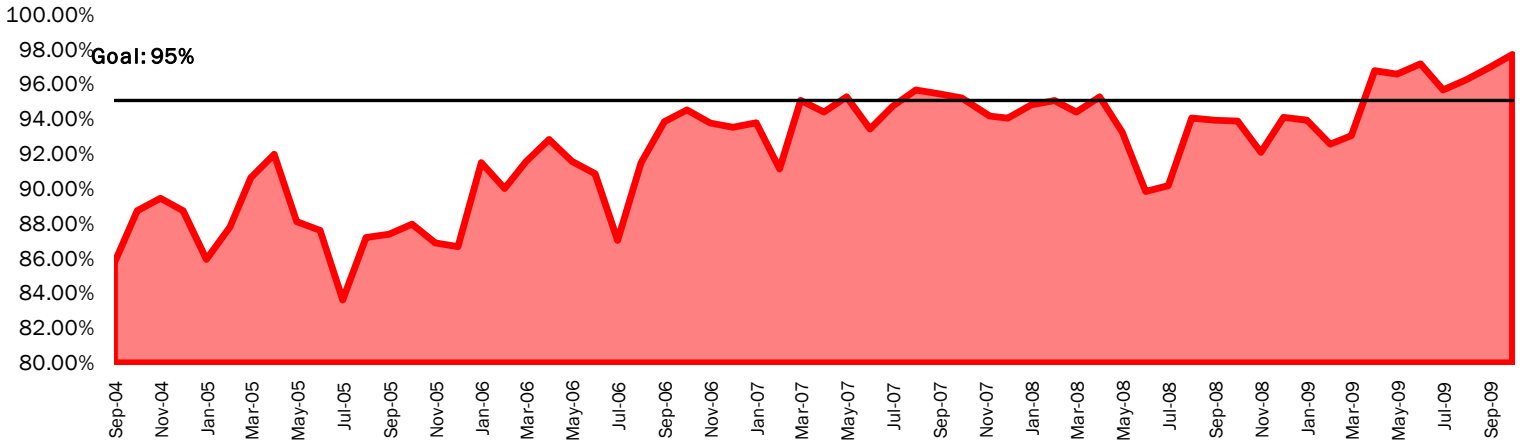
The MBTA *Service Delivery Policy* defines how on-time performance is measured and what the goals are. To keep the measurement an accurate representation of customer experience, it works differently for different modes of travel.

Subway

On the subway system customers walk up to the platform and wait for the next train. They don't know when exactly the trips are scheduled, only that service runs every so many minutes. So the subway on-time performance standard is all about the wait between trains. On heavy rail lines the actual time between trains starting their trips must be within 150% of the scheduled time between trips. For example, if in the peak a trip on the Blue Line is scheduled to leave 4 minutes after the prior trip, and it starts more than 2 minutes late, that results in a gap between trains of more than 6 minutes, over 150% of the scheduled 4-minute interval; the trip would not be considered to be on time. The MBTA's goal is for at least 95% of trips to be on time on each line. Data is recorded by track circuits and the control center computer system.

This month the historical on-time performance data shown in the graphs has changed slightly. This is because the MBTA has improved its on-time performance calculation method to account for certain conditions more accurately, and applied it retroactively to old data. The net changes vary by line between 0.3% and 1.3%.

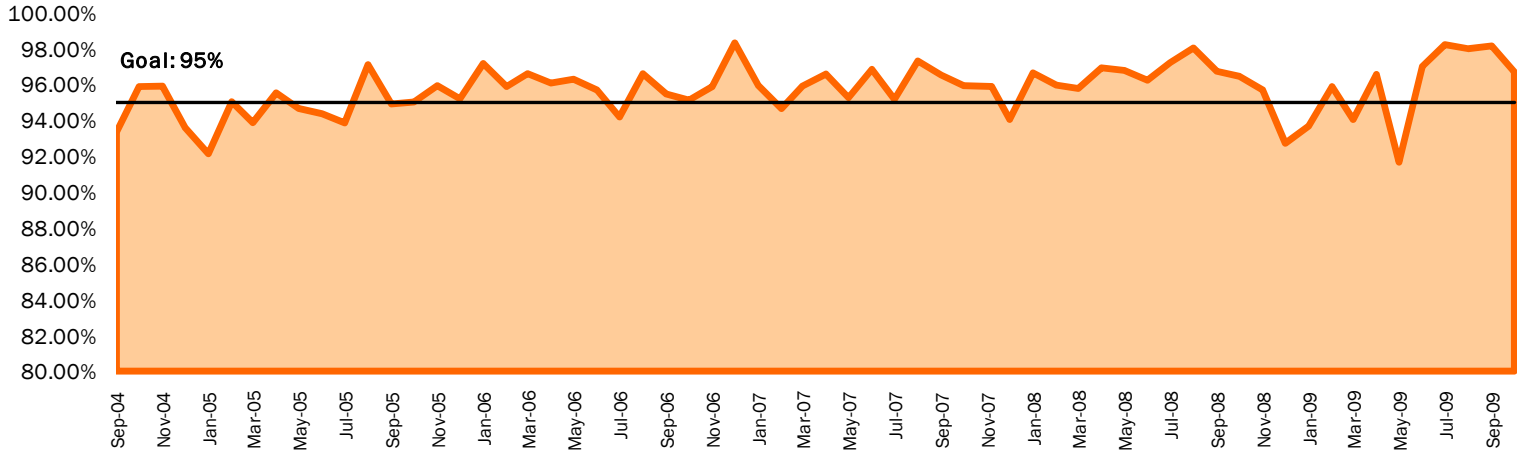
Red Line



The Red Line has seen substantial improvements over the past 5 years, from an average of 86% in September 2004 to 98% in August 2009. This was the result of a concentrated effort to improve the service, which included track infrastructure improvements to reduce speed restrictions, a schedule change and the creation of a standby train to fill gaps as needed, and maintenance improvements.

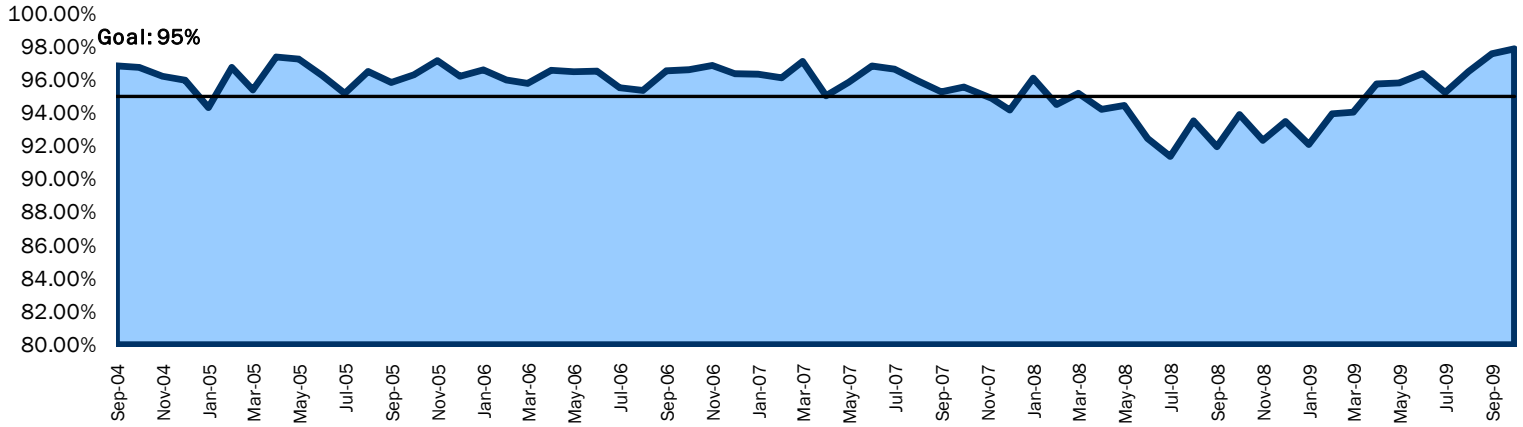
ON-TIME PERFORMANCE REPORT

Orange Line



Orange Line performance has held strong for years, owing to good train maintenance, track maintenance, and signal upgrades. The line experiences only the occasional dip in performance, most recently in May 2009, when for part of the month operational procedures on the line changed while a signal problem was repaired.

Blue Line



The Blue Line's on-time performance has been mostly steady with lower numbers recorded in early 2008. Part of this is actually a data problem. The introduction of 6-car trains led to some departure times being captured incorrectly, which was corrected in March 2009.

Green Line

As a light rail line the Green Line uses a different train-tracking technology than the MBTA's heavy rail lines. Its train tracking system is used for on-time performance reporting, but performing the analysis is most practical on a periodic rather than a monthly basis. The MBTA is in the early stages of a project to replace the vehicle tracking system on the 112-year-old line with cutting edge technology.

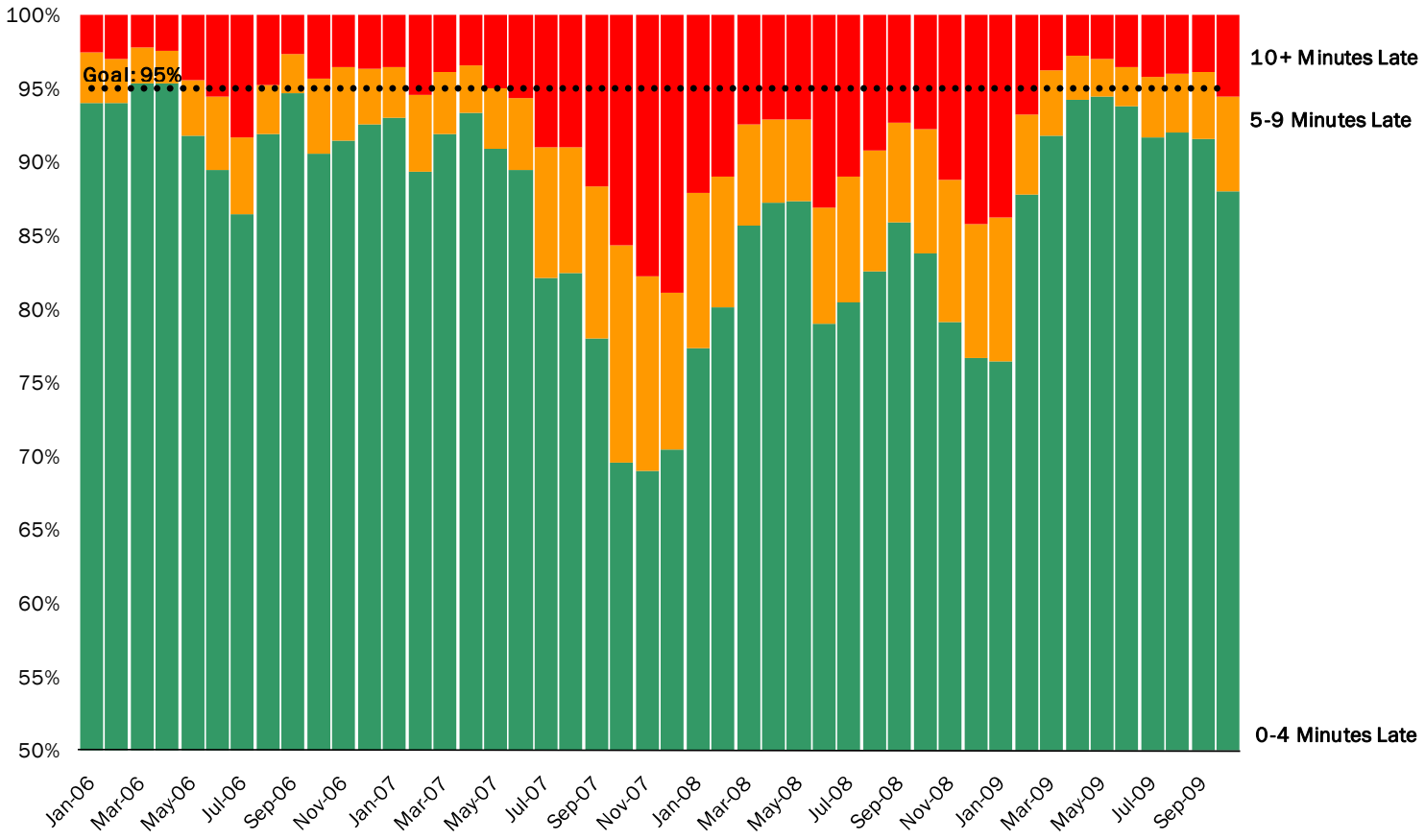
On-time performance data on the line is collected periodically for the biennial Service Plan, a public process to implement schedule changes that improve performance and better match service to the public's needs. When it was evaluated for the 2008 Service Plan, all four branches of the Green Line passed the light rail headway standard that requires 85% of trips to start within 150% of the scheduled interval, but the Green Line did not pass an additional standard that requires 95% of intervals in the central subway to be 3 minutes or less. The Service Plan evaluation resulted in a number of schedule changes to improve performance on the line. More recently, based on ongoing monitoring and analysis, the MBTA added time into the schedule to improve reliability (winter and spring 2009) and added additional service on the E branch to accommodate increased ridership (fall 2009).

ON-TIME PERFORMANCE REPORT

Commuter Rail

Commuter rail customers plan to ride a specific scheduled trip, and are delayed if that trip is late. Commuter rail trips are deemed to be "on time" if they arrive between 0 and 4 minutes after the scheduled time. The MBTA's goal is for at least 95% of trips to be on time on each commuter rail branch. The MBTA also tracks how many trips are between 0 and 9 minutes late, which includes some trips that are not technically "on time" but are still relatively close to schedule. Data is recorded in logs kept by dispatchers.

Commuter Rail On-Time Performance, 2006-Present

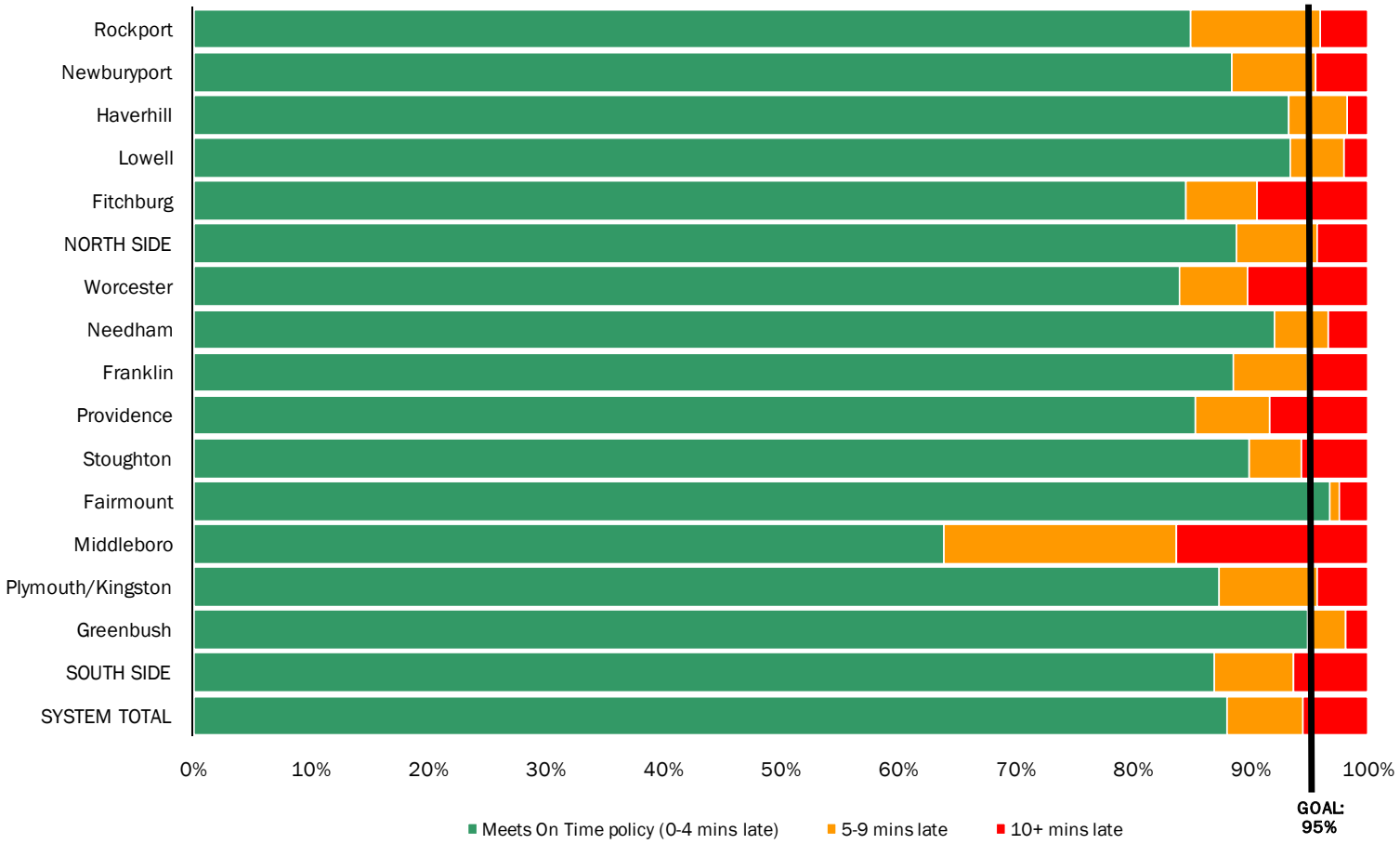


Over the last two years the on-time performance on commuter rail has improved. Improved OTP is the cumulative effect of minor improvements throughout the system. Small problems can have an impact on on-time performance over time as delays can compound across the system. A number of adjustments made recently to improve on-time performance include schedule adjustments on the Fairmont, Haverhill, Worcester, Old Colony and Greenbush lines, taking account of track projects or speed restrictions. By adjusting schedules with regard to track conditions, the commuter rail is better able to meet schedules. The track improvement projects on these lines will help over the long term to reduce speed restrictions and improve schedule adherence.

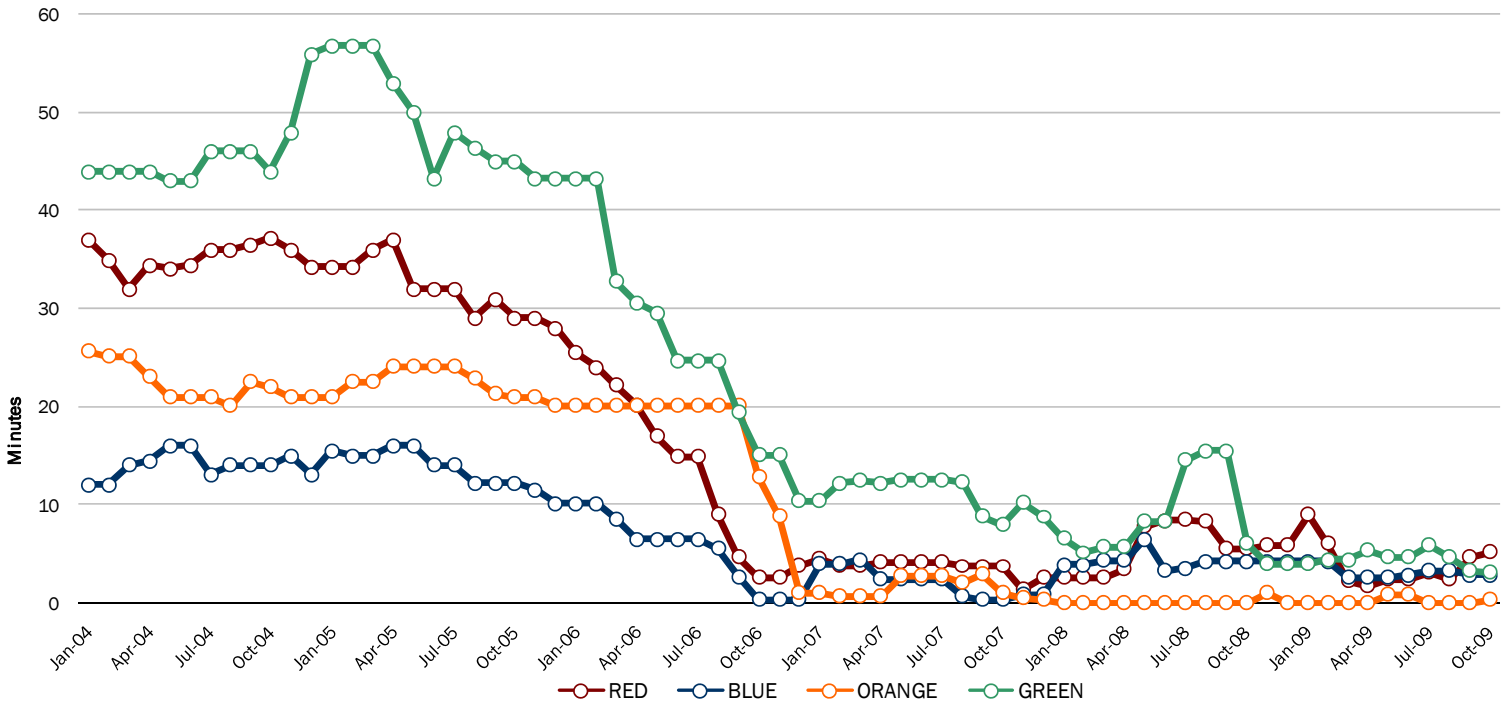
The increase in delays for the month of October is primarily attributable to slippery rail, a seasonal problem; speed restrictions, in particular on the Old Colony lines; and mechanical failures.

ON-TIME PERFORMANCE REPORT

Although the overall OTP has improved, some lines occasionally see a drop in OTP. Some of this is caused during the better weather in the spring and summer when these aforementioned track projects are scheduled. For example, over the last few months the Middleboro Line has seen an increase in speed restrictions due to the deterioration of concrete ties on that line. These ties are to be replaced, but in the interim the OTP has decreased. Also, on the Worcester Line recently, the track owner, CSX has been doing some track and switch replacement work which eventually will improve OTP, but has caused delays as work is completed.



SPEED RESTRICTIONS REPORT



Speed restrictions measure the amount of slowdown caused by track conditions in the MBTA subway system. The condition of the MBTA's tracks is constantly monitored. If a length of track falls below standards in some way – if the rail is worn down, if the ties will need to be replaced soon, if extreme heat has caused the rails to warp slightly or "kink" – then a speed restriction is put in place, and trains are operated at a reduced speed when traveling that section of track until it is repaired. Using speed restrictions where there are track problems ensures safety for our customers. Resolving track problems in a timely manner leads to fewer speed restrictions, which in turn mean faster and more reliable service. The MBTA's goal is to maintain the current low impact of speed restrictions (to fewer than 10.0 minutes for all lines.)

The following example explains how to understand the numbers. If there is a half-mile section of track on the Green Line built for a speed of 30 mph, it will take 1 minute for a train to travel it; if that speed is restricted to 10 mph it will take a train 3 minutes instead of 1, for a travel time impact of 2 minutes. If that were the only speed restriction on the Green Line then the total Green Line impact would be two minutes. Because this is a measure of track condition, it does not matter whether the track is out on one branch or in the middle of the central subway; it counts as 2 minutes whether it affects all the trains or just those traveling on one branch.

Trains don't operate at the maximum speed allowed by track conditions at all times (they slow down to a stop to pick up passengers, for instance) so the real-world impact on travel time may be less than the number represents.

Starting in 2005, when the impact number was 127.5 minutes for all lines (Red 34.2, Blue 15.5, Orange 21.0, Green 56.8) the MBTA focused additional resources on reducing the number of speed restrictions, leading to improvements in speed and reliability on all subway lines.

DROPPED TRIPS REPORT

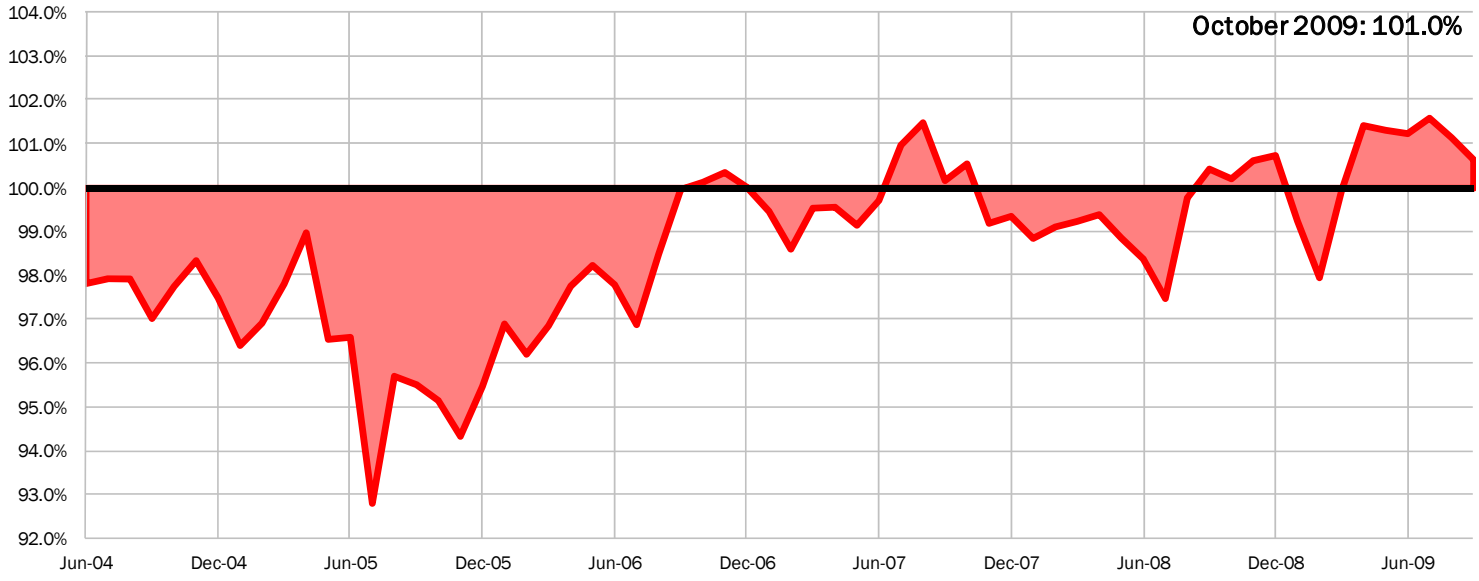
The MBTA strives to come as close as possible to operating every scheduled trip on every day. First the MBTA works to have enough operators, well-maintained vehicles and track, and good schedules. Even with those, however, there are still going to be some times when too many operators call in sick, or vehicles break down, or a track problem or a traffic jam slows down service. To counteract these problems the MBTA keeps a certain number of extra operators and vehicles on standby to fill in trips that would otherwise be prevented from running.

The MBTA has reduced the number of dropped trips considerably over the past few years, by making improvements in each of the underlying causes listed above: having enough operators, having reliable equipment, having good tracks and signals, having good schedules, and having enough standby vehicles. If a trip is missed on a frequent bus route or a subway line the MBTA will spread out other trips on the route to try to fill the gap as much as possible. If there's no way to avoid missing a trip on an infrequent route the MBTA will notify as many customers as it can by posting the information on its website, notifying staff at the customer support hotline, and sending a T-Alert email and text message to affected customers who subscribe to that service.

Subway

On the subway system it's possible to have a standby train on every line, and even use it to provide extra service when it's not needed to fill in a gap. Because of this subway lines sometimes end up operating even more trips than were actually scheduled.

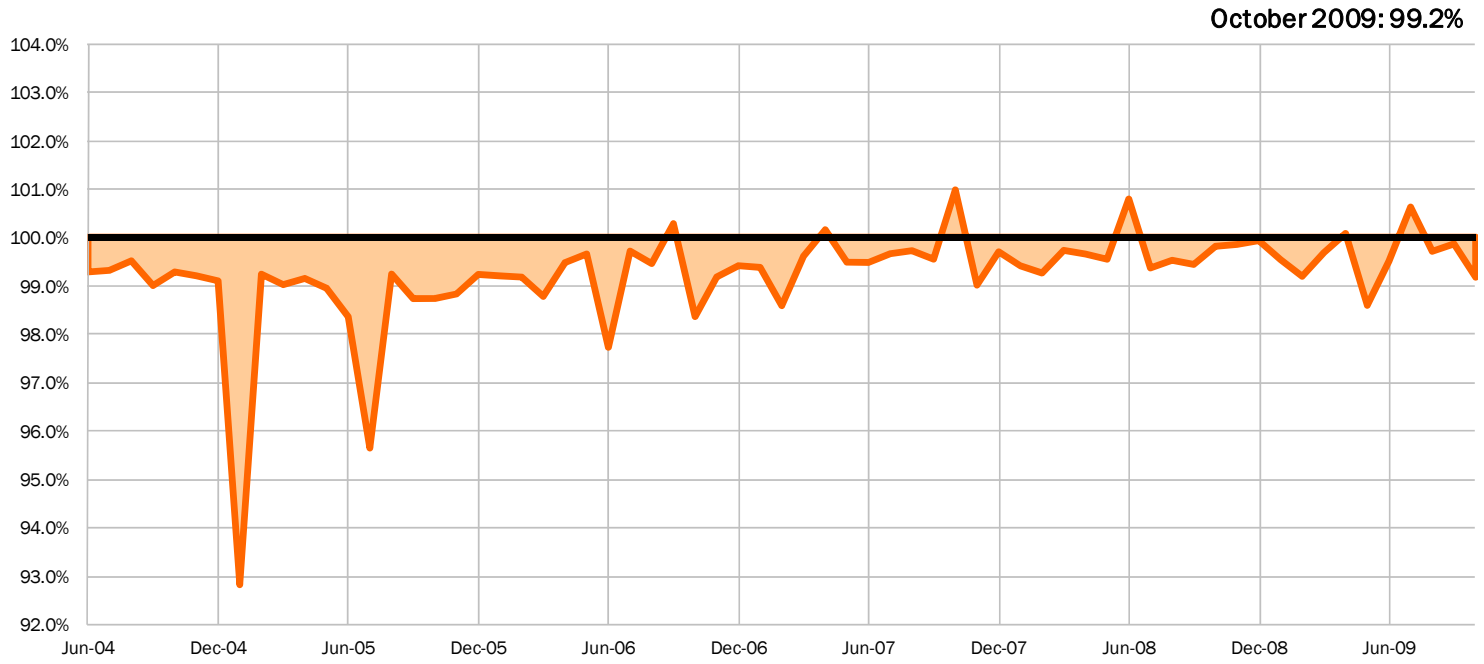
Red Line



Starting in 2006 the MBTA made a concentrated effort to reduce the number of missed trips on the Red Line. Steps taken include improvements to track condition and mechanical reliability; better use of existing personnel to perform extra work when needed, including the use of Inspectors to operate trains when no Operators are available; and two standby trains, one added in late 2006 and another added in early 2009. As a result the Red Line has gone from a low of about 95% of scheduled trips being operated in late 2005 to a high of about 101% of scheduled trips being operated in mid 2009.

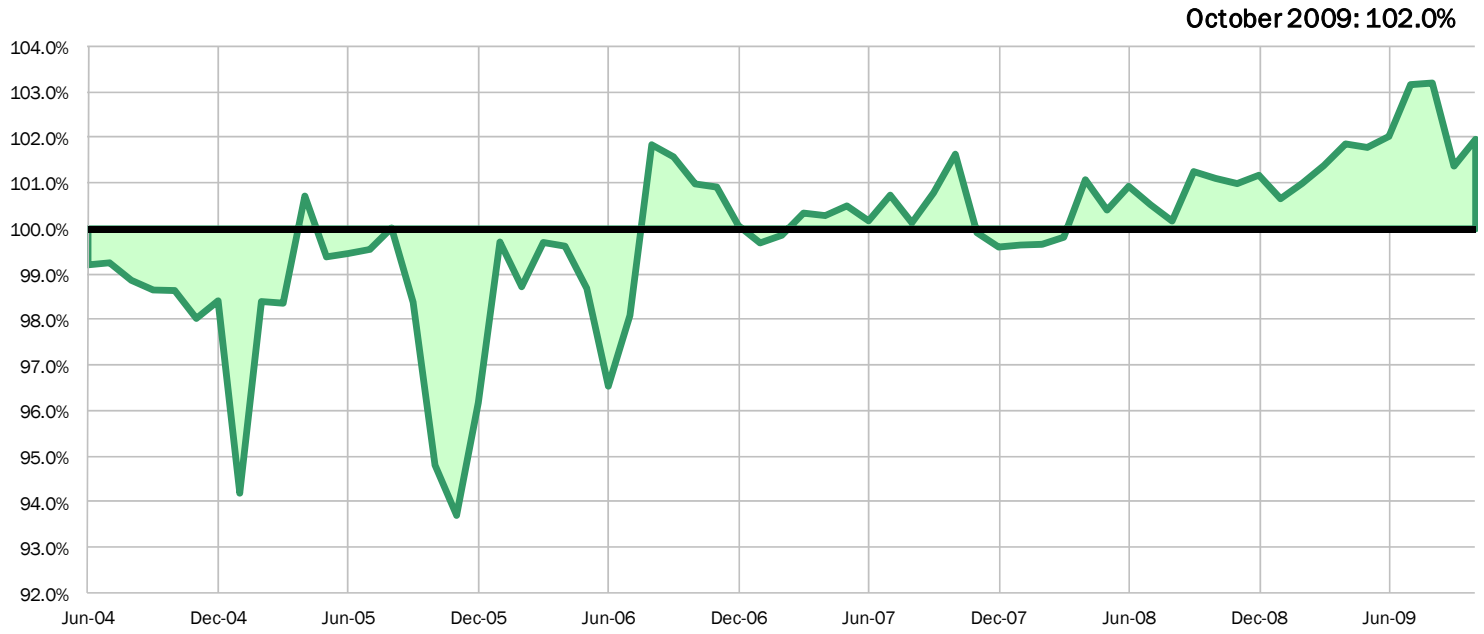
DROPPED TRIPS REPORT

Orange Line



The Orange Line has gradually increased the number of scheduled trips run, due in large part to improved maintenance.

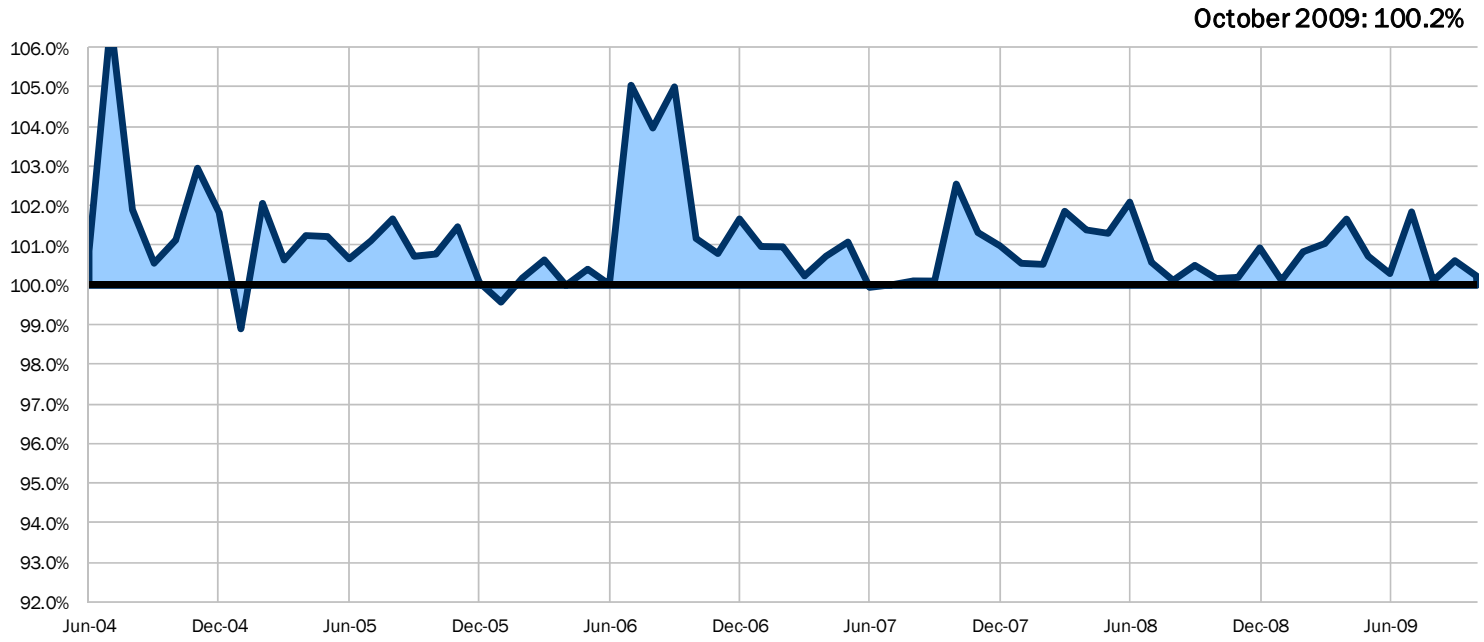
Green Line



The Green Line has increased the percentage of scheduled trips that are operated and now most often runs more, rather than fewer, than the number of scheduled trips. This was done through an improvement in vehicle reliability, particularly with improvements to the low-floor accessible "Type 8" trolleys, and the addition of standby trains.

DROPPED TRIPS REPORT

Blue Line



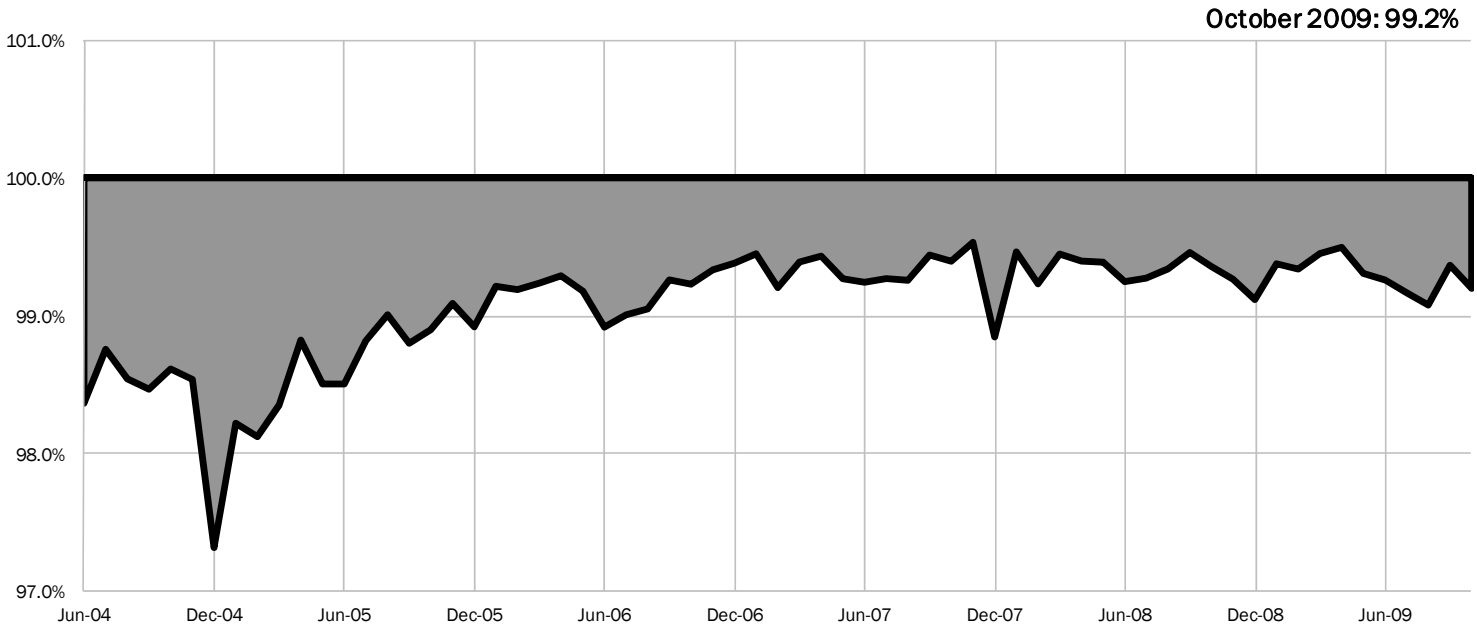
The Blue Line has long used standby trains to provide extra service where possible, and usually operates more than the scheduled number of trips.

Bus

The strategy to minimize dropped trips is slightly different for bus than it is for subway. It is not possible to have a bus on standby on each of 200 bus routes, so standby buses are distributed strategically throughout the service area so they can get in position on one of many routes quickly. To keep them available for many routes they are not routinely used to provide extra service.

Even then it is not always possible to fill every gap. When it's not possible to operate every trip, Bus Operations works to minimize the impact to customers. If one route runs every 5 minutes and one route runs every hour, then missing a trip on the frequent route will have less of an impact than dropping a trip on the hourly route, so they will sometimes borrow a bus from a frequent route to cover a trip on an infrequent one. If a subway disruption makes it necessary to run an unscheduled shuttle with buses, Operations will mobilize many operators and buses as quickly as it can, including those on standby, those scheduled to go back to the garage for the night, and some of those on the most frequent bus routes.

DROPPED TRIPS REPORT

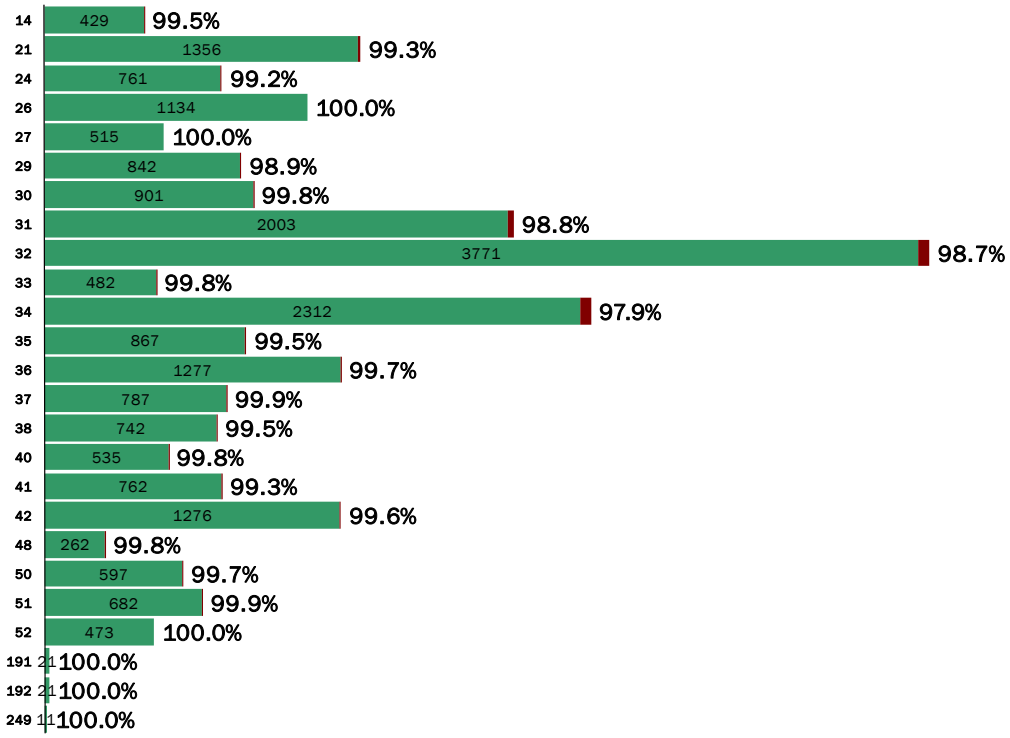


The percentage of bus trips operated has improved substantially from January 2005 through December 2008 and held fairly steady since. Increasing staffing to sufficient levels was a major contributing factor that also led to lower overtime costs.

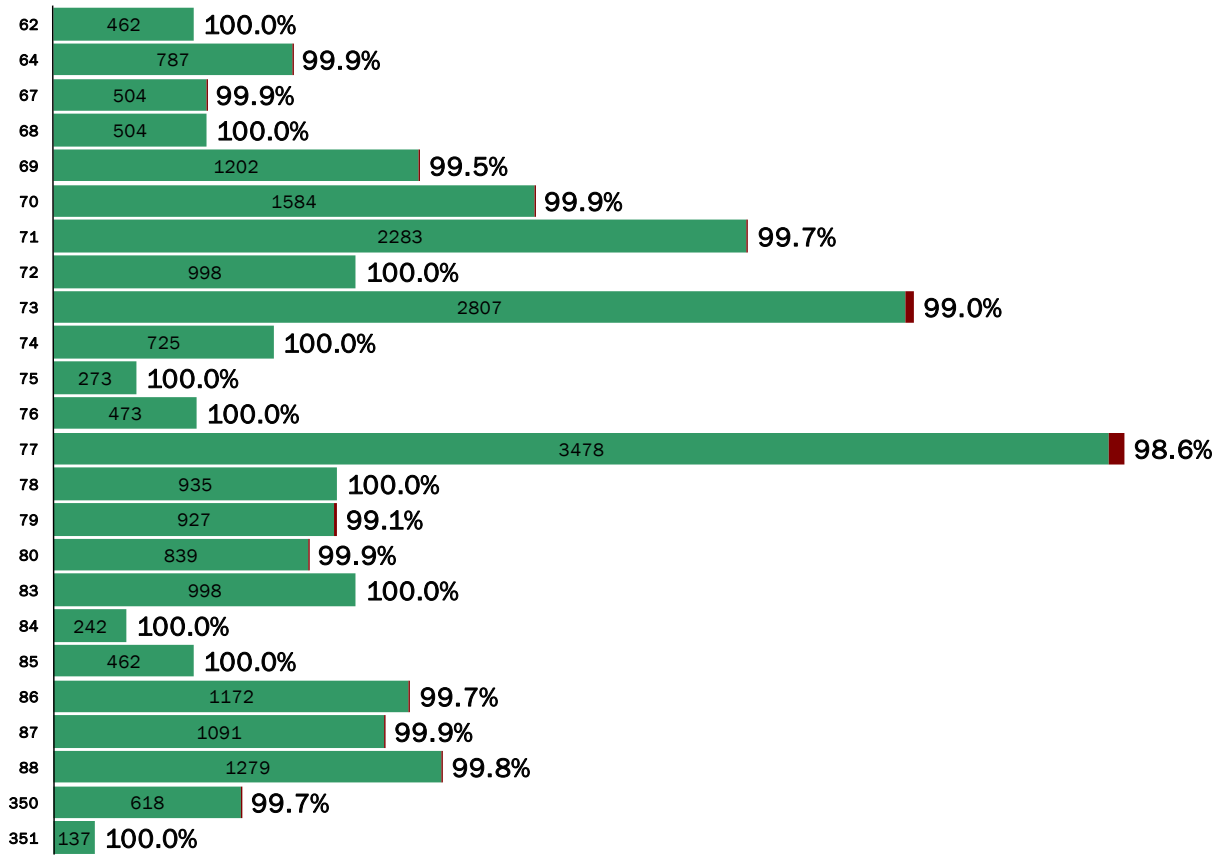
The following pages show percentages of bus round trips run by route in August 2009. Routes are organized by "district;" each district consists of one or two bus garages and covers a particular region. Each bar reflects the number of scheduled trip by route. The green portion of each bar reflects the number of trips run while the red section reflects trips dropped. At the end of each bar is the percentage of trips run.

DROPPED TRIPS REPORT

Arborway

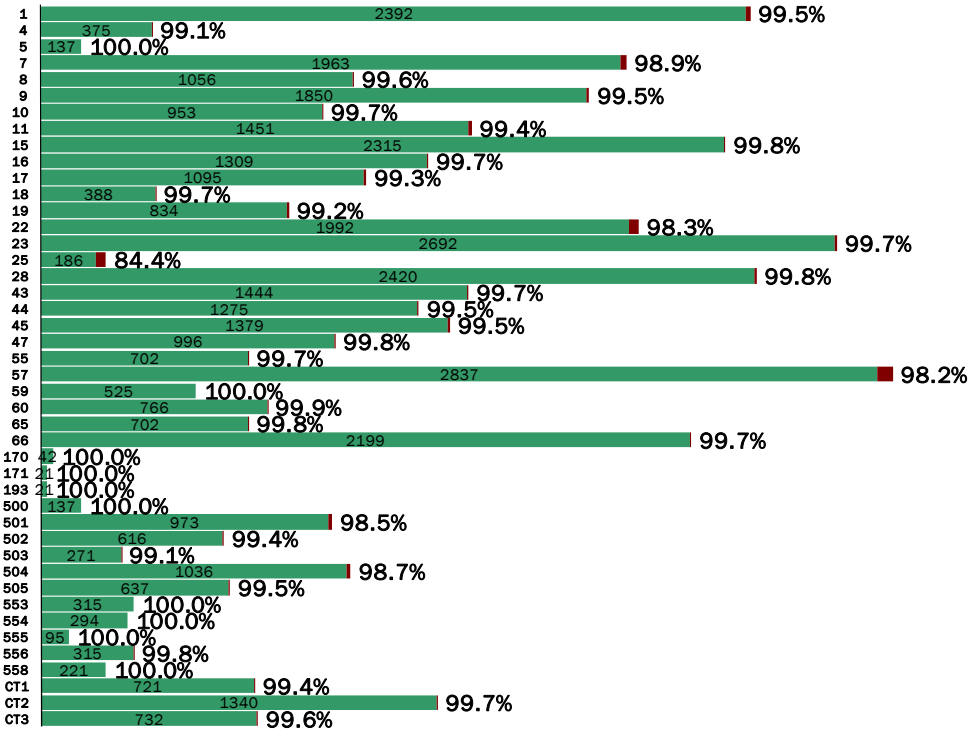


Bennett

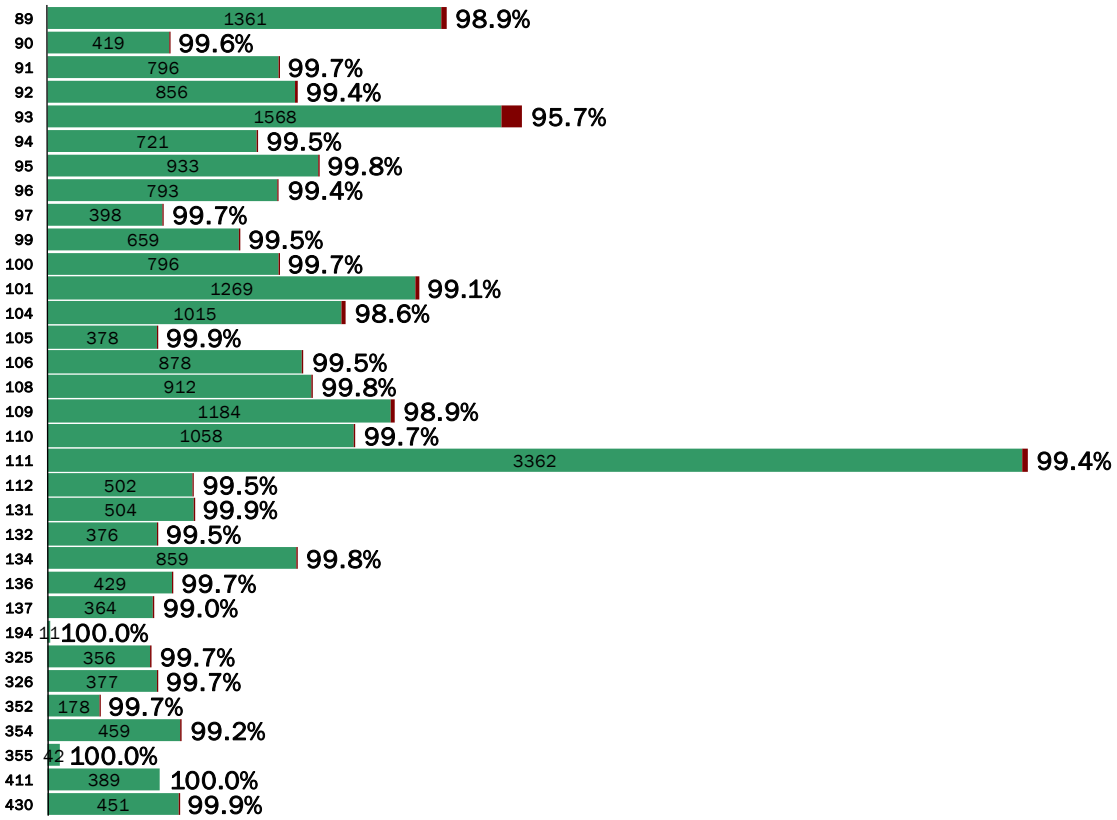


DROPPED TRIPS REPORT

Cabot

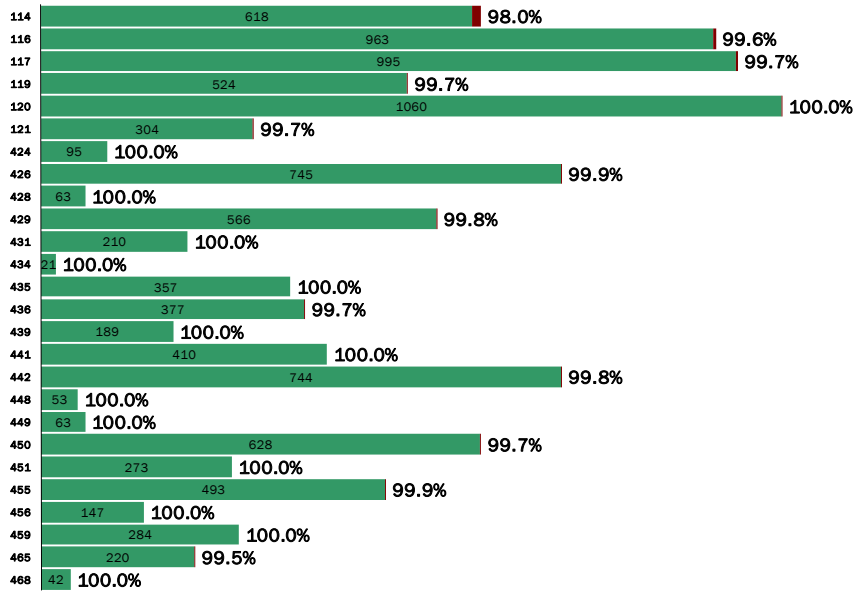


Charlestown

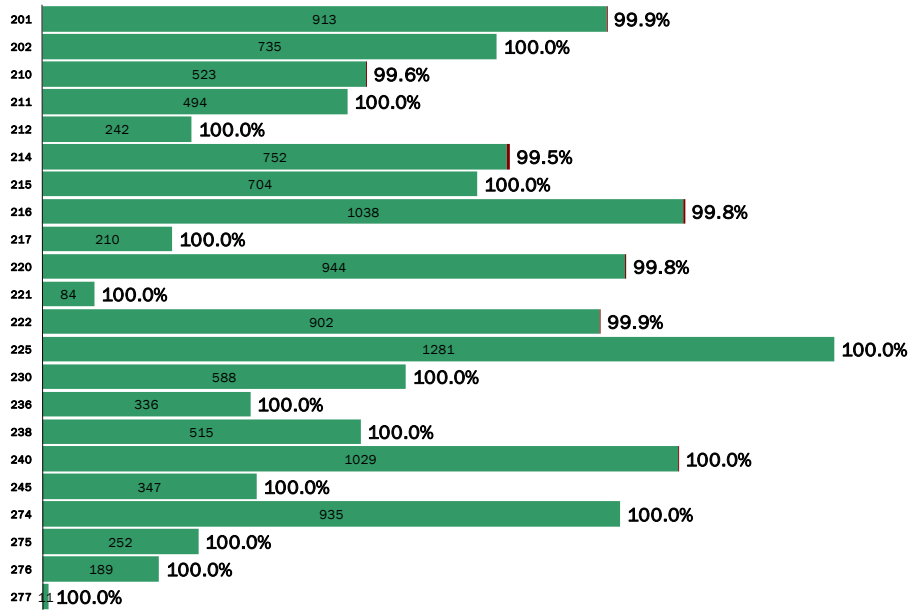


DROPPED TRIPS REPORT

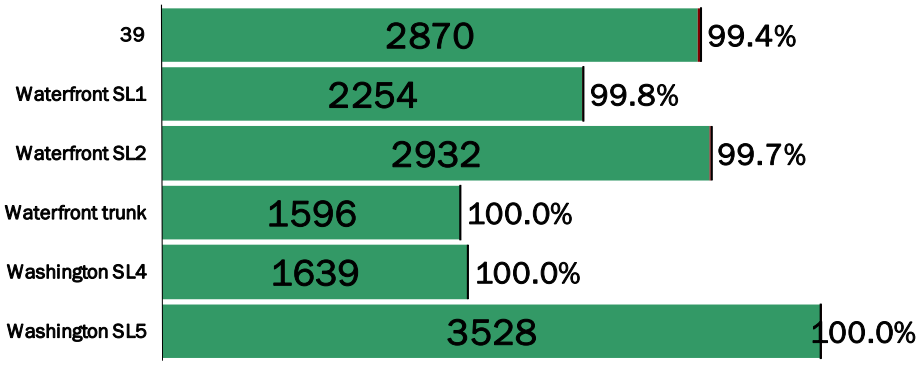
Lynn



Quincy



Southampton

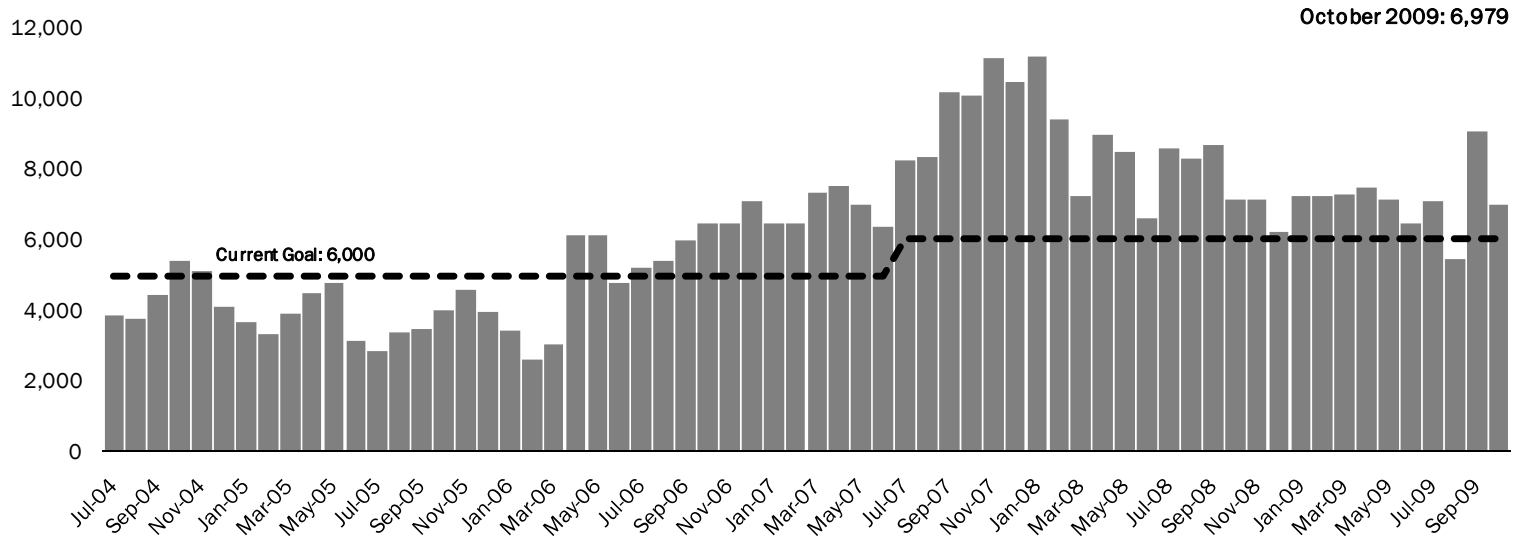


VEHICLE RELIABILITY REPORT

Mean Miles Between Failures (MMBF) is an industry-standard measurement of vehicle reliability. It measures the average number of miles a vehicle travels between breakdowns. If one vehicle travels 5,000 miles in a month, and breaks down twice during that time, that vehicle has an MMBF of 2,500. Higher numbers are better. The values can fluctuate greatly from month to month because just one or two failures will make a big difference when the total number of failures is already low.

High MMBF is achieved through ongoing vehicle maintenance, which includes everything from oil changes to major midlife overhauls, and by periodically buying new vehicles to replace old ones as they reach the end of their useful life. The vehicle maintenance team constantly analyzes trends and works to engineer solutions to mechanical problems to keep all vehicles running as reliably as possible.

Bus



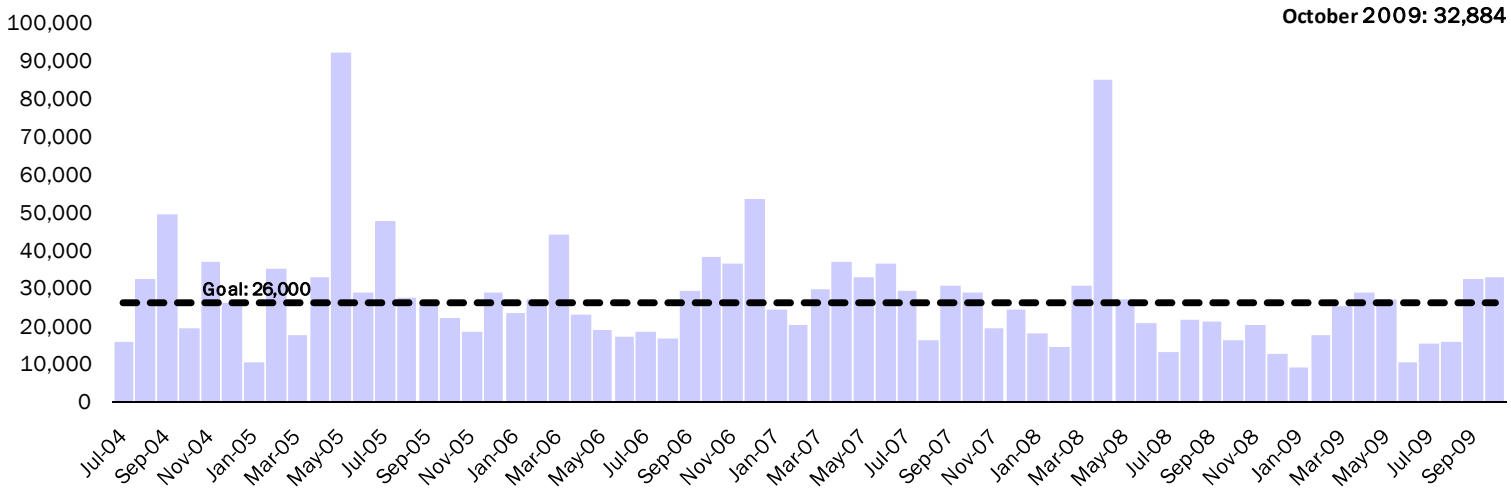
In July 2007 the MBTA adopted a more aggressive goal for MMBF reflecting the replacement of many older buses with newer ones and a general improvement in reliability. Since then the MBTA has exceeded its goal most months.

The methodology used for calculating bus MMBF was changed in April 2006 to only include failures that resulted in a customer impact (i.e. failing to run a trip.) If an engine overheated and a bus had to be taken out of service, that would count as a failure. If the wheelchair ramp's motor stopped working and the operator had to operate the ramp by hand, that would not.

The MBTA has begun the mid-life overhaul of 298 CNG-powered buses to keep them in peak operating condition for the second half of their life. Since entering service in 2003 these buses have operated a total of over 40 million miles, or a little under half of the distance between the earth and the sun. This rehabilitation includes overhauls of the engine, transmission, fuel system, air conditioning, axles, suspension and brakes; as well as bodywork, electrical work, and painting.

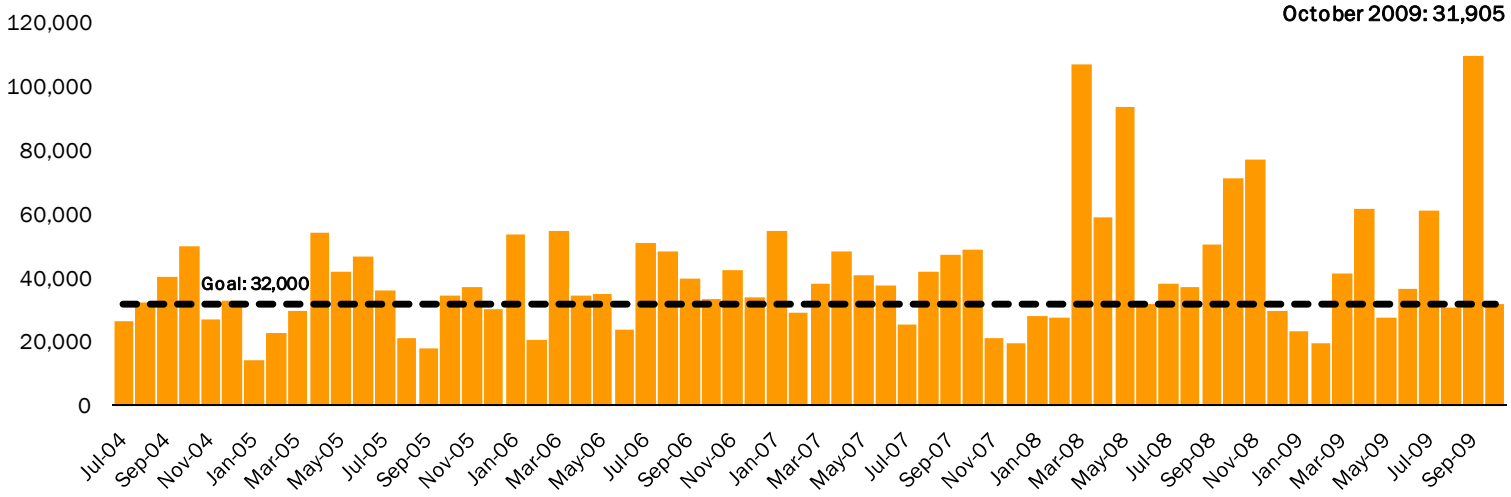
VEHICLE RELIABILITY REPORT

Blue Line



The Blue Line is in the midst of phasing out 30-year-old trains with brand new ones, enabling six-car-long trains for the first time in the Blue Line's history. In the long run this will improve Blue Line reliability, but in the short term while the bugs are worked out of the new trains there may be periods when the new trains do not perform as reliably as the old ones. No matter how much testing is done on trains under simulated conditions, operating them in revenue service for over 100 miles every day will tax the trains more and reveal problems that had been missed. The MBTA and the vendor are working together to identify trends and make modifications to improve reliability.

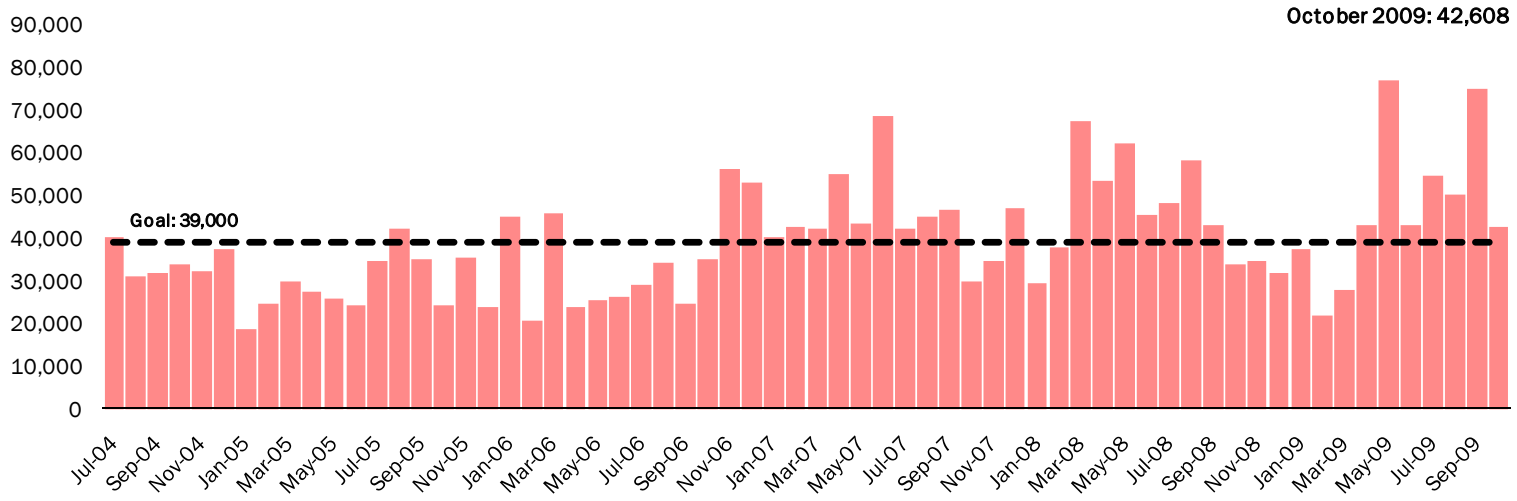
Orange Line



Orange Line trains are about 30 years old, and are kept running reliably through pro-active and attentive maintenance. The highly skilled and knowledgeable maintenance staff is able to meet MMBF requirements by following the historical and effective maintenance programs. New trains are anticipated to replace the current fleet in 2015.

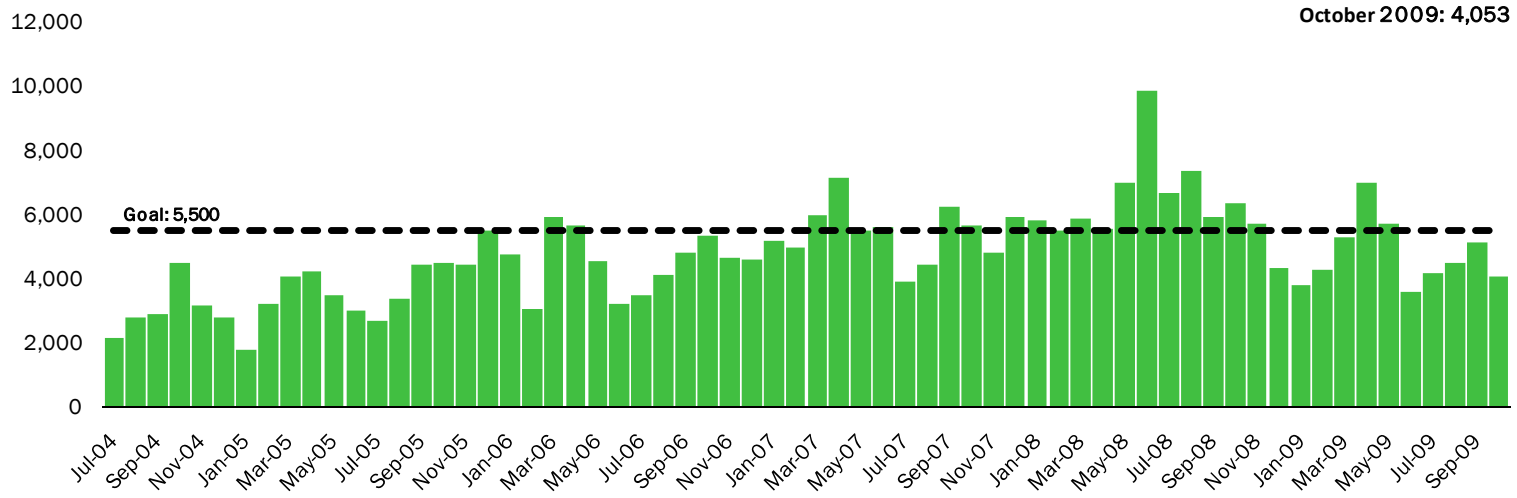
VEHICLE RELIABILITY REPORT

Red Line



Red Line trains are between 15 and 40 years old, and are kept running reliably through pro-active and attentive maintenance. New trains to replace part of the fleet are anticipated to enter service in 2018. Staff is increasingly shifting attention to preventive maintenance (as opposed to corrective maintenance to address problems that have occurred). Current initiatives include an overhaul project for the "#2 cars," which will restore a number of vital system components to as-new condition. Planned overhauls of selected components of the #1 cars and #3 cars are expected to greatly improve their reliability as well. With the planned maintenance improvements, programs and procedures, MMBF on the Red Line should continue to improve.

Green Line

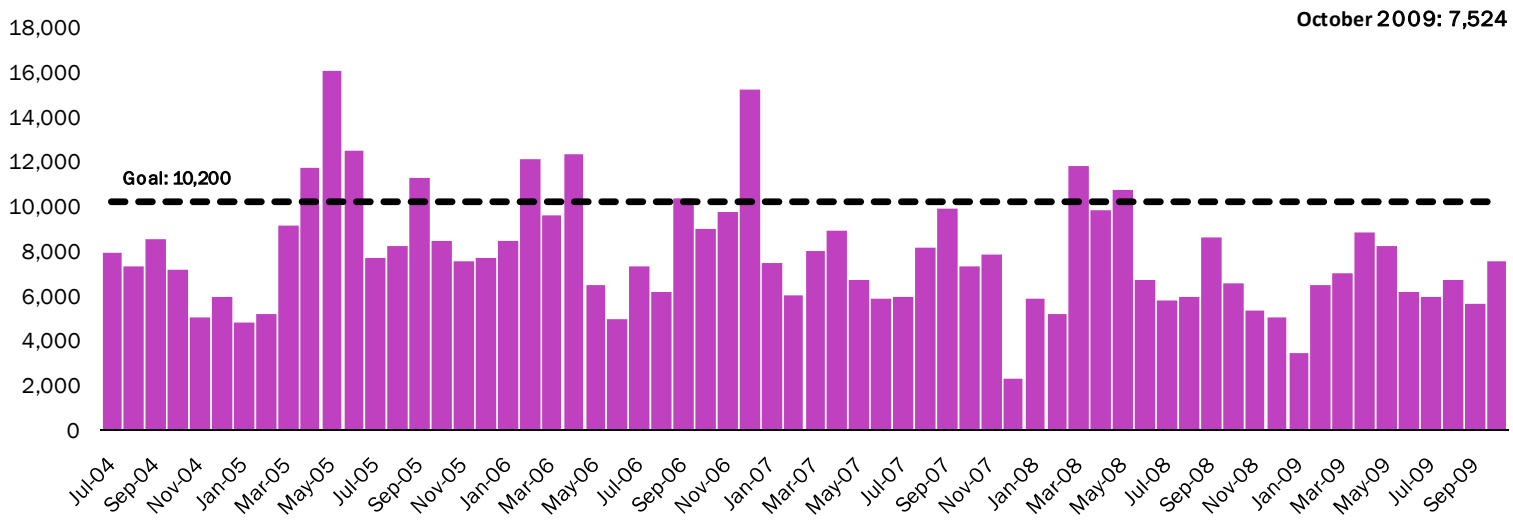


Green Line trolleys range in age from just a couple years old to 25 years old. New trolleys are anticipated to increase the fleet size in late 2014 in order to support the planned Somerville / Medford extension of the Green Line. The MBTA anticipates replacing part of the existing Green Line fleet in late 2019. The low-floor accessible "Type 8" trolleys had a number of reliability problems when they first entered service, which led to a decrease in overall Green Line MMBF. In December 2005 the MBTA reached an agreement with the manufacturer that included reengineering problem areas to improve reliability. As the improvements were implemented they led to an increase in reliability, and the Green Line is now more reliable than before the Type 8 trolleys were introduced.

VEHICLE RELIABILITY REPORT

MMBF on the Green Line is projected to improve in 2010 through several projects: the overhaul of selected systems on the older "Type 7" trolleys in mid 2010; preventive maintenance upgrades to air compressor and brake system on the Type 8 trolleys; and improvements to the effectiveness and efficiency of the Green Line workforce for routine corrective and preventive maintenance activities. All issues that delay or interrupt service on any line are thoroughly investigated by managers and engineers in order to identify and implement the best solutions.

Commuter Rail



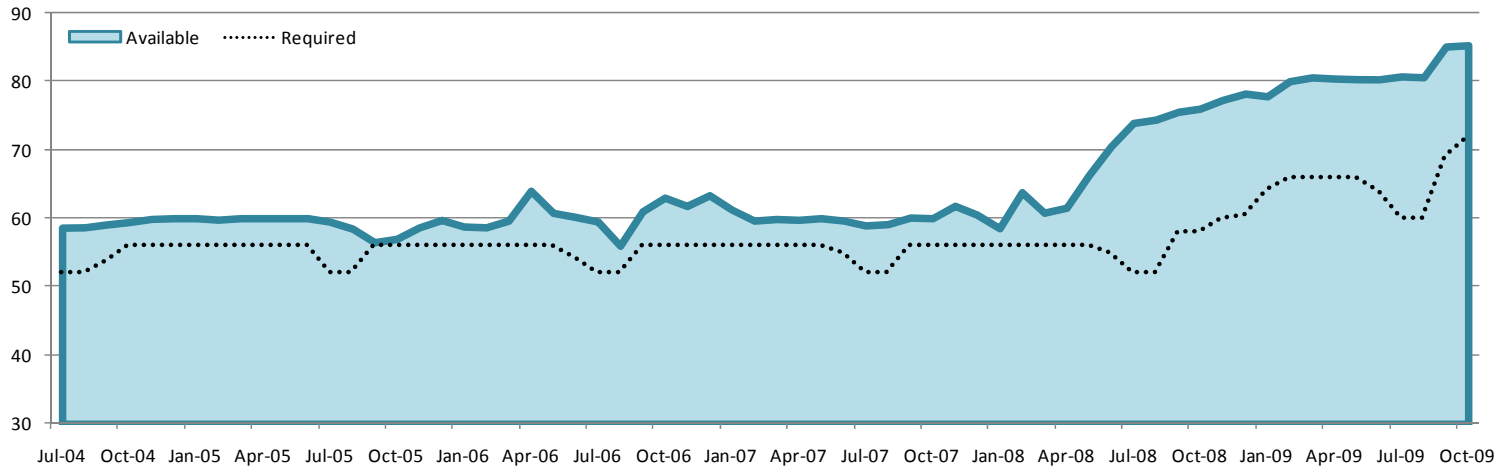
The Commuter Rail Fleet is comprised of eighty locomotives ranging in age from 6 to 30 years, as well as four hundred and ten coaches. New locomotives to replace part of the fleet are scheduled to enter service in 2014. Locomotive maintenance requires preventative maintenance, corrective maintenance, mid-life overhauls, and engine overhauls. There is currently an ongoing engine overhaul of twenty-five locomotives. Railroad Operations is currently reviewing the maintenance practices of the Massachusetts Bay Commuter Railroad Company (MBCR), who operates Commuter Rail service for the MBTA under contract. Strict adherence to all manufacturer-recommended maintenance practices, policies, and procedures will improve the reliability of the locomotive fleet.

VEHICLE AVAILABILITY REPORT

Every day, vehicle maintenance works to have enough buses and trains available for operators to run all the service that's scheduled to operate. A vehicle might not be available if it has a mechanical problem or if it is undergoing routine maintenance. Maintenance work is scheduled carefully to keep enough vehicles available for service.

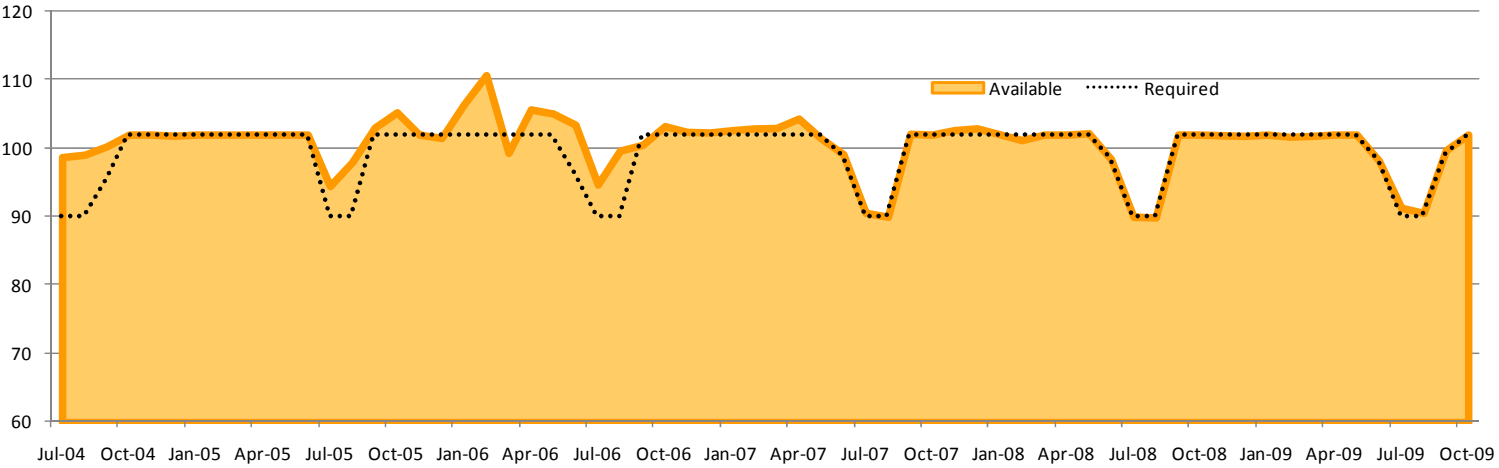
Vehicle availability compares the number of vehicles required to operate at the busiest time of day with the number of vehicles available for service at that time of day. Monthly weekday averages are shown below. The number of vehicles required is typically lower in the summer than the rest of the year, which is visible as "dips" in the vehicle requirements in the graphs. There are fewer peak customers in the summer (due to the school break and vacations) and the MBTA runs slightly less service at that time so it can budget for slightly more service in the rest of the year.

Blue Line



The number of vehicles available and required has increased starting in 2008 as the Blue Line replaces its fleet and transitions from four-car trains to six-car trains.

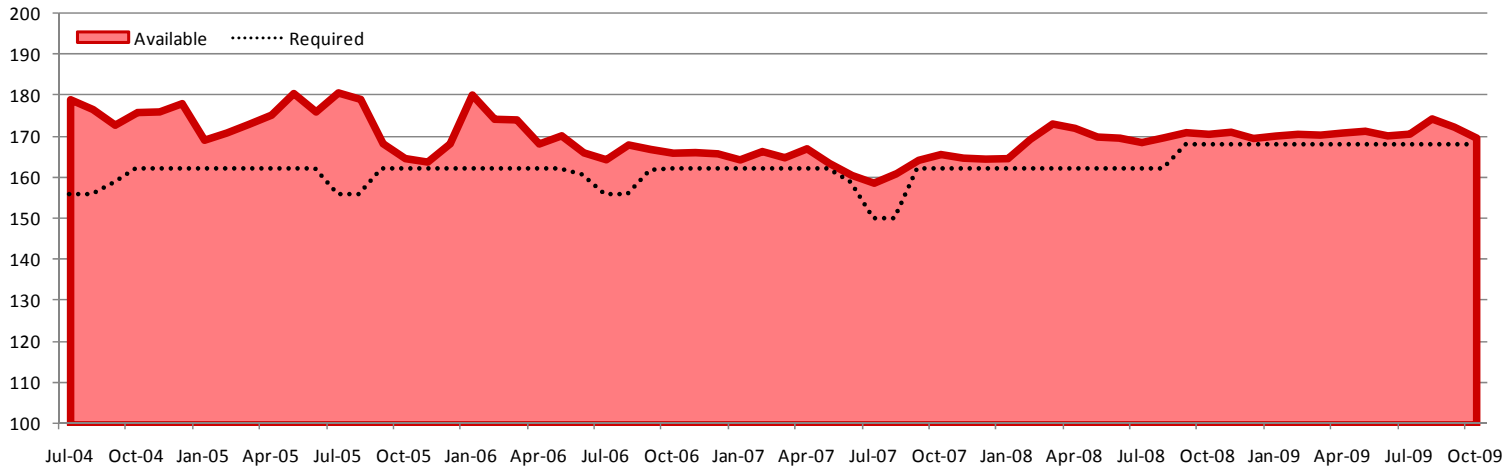
Orange Line



The Orange Line's aggressive maintenance schedule means that there are seldom more trains available for service than required.

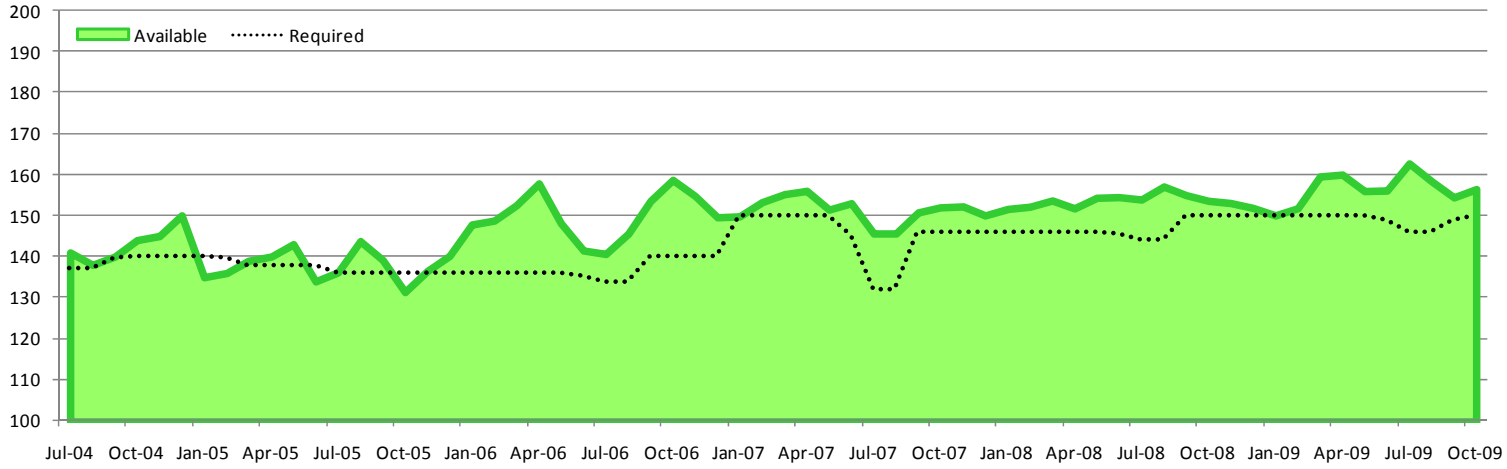
VEHICLE AVAILABILITY REPORT

Red Line



To improve service quality on the Red Line, in 2008 service was increased and service was not reduced during the summer.

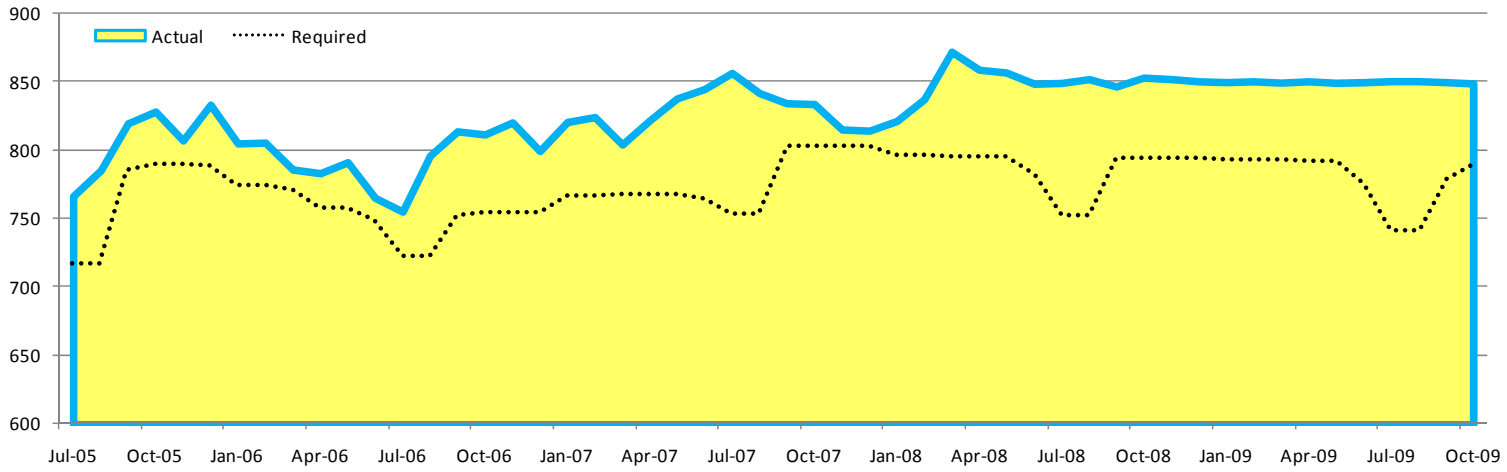
Green Line



The low-floor accessible “Type 8” trolleys had a number of reliability problems when they first entered service, and there were periods in 2005 in which not enough trains were available to run service every day. In December 2005 the MBTA reached an agreement with the manufacturer that included reengineering problem areas to improve reliability, and reliability has improved since. Some of the larger “dips” in vehicle requirements occurred during construction projects when part of a line was operated with bus shuttles; in summer 2007 for example parts of the D branch were shuttled for track reconstruction.

VEHICLE AVAILABILITY REPORT

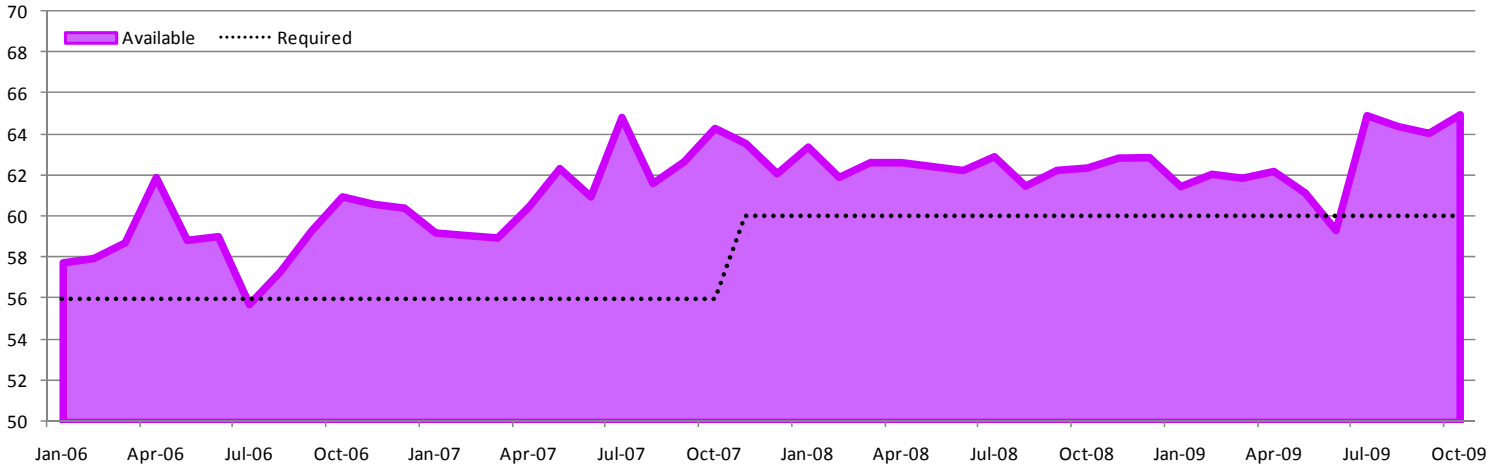
Bus



Besides summer schedule changes, the biggest contributer to changing bus vehicle requirements is shuttles for special projects, like the Lechemere Shuttle during North Station construction in 2005. The purchase of newer vehicles to replace those that were past there useful life has made it easier to have sufficient vehicles available for service.

Trackless Trolleys (buses powered by overhead wire that operate on routes 71, 72 and 73) are included in this chart from September 2007 onwards.

Commuter Rail



The number of locomotives required increased in 2007 when the Greenbush Line opened.