

MBTA - Keolis 2015 Service Improvement Plan

December 31st 2015 Status Report

Introduction

When the MBTA and Keolis entered into the 2015 Service Improvement Plan (SIP) in August, both parties recognized that Keolis' first year of operation had not been as successful as either wanted and that the MBTA's customers deserved better results. Some of the first year failures were clearly attributable to the unusually harsh winter, but on time performance (OTP) had been disappointing. Keolis and the MBTA planned this SIP to significantly enhance passenger experience by establishing a roadmap to improve MBTA commuter rail service.

This report summarizes the results of the 2015 SIP that ended December 31, 2015. It also sets the stage for a new service improvement plan that the MBTA and Keolis are discussing for the remainder of Keolis' second year of operation, February to June 2016.

The individual elements of the 2015 SIP are addressed below. The first four are directly relevant to OTP. Also related to OTP, the refinement of the contract penalty structure is aimed at creating continuing incentives for Keolis to produce better OTP.

While OTP was clearly the focus of the 2015 SIP, it was not the only area in which specific improvements were sought. The remaining areas of focus in the 2015 SIP were the proposed commuter rail schedules that are currently under public review, station amenities, daily equipment and planned life cycle equipment maintenance, winter resiliency, and fare collection.

A continuing focus on OTP will be important if the MBTA is to see desired ridership gains. Given the MBTA's financial needs, fare collection will also be a continuing priority. The new SIP will reflect these areas of emphasis.

August 2015-December 2015 SIP Highlights

- Keolis reported an overall adjusted OTP of 94.61 percent, exceeding its goal of 92% adjusted OTP. Keolis also achieved an adjusted OTP of 93.31% for the peak period.
- Actual OTP is still affected by external factors such as Amtrak signal failures and seasonal conditions such as slippery rail, but this measure also improved – Keolis achieved actual OTP of 90.35% compared to the historic average of 88.5% (2003-1013).
- Though Keolis is now training new staff on a regular basis and there are far fewer “short staffed” trains, getting passengers on and off the trains, especially if they need special assistance, remains a leading cause of delays.
- 40 new locomotives entered into revenue service by the end of 2015
- Residual delays from mechanical failures are still a leading cause of delays. This “ripple” effect is a reflection of the tight scheduling of equipment and service through key chokepoints, particularly in peak hours. One purpose of the new schedules is to reduce this delay ripple effect.

- Keolis has implemented several fare collection initiatives that – along with other factors – have contributed to a revenue increase of 3% over last year.
- Calculating the OTP penalty on a day by day rather than month by month basis seems to have worked as intended, i.e., it provides ongoing incentive to perform.

1. Overall On Time Performance

Goal: The SIP set a goal for total On Time Performance (OTP) “adjusted per the contract” for the five month period of at least 92% with no individual month below 90%. MBTA and Keolis are to hold weekly meetings to track progress and the reasons for OTP changes.

Since the prompt for the SIP was an improvement in Keolis’ performance under the contract, the SIP frequently focused on “adjusted” OTP. That is the metric that is relevant under the contract since it looks only to causes that Keolis can address and does not penalize Keolis for causes such as police actions, MBTA approved construction, medical emergencies, conflicts with freight and intercity trains, etc. However, to the customer waiting for a train this distinction is immaterial. This report therefore includes information on the “actual” OTP, as well as the “adjusted” OTP.

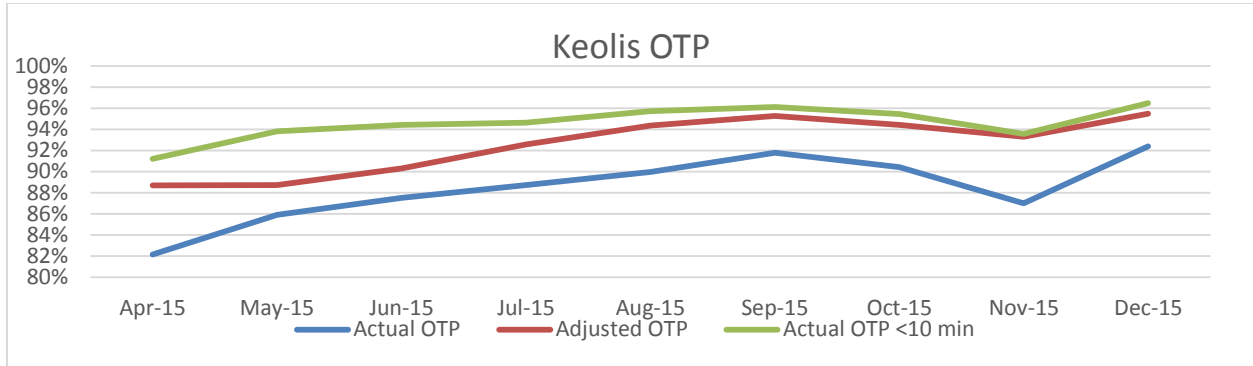
Result: Keolis’ adjusted OTP for the five month SIP period was 94.61%, which exceeds the total OTP goal of 92% adjusted. Only the Worcester line, at 91.96%, was under 92%. Adjusted peak period OTP for the system during the five month period was 93.31%, which also exceeds the goal of 92%. Keolis may be challenged to maintain that level of performance during the winter months, but is prepared to implement the Winter Action Plan that is discussed below in section 8.

| Month | August | September | October | November | December |
|--------------|--------|-----------|---------|----------|----------|
| Adjusted OTP | 94.42% | 95.29% | 94.44% | 93.32% | 95.49% |
| Actual OTP | 89.88% | 91.81% | 90.46% | 87.01% | 92.40% |

Actual OTP (which is what the customer experiences) was 90.35% overall, with the peak period OTP being 88.73%. That difference accorded with the established patterns of “adjustments” that recognize the impact of external causes such as police actions, medical emergencies, delays caused by Amtrak or freight trains using the line, MBTA construction, or seasonal problems such as the “slippery rail” conditions caused by leaves in the autumn. During the SIP the most common causes that prompted an “adjustment” were:

- Pre-Approved MBTA track work (276 events)
- Amtrak intercity conflict (260 events)
- Slippery Rail (256 events)
- Amtrak signal failure (225 events)

These factors are discussed in more detail in Part 2 of this report, but are noted here because they affect customers' experience of the commuter rail system even if Keolis and the MBTA have little (or no) ability to forestall them.



As noted in the 2015 SIP, OTP is the product of many factors, including full staffing, good boarding practices, timely dispatching, functional signal/communication systems, and reliable equipment. Sections of the 2015 SIP addressed several of these factors that had been problematic during the first year of the contract and peak period performance had been significantly lower than the overall OTP rate. The following sections of this report discuss the goal and the progress made with each of those elements.

2. Peak Period OTP:

Goal: The Service Improvement Plan asked Keolis to maintain at least a 90% adjusted peak period OTP on every line every month and set a system wide goal of 92%. The weekly meetings that the MBTA and Keolis hold on OTP have focused on this standard and the impediments to consistently reaching at least 90% adjusted OTP.

Result: On all but three lines the average adjusted OTP in both the AM and PM peak period has been at least 90%. System wide, adjusted peak period performance in August, September, October, and December exceeded the goal of 92% for both AM Peak and PM Peak Periods. Actual OTP also improved: during the 5 month SIP period 8 of the 14 lines had a combined AM/PM peak period actual OTP over 90% and the overall peak period actual OTP was 88.73%.

The lines that have been most problematic in the peak period and that were therefore monitored more closely were Worcester, Franklin and Stoughton. (See Appendices A and B) Those three lines – as well as the Needham and Providence lines – also experienced a high number of events that were not attributable to Keolis, but that had a significant and recurring impact on actual OTP. The Franklin, Stoughton, Needham, and Providence lines were all impacted by the Amtrak Signal failure, a problem that is continuing despite efforts by Amtrak to repair it. Worcester was impacted by the heat-related speed restrictions and by MBTA-approved construction activities. Slippery Rail had a large impact in November, but was not a primary reason when evaluating the full five month period.

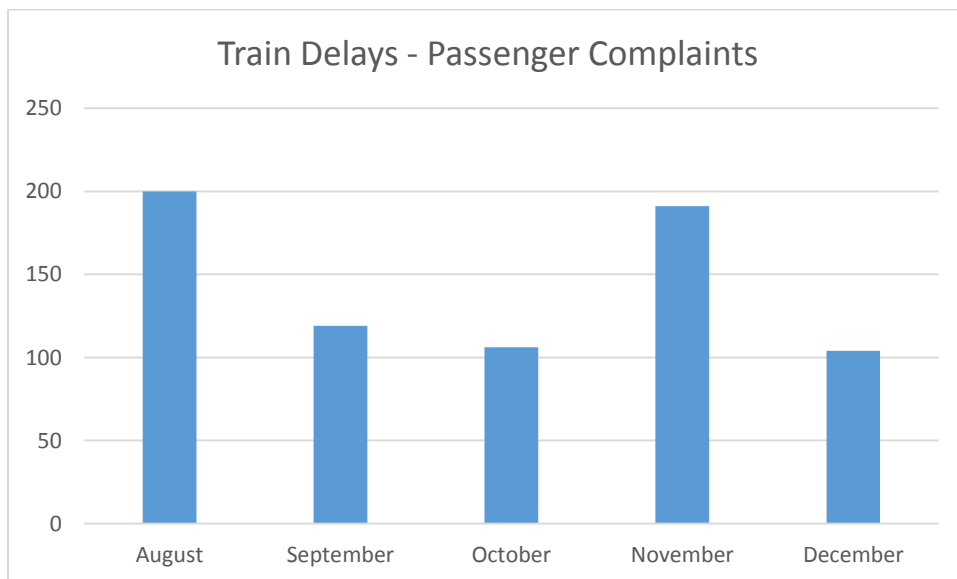
More generally, the two notable reasons for delays on the three lines with the lowest peak period OTP (both actual and adjusted) were Heavy Ridership and Residual Mechanical Delays.

“Heavy Ridership” refers to any circumstance that means extra time was required to board the passengers. The special circumstance can be a school group, a passenger in a wheelchair passenger, a passenger with a bicycle, or simply passengers waiting in their cars to keep warm. The large number of delays from “heavy ridership” suggests that staffing, scheduling, and daily operational issues remain despite the progress that has been made.

“Residual Mechanical Delays” have mechanical issues as a precipitating cause, but are also an example of the type of delay that the new schedules are intended to reduce – i.e., delays that follow a mechanical failure and that ripple through the system because the equipment is used on different lines and there is little resiliency in the current schedule. The impact of scheduling is discussed in section 5 below, while mechanical problems are discussed in section 7.

Complaints regarding OTP decreased each month from August to October, and then increased again with the advent of Slippery Rail season. Complaints decreased again in December, when the Slippery Rail season ended and OTP increased significantly. See below bar chart of customer complaints on OTP.

Customer satisfaction is sensitive to factors beyond those that are Keolis’ controlled or factors that are Keolis’ responsibility under the contract. Proactively addressing problems such as slippery rail - which can be mitigated and managed, although not avoided entirely - is important to meeting customer expectations. The senior meetings that Keolis and the MBTA teams regularly hold have been helpful in encouraging anticipatory actions. A simple example is making sure that the sand supply is topped off every night so it will be readily available to mitigate any slippery rail in the morning.



Keolis has been providing the MBTA with daily peak period OTP reports for use in the public-facing dashboard. See sample below and monthly reports in Appendix B. This data will be an important tool in responding to public concerns and identifying the degree to which improvement efforts are successful.

Actual & Keolis - by Route and Peak/Off Peak

Reporting Period: From August 1,2015 through December 31, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Keolis | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted | Change |
| Rockport Line | 3,414 | 3,414 | 91.98% | 94.34% | 89.62% | 93.63% | 90.80% | 93.99% | 3.18% | 91.04% | 93.69% | 90.98% | 93.76% | 2.78% |
| Newburyport Line | 4,380 | 4,380 | 92.59% | 95.15% | 89.15% | 92.92% | 91.00% | 94.12% | 3.12% | 93.47% | 95.74% | 92.69% | 95.23% | 2.53% |
| Haverhill Line | 5,476 | 5,476 | 95.99% | 97.17% | 94.65% | 97.01% | 95.42% | 97.10% | 1.68% | 94.09% | 96.54% | 94.45% | 96.69% | 2.25% |
| Lowell Line | 6,264 | 6,264 | 96.34% | 97.52% | 94.61% | 96.50% | 95.53% | 97.04% | 1.51% | 94.20% | 95.59% | 94.54% | 95.96% | 1.42% |
| Fitchburg Line | 3,870 | 3,870 | 88.91% | 93.37% | 90.41% | 94.97% | 89.65% | 94.16% | 4.51% | 91.41% | 95.59% | 90.83% | 95.12% | 4.29% |
| Worcester Line | 5,934 | 5,934 | 84.07% | 91.72% | 76.42% | 88.09% | 80.47% | 90.01% | 9.54% | 80.47% | 92.81% | 80.47% | 91.96% | 11.49% |
| Needham Line | 3,788 | 3,788 | 83.77% | 90.19% | 87.17% | 92.08% | 85.47% | 91.13% | 5.66% | 91.39% | 95.20% | 89.73% | 94.06% | 4.33% |
| Franklin Line | 4,668 | 4,668 | 81.49% | 89.03% | 79.40% | 87.74% | 80.59% | 88.48% | 7.88% | 87.94% | 93.94% | 85.60% | 92.20% | 6.60% |
| Providence Line | 5,092 | 5,092 | 82.43% | 91.39% | 89.31% | 94.34% | 85.38% | 92.65% | 7.28% | 84.98% | 93.32% | 85.09% | 93.13% | 8.03% |
| Stoughton Line | 3,392 | 3,392 | 74.53% | 82.31% | 82.26% | 88.87% | 78.83% | 85.95% | 7.13% | 89.62% | 95.24% | 86.59% | 92.63% | 6.04% |
| Fairmount Line | 5,838 | 5,838 | 95.28% | 96.46% | 94.53% | 96.79% | 94.86% | 96.65% | 1.78% | 93.88% | 95.60% | 94.04% | 95.77% | 1.73% |
| Middleboro Line | 3,296 | 3,296 | 94.91% | 95.66% | 88.05% | 92.77% | 92.33% | 94.58% | 2.24% | 93.83% | 95.75% | 93.45% | 95.45% | 2.00% |
| Kingston/Plymouth Line | 3,296 | 3,296 | 93.58% | 96.42% | 94.81% | 96.93% | 94.13% | 96.65% | 2.52% | 94.62% | 96.41% | 94.48% | 96.48% | 2.00% |
| Greenbush Line | 3,296 | 3,296 | 93.40% | 95.09% | 92.22% | 94.81% | 92.87% | 94.97% | 2.10% | 95.43% | 97.01% | 94.69% | 96.42% | 1.73% |
| Overall | 62,004 | 62,004 | 89.11% | 93.39% | 88.29% | 93.21% | 88.73% | 93.31% | 4.58% | 90.96% | 95.11% | 90.35% | 94.61% | 4.26% |

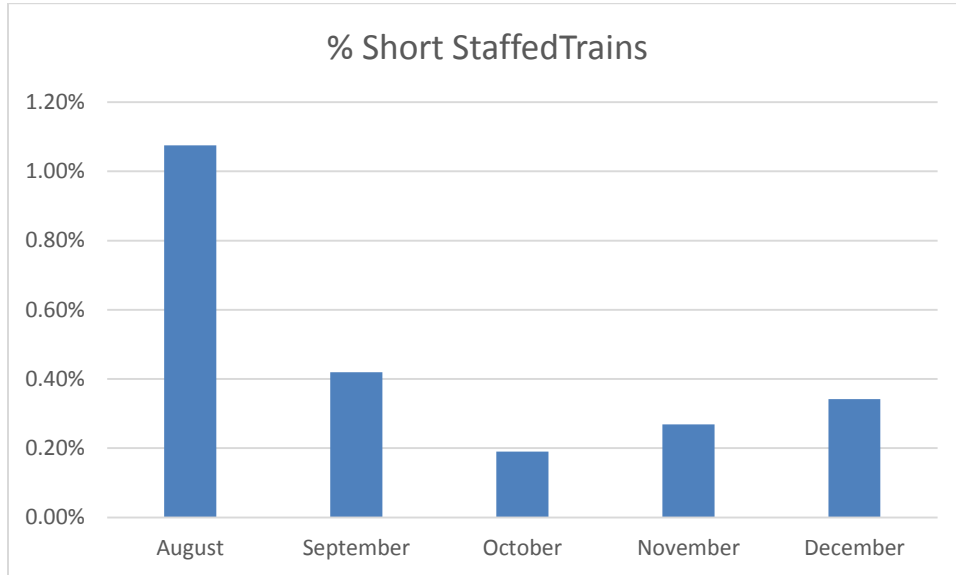
3. Staffing/OTP Impact:

Goal: The Service Improvement Plan included specific steps that Keolis would take to counter the staffing shortage that had hindered OTP and occasionally resulted in train cancellations.

Result: The specific steps were accomplished:

- Step: Successful trainees from initial class of 11 engineers to start in October- November
 - Result: 9 of the initial class of engineers have entered service
- Step: New class of at least 10 engineers to begin no later than October 15
 - Result: On October 2 a new class of 15 engineers started training
- Step: Promote 9 assistant conductors to conductors and promote more as merit and attrition dictate
 - Result: On November 20 12 assistant conductors completed their training as conductors and were added to workforce
- Step: Successful Assistant Conductors trainees from initial class of 18 to start by September 11
 - Result: From the class of 18, 17 entered service on September 11 as Assistant Conductors
- Step: Use penalty funds to train and assign additional staff to help with Fare Collection
 - Result: 14 Fare Collectors entered service October 16 after abbreviated training with completion of training to occur when the second class has entered service
 - Result: New class of 15 Fare Collectors started November 16th

The numbers of trains with crew shortages decreased significantly as new crewmembers have been introduced to service. December crew shortages rose slightly due to vacations and crew recertification training requirements. This reflects the ongoing need to continuously monitor and manage the availability of operating personnel. (See below graph).



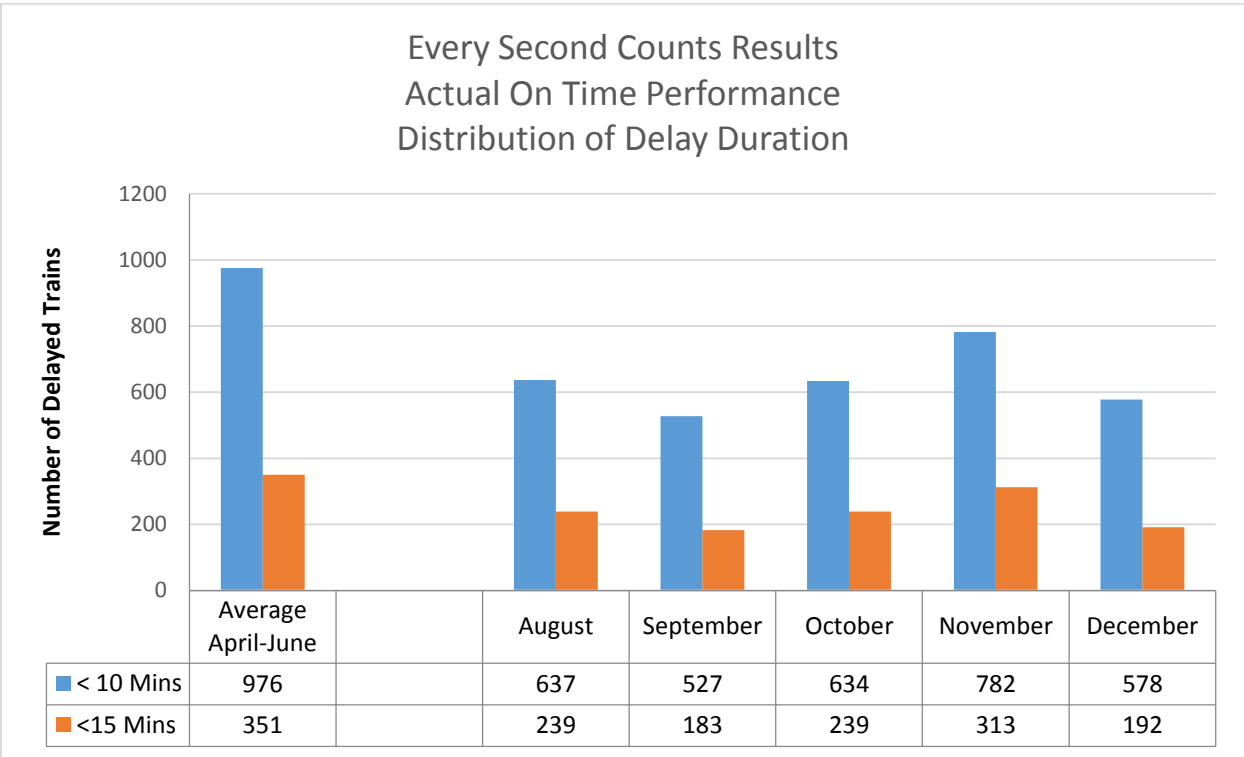
The new Fare Collectors have been deployed as supplemental staff on crowded trains and have supported the Fare is Fair initiative described in more detail in Section 9 and Appendix C.

While the number of short staffed trains has decreased, a significant number of trains have a low OTP because of “heavy ridership” or other expectable rider needs (extra time boarding/deboarding persons with disabilities, school groups, bicycles). In fact, on eight of the fourteen lines it is the largest single cause of delay. Some of this may reflect seasonal habits of riders – i.e., waiting in the car on a cold day, etc. But it also indicates that staffing and staff performance is still an area in which better outcomes can be sought.

4. Operations/ OTP Impact

Goal: In the period April 1 – June 30, there had been a monthly average of 976 trains delayed less than 10 minutes, and 351 trains delayed less than 15 minutes. This meant that 53% of the late trains were less than 10 minutes and 72% were less than 15 minutes late. Keolis was therefore asked to focus attention on trains with short delays (less than 10 minutes and less than 15 minutes) during the period covered by the 2015 SIP.

Result: Keolis adopted a multi-pronged approach to the problem of short delays. Much of the effort was captured in a program called “Every Second Counts”. By focusing on “every second counts” for all trains, the actual OTP was improved and the number of trains delayed for short durations was decreased. (See the chart below) There was a slight increase in short delays in late October and November due to slippery rail, but the frequency of short delays decreased again in December. On average, there has been a one-third reduction in short delays over the period of the Service Improvement Program.



Under Keolis’ “Every Second Counts” program:

- The Trainmaster on the North Side is on the platform to measure on time departure, expedite boarding on common platforms, and ensure timely departure from the maintenance facility. This strategy may be extended to the South side in 2016.
- A new Trainmaster started working from 10PM to 6am to coordinate with all major mechanical facilities (CRMF, Readville, and Southampton) to make sure that the equipment is ready for the AM rush
- Field Transportation Managers evaluate crewmember performance on operating rules, particularly with respect to On-Time Departures
- Weekend telephone calls between Keolis’ Mechanical and Transportation departments began in mid-November to improve preparation for the Monday morning peak period

The decrease in short delays also reflects successful implementation of other steps that were identified in the current SIP, including dispatchers paying closer attention to short delays and Increased on-board staffing to open doors and handle passenger loads.

The “Every Second Counts” program has been complemented by Keolis’ Joint Performance Improvement Program (JPIP), which calls for a weekly meeting among Keolis senior operating personnel to evaluate the previous week’s performance and identify actions for each department to adopt to improve OTP, equipment reliability, etc.

5. Schedules

Goal: MBTA and Keolis worked jointly on new schedules that are now to be implemented in May 2016. The schedules are expected to decrease residual delays and make the system more resilient, thereby allowing a more consistent level of OTP.

Result: Implementation of the schedules was delayed to May, but the high level of public interest in the schedules is consistent with the sensitivity of commuter rail passengers to delays and cancellations – i.e., the riders depend on the commuter rail system every day and the system’s timeliness can be an important ingredient in a customer’s busy daily schedule. Customers were concerned about the impact of schedule changes on their everyday life – even if the trains were on time, the changes in departure or arrival times could affect the feasibility of commuter rail for either their work schedule or their home-based obligations.

6. Station Amenities:

Goal: Keolis was asked to help the MBTA address ongoing problems with station signage and condition. While some of these problems reflect past deferred maintenance, Keolis has responsibility for current maintenance and the MBTA has an ongoing interest in providing clean and well maintained stations to its customers and the host communities.

Result: Four stations (Beverly, Swampscott, Sharon, and West Natick) have been identified as candidates for improved signage to direct customers where to wait for train boarding. Keolis is preparing initial designs for new signs for these stations and will present the proposed signage to the MBTA for review and approval. The goal of the improved signage is to reduce the dwell times in the stations by having standard signage to better inform passengers on where to stand. Keolis anticipates installing the first pilot signage in Beverly Station in March.

Station condition will be part of the challenge that Keolis will face this winter. However, during the period covered by the 2015 SIP Keolis worked cooperatively with the MBTA to assure a basic level of cleanliness, functionality, and information at all stations. The MBTA and Keolis are also exploring the feasibility of local partnerships that could improve the customer experience.

7. Equipment maintenance

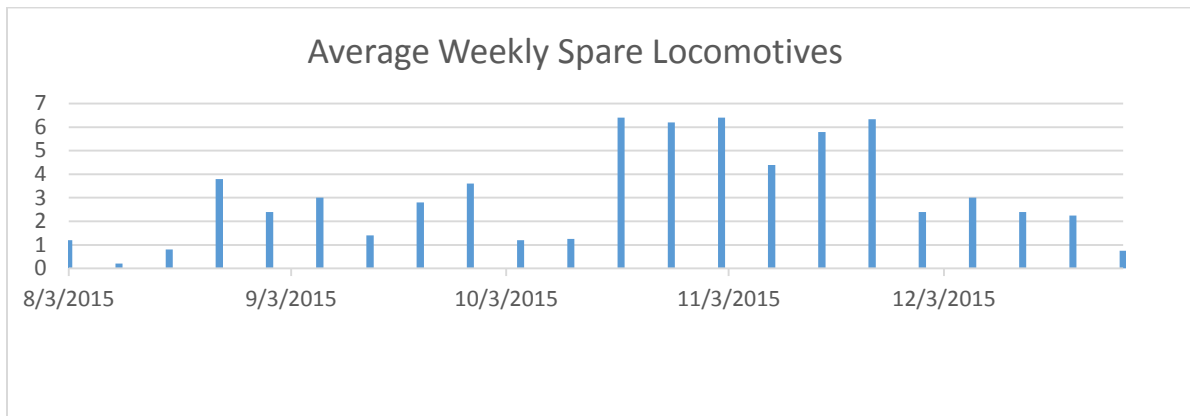
Locomotive Goal: The contract requires Keolis to provide 63 locomotives daily, including 2 spares.

Result: All 40 new MCI locomotives were placed in service and Keolis has been training its staff to use the new equipment. Keolis has worked aggressively to manage locomotive availability and assignment to trains. However, the new locomotives have had an extended “break-in” period and have not been trouble-free. Several warranty claims are being pursued, a process that takes time even when there is full agreement on the problem and the remedy. Some Keolis staff has also required additional training for the new equipment.

Unfortunately, equipment failures remain a major contributor to delays – both directly and through the ripple effect that occurs when a piece of equipment fails. The residual impact of an equipment failure will be better contained with the new schedules, but with the influx of new equipment customers expect an increase in reliability that they have not yet experienced.

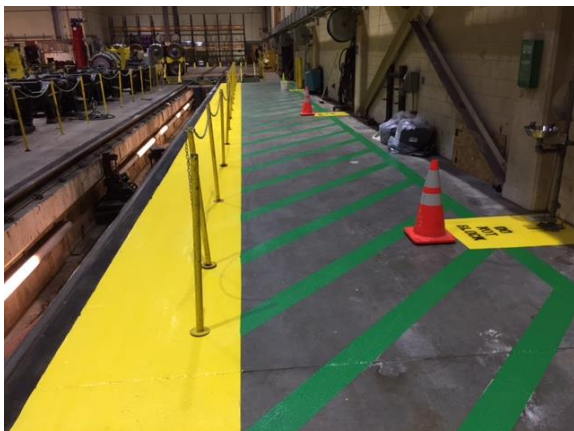
It should also be remembered that the 40 new locomotives are only a portion of the 63 locomotives that Keolis must ready for service daily and are less than half the 90 locomotives that the MBTA maintains as an active fleet. Much of the rest of the fleet has seen between 18-36 years of service.

Despite those limitations, locomotive availability is generally better. The average number of spare locomotives daily, report for each week, is displayed in the following graph.



Keolis operated 62,004 trains from August to December, of which only 14 were canceled due to equipment shortages. Keolis has also advanced the schedule of mandatory inspections in order to ensure increased availability of locomotives during the winter months.

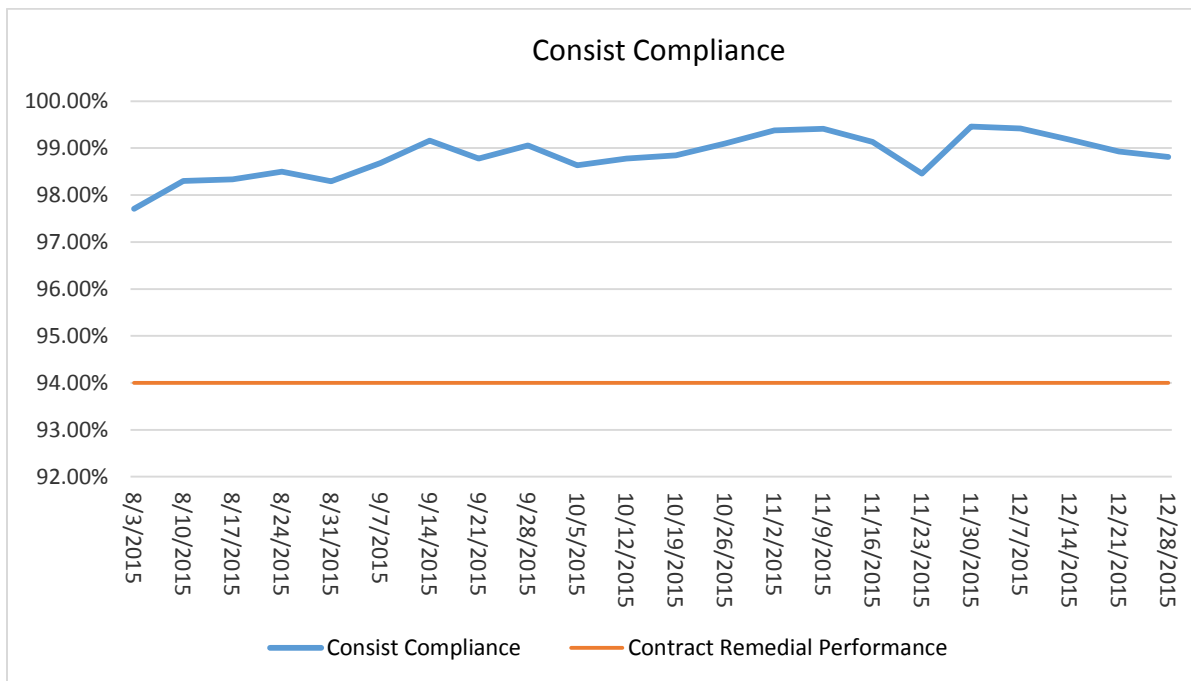
Process improvements have been implemented at the locomotive shop to expedite repair work. Improvements included removal of surplus parts and scaffolding, striping and painting of the locomotive shop (see photos below), and new storage solutions for traction motor combos. Continued work by Keolis will be important to making the most of the MBTA's existing fleet, including the MBTA's recent investments in locomotives.



Coach Goal: In a June/July 2015 customer satisfaction survey 73% of the customers had said that seating was important to them, but only 31% said that they were satisfied with the seating provided. The contract requires that Keolis have 359 coaches ready for service, including at least 130 bi-level cars. Because bi-level and single level cars are combined in various configurations to meet ridership demand, the number of coaches needed and seats needed and provided will vary between trains. The perceived adequacy of seating may also be affected by the fact that a portion of the fleet (including the newer coaches) has seats that assume customers will sit 3 across, while other coaches are sized for customers to sit 2 across. Even when people are standing, middle seats in three-across rows often remain unfilled.

Result: The contract standard does not correlate perfectly with daily customer demand. Not only does customer demand vary widely from train to train, but the MBTA has very imperfect information on the actual number of customers on each train. Technology that will give more actual counts is currently being reviewed by the MBTA. Until the MBTA has better information on seat demand, Keolis' response to that demand can only be judged anecdotally and against the contract specifications.

Passenger satisfaction in this area has not improved during the last 5 months of 2015, but train seating compliance during the 2015 SIP has consistently exceeded the contract's remedial performance standard of 94% of the seating required by the contract. Compliance between August and December varied between 98.3% in August and 99.2% in December. The chart below illustrates the percentage of trains each week during the current SIP that complied with seating requirements as measured against the contract standard.



Keolis has hired a dedicated manager daily Equipment Servicing and Inspection, a Coach Shop manager for preventive maintenance and repairs and a Manager of Performance Improvements and Life Cycle Maintenance. These staff additions are helping to assure contract compliance and a continued focus on the availability of the number of seats called for in the contract. .

Life Cycle Maintenance Goal: The contract set goals for the development of a Life Cycle Maintenance program and the SIP reinforced the need for Keolis and the MBTA to move forward with that approach to maintenance. As asset management becomes a hallmark of the MBTA's investment plans, Life Cycle Maintenance is becoming a more important part of the MBTA's approach to maintenance and capital planning– i.e., how to know when to replace and when to repair.

Result: Keolis and the MBTA are meeting weekly to implement a life cycle maintenance program for the locomotives and coaches. In the short term, the team is focusing on identifying major components with high failure rates. By addressing the root causes underlying these failures, improvements will be seen in the customer experience, equipment reliability, and on-time performance. Examples of these components include Traction Motors, Head End Power (provides light and heat in the coaches), Door Systems, and Turbochargers. All identified components will be tracked in the Maintenance Management System.

Concurrently, Keolis is working with the MBTA to define fleet-specific planned life cycle maintenance activities which balance mission critical vehicle system maintenance with cost containment, taking into account the age of each particular fleet.

This work will continue in accordance with the contract and its results will gradually shape Keolis' approach to maintenance and the MBTA's choices for capital reinvestment.

8. Winter Resiliency Action Plan.

Goal: Prepare and be ready to implement a Winter Action Plan that can be carried out in concert with the MBTA's overall winter resiliency initiatives.

Result: The Winter Resiliency Action Plan was completed and is being used. It leverages the MBTA's recent investments in winter resiliency, including the purchase of 25 vehicles, 285 pieces of heavy work equipment, and over 1,000 pieces of support equipment. The Commuter Rail Winter Action Plan also incorporated Keolis' improvement to the communications system. These improvements included additional staff dedicated to customer communications (particularly social media and service alerts) and better information flow about the cause and impact of delays.

The Action Plan is reviewed and updated by Keolis and the MBTA on a weekly basis. Improvements are being garnered from table top exercises, field drills, and winter experience.

Winter preparations were successfully applied on December 28/29 when the Boston region had its first measurable snow. Actual daily OTP on December 29th was 92.6%, AM peak OTP was 93.1%, PM peak OTP was 94.7%, and off peak OTP was 92%.

9. Revenue Collection

Goal: Create benchmarks for fare collection and improve upon reported performance.

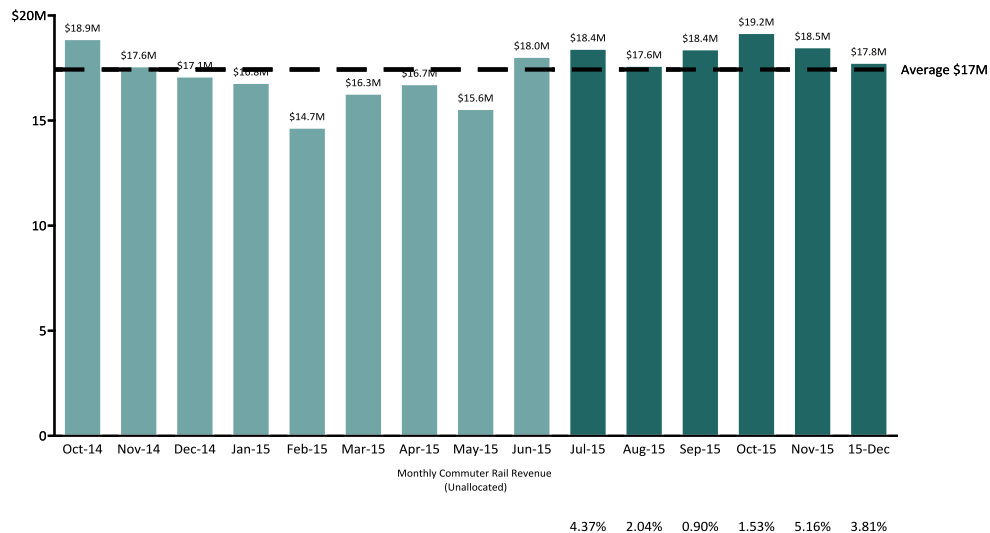
Result: Inconsistent fare collection has been a longstanding complaint from commuter rail riders. It is likely to be a key area of focus for the new SIP and the work done under the 2015 SIP created basic benchmarks that will be used going forward.

Those benchmarks are based on customer satisfaction surveys that Keolis conducted In June and October 2015, supplemented by passenger complaints received between July and September 2015.

The survey showed a mixed trend in fare collection, with great variation between lines This line-specific information will allow Keolis to focus its training efforts with on-board staff, effectively assign the new fare collectors, and target other “Fare is Fair” strategies described in Appendix C. An example of those strategies is the “Buy Before You Board” event that was held at North Station and South Station as part of the Fare is Fair initiative.

Another very important measure of better collection is commuter rail fare revenue, which is up 3% over last year and has been trending up slightly. .

Monthly MBTA Commuter Rail Revenue



However, the MBTA does not have a reliable method for tracking the actual number of commuter rail passengers. As a result, these increased revenues cannot be correlated with reliable passenger counts to verify the improved fare collection reported in the passenger survey. Better passenger counts are likely to be a part of the next SIP since that information could be used by the MBTA to cross-check collection rates and also understand trends that would affect other factors such as seat requirements. In the interim, Keolis is incorporating social media feedback to monitor and investigate incidents of fare non-collection.

Even without better on-board passenger counts it is clear that traditional onboard sales are decreasing and other distribution channels are becoming more important. Those channels include third party vendors, vending machines, corporate passes, and mTickets. All the on board purchases are made with

cash, but only 19.6% of the other purchases were with cash. This trend is likely to continue and more attention to non-cash pre-payment is expected.



Particularly given the MBTA's continuing need for increased revenue, new efforts to improve fare collection are a priority. The MBTA anticipates working closely with Keolis to apply those strategies (including on-platform collection by some of the new fare collectors) and to allocate resources to assure continued improvement in fare collection.

10. Interim On Time Performance Penalty Cap

Goal: Create an incentive for better OTP by administering the OTP penalty cap on a daily basis.

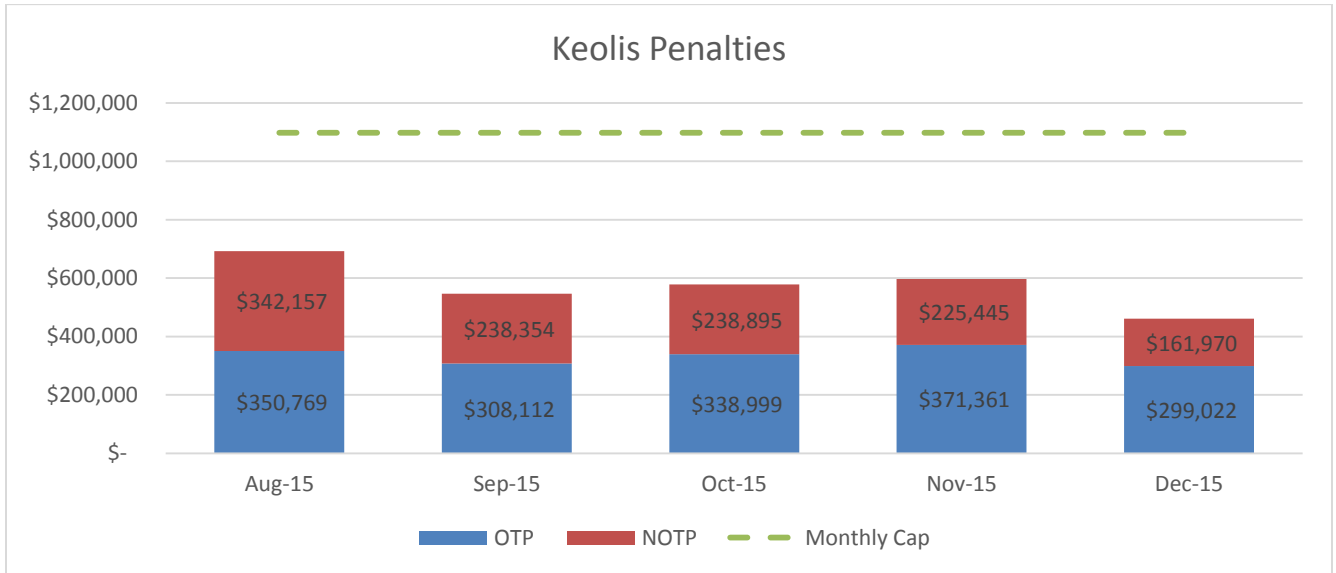
Result: The daily OTP cap was instituted and has been effective at focusing attention on OTP for every day of the month. Actual OTP for September and October was the best performance since 2006 for each respective month. Actual OTP for the North Side for December was the best December performance since before 2003. The OTP penalty cap had been exceeded consistently in year one and in year two prior to the daily cap calculation being applied. Since then the OTP cap has not been exceeded. Further information on penalties is provided in section 11.

11. Other:

Reports: Reports and Consultation MBTA and Keolis senior management meet twice weekly and Keolis provides reports on an established schedule, as well as upon request of the MBTA.

Penalties: The 2015 SIP encouraged collaboration by the MBTA and Keolis and provided for a portion of the penalties assessed under the contract to be used for improvements that were not called for in the contract and that would improve the customers’ experience.

Under the contract the monthly cap on penalties increased in year 2. During the 2015 SIP penalties have been deducted at the higher monthly rate specified in the contract. The penalties are generated by both OTP and non-OTP deficiencies. The following chart summarizes penalties during the 2015 SIP.



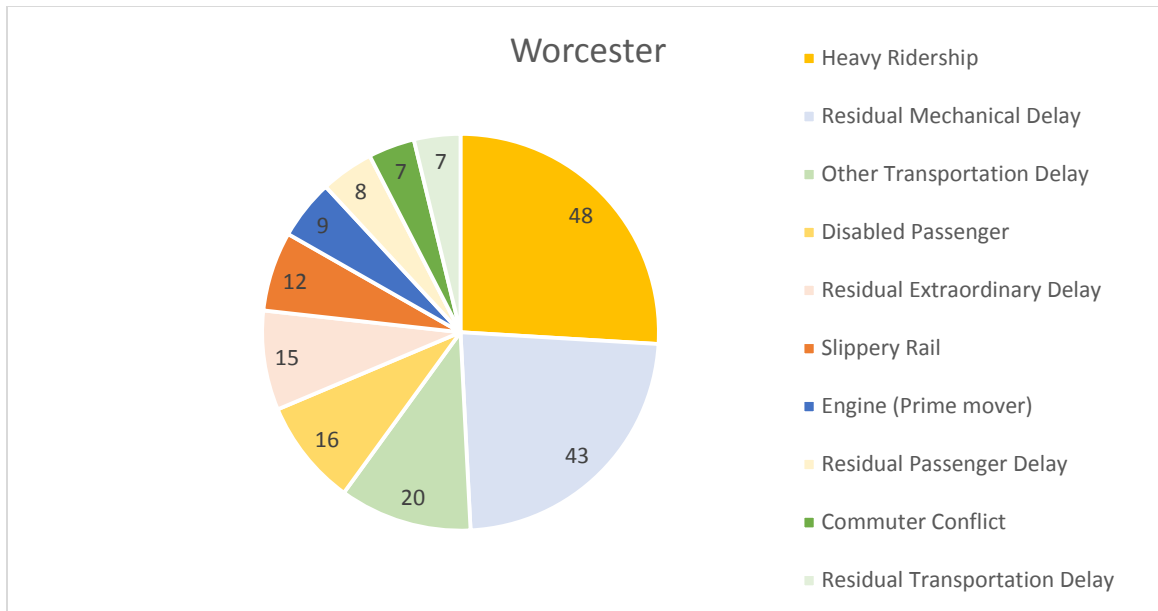
The contract provides for the monthly penalty to increase each year according to the following schedule:

| Year | Yearly Cap | Monthly Cap |
|---------------------|---------------|--------------|
| Oct 2014-June 2015 | \$ 10,426,192 | \$ 868,849 |
| July 2015 June 2016 | \$ 13,176,481 | \$ 1,098,040 |
| July 2016 June 2017 | \$ 13,489,893 | \$ 1,124,158 |
| July 2017 June 2018 | \$ 13,735,888 | \$ 1,144,657 |
| July 2018 June 2019 | \$ 14,027,959 | \$ 1,168,997 |
| July 2019 June 2020 | \$ 14,363,630 | \$ 1,196,969 |
| July 2020 June 2021 | \$ 14,653,807 | \$ 1,221,151 |
| July 2021 June 2022 | \$ 14,968,229 | \$ 1,247,352 |

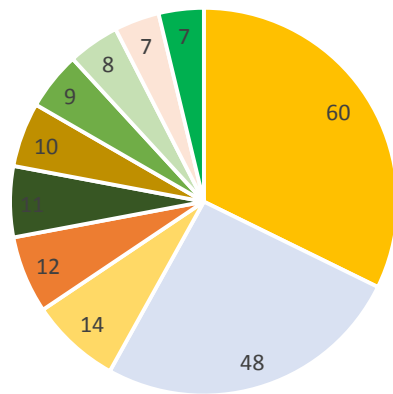
\$6,767,500 of the \$11,270,267 in penalties assessed to date have been committed to the additional items specified in the 2015 SIP, including improved cleaning facilities, customer information staff, and fare collectors. The new SIP is expected to outline new uses for penalty funds.

Appendix A: Distribution of Contract Delays for Peak Periods

The following pie charts illustrate the primary reasons for delays during peak periods on each line. The pie charts contain the number of events in each category over this time period (note that a train may be delayed by more than one event). These pie charts contain a mix of events for which Keolis is responsible (ex: insufficient staffing, engine failure, etc.) and those which Keolis is not penalized since the cause is not within Keolis' control (slippery rail, speed restriction, etc.). These charts provide a snapshot of the variety of causes that contribute to delays and give a sense of the role that various causes play on different lines.

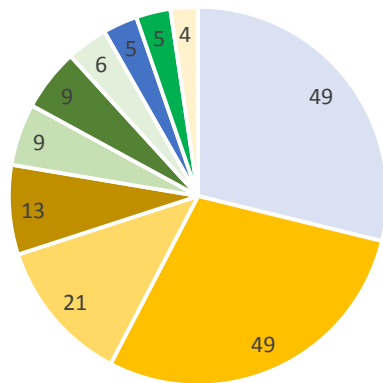


Franklin



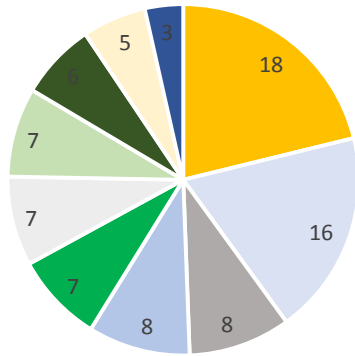
- Heavy Ridership
- Residual Mechanical Delay
- Disabled Passenger
- Slippery Rail
- Terminal Congestion
- Late Passengers
- Commuter Conflict
- Other Transportation Delay
- Residual Extraordinary Delay
- Insufficient Staffing

Stoughton



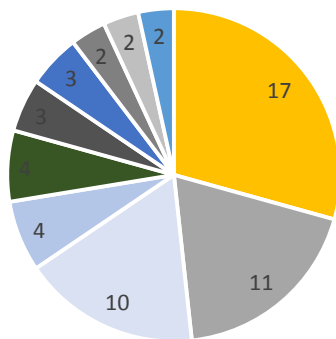
- Residual Mechanical Delay
- Heavy Ridership
- Disabled Passenger
- Late Passengers
- Other Transportation Delay
- Commuter Conflict
- Residual Transportation Delay
- Engine (Prime mover)
- Insufficient Staffing
- Residual Passenger Delay

Newburyport



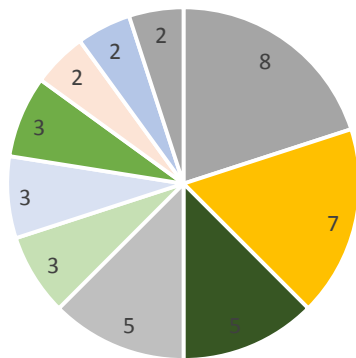
- Heavy Ridership
- Residual Mechanical Delay
- Signal System
- Other Mechanical Failure
- Insufficient Staffing
- Residual Engineering Delay
- Other Transportation Delay
- Terminal Congestion
- Residual Passenger Delay
- Incomplete Servicing

Rockport



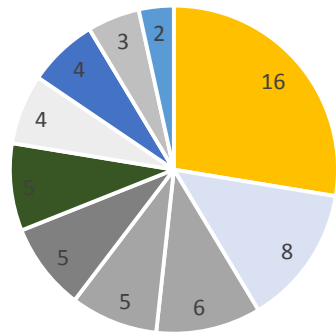
- Heavy Ridership
- Signal System
- Residual Mechanical Delay
- Other Mechanical Failure
- Terminal Congestion
- Signal Code Line Failure
- Engine (Prime mover)
- Drawbridge
- Switch Failure
- PC Hit

Haverhill



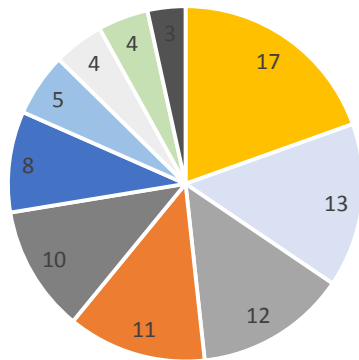
- Signal System
- Heavy Ridership
- Terminal Congestion
- Switch Failure
- Other Transportation Delay
- Residual Mechanical Delay
- Commuter Conflict
- Residual Extraordinary Delay
- Other Mechanical Failure
- Late Clearing Up

Lowell



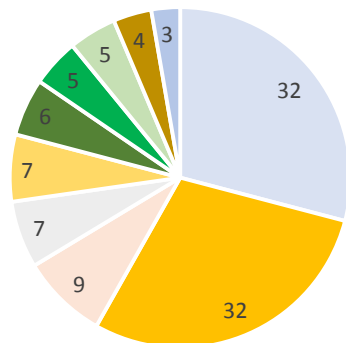
- Heavy Ridership
- Residual Mechanical Delay
- Late Clearing Up
- Signal System
- Gate/Crossing Protection
- Terminal Congestion
- Residual Engineering Delay
- Engine (Prime mover)
- Speed Restriction
- PC Hit

Fitchburg



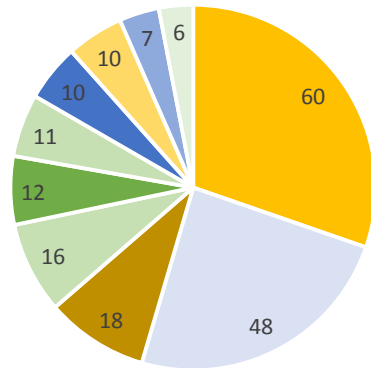
- Heavy Ridership
- Residual Mechanical Delay
- Signal System
- Slippery Rail
- Gate/Crossing Protection
- Engine (Prime mover)
- Brake System
- Residual Engineering Delay
- Other Transportation Delay
- Signal Code Line Failure

Needham



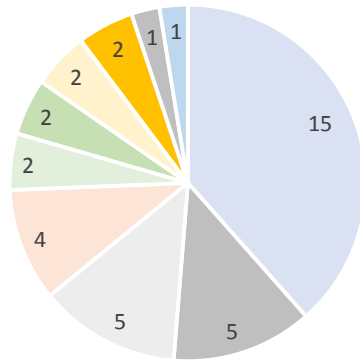
- Residual Mechanical Delay
- Heavy Ridership
- Residual Extraordinary Delay
- Residual Engineering Delay
- Disabled Passenger
- Commuter Conflict
- Insufficient Staffing
- Other Transportation Delay
- Late Passengers
- Other Mechanical Failure

Providence



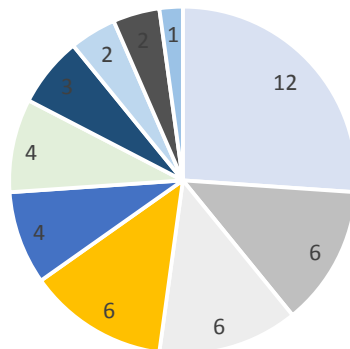
- Heavy Ridership
- Residual Mechanical Delay
- Late Passengers
- Missing Report
- Commuter Conflict
- Other Transportation Delay
- Engine (Prime mover)
- Disabled Passenger
- Brake System
- Residual Transportation Delay

Fairmount



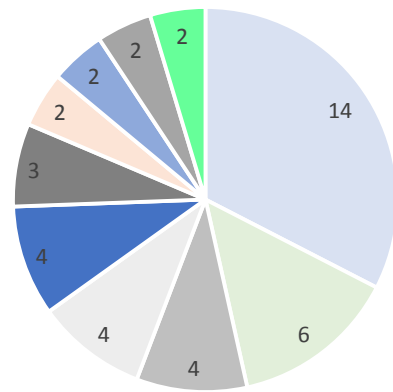
- Residual Mechanical Delay
- Speed Restriction
- Residual Engineering Delay
- Residual Extraordinary Delay
- Other Transportation Delay
- Residual Transportation Delay
- Residual Passenger Delay
- Heavy Ridership
- Switch Failure
- ATC - Cab Signal Failure

Middleboro



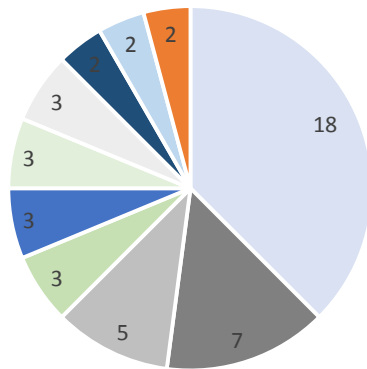
- Residual Mechanical Delay
- Speed Restriction
- Residual Engineering Delay
- Heavy Ridership
- Engine (Prime mover)
- Residual Transportation Delay
- HEP
- ATC - Cab Signal Failure
- Signal Code Line Failure
- Brake System

Kingston/Plymouth



- Residual Mechanical Delay
- Residual Transportation Delay
- Speed Restriction
- Residual Engineering Delay
- Engine (Prime mover)
- Gate/Crossing Protection
- Residual Extraordinary Delay
- Brake System
- Signal System
- Late Crew

Greenbush



- Residual Mechanical Delay
- Gate/Crossing Protection
- Switch Failure
- Other Transportation Delay
- Engine (Prime mover)
- Residual Transportation Delay
- Residual Engineering Delay
- HEP
- ATC - Cab Signal Failure
- Slippery Rail

Appendix B: Monthly Peak/Off Peak OTP Reports

On-Time Performance Percentages Actual & Adjusted - by Route and Peak/Off Peak

Reporting Period: From August 1,2015 through August 31, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Adjusted | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted |
| Rockport Line | 686 | 686 | 97.62% | 98.81% | 97.62% | 98.81% | 97.62% | 98.81% | 1.19% | 91.31% | 92.66% | 92.86% | 94.17% |
| Newburyport Line | 876 | 876 | 96.60% | 97.96% | 88.10% | 93.65% | 92.67% | 95.97% | 3.30% | 93.53% | 95.36% | 93.26% | 95.55% |
| Haverhill Line | 1,104 | 1,104 | 95.83% | 98.81% | 98.41% | 98.41% | 96.94% | 98.64% | 1.70% | 92.72% | 95.80% | 93.84% | 96.56% |
| Lowell Line | 1,252 | 1,252 | 94.05% | 98.21% | 88.44% | 93.20% | 91.43% | 95.87% | 4.44% | 95.62% | 97.33% | 94.57% | 96.96% |
| Fitchburg Line | 714 | 714 | 86.51% | 89.68% | 87.30% | 96.03% | 86.90% | 92.86% | 5.95% | 87.23% | 92.86% | 87.11% | 92.86% |
| Worcester Line | 1,188 | 1,188 | 88.89% | 92.59% | 73.21% | 92.26% | 81.51% | 92.44% | 10.92% | 80.14% | 94.71% | 80.56% | 94.02% |
| Needham Line | 762 | 762 | 89.52% | 92.38% | 81.90% | 87.62% | 85.71% | 90.00% | 4.29% | 89.49% | 92.57% | 88.45% | 91.86% |
| Franklin Line | 937 | 937 | 83.93% | 86.31% | 74.60% | 88.10% | 79.93% | 87.07% | 7.14% | 88.80% | 96.11% | 86.02% | 93.28% |
| Providence Line | 1,021 | 1,021 | 82.74% | 91.67% | 83.33% | 90.48% | 82.99% | 91.16% | 8.16% | 83.22% | 91.88% | 83.15% | 91.67% |
| Stoughton Line | 672 | 672 | 79.76% | 84.52% | 81.90% | 86.67% | 80.95% | 85.71% | 4.76% | 92.34% | 96.48% | 89.14% | 93.45% |
| Fairmount Line | 1,180 | 1,180 | 96.43% | 97.62% | 91.43% | 96.19% | 93.65% | 96.83% | 3.17% | 92.84% | 94.15% | 92.97% | 94.58% |
| Middleboro Line | 664 | 664 | 95.24% | 95.24% | 82.54% | 88.89% | 90.48% | 92.86% | 2.38% | 92.94% | 95.16% | 92.32% | 94.58% |
| Kingston/Plymouth Line | 664 | 664 | 98.10% | 98.10% | 90.48% | 94.05% | 94.71% | 96.30% | 1.59% | 92.84% | 94.74% | 93.37% | 95.18% |
| Greenbush Line | 664 | 664 | 95.24% | 97.14% | 89.29% | 92.86% | 92.59% | 95.24% | 2.65% | 93.68% | 96.00% | 93.37% | 95.78% |
| Overall | 12,384 | 12,384 | 91.09% | 94.13% | 85.71% | 92.70% | 88.58% | 93.46% | 4.88% | 90.37% | 94.78% | 89.88% | 94.42% |

On-Time Performance Percentages Actual & Keolis - by Route and Peak/Off Peak

Reporting Period: From September 1,2015 through September 30, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| | Scheduled | Reporting | Actual | Adjust | Actual | Adjust. | Actual | Adjust. | Change | Actual | Adjust. | Actual | Adjust. | Change |
| Rockport Line | 673 | 673 | 94.05% | 94.05% | 91.67% | 91.67% | 92.86% | 92.86% | 0.00% | 92.67% | 93.86% | 92.72% | 93.61% | 0.89% |
| Newburyport Line | 864 | 864 | 92.52% | 94.56% | 93.65% | 93.65% | 93.04% | 94.14% | 1.10% | 94.25% | 95.26% | 93.87% | 94.91% | 1.04% |
| Haverhill Line | 1,033 | 1,033 | 99.40% | 100.00% | 96.03% | 96.83% | 97.96% | 98.64% | 0.68% | 94.59% | 97.02% | 95.55% | 97.48% | 1.94% |
| Lowell Line | 1,237 | 1,237 | 97.62% | 97.62% | 97.28% | 97.96% | 97.46% | 97.78% | 0.32% | 97.40% | 97.83% | 97.41% | 97.82% | 0.40% |
| Fitchburg Line | 763 | 763 | 89.68% | 97.62% | 92.86% | 98.41% | 91.27% | 98.02% | 6.75% | 93.54% | 95.30% | 92.79% | 96.20% | 3.41% |
| Worcester Line | 1,170 | 1,170 | 89.95% | 92.06% | 77.38% | 89.88% | 84.03% | 91.04% | 7.00% | 77.74% | 94.22% | 79.66% | 93.25% | 13.59% |
| Needham Line | 744 | 744 | 88.57% | 94.29% | 88.57% | 96.19% | 88.57% | 95.24% | 6.67% | 95.13% | 97.75% | 93.28% | 97.04% | 3.76% |
| Franklin Line | 919 | 919 | 84.52% | 91.07% | 80.16% | 87.30% | 82.65% | 89.46% | 6.80% | 88.64% | 93.76% | 86.72% | 92.38% | 5.66% |
| Providence Line | 1,003 | 1,003 | 77.98% | 85.12% | 89.68% | 93.65% | 82.99% | 88.78% | 5.78% | 87.45% | 93.51% | 86.14% | 92.12% | 5.98% |
| Stoughton Line | 672 | 672 | 84.52% | 88.10% | 81.90% | 88.57% | 83.07% | 88.36% | 5.29% | 91.51% | 95.45% | 89.14% | 93.45% | 4.32% |
| Fairmount Line | 1,146 | 1,146 | 100.00% | 100.00% | 97.14% | 98.10% | 98.41% | 98.94% | 0.53% | 94.25% | 94.88% | 94.94% | 95.55% | 0.61% |
| Middleboro Line | 648 | 648 | 98.10% | 98.10% | 93.65% | 100.00% | 96.43% | 98.81% | 2.38% | 96.04% | 97.08% | 96.14% | 97.53% | 1.39% |
| Kingston/Plymouth Line | 648 | 648 | 93.33% | 93.33% | 95.24% | 97.62% | 94.18% | 95.24% | 1.06% | 96.73% | 97.39% | 95.99% | 96.76% | 0.77% |
| Greenbush Line | 648 | 648 | 93.33% | 93.33% | 86.90% | 91.67% | 90.48% | 92.59% | 2.12% | 97.39% | 98.26% | 95.37% | 96.60% | 1.23% |
| Overall | 12,168 | 12,168 | 91.31% | 94.08% | 89.71% | 94.16% | 90.56% | 94.11% | 3.55% | 92.30% | 95.74% | 91.81% | 95.29% | 3.48% |

On-Time Performance Percentages

Actual & Adjusted - by Route and Peak/Off Peak

Reporting Period: From October 1,2015 through October 31, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Adjusted | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted | Change |
| Rockport Line | 699 | 699 | 94.32% | 95.45% | 88.64% | 94.32% | 91.48% | 94.89% | 3.41% | 87.19% | 91.59% | 88.27% | 92.42% | 4.15% |
| Newburyport Line | 900 | 900 | 89.61% | 92.21% | 86.36% | 89.39% | 88.11% | 90.91% | 2.80% | 90.07% | 94.14% | 89.44% | 93.11% | 3.67% |
| Haverhill Line | 1,097 | 1,097 | 99.43% | 99.43% | 93.94% | 96.21% | 97.08% | 98.05% | 0.97% | 95.56% | 98.35% | 95.99% | 98.27% | 2.28% |
| Lowell Line | 1,289 | 1,289 | 96.59% | 97.16% | 94.16% | 97.40% | 95.45% | 97.27% | 1.82% | 89.47% | 92.08% | 91.00% | 93.41% | 2.40% |
| Fitchburg Line | 749 | 749 | 90.91% | 93.18% | 87.88% | 92.42% | 89.39% | 92.80% | 3.41% | 92.37% | 96.29% | 91.32% | 95.06% | 3.74% |
| Worcester Line | 1,218 | 1,218 | 87.88% | 92.93% | 82.95% | 88.07% | 85.56% | 90.64% | 5.08% | 84.48% | 93.60% | 84.81% | 92.69% | 7.88% |
| Needham Line | 794 | 794 | 77.27% | 83.64% | 91.82% | 97.27% | 84.55% | 90.45% | 5.91% | 94.43% | 96.52% | 91.69% | 94.84% | 3.15% |
| Franklin Line | 960 | 960 | 83.52% | 89.20% | 83.33% | 88.64% | 83.44% | 88.96% | 5.52% | 92.48% | 95.25% | 89.58% | 93.23% | 3.65% |
| Providence Line | 1,048 | 1,048 | 86.93% | 95.45% | 90.91% | 93.94% | 88.64% | 94.81% | 6.17% | 87.03% | 94.59% | 87.50% | 94.66% | 7.16% |
| Stoughton Line | 704 | 704 | 71.59% | 78.41% | 84.55% | 91.82% | 78.79% | 85.86% | 7.07% | 88.14% | 93.28% | 85.51% | 91.19% | 5.68% |
| Fairmount Line | 1,186 | 1,186 | 90.91% | 93.18% | 94.55% | 98.18% | 92.93% | 95.96% | 3.03% | 93.22% | 95.65% | 93.17% | 95.70% | 2.53% |
| Middleboro Line | 672 | 672 | 93.64% | 96.36% | 87.88% | 96.97% | 91.48% | 96.59% | 5.11% | 92.74% | 94.96% | 92.41% | 95.39% | 2.98% |
| Kingston/Plymouth Line | 672 | 672 | 95.45% | 96.36% | 94.32% | 96.59% | 94.95% | 96.46% | 1.52% | 94.09% | 97.05% | 94.35% | 96.88% | 2.53% |
| Greenbush Line | 672 | 672 | 90.91% | 93.64% | 90.91% | 94.32% | 90.91% | 93.94% | 3.03% | 92.83% | 96.41% | 92.26% | 95.68% | 3.42% |
| Overall | 12,660 | 12,660 | 89.64% | 93.13% | 89.21% | 93.58% | 89.44% | 93.34% | 3.90% | 90.85% | 94.90% | 90.46% | 94.46% | 4.00% |

On-Time Performance Percentages

Actual & Adjusted - by Route and Peak/Off Peak

Reporting Period: From November 1,2015 through November 30, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|-----------|-----------|---------|----------|---------|----------|---------------|----------|--------|----------|----------|---------|----------|--------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Adjusted | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted | Change |
| Rockport Line | 659 | 659 | 83.75% | 91.25% | 81.25% | 93.75% | 82.50% | 92.50% | 10.00% | 89.78% | 95.59% | 88.01% | 94.84% | 6.83% |
| Newburyport Line | 840 | 840 | 92.14% | 94.29% | 82.50% | 91.67% | 87.69% | 93.08% | 5.38% | 94.31% | 97.41% | 92.26% | 96.07% | 3.81% |
| Haverhill Line | 1,079 | 1,079 | 90.00% | 92.50% | 94.17% | 97.50% | 91.79% | 94.64% | 2.86% | 92.24% | 94.87% | 92.12% | 94.81% | 2.69% |
| Lowell Line | 1,199 | 1,199 | 95.00% | 96.25% | 96.43% | 97.14% | 95.67% | 96.67% | 1.00% | 93.55% | 94.77% | 94.08% | 95.25% | 1.17% |
| Fitchburg Line | 727 | 727 | 80.83% | 89.17% | 90.00% | 93.33% | 85.42% | 91.25% | 5.83% | 89.94% | 94.46% | 88.45% | 93.40% | 4.95% |
| Worcester Line | 1,140 | 1,140 | 76.67% | 91.11% | 63.13% | 81.25% | 70.29% | 86.47% | 16.18% | 73.63% | 87.38% | 72.63% | 87.11% | 14.47% |
| Needham Line | 712 | 712 | 72.00% | 87.00% | 82.00% | 85.00% | 77.00% | 86.00% | 9.00% | 85.74% | 91.99% | 83.29% | 90.31% | 7.02% |
| Franklin Line | 896 | 896 | 68.75% | 84.38% | 70.83% | 85.00% | 69.64% | 84.64% | 15.00% | 81.66% | 90.75% | 77.90% | 88.84% | 10.94% |
| Providence Line | 976 | 976 | 76.25% | 91.88% | 90.83% | 97.50% | 82.50% | 94.29% | 11.79% | 78.74% | 92.53% | 79.82% | 93.03% | 13.22% |
| Stoughton Line | 640 | 640 | 60.00% | 78.75% | 77.00% | 85.00% | 69.44% | 82.22% | 12.78% | 84.13% | 94.13% | 80.00% | 90.78% | 10.78% |
| Fairmount Line | 1,140 | 1,140 | 92.50% | 93.75% | 95.00% | 97.00% | 93.89% | 95.56% | 1.67% | 92.50% | 96.04% | 92.72% | 95.96% | 3.25% |
| Middleboro Line | 640 | 640 | 88.00% | 89.00% | 88.33% | 90.00% | 88.13% | 89.38% | 1.25% | 92.50% | 96.25% | 91.41% | 94.53% | 3.13% |
| Kingston/Plymouth Line | 640 | 640 | 87.00% | 96.00% | 95.00% | 97.50% | 90.56% | 96.67% | 6.11% | 94.78% | 96.96% | 93.59% | 96.88% | 3.28% |

| | | | | | | | | | | | | | | |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| Greenbush Line | 640 | 640 | 89.00% | 92.00% | 96.25% | 97.50% | 92.22% | 94.44% | 2.22% | 96.09% | 96.74% | 95.00% | 96.09% | 1.09% |
| Overall | 11,928 | 11,928 | 82.38% | 90.81% | 85.00% | 91.73% | 83.60% | 91.24% | 7.64% | 88.28% | 94.09% | 87.01% | 93.32% | 6.30% |

On-Time Performance Percentages Actual & Adjusted - by Route and Peak/Off Peak

Reporting Period: From December 1,2015 through December 31, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Adjusted | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted | Change |
| Rockport Line | 697 | 697 | 89.77% | 92.05% | 88.64% | 89.77% | 89.20% | 90.91% | 1.70% | 94.24% | 94.82% | 92.97% | 93.83% | 0.86% |
| Newburyport Line | 900 | 900 | 92.21% | 96.75% | 94.70% | 96.21% | 93.36% | 96.50% | 3.15% | 95.28% | 96.58% | 94.67% | 96.56% | 1.89% |
| Haverhill Line | 1,163 | 1,163 | 94.89% | 94.89% | 90.91% | 96.21% | 93.18% | 95.45% | 2.27% | 95.32% | 96.73% | 94.75% | 96.39% | 1.63% |
| Lowell Line | 1,287 | 1,287 | 98.30% | 98.30% | 96.75% | 96.75% | 97.58% | 97.58% | 0.00% | 95.09% | 96.03% | 95.73% | 96.43% | 0.70% |
| Fitchburg Line | 917 | 917 | 95.17% | 96.55% | 93.94% | 94.70% | 94.58% | 95.67% | 1.08% | 93.13% | 98.13% | 93.57% | 97.38% | 3.82% |
| Worcester Line | 1,218 | 1,218 | 76.77% | 89.90% | 84.09% | 88.64% | 80.21% | 89.30% | 9.09% | 85.90% | 93.96% | 84.15% | 92.53% | 8.37% |
| Needham Line | 776 | 776 | 90.91% | 93.64% | 90.91% | 93.64% | 90.91% | 93.64% | 2.73% | 91.73% | 96.94% | 91.49% | 96.01% | 4.51% |
| Franklin Line | 956 | 956 | 85.80% | 93.75% | 87.12% | 89.39% | 86.36% | 91.88% | 5.52% | 87.81% | 93.67% | 87.34% | 93.10% | 5.75% |
| Providence Line | 1,044 | 1,044 | 87.50% | 92.61% | 91.67% | 96.21% | 89.29% | 94.16% | 4.87% | 88.18% | 94.02% | 88.51% | 94.06% | 5.56% |
| Stoughton Line | 704 | 704 | 76.14% | 81.82% | 85.45% | 91.82% | 81.31% | 87.37% | 6.06% | 91.70% | 96.84% | 88.78% | 94.18% | 5.40% |
| Fairmount Line | 1,186 | 1,186 | 96.59% | 97.73% | 94.55% | 94.55% | 95.45% | 95.96% | 0.51% | 96.56% | 97.27% | 96.37% | 97.05% | 0.67% |
| Middleboro Line | 672 | 672 | 99.09% | 99.09% | 87.88% | 87.88% | 94.89% | 94.89% | 0.00% | 94.96% | 95.36% | 94.94% | 95.24% | 0.30% |
| Kingston/Plymouth Line | 672 | 672 | 93.64% | 98.18% | 98.86% | 98.86% | 95.96% | 98.48% | 2.53% | 94.73% | 95.99% | 95.09% | 96.73% | 1.64% |
| Greenbush Line | 672 | 672 | 98.18% | 99.09% | 97.73% | 97.73% | 97.98% | 98.48% | 0.51% | 97.26% | 97.68% | 97.47% | 97.92% | 0.45% |
| Overall | 12,864 | 12,864 | 90.71% | 94.65% | 91.45% | 93.76% | 91.05% | 94.23% | 3.18% | 92.91% | 95.97% | 92.40% | 95.49% | 3.09% |

Actual & Adjusted - by Route and Peak/Off Peak

Reporting Period: From August 1,2015 through December 31, 2015

| Line | Trains | | AM Peak | | PM Peak | | Combined Peak | | | Off-Peak | | Overall | | |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|--------------|
| | Scheduled | Reporting | Actual | Adjusted | Actual | Adjusted | Actual | Adjusted | Change | Actual | Adjusted | Actual | Adjusted | Change |
| Rockport Line | 3,414 | 3,414 | 91.98% | 94.34% | 89.62% | 93.63% | 90.80% | 93.99% | 3.18% | 91.04% | 93.69% | 90.98% | 93.76% | 2.78% |
| Newburyport Line | 4,380 | 4,380 | 92.59% | 95.15% | 89.15% | 92.92% | 91.00% | 94.12% | 3.12% | 93.47% | 95.74% | 92.69% | 95.23% | 2.53% |
| Haverhill Line | 5,476 | 5,476 | 95.99% | 97.17% | 94.65% | 97.01% | 95.42% | 97.10% | 1.68% | 94.09% | 96.54% | 94.45% | 96.69% | 2.25% |
| Lowell Line | 6,264 | 6,264 | 96.34% | 97.52% | 94.61% | 96.50% | 95.53% | 97.04% | 1.51% | 94.20% | 95.59% | 94.54% | 95.96% | 1.42% |
| Fitchburg Line | 3,870 | 3,870 | 88.91% | 93.37% | 90.41% | 94.97% | 89.65% | 94.16% | 4.51% | 91.41% | 95.59% | 90.83% | 95.12% | 4.29% |
| Worcester Line | 5,934 | 5,934 | 84.07% | 91.72% | 76.42% | 88.09% | 80.47% | 90.01% | 9.54% | 80.47% | 92.81% | 80.47% | 91.96% | 11.49% |
| Needham Line | 3,788 | 3,788 | 83.77% | 90.19% | 87.17% | 92.08% | 85.47% | 91.13% | 5.66% | 91.39% | 95.20% | 89.73% | 94.06% | 4.33% |
| Franklin Line | 4,668 | 4,668 | 81.49% | 89.03% | 79.40% | 87.74% | 80.59% | 88.48% | 7.88% | 87.94% | 93.94% | 85.60% | 92.20% | 6.60% |
| Providence Line | 5,092 | 5,092 | 82.43% | 91.39% | 89.31% | 94.34% | 85.38% | 92.65% | 7.28% | 84.98% | 93.32% | 85.09% | 93.13% | 8.03% |
| Stoughton Line | 3,392 | 3,392 | 74.53% | 82.31% | 82.26% | 88.87% | 78.83% | 85.95% | 7.13% | 89.62% | 95.24% | 86.59% | 92.63% | 6.04% |
| Fairmount Line | 5,838 | 5,838 | 95.28% | 96.46% | 94.53% | 96.79% | 94.86% | 96.65% | 1.78% | 93.88% | 95.60% | 94.04% | 95.77% | 1.73% |
| Middleboro Line | 3,296 | 3,296 | 94.91% | 95.66% | 88.05% | 92.77% | 92.33% | 94.58% | 2.24% | 93.83% | 95.75% | 93.45% | 95.45% | 2.00% |
| Kingston/Plymouth Line | 3,296 | 3,296 | 93.58% | 96.42% | 94.81% | 96.93% | 94.13% | 96.65% | 2.52% | 94.62% | 96.41% | 94.48% | 96.48% | 2.00% |
| Greenbush Line | 3,296 | 3,296 | 93.40% | 95.09% | 92.22% | 94.81% | 92.87% | 94.97% | 2.10% | 95.43% | 97.01% | 94.69% | 96.42% | 1.73% |
| Overall | 62,004 | 62,004 | 89.11% | 93.39% | 88.29% | 93.21% | 88.73% | 93.31% | 4.58% | 90.96% | 95.11% | 90.35% | 94.61% | 4.26% |

Appendix C: “Fare is Fair” Campaign:

Objectives:

Promote fare collection requirements by crews on commuter rail and at stations. This will be a multi-faceted approach throughout the year designed to increase the awareness of fare evasion and enhance passengers and employee support for “Fare is Fair” campaign.

Conductors/Assistant Conductors

- Enhance and improve overall onboard fare collection
- Enhance ticket/pass/mTicket inspections on board trains
- Promote announcements by crews advising passengers of the expectation to have ticket/passes available for inspection
- Identify and address opportunities for fraudulent practices by passengers

Passengers

- Promote activation of mTickets prior to boarding trains
- Promote the purchase of tickets prior to boarding trains
- Discourage the purchase and use of 10 Ride tickets
- Through campaign promotion – obtain support of passengers that paying your fare is fair!

Proposed Campaign Strategies:

- Promote “Fare is Fair” campaign through social media, video (with T Police Chief), station announcements, brochures, etc.



Conduct “Fare is Fair” regular random ticket checks at main and outlying stations.

- Investigate the ability to create an mTicket app message advising passengers to activate mTicket prior to boarding train.
- Partner with the MBTA RR Ops, MBTA Marketing and MBTA Police to continue to develop ideas to reinforce fare collection and deter fare evasion.
- Promote the event via public address on board the trains, in Boston stations and on LED signs (for events taking place in local stations)

List of “Fare is fair” events:

- Monday 10/26: North Station 4pm to 6pm
- Tuesday 10/27: South Station 4pm to 6pm
- Tuesday 11/3: Salem Station 5:40 am to 8 am
- Tuesday 11/12: North Station 4pm to 6pm
- Wednesday 11/18: Beverly 5:30 am to 8 am
- Thursday 12/15: South Station 4pm to 6pm



Key results:

Example of **South Station event** on October 27th:

- 5108 passengers were fare inspected (Stoughton, Providence, Franklin, Worcester and Greenbush lines)
- 816 passengers were requested to activate their mTicket
- 41 had to buy a paper ticket prior to boarding
- For the 2nd half of year 2015, revenues are up 3% over last year

Some other results from the event were:

- ✓ Received a couple of expired tickets (required to purchase new tickets)
- ✓ Passengers complained and did not want to show their tickets / passes but were invited to buy one
- ✓ 5 Passengers with multiple punches on their 10 Ride tickets
- ✓ Appreciation of monthly pass holders for enhanced fare collection