On Time Performance and Number of Short Trains are important metrics to customers. The LIRR has shown marked improvement in these two areas through March 2019.
The Long Island Rail Road has developed a robust performance management program enabling it to measure whether goals are being achieved and to guide investment decisions. The MTA Board requested that the LIRR report monthly on the following three key metrics: Systemwide On Time Performance (OTP), the Number of Short Trains, and the Number of Track Circuit Incidents Causing At Least One Delay. Highlights through March 2019 include:

- Year-to-date through March the LIRR’s 2019 OTP is 93.2%%, including a 94.6% OTP in March 2019, which was just over 6% better than March 2018. The 2019 annual goal is 94%.
- Year-to-date through March the number of short trains dropped by almost 17% when compared to the same period in 2018 (919 versus 1,102). The annual goal is a 10% reduction.
- Year-to-date through March, the LIRR experienced 21 track circuit failures that caused at least one delay. This was eight more incidents more than the same period in 2018 and represented an approximate 62% increase from the same period in 2018. The annual goal is a 16% reduction versus 2018.

Additionally, the LIRR has embarked on an anti-fare evasion strategy that focuses on reducing credit card fraud and improving on-board fare collection. Some highlights in 2019 include:

- The key initiative to reducing credit card fraud is the deployment of special chip readers on ticket selling machines. The installation is scheduled to begin during Q2 2019 and be completed by the end of the year. Through February 2019, the LIRR’s Credit Card Chargeback Rate was 0.77% versus a year-end goal of 0.10%.
- Effective February 12th, 2019, the LIRR is no longer accepting checks for payment on new Mail & Ride accounts.
- The Transportation Department has strategically deployed train crews to increase its ability to collect fares onboard. The LIRR’s Fare Not Collected Rate as of February 2019 was 6.1%, which was less than the 2018 annual rate of 6.9%. The 2019 goal is 5%. The LIRR’s Incorrect Fare Collected Rate year-to-date as of February 2019 was 10.8%, which was less than the 2018 rate during the same time frame of 13.2%. The 2019 goal is 10%.

The LIRR has established ambitious goals for 2019 and the leadership team is reviewing performance monthly to assess the impact that its activities and investments are having on the customer experience. It will use this information to shape decisions as the year progresses.

Mark Young
Vice President – Management & Finance and Chief Financial Officer
On Time Performance (OTP)

Systemwide OTP represents the average on time performance of all LIRR trains. The national commuter railroad industry standard defines “on time” as a train that arrives at its final destination within 5 minutes and 59 seconds of its scheduled time. OTP provides the best overall picture of the Rail Road’s operating performance and surveys have revealed that it is the single most important factor affecting customer satisfaction.

The LIRR’s 2019 OTP goal is 94%, which is significantly better than the five-year average of 91.6%. While the LIRR has not achieved an annual 94% OTP since 2009, it continues to strive to achieve that level of performance even though there will be at least 209 scheduled track work programs during 2019 (including significant efforts related to Penn Station, Mainline Expansion, East Side Access and other projects) with a potential for more. There were 67 track work programs in 2009.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Yearly Performance</th>
<th>YTD Increase</th>
<th>OTP Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTP</td>
<td>2017: 91.4%</td>
<td>2018: 90.5%</td>
<td>2018 YTD: 88.3%</td>
</tr>
</tbody>
</table>

OTP for March 2019 was robust at 94.6% and was the first month since April 2018 during which OTP was greater than 94%. Additionally, it was the highest single month OTP since May 2016 when OTP was 94.7%. This elevates the LIRR’s YTD OTP to 93.2% (from 92.4% in February 2019), bringing the Rail Road closer to its annual goal of 94.0%. Lastly, when compared with the YTD total from 2018 (January, February and March) this represents an increase of 4.9%.

Much of this improvement is due to the continued progress of LIRR Forward, which has improved key facets of performance and service. Some examples of these service improvements include a reduction in failures at our addressed switch locations, and the complete elimination of cars turning onto the right of way at our grade crossings, PSEG poles falling onto the right of way, and bridge strikes at Buckram Road and Post Avenue Bridges after their replacement.
**Number of Short Trains**

The number of short trains is defined as the total number of AM and PM peak trains that operate with fewer cars than planned. This is an important metric because operating with fewer cars than planned can result in overcrowding and produce delays. It is one of the most important indicators of customer satisfaction and short trains can result in standees. The LIRR’s 2019 goal for this metric is 3,397 short trains, which represents an 10% reduction from 2018’s number.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Yearly Performance</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018</td>
<td>2018 YTD</td>
<td>2019 YTD</td>
<td>YTD Reduction</td>
<td>Reduction Goal</td>
</tr>
<tr>
<td>Number of Short Trains</td>
<td>2691</td>
<td>3774</td>
<td>1102</td>
<td>919</td>
<td>17%</td>
<td>10%</td>
</tr>
</tbody>
</table>

For March 2019, LIRR customers experienced 189 short trains. When compared to the number of short trains in March 2018 (303), this represents an almost 38% reduction. Year to date, the LIRR has reduced the number of short trains by almost 17% when compared to the same period in 2018.

This reduction year to date is due to a few initiatives. The LIRR increased its wheel truing capacity by 30%; it adopted an aggressive vegetation management campaign along the right of way, clearing over 220 miles of trees and shrubbery that could negatively impact performance with their leaf fall; and it proactively reduced the speed of trains in strategic locations, which mitigates the risk of flat wheels. Going forward in 2019, the LIRR will continue with these initiatives to mitigate the number of short trains.
**Number of Track Circuit Failures**

The LIRR is committed to addressing those issues that cause the most train delays. Because of their location at major interlockings, track circuits are a critical piece of the infrastructure and their failure can cause significant delays. Improved performance in this area will have a dramatic impact on the customer experience and the Rail Road’s performance. The LIRR’s 2019 goal is to reduce the number of track circuit failures that cause at least one train delay to 72 incidents, which is the midpoint between the Rail Road’s best year since 2014 (59 failures in 2016) and its worst year (86 failures in 2018) and would also represent an approximate 16% reduction from 2018.

Through the first three months of 2019, the LIRR has experienced 21 track circuit failures causing at least one delay. This was 8 more incidents than the same period in 2018 and represents a YTD increase from 2018 of approximately 62%. These failures occurred at several different interlockings throughout the LIRR’s system and the causes varied. LIRR Engineering Department is carefully reviewing the nature of these failures and determining what actions it can take to reduce this number going forward.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Yearly Performance</th>
<th>Reduction Goal</th>
<th>Incident Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2017</td>
<td>2018 YTD</td>
<td>2019 YTD</td>
</tr>
<tr>
<td>Circuit Failures</td>
<td>61</td>
<td>86</td>
<td>13</td>
</tr>
</tbody>
</table>
Anti-Fare Evasion Strategy

The LIRR has developed a two-pronged approach to its anti-fare evasion strategy:

1. Address Payment/Credit Card Fraud
2. Enhance onboard ticket collection/validation

Credit Card Fraud Strategy

1. Deploy “Chip” Credit/Debit Card Acceptance at Ticket Selling Machines
   - Deployment will begin in Q2 2019 and be complete by the end of 2019.
2. Deploy Visa Anti-Fraud Tool
   - Deployment will take place in Q2 2019.
3. Shift Monthly Pre-Sale dates from 20th to 25th Day of Month
   - Implementation scheduled for the May monthly ticket - April 25, 2019.
4. Eliminate Check Payment for New Mail and Ride Accounts
   - Status: Implemented on February 12, 2019. Existing accounts will be migrated in phases through July 2019.

While the LIRR’s chargeback rate is trending upward, once chip readers are deployed, full responsibility for fraud will shift to credit card companies and this rate will drop dramatically.
On Board Strategy

1. Enhance Train Crew/Customer Education Efforts
   - The LIRR has launched a more robust education campaign through customer communications (public announcements, social media, etc.) and internal communications to train crews (bulletin boards, FAQs, notices, etc.). Phase 1 will be completed in Q2 2019.

2. Charge On-Board Fare if a Customer has not Pre-Purchased an e-Ticket
   - LIRR is considering the best approach to addressing this issue.

3. Reduce the Time Flag for Recently Activated e-Tickets from 5 to 2 Minutes.
   - This will be applicable to LIRR once e-Ticket electronic scanning begins in Q2 2019.

4. Reduce the e-Tix Refund Fee Waiver Period from 5 Minutes to 2 Minutes
   - Implemented on February 12th, 2019.

5. Request that MTA Audit Services Re-Assess Its On-Board Compliance Program and evaluate whether a redesign or expansion, performed either in-house or by a third party, would be beneficial.
   - Will launch in Q2 2019.

The data shows progress with regard to the Fare Not and Incorrect Fare Collected rate in recent months. The LIRR expects continued improvement as the year progresses and the initiatives take hold.