



**Metropolitan Transportation Authority**

# Metro-North Report on Metrics and Fare Evasion



# Metro-North Railroad

## Performance Metrics

### Service Performance Improvement Metrics

<b>Service Metric</b>	<b>Change from 2018</b>	<b>2019 Goal</b>	<b>YTD Target</b>	<b>YTD Actual</b>	<b>Difference</b>	
OTP	2.9%	93.0%	93.0%	96.1%	3.1%	Higher
SHORT TRAINS	-10%	1,138	190	180	-5.3%	Lower
SWITCH/SIGNAL DELAYS	-15%	1,896	316	143	-54.7%	Lower

### Revenue Collection Improvement Metrics

<b>Fare Metric</b>	<b>Change from 2018</b>	<b>2019 Goal</b>	<b>YTD Target</b>	<b>YTD Actual</b>	<b>Difference</b>	
FARE NOT COLLECTED RATE	-10%	2.6%	2.6%	4.0%	1.4%	Higher
INCORRECT FARE COLLECTED RATE	-10%	12.5%	12.5%	17.9%	5.4%	Higher
CREDIT CARD CHARGEBACK RATE	-10%	0.045%	0.045%	0.076%	-0.031%	Higher
e-TIX REFUNDS PROCESSED	-10%	25,413	4,236	4,640	9.6%	Higher

**MTA METRO-NORTH RAILROAD  
PAYMENT FRAUD / FARE EVASION STRATEGY REPORT  
ACTION ITEMS  
FEBRUARY 2019**

<b>Action Items:</b>	<b>2019 TARGET DATE</b>	<b>STATUS</b>
<b><u>PAYMENT / CREDIT CARD FRAUD</u></b>		
1. Deploy "Chip" Credit/Debit Card Acceptance at Ticket Selling Machines	4th Qtr.	In Progress
2. Deploy Visa Anti-Fraud Tool	1st Qtr.	In Progress
3. Shift Monthly Pre-Sale Dates from 20th to 25th Day of Month	2nd Qtr.	Implemented / May ticket
4. Eliminate Check Payment for New Mail&Ride Accounts	1st Qtr.	Implemented
<b><u>ON BOARD TICKET COLLECTION / VALIDATION</u></b>		
1. Enhance Train Crew/Customer Education Efforts (focus on MTA eTix)	2nd Qtr.	In Progress
2. Charge On-Board Fare if a Customer has not pre-purchased an e-Ticket	1st Qtr.	In Progress
3. Reduce the Time Flag for Recently Activated e-Tickets from 5 to 2 Minutes.	1st Qtr.	Implemented
4. Reduce the e-Tix Refund Fee Waiver Period from 5 Minutes to 2 Minutes	1st Qtr.	Implemented
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	2nd Qtr.	In Progress



**Metropolitan Transportation Authority**

# Long Island Rail Road Report on Metrics and Fare Evasion



# Long Island Rail Road

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## Long Island Rail Road Performance Metrics Report



The LIRR has greatly expanding its wheel truing capacity. This enables it to maintain car availability and reduce the number of short trains.

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## Executive Summary

The Long Island Rail Road has developed a robust performance management program enabling it to assess agency performance, measure whether goals and objectives are being achieved and guide investments decisions. At its February 2019 meeting, the MTA Board approved an action item directing the LIRR to report monthly on 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 February 2019 include:

- Year-to-date through February the LIRR's 2019 OTP is 92.4%, including a 92.7% OTP in January 2019, which was almost 10% better than January 2018. The 2019 annual goal is 94%.
- Year-to-date through February the number of short trains dropped by 8.6% when compared to the same period in 2018 (730 versus 799). The annual goal is a 10.0% reduction.
- Year-to-date through February, the LIRR experienced 13 track circuit failures that caused at least one delay. This was four incidents more than the same period in 2018. The annual goal is a 16% reduction versus 2018.

In addition, the LIRR has embarked on an anti-fare evasion strategy that focuses both on reducing credit card fraud and improving on-board fare collection. Highlights of this effort so far in 2019 include:

- The key initiative to reducing credit card fraud is the deployment of special chip readers on ticket selling machines and is scheduled to begin in 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 5.0%. 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 10.0%.

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**

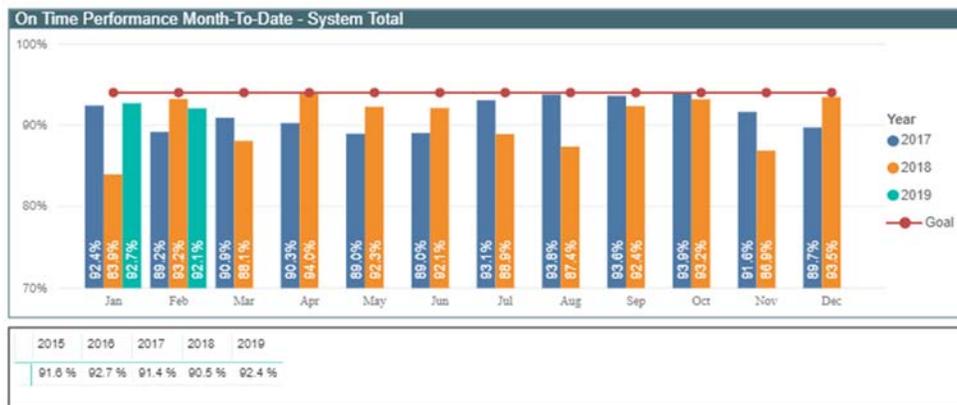
**Vice President – Management & Finance and Chief Financial Officer**

## 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 94.0%, which is significantly better than the five-year average of 91.6%. While the LIRR has not achieved an annual 94.0% OTP since 2009, it will continue 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. Note there were only 67 track work programs in 2009.

Performance				
Performance Indicator	Yearly Performance			
	2017	2018	2019 YTD	OTP Goal
OTP	91.4%	90.5%	92.4%	94.0%



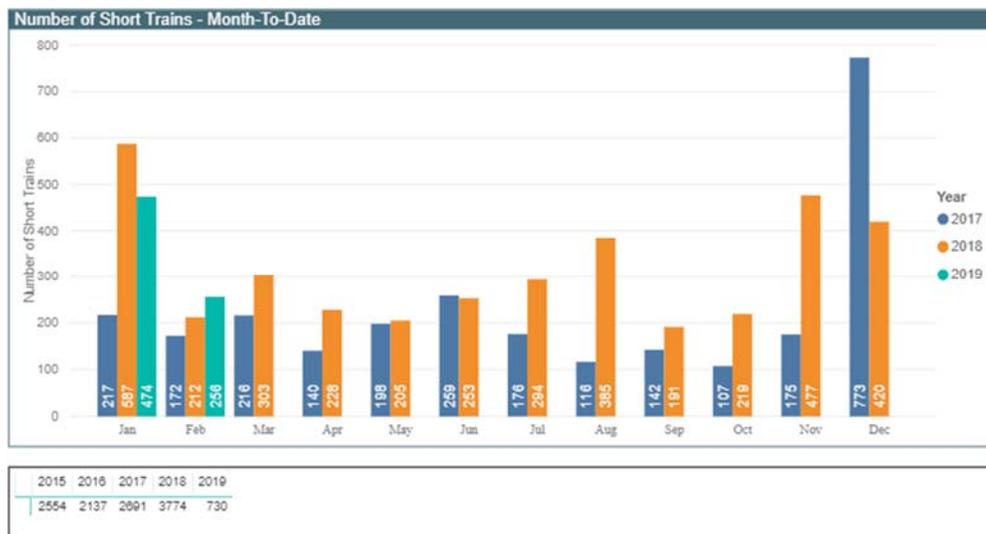
December 2018 and January 2019 reveal dramatic improvements in OTP when compared to the prior year. While still short of the 94.0% goal, OTP improved from 89.7% in December 2017 to 93.5% in December 2018, and from 83.9% in January 2018 to 92.7% in January 2019. Additionally, OTP in February was 92.1% with a total 2019 year-to-date OTP of 92.4%.

While the LIRR is yet to achieve its goal of 94% it is encouraged by the success of *LIRR Forward* in improving key facets of performance that will make the 94.0% goal that much more attainable. 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 10.0% reduction from 2018's number.

Performance					
Performance Indicator	Yearly Performance				
	2017	2018	2019	Reduction Goal	Short Trains Goal
Number of Short Trains	2691	3774	730	10.0%	3397



December 2018 and January 2019 represented marked improvements over the prior year. There was a 46% reduction in the number of short trains in December 2018 when compared to December 2017, and there was a 19% reduction in the number of short trains in January 2019 when compared to January 2018. In February 2019, the number of short trains increased slightly to 256 from 212 in 2018.

The 8.6% 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.

# 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 will be 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 two months of 2019, the LIRR had experienced 13 track circuit failures causing at least one delay. This was four more incidents than the same period in 2018. Many of these failures occurred in Harold Interlocking, which is the busiest interlocking in North America, and undergoing a tremendous amount of construction as part of the East Side Access construction project. The LIRR Engineering Department is carefully reviewing the nature of these failures and determining what actions it can take to reduce this number going forward.

Performance					
Performance Indicator	Yearly Performance				
	2017	2018	2019 YTD	Reduction Goal	Incident Goal
Track Circuit Failures	61	86	13	16%	72

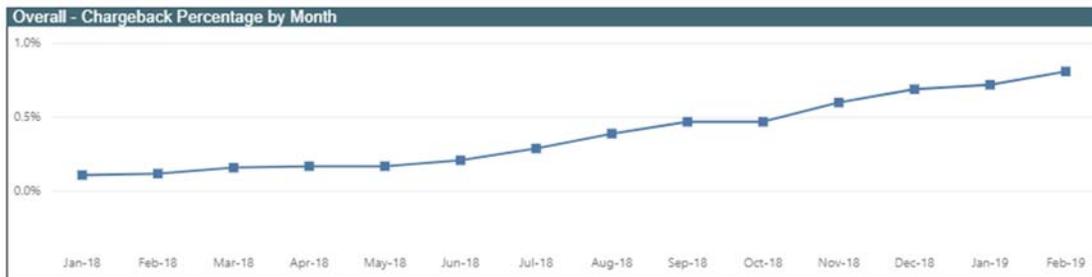
## Anti-Fare Evasion Strategy

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

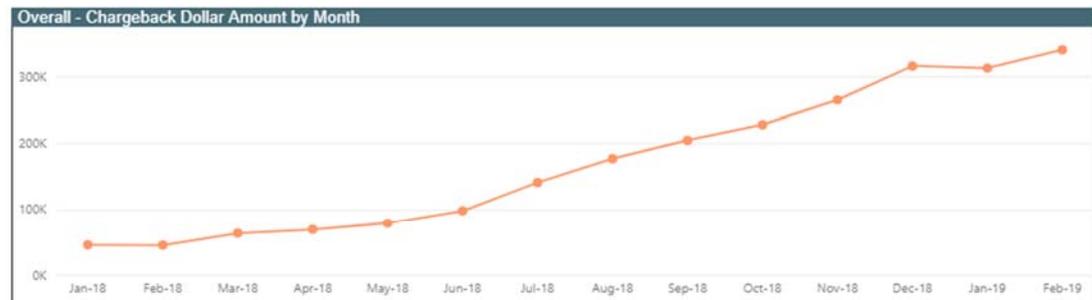
## Credit Card Fraud Strategy

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 Sales from 20<sup>th</sup> to 25<sup>th</sup> 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.



Annual Chargeback Average Percentage

Year	Percentage
2018	0.32 %
2019	0.77 %



Annual Chargeback Dollar Amount

Year	Dollar Amount
2018	1,738,604.04
2019	653,809.95

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.



**Metropolitan Transportation Authority**

# New York City Transit Report on Metrics and Fare Evasion

## NYCT Performance Metrics

<b>Subway Service Metrics</b>	<b>Feb-19</b>	<b>Goal</b>
Customer Journey Time Performance	82.0%	80.0%
Weekday Terminal On-Time Performance	76.4%	71.0%
Monthly Delay Reduction	267% of goal achieved	10,000

<b>Bus Service Metrics</b>	<b>Feb-19</b>	<b>Goal</b>
Mean Distance Between Failures	8,834	6,800
Service Delivered	97.5%	97.5%
Wait Assessment	78.9%	78.0%

# Transit Fare Evasion, 4<sup>th</sup> Quarter 2018

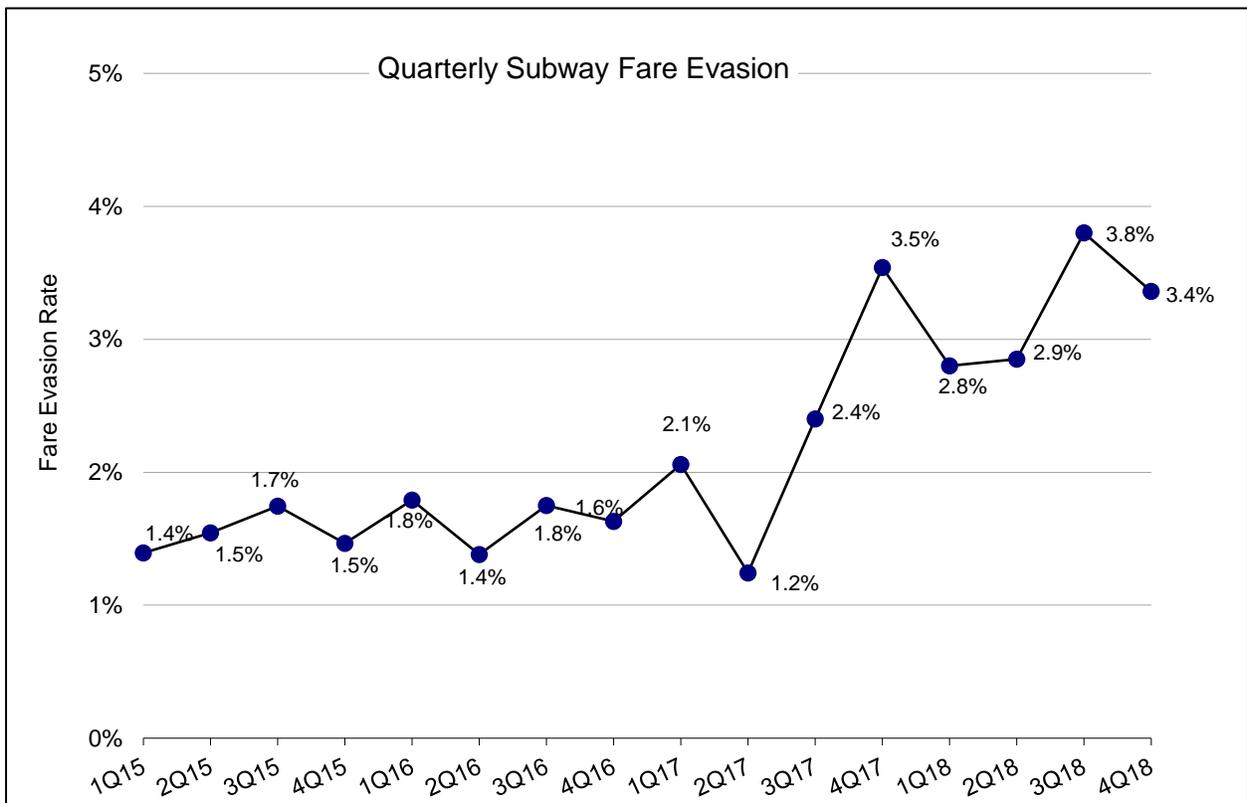
## Subway Fare Evasion Results

The 4<sup>th</sup> quarter 2018 fare evasion rate for subways was relatively flat compared to the same period the year prior, but the rate for the 12 months ending December 2018 is up 0.9% from 2017.

**Subway Fare Evasion Survey Summary**

	Oct-Dec 2018	Oct-Dec 2017	Change Percentage Points	12 Mo. Ending Dec 2018	12 Mo. Ending Dec 2017	Change Percentage Points
Total Subway Fare Evasion	3.4%	3.5%	-0.1%	3.2%	2.3%	+0.9%
Estimated Fare Evasion Revenue Loss (\$ Millions)	\$26	\$27	-4.5%	\$97	\$70	+38.3%

Enforcement Actions						
TOS TABS Summonses	17,102	11,465	+49.2%	53,142	54,846	-3.1%
TOS C-Summonses	1,826	-		1,826		
TOS Arrests	1,017	3,818	-73.4%	5,904	17,842	-66.9%
<b>Total Enforcement Actions</b>	<b>19,945</b>	<b>15,283</b>	<b>+30.5%</b>	<b>60,872</b>	<b>72,688</b>	<b>-16.3%</b>



## Bus Fare Evasion Results

The 4<sup>th</sup> quarter bus fare evasion rate increased to 21.9%, up 5.9% from the same period the year prior, and the rate for the 12 months ending December 2018 is up 5.1% from 2017.

### Bus Fare Evasion Survey Summary

Bus Fare Evasion	Oct-Dec 2018	Oct-Dec 2017	Change Percentage Points	12 Mo. Ending Dec 2018	12 Mo. Ending Dec 2017	Change Percentage Points
Local Bus Evasion (Excl SBS)	24.2%	17.7%	+6.5%	20.3%	14.7%	+5.6%
Select Bus Service (SBS) Evasion	2.5%	2.0%	+0.4%	2.3%	2.2%	+0.1%
<b>Total Local &amp; SBS Bus Evasion</b>	<b>21.9%</b>	<b>16.0%</b>	<b>+5.9%</b>	<b>18.4%</b>	<b>13.4%</b>	<b>+5.1%</b>
Estimated Fare Evasion Revenue Loss (\$ Millions)	\$39	\$29	+35.6%	\$128	\$97	+32.3%

