



**Metropolitan Transportation Authority**

# **Safety Committee Meeting July 2018**

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## **Committee Members**

J. Lhota, Chair

A. Albert

N. Brown

F. Ferrer

C. Moerdler

M. Pally

J. Samuelson

V. Tessitore, Jr.

J. Vitiello

P. Ward

N. Zuckerman

# **Safety Committee Meeting**

**2 Broadway, 20th Floor Board Room  
New York, NY 10004**

**Wednesday, 7/25/2018  
7:45 - 8:45 AM ET**

## **1. Public Comments**

## **2. Approval of Minutes - April 25, 2018**

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## **3. Safety Committee Work Plan**

*2018 Safety Committee Work Plan - Page 6*

## **4. Safety Metrics**

### **May**

*MTACC Safety Metrics - ESA-SAS - Page 9*

*MTACC Safety Metrics - Cortlandt-No 7 Line - Page 10*

*MNR Safety Metrics - Page 11*

*LIRR Safety Metrics - Page 12*

*NYCT Safety Metrics - Page 13*

*B&T Safety Metrics - Page 14*

### **April**

*MTACC Safety Metrics - ESA-SAS - Page 15*

*MTACC Safety Metrics - Cortlandt-No 7 Line - Page 16*

*MNR Safety Metrics - Page 17*

*LIRR Safety Metrics - Page 18*

*NYCT Safety Metrics - Page 19*

*B&T Safety Metrics - Page 20*

## **5. Safety Promotion: Safety Awareness Brochures/HQ Safety Day**

## **6. Safety Assurance: Review of Safety Performance**

Date of next meeting: September 26th @8:30 am

**Metropolitan Transportation Authority  
Minutes of  
Safety Committee Meeting  
2 Broadway, 20<sup>th</sup> Floor  
New York, NY 10004**

**Wednesday, April 25, 2018  
8:30 AM**

**The following members were present:**

**Hon. Fernando Ferrer, Vice Chair  
Hon. Mitchell Pally  
Hon. Andrew Albert  
Hon. Norman Brown  
Hon. James Vitiello  
Hon. Peter Ward  
Hon. Neal Zuckerman**

The following safety officers were present:

David Mayer - MTAHQ  
James Bromfield - NYCT  
Loretta Ebbighausen - LIRR  
Matthew Peloso – MNR  
Anne Kirsch – MTAHQ  
Eric Osnes – B & T

Ronnie Hakim, Managing Director, Metropolitan Transportation Authority, Helene Fromm, Chief of Staff, Metropolitan Transportation Authority, Janno Lieber, Chief Development Officer, Metropolitan Transportation Authority, Catherine Rinaldi, President, Metro-North Railroad (“MNR”), Phillip Eng, President, Long Island Rail Road (“LIRR”), Cedrick Fulton, President, Bridges and Tunnels (“B&T”), Darryl Irick, President, MTA Bus and Andy Byford, President, NY Transit (“NYCT”) also attended the meeting.

**Vice-Chairman Ferrer chaired the April meeting, and called the meeting to order.**

**PUBLIC SPEAKERS**

There was one public speaker, Jodie Ann Beatty. Refer to the video recording of the meeting produced by the MTA and maintained in MTA records, for content of the speaker’s statement.

**APPROVAL OF MINUTES**

Upon motion duly made and seconded, the minutes of the January 24, 2018 Safety Committee were approved.

## **SAFETY COMMITTEE WORK PLAN**

Chair Ferrer asked if there any changes to the work plan. Mr. Mayer said that were no changes. Chair Ferrer thanked Mr. Mayer for his service and congratulated him on his new position in Washington D.C.

## **SAFETY METRICS**

Mr. Mayer asked the Committee members if they had any comments on the Safety Metrics provided in the book.

Mr. Albert had a question about derailments. He asked if the cause of the derailment could be noted in the metrics in the future.

Mr. Bromfield answered that if the investigation is complete then yes, we can add it.

Mr. Brown commented on the two transit deaths since the last Safety Committee meeting and how the metrics did not reflect those two incidents any differently than other kinds of safety incidents.

Ms. Hakim responded to Mr. Brown's inquiry and explained that Chairman Lhota intends to address this at the Board Meeting. Ms. Hakim also stated that we will look at how fatalities and specifically employee fatalities, are reported.

## **SAFETY POLICY: DISCUSSION OF SMS FRAMEWORK**

Mr. Mayer discussed the four principals of Safety Management System ("SMS"). Please refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of the speaker's presentation.

Mr. Mayer spoke on the Third Rail Assessment performed in response to a recommendation from the National Transportation Safety Board.

Mr. Zuckerman asked for a summary on where we've come, from a safety perspective, since Mr. Mayer started at the MTA. He also thanked Mr. Mayer for all he has done.

Mr. Mayer indicated that it is a reasonable request and he will provide the summary.

Mr. Pally, Mr. Albert and Mr. Brown asked about the WSP assessment and the analysis of all other properties with third rail near roadways around the world. Please refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of the speaker's presentation.

Mr. Mayer provided an update on Obstructive Sleep Apnea Screening ("OSA").

Mr. Mayer also stated that a brochure stressing the importance of safety will be distributed across all agencies with material specific to their agency.

Mr. Greenberg asked about OSA screening for New York and Atlantic Railway and CSX.

Mr. Mayer stated that all New York and Atlantic Railway locomotive engineers had been screened.

Ms. Kirsch stated we have shared industry wide all our materials on OSA.

## **SAFETY RISK MANAGEMENT: CONSTRUCTION SAFETY AND WAZE PARTNERSHIP**

Mr. Mayer introduced Peter Kohner of MTACC to talk about construction safety. Please refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of the speaker's presentation.

Mr. Lieber followed up on the video presentation to talk about insurance, especially OCIP insurance and how it relates to cost increases.

Mr. Zuckerman asked why we pay for the insurance since most of the work is done through contractors.

Mr. Lieber stated the strategy of paying for the insurance is to keep costs down.

Mr. Tessitore asked a question regarding training for work being conducted near the right of way.

Mr. Kohner stated that the training is a prerequisite before entering the property.

Mr. Mayer introduced Eric Osnes and Adam Hartke for a presentation on their relationship with Waze. Please refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of the speaker's presentation.

Mr. Pally asked about working with the railroad regarding grade crossing incidents and mapping/navigation apps.

Ms. Ebbighausen stated LIRR is very excited about working with the application developers regarding both grade crossings and bridge strikes (height restrictions).

Mr. Mayer stated MNR is also working to accomplish the same goals with the applications.

Mr. Albert asked if anyone has ever sued one of these application developers such as Google and Waze. Laretta Ebbighausen responded that we'd have to look into it.

Mr. Brown stated he believes that while WAZE may make their trip a quicker trip but not a safer trip and that anything that distracts a driver does not make for a safer trip.

## **ADJOURNMENT**

Chair Ferrer asked for a motion to adjourn the meeting. A motion was made and seconded and the meeting was adjourned.

# 2018 Safety Committee Work Plan

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## I. RECURRING AGENDA ITEMS

| <u>Topic</u>        | <u>Responsibility</u>     |
|---------------------|---------------------------|
| Public Comments     | Committee Chair & Members |
| Approval of Minutes | Committee Chair & Members |
| Committee Work Plan | Committee Chair & Members |

## II. SPECIFIC AGENDA ITEMS

### January 2018

|   |                     |
|---|---------------------|
| Safety Assurance – Job Safety Briefings-Vision Zero | Agency Safety Leads |
| Safety Promotion – Winter Challenges                | Safety Staff        |

### April 2018

|  |                          |
|--|--------------------------|
| Safety Policy – Discussion of SMS Framework                                  | MTA Chief Safety Officer |
| Safety Risk Management – MTACC Construction Safety<br>MTABT WAZE Partnership | Safety Staff             |

### July 2018

|   |                                 |
|---|---------------------------------|
| Safety Promotion – Awareness Brochure/HQ Safety Day | MTA Acting Chief Safety Officer |
| Safety Assurance – Review of Safety Performance     | Agency Safety Leads             |

### September 2018

|  |                          |
|--|--------------------------|
| Safety Promotion – Specific item TBD       | MTA Chief Safety Officer |
| Safety Risk Management – Specific item TBD | Safety Staff             |

### December 2018

|  |                           |
|--|---------------------------|
| Safety Policy – Evaluation of Safety Committee Charter | Committee Chair & Members |
| Safety Assurance – Review of Safety Performance        | Agency Safety Leads       |

### January 2019

|  |                           |
|--|---------------------------|
| Safety Policy – Approval of 2016 Work Plan | Committee Chair & Members |
| Safety Risk Management – Specific item TBD | Safety Staff              |

## Detailed Summary

### I. RECURRING AGENDA ITEMS

#### Approval of Minutes

The Committee Chair will request a motion to approve the minutes of the prior meeting of the Safety Committee.

### Committee Work Plan

The Work Plan will list, by meeting, the topics scheduled for review. The Committee will be advised if any changes have been made to the plan.

## **II. SPECIFIC AGENDA ITEMS**

Note: The SMS framework has four pillars: Safety Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. To facilitate general oversight of SMS activities at the MTA and its agencies, each agenda items will generally pertain to one of these pillars.

### **January 2018**

#### Safety Assurance – Review of Safety Performance

The committee will receive a briefing and discuss matters pertaining to Agency safety performance. This relates to the Safety Assurance SMS pillar, and provides an opportunity for deeper exploration of “lagging” indicators of safety.

#### Safety Promotion

The committee will receive a briefing and/or an action item pertaining to a specific aspect of the Safety Promotion SMS pillar.

### **April 2018**

#### Safety Policy

The committee will receive a briefing and/or an action item pertaining to a specific aspect of the Safety Policy SMS pillar.

#### Safety Risk Management

The committee will receive a briefing and discussion will be invited pertaining to a specific aspect of the Safety Risk Management SMS pillar.

### **July 2018**

#### Safety Assurance – Review of Safety Performance

The committee will receive a briefing and discuss matters pertaining to Agency safety performance. This relates to the Safety Assurance SMS pillar, and provides an opportunity for deeper exploration of “lagging” indicators of safety.

#### Safety Promotion

The committee will receive a briefing and/or an action item pertaining to a specific aspect of the Safety Promotion SMS pillar.

### **September 2018**

#### Safety Promotion

The committee will receive a briefing and/or an action item pertaining to a specific aspect of the Safety Promotion SMS pillar.

#### Safety Risk Management

The committee will receive a briefing and discussion will be invited pertaining to a specific aspect of the Safety Risk Management SMS pillar.

### **December 2018**

#### **Safety Policy – Evaluation of Safety Committee Charter**

The Safety Committee Charter specifies that the Committee Chair & Members will review the charter annually. This relates to the Safety Policy SMS pillar.

#### **Safety Assurance – Review of Safety Performance**

The committee will receive a briefing and discuss matters pertaining to Agency safety performance. This relates to the Safety Assurance SMS pillar, and provides an opportunity for deeper exploration of “lagging” indicators of safety.

### **January 2019**

#### **Safety Policy – Approval of 2019 Work Plan**

The committee will be presented with and discuss the 2018 work plan and asked to approve the same. As the work plan governs the activities of the committee, this pertains to the Safety Policy SMS pillar.

#### **Safety Risk Management**

The committee will receive a briefing and discussion will be invited pertaining to a specific aspect of the Safety Risk Management SMS pillar.

# SAFETY OPERATIONS REPORT

## For East Side Access - May 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.23 | 0.5      |
| Recordable Injury Rate                         | 1.25 | 0.8      |

| Performance Indicator - CM      | May | YTD  | Goal | YTD as % of Goal |
|---------------------------------|-----|------|------|------------------|
| Daily Safety Walkthrough        | 191 | 1001 | 1920 | 52%              |
| JHAT Audit                      | 10  | 51   | 120  | 43%              |
| Quarterly Safety Audit          | 0   | 5    | 20   | 25%              |
| Bi Annual ACE Evaluation        | 0   | 6    | 10   | 60%              |
| Safety Monthly Meeting          | 6   | 30   | 12   | 250%             |
| Leading Indicators - Contractor | May | YTD  | Goal | YTD as % of Goal |
| Training                        | 23  | 142  | 160  | 89%              |
| Toolbox Talks                   | 48  | 445  | 500  | 89%              |
| Site Inspections                | 49  | 1241 | 2940 | 42%              |
| SWP Review/Audit                | 21  | 245  | 425  | 58%              |
| New Employee Orientation        | 36  | 724  | 1500 | 48%              |
| Emergency Preparedness          | 6   | 17   | 20   | 85%              |

## For Second Avenue Subway - May 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.0  | 0.0      |
| Recordable Injury Rate                         | 0.57 | 0.0      |

| Performance Indicator - CM      | May | YTD | Goal | YTD as % of Goal |
|---------------------------------|-----|-----|------|------------------|
| Daily Safety Walkthrough        | 32  | 221 | 1415 | 16%              |
| JHAT Audit                      | 0   | 0   | 120  | 0%               |
| Quarterly Safety Audit          | 0   | 0   | 20   | 0%               |
| Bi Annual ACE Evaluation        | 0   | 0   | 10   | 0%               |
| Safety Monthly Meeting          | 5   | 23  | 60   | 38%              |
| Leading Indicators - Contractor | May | YTD | Goal | YTD as % of Goal |
| Training                        | 4   | 15  | 158  | 9%               |
| Toolbox Talks                   | 12  | 75  | 240  | 31%              |
| Site Inspections                | 67  | 470 | 1415 | 33%              |
| SWP Review/Audit                | 6   | 35  | 0    |                  |
| New Employee Orientation        | 8   | 32  | 0    |                  |
| Emergency Preparedness          | 0   | 0   | 10   | 0%               |

# SAFETY OPERATIONS REPORT

## For Cortlandt - May 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.0  | 0.0      |
| Recordable Injury Rate                         | 0.0  | 0.0      |

| Performance Indicator - CM      | May | YTD | Goal | YTD as % of Goal |
|---------------------------------|-----|-----|------|------------------|
| Daily Safety Walkthrough        | 46  | 187 | 480  | 39%              |
| JHAT Audit                      | 2   | 8   | 24   | 33%              |
| Quarterly Safety Audit          | 0   | 2   | 4    | 50%              |
| Bi Annual ACE Evaluation        | 0   | 1   | 2    | 50%              |
| Safety Monthly Meeting          | 19  | 64  | 180  | 36%              |
| Leading Indicators - Contractor | May | YTD | Goal | YTD as % of Goal |
| Training                        | 5   | 18  | 64   | 28%              |
| Toolbox Talks                   | 5   | 27  | 50   | 54%              |
| Site Inspections                | 60  | 201 | 720  | 28%              |
| SWP Review/Audit                | 3   | 15  | 45   | 33%              |
| New Employee Orientation        | 2   | 52  | 100  | 52%              |
| Emergency Preparedness          | 0   | 1   | 2    | 50%              |

## For No. 7 Line - March 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0    | 0.0      |
| Recordable Injury Rate                         | 0.0  | 0.0      |

| Performance Indicator - CM      | March | YTD | Goal | YTD as % of Goal |
|---------------------------------|-------|-----|------|------------------|
| Daily Safety Walkthrough        | 22    | 63  | 251  | 25%              |
| JHAT Audit                      | 2     | 4   | 11   | 36%              |
| Quarterly Safety Audit          | 0     | 1   | 5    | 20%              |
| Bi Annual ACE Evaluation        | 0     | 0   | 2    | 0%               |
| Safety Monthly Meeting          | 1     | 3   | 12   | 25%              |
| Leading Indicators - Contractor | March | YTD | Goal | YTD as % of Goal |
| Training                        | 3     | 8   | 26   | 31%              |
| Toolbox Talks                   | 5     | 14  | 48   | 29%              |
| Site Inspections                | 50    | 150 | 729  | 21%              |
| SWP Review/Audit                | 0     | 0   | 9    | 0%               |
| New Employee Orientation        | 24    | 55  | 124  | 44%              |
| Emergency Preparedness          | 0     | 0   | 1    | 0%               |

## May 2018 Safety Report

| Performance  |                     |                     |                     |              |
|--|---------------------|---------------------|---------------------|--------------|
| Performance Indicator  | 12-Month Average    |                     |                     |              |
|  | June 2015 -May 2016 | June 2016 -May 2017 | June 2017 -May 2018 |              |
| FRA Reportable Customer Accident Rate per Million Customers            | 1.22                | 1.04                | 0.78                |              |
| FRA Reportable Employee Lost Time Injury Rate per 200,000 worker hours | 2.56                | 3.10                | 2.79                |              |
|  | 2017                |                     | 2018                |              |
|  | May                 | Year to Date        | May                 | Year to Date |
| Grade Crossing Incidents <sup>1</sup>                                  | 0                   | 1                   | 0                   | 1            |
| Mainline FRA Reportable Train Derailments                              | 1                   | 2                   | 0                   | 0            |
| Mainline FRA Reportable Train Collisions                               | 0                   | 0                   | 0                   | 0            |

<sup>1</sup> Per FRA - Any impact between railroad on-track equipment and a highway user at a highway-rail grade crossing. The term "highway user" includes automobiles, buses, trucks, motorcycles, bicycles, farm vehicles, pedestrians, and all other modes of surface transportation motorized and un-motorized.

| Leading Indicators                                  |            |                     |            |              |
|---|------------|---------------------|------------|--------------|
| Safety Training                                     | 2017       |                     | 2018       |              |
|   | May        | Year to Date        | May        | Year to Date |
| First Responders Trained                            | 118        | 789                 | 230        | 894          |
| Employee Safety Training Courses                    | 104        | 244                 | 138        | 280          |
| Employees Trained                                   | 796        | 4,157               | 1,278      | 4,313        |
| Employee Safety Training Hours                      | 11,862     | 100,196             | 18,090     | 124,590      |
| Customer and Community:<br>Focus on Grade Crossings | 2017       |                     | 2018       |              |
|   | May        | Year to Date        | May        | Year to Date |
| Broken Gates  | 0          | 13                  | 3          | 12           |
| MTA Police Details                                  | 91         | 665                 | 114        | 561          |
| Summons   | 11         | 65                  | 6          | 60           |
| Warnings  | 34         | 80                  | 6          | 20           |
| Community Education and Outreach                    | 2,615      | 25,955              | 29,345     | 58,445       |
| Cars Equipped with Cameras                          | Fleet Size | Total Cars Equipped | % Complete |              |
| Inward / Outward Facing Cab Cameras                 | 956        | 517                 | 54.08%     |              |
| Passenger Compartment Cameras                       | 1,086      | 502                 | 46.22%     |              |

**Definitions:**

**First Responders Trained** - The number of first responders trained by MNR's Emergency Management to assist in crisis events, such as train evacuation.

**Employee Safety Training Courses** - The number of distinct safety-related courses offered, including technical courses that have a safety element. Repeats are excluded so that each course is counted only once.

**Employees Trained** - The number of unique employees that attended one or more of these safety-related courses.

**Employee Safety Training Hours** - The total hours of training completed by employees in all safety-related courses attended.

**Broken Gates** - The number of events at grade crossing locations where a vehicle struck a crossing gate.

**MTA Police Detail** - The number of details specifically for the purpose of monitoring behavior at Grade Crossings.

**Summons** - The number of violations issued to a motorist for going around a crossing gate or due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Warnings** - The number of warnings issued to motorists due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Community Education and Outreach** - The number of individuals reached at a TRACKS event. Program began in May 2016.

**Cars Equipped with Cameras** - Number of complete inward/outward and passenger compartment camera installations on rolling stock.



## Monthly Operations Report May 2018

Statistical results for the 12-Month period are shown below.

| <b>Safety Report</b>  |  |                         |                    |                    |
|---|--|-------------------------|--------------------|--------------------|
| <b>Performance Indicators</b>   |  | <b>12-Month Average</b> |                    |                    |
|   |  | Jun 15 -<br>May 16      | Jun 16 -<br>May 17 | Jun 17 -<br>May 18 |
| <b>Subways</b>  |  |                         |                    |                    |
| Subway Customer Accidents per Million Customers <sup>1</sup>              |  | 2.49                    | 2.69               | 2.95               |
| Subway Collisions <sup>2</sup>  |  | 0                       | 0                  | 0                  |
| Subway Derailments <sup>2</sup>   |  | 2                       | 3                  | 4                  |
| Subway Fires <sup>2</sup>   |  | 918                     | 974                | 956                |
| <b>Buses</b>  |  |                         |                    |                    |
| Bus Collisions Per Million Miles Regional                                 |  | 54.99                   | 55.52              | 54.59              |
| Bus Collision Injuries Per Million Miles Regional                         |  | 6.36                    | 6.21               | 6.42               |
| Bus Customer Accidents Per Million Customers <sup>1</sup> Regional        |  | 1.18                    | 1.29               | 1.23               |
| Total NYCT and MTA Bus Lost Time Accidents per 100 Employees <sup>1</sup> |  | 4.05                    | 3.80               | 3.46               |

<sup>1</sup> 12-Month Average data from May through April.

<sup>2</sup> 12-month figures shown are totals rather than averages.

| <b>Leading Indicators</b>                           |            |            |             |                         |
|---|------------|------------|-------------|-------------------------|
| <b>Subways</b>                                      | <b>May</b> | <b>YTD</b> | <b>Goal</b> | <b>YTD as % of Goal</b> |
| <b>Roadway Worker Protection</b>                    |            |            |             |                         |
| Joint Track Safety Audits -- Actual Count           | 35         | 166        | 340         | 48.8%                   |
| Joint Track Safety Audits -- Compliance Rate        | 96.7%      | 97.9%      | 100.0%      | 97.9%                   |
| <b>Mainline Collision/Derailment Prevention</b>     |            |            |             |                         |
| Continuous Welded Rail Initiative (# of Track Feet) | 10,908     | 39,547     | 72,000      | 54.9%                   |
| Friction Pad Installation                           | 16,137     | 48,778     | 50,000      | 97.6%                   |
| <b>Buses</b>  | <b>May</b> | <b>YTD</b> | <b>Goal</b> | <b>YTD as % of Goal</b> |
| <b>Collision Prevention</b>                         |            |            |             |                         |
| Audible Pedestrian Warning System Pilot             | 29         | 99         | 283         | 35.0%                   |
| Vision Zero Employee Training                       | 503        | 2,748      | 6,100       | 45.0%                   |

## Safety Report May 2018

Statistical results for the 12-Month period are shown below.

| Performance Indicators  |                      |                      |                      |
|---|----------------------|----------------------|----------------------|
| Performance Indicator   | 12-Month Average     |                      |                      |
|   | June 2015 - May 2016 | June 2016 - May 2017 | June 2017 - May 2018 |
| Customer Collisions Rate for Bridge Customers per Million Vehicles        | 6.56                 | 8.08                 | 7.10                 |
| Customer Injury Collisions Rate for Bridge Customers per Million Vehicles | 0.96                 | 0.90                 | 1.00                 |
| Employee Accident Reports   | 242                  | 293                  | 206                  |
| Employee Lost Time Injuries Rate per 200,000 worker hours                 | 5.6                  | 7.9                  | 6.7                  |
| Construction Injuries per 200,000 worker hours                            | 2.34                 | 1.68                 | 1.47                 |

| Leading Indicators                        |      |          |      |              |
|---|------|----------|------|--------------|
| Roadway Safety                            | 2017 |          | 2018 |              |
|   | May  | Year End | May  | Year to Date |
| Workforce Development (# of Participants) | 73   | 926      | 8    | 299          |
| Fleet Preventative Maintenance Insp.      | 137  | 1445     | 141  | 690          |
| Safety Taskforce Inspections              | 0    | 12       | 2    | 4            |
| Construction Safety                       | May  | Year End | May  | Year to Date |
| Construction Safety Inspections           | 349  | 3384     | 183  | 870          |
| Fire Safety                               | May  | Year End | May  | Year to Date |
| Fire Code Audits Completed                | 1    | 14       | 1    | 5            |
| FDNY Liaison Visits                       | 6    | 25       | 2    | 11           |

### Definitions:

**Workforce Development** provides for focused safety and skills training to all operations, maintenance and staff personnel. Classes feature OSHA 10 and 30 Classes, operations mandatory safety and skills instruction and retraining and specialty training (TIMS, CDL, FDNY instruction, Wrecker Driver Instruction and Roadway Safety Rules).

**Fleet Preventative Maintenance Inspections** are conducted at each location to improve the customer and worker safety environment. Inspections identify potential hazardous roadway or facility conditions and prescribe corrective actions to eliminate hazards.

**Safety Taskforce Inspections** are conducted by the joint Labor and Management Committee at each facility throughout the year on a rotating basis. The inspections consist of reviewing past accident and incident experiences/reports and facility safety reports. The Taskforce meets with location management and union representatives and makes a complete tour of the facility. The Taskforce is comprised of representatives of the Safety and Operations groups and has representation from each of the represent unions.

**Construction Safety Inspections** are conducted by an independent safety monitor to ensure that the necessary components for a safe construction are present. Inspections include review of safety organization, job hazard analysis, safe work plans for specific high risk activities, personal protective equipment, fire protection, industrial hygiene, and training.

**Fire Code Audits** are required by the NYS Uniform Fire Prevention Code. They are conducted by the Safety and Health Department at each building and facility throughout the Agency. They feature a review of fire prevention activities and the condition of fire fighting and suppression equipment.

**FDNY Liaison Visits** are conducted on a regular basis (typically twice a year) whereby local fire companies visit and tour the facilities to become familiar with the structures and buildings and the fire equipment provided. This facilitates the development of strategies for fighting fires and responding to emergencies. Additionally, special drills and training exercises are conducted to drill communications and special rescue operations should they be required.

# SAFETY OPERATIONS REPORT

## For East Side Access - April 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.23 | 0.5      |
| Recordable Injury Rate                         | 1.25 | 0.8      |

| Performance Indicator - CM      | April | YTD  | Goal | YTD as % of Goal |
|---------------------------------|-------|------|------|------------------|
| Daily Safety Walkthrough        | 199   | 795  | 1920 | 41%              |
| JHAT Audit                      | 10    | 41   | 120  | 34%              |
| Quarterly Safety Audit          | 0     | 5    | 20   | 25%              |
| Bi Annual ACE Evaluation        | 0     | 6    | 10   | 60%              |
| Safety Monthly Meeting          | 6     | 24   | 12   | 200%             |
| Leading Indicators - Contractor | April | YTD  | Goal | YTD as % of Goal |
| Training                        | 20    | 98   | 160  | 61%              |
| Toolbox Talks                   | 93    | 386  | 500  | 77%              |
| Site Inspections                | 220   | 1150 | 2940 | 39%              |
| SWP Review/Audit                | 29    | 189  | 425  | 44%              |
| New Employee Orientation        | 115   | 657  | 1500 | 44%              |
| Emergency Preparedness          | 1     | 6    | 20   | 30%              |

## For Second Avenue Subway - April 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.0  | 0.0      |
| Recordable Injury Rate                         | 0.57 | 0.0      |

| Performance Indicator - CM      | April | YTD | Goal | YTD as % of Goal |
|---------------------------------|-------|-----|------|------------------|
| Daily Safety Walkthrough        | 40    | 189 | 1415 | 13%              |
| JHAT Audit                      | 0     | 0   | 120  | 0%               |
| Quarterly Safety Audit          | 0     | 0   | 20   | 0%               |
| Bi Annual ACE Evaluation        | 0     | 0   | 10   | 0%               |
| Safety Monthly Meeting          | 3     | 18  | 60   | 30%              |
| Leading Indicators - Contractor | April | YTD | Goal | YTD as % of Goal |
| Training                        | 3     | 11  | 158  | 7%               |
| Toolbox Talks                   | 15    | 63  | 240  | 26%              |
| Site Inspections                | 92    | 403 | 1415 | 28%              |
| SWP Review/Audit                | 7     | 29  | 0    |                  |
| New Employee Orientation        | 2     | 24  | 0    |                  |
| Emergency Preparedness          | 0     | 0   | 10   | 0%               |

# SAFETY OPERATIONS REPORT

## For Cortlandt - April 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0.0  | 0.0      |
| Recordable Injury Rate                         | 0.0  | 4.7      |

| Performance Indicator - CM      | April | YTD | Goal | YTD as % of Goal |
|---------------------------------|-------|-----|------|------------------|
| Daily Safety Walkthrough        | 48    | 187 | 480  | 39%              |
| JHAT Audit                      | 2     | 8   | 24   | 33%              |
| Quarterly Safety Audit          | 1     | 2   | 4    | 50%              |
| Bi Annual ACE Evaluation        | 0     | 1   | 2    | 50%              |
| Safety Monthly Meeting          | 15    | 64  | 180  | 36%              |
| Leading Indicators - Contractor | April | YTD | Goal | YTD as % of Goal |
| Training                        | 5     | 18  | 64   | 28%              |
| Toolbox Talks                   | 4     | 27  | 50   | 54%              |
| Site Inspections                | 50    | 201 | 720  | 28%              |
| SWP Review/Audit                | 3     | 15  | 45   | 33%              |
| New Employee Orientation        | 5     | 52  | 100  | 52%              |
| Emergency Preparedness          | 0     | 1   | 2    | 50%              |

## For No. 7 Line - March 2018

| Performance                                    |      |          |
|--|------|----------|
| Injury Rate                                    | 2017 | 2018 YTD |
| Lost Time Injury Rate per 200,000 worker hours | 0    | 0.0      |
| Recordable Injury Rate                         | 0.0  | 0.0      |

| Performance Indicator - CM      | March | YTD | Goal | YTD as % of Goal |
|---------------------------------|-------|-----|------|------------------|
| Daily Safety Walkthrough        | 22    | 63  | 251  | 25%              |
| JHAT Audit                      | 2     | 4   | 11   | 36%              |
| Quarterly Safety Audit          | 0     | 1   | 5    | 20%              |
| Bi Annual ACE Evaluation        | 0     | 0   | 2    | 0%               |
| Safety Monthly Meeting          | 1     | 3   | 12   | 25%              |
| Leading Indicators - Contractor | March | YTD | Goal | YTD as % of Goal |
| Training                        | 3     | 8   | 26   | 31%              |
| Toolbox Talks                   | 5     | 14  | 48   | 29%              |
| Site Inspections                | 50    | 150 | 729  | 21%              |
| SWP Review/Audit                | 0     | 0   | 9    | 0%               |
| New Employee Orientation        | 24    | 55  | 124  | 44%              |
| Emergency Preparedness          | 0     | 0   | 1    | 0%               |

## April 2018 Safety Report

| Performance  |                      |                      |                      |              |
|--|----------------------|----------------------|----------------------|--------------|
| Performance Indicator  | 12-Month Average     |                      |                      |              |
|  | May 2015 -April 2016 | May 2016 -April 2017 | May 2017 -April 2018 |              |
| FRA Reportable Customer Accident Rate per Million Customers            | 1.23                 | 1.08                 | 0.77                 |              |
| FRA Reportable Employee Lost Time Injury Rate per 200,000 worker hours | 2.56                 | 2.89                 | 2.84                 |              |
|  | 2017                 |                      | 2018                 |              |
|  | April                | Year to Date         | April                | Year to Date |
| Grade Crossing Incidents <sup>1</sup>                                  | 1                    | 1                    | 0                    | 1            |
| Mainline FRA Reportable Train Derailments                              | 0                    | 1                    | 0                    | 0            |
| Mainline FRA Reportable Train Collisions                               | 0                    | 0                    | 0                    | 0            |

<sup>1</sup> Per FRA - Any impact between railroad on-track equipment and a highway user at a highway-rail grade crossing. The term "highway user" includes automobiles, buses, trucks, motorcycles, bicycles, farm vehicles, pedestrians, and all other modes of surface transportation motorized and un-motorized.

| Leading Indicators                                  |            |                     |            |              |
|---|------------|---------------------|------------|--------------|
| Safety Training                                     | 2017       |                     | 2018       |              |
|   | April      | Year to Date        | April      | Year to Date |
| First Responders Trained                            | 176        | 671                 | 325        | 664          |
| Employee Safety Training Courses                    | 92         | 389                 | 124        | 252          |
| Employees Trained                                   | 1,066      | 3,879               | 1,241      | 3,791        |
| Employee Safety Training Hours                      | 18,935     | 69,435              | 26,040     | 103,074      |
| Customer and Community:<br>Focus on Grade Crossings | 2017       |                     | 2018       |              |
|   | April      | Year to Date        | April      | Year to Date |
| Broken Gates  | 3          | 13                  | 3          | 9            |
| MTA Police Details                                  | 123        | 574                 | 111        | 447          |
| Summons   | 15         | 54                  | 8          | 54           |
| Warnings  | 31         | 46                  | 9          | 14           |
| Community Education and Outreach                    | 2,190      | 23,340              | 10,500     | 29,100       |
| Cars Equipped with Cameras                          | Fleet Size | Total Cars Equipped | % Complete |              |
| Inward / Outward Facing Cab Cameras                 | 956        | 439                 | 45.92%     |              |
| Passenger Compartment Cameras                       | 1,086      | 428                 | 39.41%     |              |

**Definitions:**

**First Responders Trained** - The number of first responders trained by MNR's Emergency Management to assist in crisis events, such as train evacuation.

**Employee Safety Training Courses** - The number of distinct safety-related courses offered, including technical courses that have a safety element. Repeats are excluded so that each course is counted only once.

**Employees Trained** - The number of unique employees that attended one or more of these safety-related courses.

**Employee Safety Training Hours** - The total hours of training completed by employees in all safety-related courses attended.

**Broken Gates** - The number of events at grade crossing locations where a vehicle struck a crossing gate.

**MTA Police Detail** - The number of details specifically for the purpose of monitoring behavior at Grade Crossings.

**Summons** - The number of violations issued to a motorist for going around a crossing gate or due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Warnings** - The number of warnings issued to motorists due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Community Education and Outreach** - The number of individuals reached at a TRACKS event. Program began in May 2016.

**Cars Equipped with Cameras** - Number of complete inward/outward and passenger compartment camera installations on rolling stock.

# April 2018 Safety Report

Statistical results for the 12-Month period are shown below.

| Performance  |                     |                       |                       |       |              |
|--|---------------------|-----------------------|-----------------------|-------|--------------|
| Performance Indicator  | 12-Month Average    |                       |                       |       |              |
|  | May 2015-April 2016 | May 2016 - April 2017 | May 2017 - April 2018 |       |              |
| FRA Reportable Customer Accident Rate per Million Customers            | 4.27                | 4.42                  | 2.56                  |       |              |
| FRA Reportable Employee Lost Time Injury Rate per 200,000 worker hours | 3.14                | 3.38                  | 3.42                  |       |              |
|  |                     | 2017                  |                       | 2018  |              |
|  |                     | April                 | Year to Date          | April | Year to Date |
| Grade Crossing Incidents <sup>1</sup>                                  | 0                   | 6                     |                       | 0     | 2            |
| Mainline FRA Reportable Train Derailments                              | 0                   | 1                     |                       | 0     | 0            |
| Mainline FRA Reportable Train Collisions                               | 0                   | 1                     |                       | 0     | 3            |

<sup>1</sup> Per FRA - Any impact between railroad on-track equipment and a highway user at a highway-rail grade crossing. The term "highway user" includes automobiles, buses, trucks, motorcycles, bicycles, farm vehicles, pedestrians, and all other modes of surface transportation motorized and un-motorized.

| Leading Indicators               |            |              |        |              |
|----------------------------------|------------|--------------|--------|--------------|
| Focus on Safety Training         | 2017       |              | 2018   |              |
|                                  | April      | Year to Date | April  | Year to Date |
| First Responders Trained         | 283        | 696          | 493    | 1,028        |
| Employee Safety Training Courses | 88         | 155          | 88     | 330          |
| Employees Trained                | 1,085      | 3,042        | 1,160  | 4,096        |
| Employee Safety Training Hours   | 19,078     | 87,192       | 29,851 | 98,973       |
| Customer and Community:          | April      | Year to Date | April  | Year to Date |
| Broken Gates                     | 9          | 32           | 6      | 24           |
| MTA Police Details               | 90         | 240          | 129    | 465          |
| Summons                          | 6          | 13           | 31     | 103          |
| Warnings                         | 100        | 324          | 54     | 182          |
| Arrests                          | 0          | 1            | 1      | 1            |
| Community Education and Outreach | 10,575     | 34,594       | 6,287  | 31,289       |
|                                  |            | Completed    | Total  | % Complete   |
| Cameras on Rolling Stock         | M7         |              | 34     | 4.06         |
|                                  | C3 Cab     |              | 7      | 30.43        |
|                                  | C3 Trailer |              | 3      | 2.70         |
|                                  | DE/DM      |              | 1      | 2.22         |

**Definitions:**

**First Responders Trained** - The number of first responders trained to assist in crisis events.

**Employee Safety Training Courses** - The number of distinct safety-related courses offered, including technical courses that have a safety element. Repeats are excluded so that each course is counted only once.

**Employees Trained** - The number of unique employees that attended one or more of these safety-related courses.

**Employee Safety Training Hours** - The total hours of training completed by employees in all safety-related courses attended.

**Broken Gates** - The number of events at grade crossing locations where a vehicle broke a crossing gate.

**MTA Police Detail** - The number of details specifically for the purpose of monitoring behavior at Grade Crossings.

**Summons for Grade Crossing Violation and other Infractions**- The number of violations issued to a motorist for going around a crossing gate or due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Warnings** - The number of warnings issued to motorists due to behavior that put the motorist at risk (i.e. cell phone use, etc.).

**Community Education and Outreach** - The number of participants who attended a TRACKS, Operation LifeSaver, or Railroad Safety Awareness Event.

**Cameras on Rolling Stock** - Number of complete inward/outward camera installations on rolling stock.

## Monthly Operations Report April 2018

Statistical results for the 12-Month period are shown below.

| <b>Safety Report</b>  |  |                         |                    |                    |
|---|--|-------------------------|--------------------|--------------------|
| <b>Performance Indicators</b>   |  | <b>12-Month Average</b> |                    |                    |
|   |  | May 15 -<br>Apr 16      | May 16 -<br>Apr 17 | May 17 -<br>Apr 18 |
| <b>Subways</b>  |  |                         |                    |                    |
| Subway Customer Accidents per Million Customers <sup>1</sup>              |  | 2.48                    | 2.68               | 2.93               |
| Subway Collisions <sup>2</sup>  |  | 0                       | 0                  | 0                  |
| Subway Derailments <sup>2</sup>   |  | 2                       | 3                  | 4                  |
| Subway Fires <sup>2</sup>   |  | 945                     | 981                | 964                |
| <b>Buses</b>  |  |                         |                    |                    |
| Bus Collisions Per Million Miles                      Regional            |  | 54.29                   | 56.00              | 54.48              |
| Bus Collision Injuries Per Million Miles                      Regional    |  | 6.33                    | 6.41               | 6.21               |
| Bus Customer Accidents Per Million Customers <sup>1</sup> Regional        |  | 1.16                    | 1.28               | 1.25               |
| Total NYCT and MTA Bus Lost Time Accidents per 100 Employees <sup>1</sup> |  | 3.98                    | 3.86               | 3.48               |

<sup>1</sup> 12-Month Average data from April through March.

<sup>2</sup> 12-month figures shown are totals rather than averages.

| <b>Leading Indicators</b>                           |        |        |        |                  |
|---|--------|--------|--------|------------------|
| <b>Subways</b>                                      | April  | YTD    | Goal   | YTD as % of Goal |
| <b>Roadway Worker Protection</b>                    |        |        |        |                  |
| Joint Track Safety Audits -- Actual Count           | 31     | 131    | 340    | 38.5%            |
| Joint Track Safety Audits -- Compliance Rate        | 99.0%  | 98.2%  | 100.0% | 98.2%            |
| <b>Mainline Collision/Derailment Prevention</b>     |        |        |        |                  |
| Continuous Welded Rail Initiative (# of Track Feet) | 10,480 | 28,639 | 72,000 | 39.8%            |
| Friction Pad Installation                           | 7,471  | 32,641 | 50,000 | 65.3%            |
| <b>Buses</b>  | April  | YTD    | Goal   | YTD as % of Goal |
| <b>Collision Prevention</b>                         |        |        |        |                  |
| Audible Pedestrian Warning System Pilot             | 18     | 70     | 283    | 24.7%            |
| Vision Zero Employee Training                       | 620    | 2,245  | 6,100  | 36.8%            |

## Safety Report April 2018

Statistical results for the 12-Month period are shown below.

| Performance Indicators  |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|
| Performance Indicator   | 12-Month Average         |                          |                          |
|   | May 2015 -<br>April 2016 | May 2016 -<br>April 2017 | May 2017 -<br>April 2018 |
| Customer Collisions Rate for Bridge Customers per Million Vehicles        | 6.29                     | 7.91                     | 7.38                     |
| Customer Injury Collisions Rate for Bridge Customers per Million Vehicles | 0.98                     | 0.90                     | 0.94                     |
| Employee Accident Reports   | 238                      | 292                      | 205                      |
| Employee Lost Time Injuries Rate per 200,000 worker hours                 | 5.4                      | 7.6                      | 6.9                      |
| Construction Injuries per 200,000 worker hours                            | 2.26                     | 1.66                     | 1.49                     |

| Leading Indicators                        |       |          |       |              |
|---|-------|----------|-------|--------------|
| Roadway Safety                            | 2017  |          | 2018  |              |
|   | April | Year End | April | Year to Date |
| Workforce Development (# of Participants) | 42    | 926      | 7     | 291          |
| Fleet Preventative Maintenance Insp.      | 112   | 1445     | 160   | 549          |
| Safety Taskforce Inspections              | 2     | 12       | 1     | 2            |
| Construction Safety                       | April | Year End | April | Year to Date |
| Construction Safety Inspections           | 347   | 3384     | 216   | 687          |
| Fire Safety                               | April | Year End | April | Year to Date |
| Fire Code Audits Completed                | 0     | 14       | 1     | 4            |
| FDNY Liaison Visits                       | 10    | 25       | 9     | 9            |

### Definitions:

**Workforce Development** provides for focused safety and skills training to all operations, maintenance and staff personnel. Classes feature OSHA 10 and 30 Classes, operations mandatory safety and skills instruction and retraining and specialty training (TIMS, CDL, FDNY instruction, Wrecker Driver Instruction and Roadway Safety Rules).

**Fleet Preventative Maintenance Inspections** are conducted at each location to improve the customer and worker safety environment. Inspections identify potential hazardous roadway or facility conditions and prescribe corrective actions to eliminate hazards.

**Safety Taskforce Inspections** are conducted by the joint Labor and Management Committee at each facility throughout the year on a rotating basis. The inspections consist of reviewing past accident and incident experiences/reports and facility safety reports. The Taskforce meets with location management and union representatives and makes a complete tour of the facility. The Taskforce is comprised of representatives of the Safety and Operations groups and has representation from each of the represent unions.

**Construction Safety Inspections** are conducted by an independent safety monitor to ensure that the necessary components for a safe construction are present. Inspections include review of safety organization, job hazard analysis, safe work plans for specific high risk activities, personal protective equipment, fire protection, industrial hygiene, and training.

**Fire Code Audits** are required by the NYS Uniform Fire Prevention Code. They are conducted by the Safety and Health Department at each building and facility throughout the Agency. They feature a review of fire prevention activities and the condition of fire fighting and suppression equipment.

**FDNY Liaison Visits** are conducted on a regular basis (typically twice a year) whereby local fire companies visit and tour the facilities to become familiar with the structures and buildings and the fire equipment provided. This facilitates the development of strategies for fighting fires and responding to emergencies. Additionally, special drills and training exercises are conducted to drill communications and special rescue operations should they be required.