



Metropolitan Transportation Authority

# Metro-North Railroad Committee Meeting

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## March 2019

### Members

S. Metzger

N. Brown

R. Glucksman

C. Moerdler

M. Pally

A. Saul

V. Vanterpool

N. Zuckerman

# **Metro-North Railroad Committee Meeting**

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

**Monday, 3/25/2019  
8:30 - 9:30 AM ET**

## **1. Public Comments**

## **2. Approval of Minutes**

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## **3. 2019 Work Plan**

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## **4. President's Reports**

### **Safety**

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## **5. Information Items**

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### **Annual Strategic Investments & Planning Studies**

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### **Annual Elevator & Escalator Report**

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### **Customer Satisfaction Survey Results**

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### **PTC Status Report**

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### **Lease Agreement for Hastings Station**

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### **License agreement for Purdy's Station**

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## **6. Procurements**

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### **MNR Non-Competitive Procurements**

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## **MNR Competitive Procurements**

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### **7. Operations Report**

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### **9. Ridership Report**

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### **10. Capital Program Report**

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Next Meeting: Joint meeting with Long Island on Monday, April 15th @ 8:30 a.m.

Minutes of the Regular Meeting  
Metro-North Committee  
Monday, February 25, 2019

Meeting held at  
2 Broadway – 20<sup>th</sup> Floor  
New York, New York 10004  
8:30 a.m.

The following members were present:

Hon. Susan G. Metzger, Chair of the Metro-North Committee  
Hon. Mitchell H. Pally, Chair of the Long Island Rail Road Committee  
Hon. Norman Brown  
Hon. Charles G. Moerdler  
Hon. Andrew Saul  
Hon. Veronica Vanterpool  
Hon. Neal J. Zuckerman  
Hon. Vincent Tessitore, Jr.

Not Present:

Hon. Randy Glucksman  
Hon. Scott Rechler

Also Present:

Janno Lieber, MTA Chief Development Officer  
Catherine Rinaldi – President, Metro-North Railroad  
Susan J. Doering – Executive Vice President, Metro-North Railroad  
Glen Hayden – Vice President, Engineering, Metro-North Railroad  
Yvonne Hill-Donald - Vice President, Human Resources, Metro-North Railroad  
Richard L. Gans – Vice President and General Counsel, Metro-North Railroad  
John Kennard – Vice President – Capital Programs, Metro-North Railroad  
John Kesich – Senior Vice President, Operations, Metro-North Railroad  
Mark Mannix – Sr. Director, Corporate and Public Affairs, Metro-North Railroad  
Thomas Mitchell – Vice President, Customer Service and Stations, Metro-North Railroad  
Owen Monaghan – Chief, MTA Police Department  
Andrew Paul – Vice President, Labor Relations, Metro-North Railroad  
Michael Shiffer – Vice President, Planning, Metro-North Railroad  
Justin Vonashek – Vice President, System Safety, Metro-North Railroad  
Steve Weiss – Executive Director, Management and Budget, Metro-North Railroad

The members of the Metro-North Committee met jointly with the members of the Long Island Rail Road Committee. Mr. Pally, as Chair of the Long Island Rail Road Committee, called the joint meeting to order. In addition to the Metro-North President and Metro-North staff noted above, President Eng and various staff of the Long Island Rail Road attended the joint committee meeting. The minutes of the Long Island Rail Road Committee for the meeting of February 25, 2019 should be consulted for matters addressed at the joint meeting relating to the Long Island Rail Road.

## **SAFETY PROCEDURES:**

Mark Hoffer, Vice President, General Counsel and Secretary, Long Island Rail Road, reviewed the emergency safety procedures and introduced the public speakers.

## **PUBLIC COMMENT:**

Orrin Getz, Vice Chairman of the Metro-North Railroad Commuter Council, commented that he attended a public forum sponsored by New Jersey Transit (“NJT”) on February 6, 2019. He remarked that some MTA Board members were also in attendance. Mr. Getz stated that NJT announced at the meeting that it would be able to start restoring service after cuts were implemented in June 2018. Mr. Getz requested that Metro-North work with NJT to ensure the Pascack Valley Line express train service is prioritized. Mr. Getz also requested that the MTA take over Suffern Station to perform necessary upgrades.

H.P. Schroer, Director of “U and ME Become WE,” requested a fare discount for veterans. Mr. Schroer commented that veterans offer skills and work ethic, yet 35% of the veteran population has left the area due to the high cost of living. Mr. Schroer requested the Board consider his proposal to dedicate two cents from every fare collected towards a veterans’ discount.

Lisa Daglian, Executive Director of the Permanent Citizens Advisory Committee (“PCAC”) commented that PCAC will be testifying in support of sustainable funding for all the MTA operating agencies, including congestion pricing. She commented that sustainable funding is necessary for the region’s economy and to avoid a major fare increase.

Additional details of the comments made by the public speakers are contained in the minutes of the Long Island Rail Road Committee for the meeting of February 25, 2019. The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of the public comments.

## **APPROVAL OF MINUTES:**

Upon motion duly made and seconded, the Committee approved the minutes of the January 22, 2019 Metro-North Committee meeting.

## **METRO-NORTH 2019 WORK PLAN:**

President Rinaldi reported that the Metro-North Work Plan will have to be amended to reflect two additional reports that were requested as part of Board Member Zuckerman’s resolution approved by the Committee at the January 2019 meeting. The reports will address:

1. The deadline (month and year) when deferred track maintenance work will be completed including the amount and nature of work required to be completed by Line; and
2. An accelerated plan to complete the deferred track maintenance work including the key actions of the plan and incremental cost to complete the plan.

President Rinaldi requested that the reports be presented in July 2019 instead of March 2019 to allow sufficient time for an external evaluation of Metro-North’s internal analysis. After discussion, the Work Plan was amended to present the formal reports in June 2019 and provide an interim update on Metro-North’s internal analysis prior to June 2019.

The details of the Metro-North 2019 Work Plan are contained in the records of this meeting. The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of President Rinaldi's remarks and discussion with Board members.

**METRO-NORTH PRESIDENT'S OPENING REMARKS:**

President Rinaldi recognized the retirement of Al Muir, Senior Director of Procurement and Material Management. Mr. Muir has been with Metro-North since 1988 and his first job was in the Metro-North mechanical department. He quickly moved to the Procurement and Materials Management Department where he spent 29 1/2 years specializing in the purchase of rolling stock, including M7s, M8s, and coaches. Mr. Muir was also instrumental in the implementation of Positive Train Control ("PTC") on rolling stock, a joint Metro-North and Long Island Rail Road venture. President Rinaldi noted that as Metro-North continues to meet the needs of the future, rolling stock technology and procurement processes have become incredibly complex. Effective procurement of Metro-North's state-of-the art rolling stock can only be accomplished by someone with Mr. Muir's skillset, which includes a mixture of mechanical knowledge and patience. President Rinaldi stated that Mr. Muir and his expertise will be missed and thanked Mr. Muir for his service. Mr. Muir was presented with a plaque and a photograph was taken. Vice President and General Counsel Richard Gans also recognized the retirement of Linda Montanino, Corporate Secretary and FOIL Officer. Mr. Gans thanked Ms. Montanino and wished her the best.

President Rinaldi reported that service delivery during January operated above goal at 95.9% and there were no significant winter storms that impacted service during the month. The Hudson Line service operated at 95.6%, the Harlem Line service operated at 96.8%, and the New Haven Line service operated at 95.4%. President Rinaldi reported on an incident that occurred on the New Haven Line on February 19, 2019. At approximately 12:15 AM there was a circuit breaker failure which resulted in a fire at an overhead traction power substation located east of the Devon Bridge in Connecticut. The fire resulted in significant damage to the cables and wires that support the operations of the power substation and it was determined the substation could not be repaired. Metro-North crews accelerated work over the weekend to successfully bring a new substation that was under construction into service to provide some of the functionality lost at the Devon substation. Engineers are also working to introduce interim functionality of a new replacement substation at the Devon location that was not scheduled to come on line until this fall. These projects demonstrate why it is important to invest in Metro-North's infrastructure, which is a key priority under Metro-North's Way Ahead Plan. These projects are critical to keeping Metro-North's system safe and reliable.

President Rinaldi reported that the incident has caused minimal delays to some trains on the New Haven Line. Metro-North continues to inform New Haven Line customers between Stamford and New Haven that they should anticipate potential delays of up to 15 minutes until this interim repair work is completed and there is a full restoration of normal operations. President Rinaldi reported that year-to-date, OTP is at 96.2% despite the incident and overall OTP has been above goal since December 8, 2018 when the major infrastructure work for 2018 came to an end.

President Rinaldi reported that West of Hudson Service operated below goal at 90.1% as service during January was impacted by weather, equipment failures, and disruptions due to accelerated PTC train equipment installations. The Pascack Valley Line operated at 92.2% and the Port Jervis Line operated at 87.4% due primarily to signal problems at Harriman. The availability of NJT equipment and crews has improved so far this year. There were only four cancelled trains West of Hudson during the month of January and they were limited to the Pascack Valley Line. President Rinaldi reported that on February 6, 2019, she attended an open house hosted by NJT in

Suffern, NY to hear comments and concerns from Metro-North's West of Hudson customers with Chair Susan Metzger and Board Member Randy Glucksman.

Board Member Zuckerman commented on Metro-North's OTP statistics, stating that overall OTP statistics mask the AM Peak performance statistics, which are the most important. President Rinaldi agreed that the AM Peak OTP presents an area of opportunity for improvement and noted that Metro-North's performance statistics are transparent. Board Member Moerdler asked if it was possible to avoid conducting track work during the AM peak hours. President Rinaldi responded that Metro-North does consistently perform overnight infrastructure work and the tracks are given back to the Transportation Department for the morning commute.

Regarding the Fordham Station, President Rinaldi reported that Metro-North has reached an agreement with the Connecticut Department of Transportation to eliminate the long-standing boarding restrictions at Fordham Station, which will open New Haven Line trains for travel between Fordham and Manhattan. This change will become effective Sunday, April 14, 2019 to coincide with the New Haven Line schedule change. New Haven Line trains currently stop at Fordham only to enable travel between Fordham and points north in Westchester County and Connecticut. Customers wishing to travel between Fordham and Manhattan are currently directed to Harlem Line trains for travel. The change means railroad customers will be able to access an additional 96 weekday trains for travel between Fordham and Manhattan that previously had been unavailable to local customers, more than doubling the existing service. On Saturdays, 67 New Haven Line trains will now be available for such travel, bolstering the existing 83 Harlem Line trains. On Sundays, Metro-North is adding access to 65 New Haven Line trains to the existing 63 Harlem Line trains. During off-peak times, there will be approximately four trains per hour instead of the current two trains per hour between Fordham and Manhattan.

President Rinaldi reported on Metro-North's TRACKS Safety Poster Contest, which was part of Metro-North's Way Ahead Plan. In an effort to raise awareness about the importance of rail safety, Metro-North's TRACKS Program launched an inaugural Rail Safety Poster Contest last September. The contest was open to all schools (Pre-K through 12th grade) within the Metro-North territory throughout New York and Connecticut. Students were asked to illustrate what they know and believe are most important about rail safety. The TRACKS team received a total of 62 student poster entries from 13 different schools. The poster entries were divided into four groups for the judging process: Pre-Kindergarten, Kindergarten through 3<sup>rd</sup> grade, 4<sup>th</sup> grade through 8<sup>th</sup> grade, and 9<sup>th</sup> grade through 12<sup>th</sup> grade. The posters were evaluated based on the best representations of safety around trains and train tracks within their grade levels. The five winning posters will be featured in Metro-North's TRACKS presentations throughout the year. In addition, Metro-North is arranging a visit to each school, accompanied by Metro-North's TRACKS ambassador, "Metro-Man," so Metro-North can recognize the winning students for their achievement. The five schools by class category along with their winning posters are as follows:

- Pre-Kindergarten: J.A.C.E. Daycare and Early Learning Program in Wappinger Falls, NY
- Kindergarten through 3rd Grade: Park City Magnet School in Bridgeport, CT
- 4th Grade through 8th Grade: Tie between Dobbs Ferry Middle School in Dobbs Ferry, NY, and Graham Elementary School in Mt. Vernon, NY
- 9th Grade through 12th Grade: Cardinal Hayes High School in the Bronx

The winning posters were displayed at the meeting. President Rinaldi congratulated all the winners as well as those who participated in the contest and stated that she looks forward to visiting the schools.

President Rinaldi also reported on Metro-North's Customer "Connect with Us" forums. Since 2014, Metro-North has held informal customer forums at Metro-North train stations on a

regular basis to foster an open dialogue with customers. The “Connect with Us” forums are an excellent opportunity for Metro-North to listen and learn what Metro-North can do to improve service for customers. Recently, Metro-North was at Beacon Station on January 29, 2019 and Brewster Station on February 6, 2019. President Rinaldi announced the following upcoming sessions:

- Croton-Harmon Station from 7am to 8:30am on February 26, 2019;
- Nanuet Station on March 12, 2019 from 6am to 8am; and
- Harriman Station on March 26 from 6:30am to 8am.

President Rinaldi reported that there will be more forums in the future, including in Connecticut. A FiOS 1 News video of the Brewster Station forum was played at the meeting.

Regarding outreach, President Rinaldi reported that Metro-North and MTA’s Department of Diversity and Civil Rights are coordinating an MWBE Outreach event on March 1, 2019 with the joint venture of Skanska-ECCO. Last fall, the Board approved a design/build contract award to Skanska-ECCO for the final phase of the Harmon Shop replacement project. MTA’s Department of Diversity and Civil Rights established a 15% Minority Business Enterprise and a 15% Women Business Enterprise participation goal for that project. The March 1, 2019 outreach event will be held at the Yonkers Public Library from 8AM to 12PM so prospective MWBE firms can be informed of the project’s subcontracting opportunities.

President Rinaldi reported that Metro-North continues to focus on improving customer communications as part of the Way Ahead Plan and began installing more digital screens in Grand Central Terminal. Seven new screens have replaced some of the old phone banks in the Terminal and these screens will enable Metro-North to provide customer information on a regular basis and improve communications, especially during service disruptions. Metro-North is working on digital enhancements to these screens and will be deploying an additional seven screens this year in place of other phone banks in Grand Central Terminal. President Rinaldi reported that Metro-North also has plans to install 300 additional screens in Grand Central Terminal’s trainshed, platform areas, and North End Access and is starting to roll out the digital screens at outlying stations.

President Rinaldi reported that Metro-North is implementing a new collection box initiative at Grand Central Terminal to raise funds for people in need of services within the Terminal and acknowledged the participation and support of the MTAPD on the initiative. This new program will assist the most vulnerable New Yorkers and try to help reduce the amount of panhandling within Grand Central Terminal and at Terminal entrances. The collection boxes have been designed and constructed by Metro-North forces in accordance with Grand Central Terminal’s aesthetics and with minimal structural impact. The funds will be processed and transferred to the MTA’s social service provider, the Bowery Residents Committee (“BRC”). Collection amounts will be reported to Metro-North personnel every month, and the railroad has the right to audit the collection process. After accepting help and services from BRC and meeting measurable goals, a homeless individual will receive a gift card purchased from the funds collected at Grand Central Terminal. BRC outreach staff will ensure that these gift cards are distributed to entrenched clients in the Terminal. Additional gift cards will be distributed to clients who continue to meet benchmarks, accept services, and move towards stability and independence in their lives. To measure and monitor the program’s impact, BRC and Metro-North personnel will conduct several daily counts of people panhandling inside Grand Central Terminal and at Terminal entrances. Homelessness is a devastating, complex societal problem, and this new collection box initiative is a valuable way for the MTA to contribute to a solution. President Rinaldi thanked customers for their support and generosity. President Rinaldi also recognized MTA Bus for providing the collection devices, MTAPD for their assistance and guidance in developing the initiative, and Metro-North’s Maintenance of Way team for designing and constructing the collection boxes.

Board Member Moerdler asked if there were areas in Grand Central Terminal the homeless can access during inclement weather. President Rinaldi responded that appropriate space would need to be identified and she has concerns about drawing people to Grand Central Terminal who would not otherwise come.

The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of the President's Opening Remarks and the discussions between President Rinaldi, and Board Members Zuckerman and Moerdler.

#### **CUSTOMER SERVICE REPORT:**

Thomas Mitchell, Vice President, Customer Service and Stations, reported that as part of the Way Ahead Plan, Metro-North is improving the customer experience at its stations by expanding the Station Ambassadors Pilot Program. The pilot commenced in December 2018 at four key outlying stations: Harlem-125th Street, Fordham, White Plains and Stamford. The ambassadors answer questions and continually monitor the stations which allows Metro-North to react quickly to issues that may arise. The ambassadors also monitor homeless activity and assist customers with limited mobility. Mr. Mitchell reported that Metro-North has received positive feedback from customers and will soon be expanding the pilot to include New Rochelle and Croton-Harmon stations and will be adding a second shift at Harlem-125th station. Mr. Mitchell acknowledged Labor Relations and the Transportation Communications Union for their cooperation in developing this pilot program.

The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of Mr. Mitchell's report.

#### **METRO-NORTH RAILROAD SAFETY REPORT:**

Justin Vonashek, Vice President, System Safety, reported that customer injuries continue to trend less than 1 injury per million customers and employee lost time injuries trended better than the previous 12 months and are down 17%. Metro-North's community outreach program, TRACKS, reached over 2,100 individuals in December 2018, bringing the total individuals reached during 2018 to over 101,000 (surpassing Metro-North's goal of 100,000). In 2018, Metro-North participated in 50 community outreach events, and conducted 86 school presentations and 60 outreach events at stations and grade crossings. On Wednesday, March 6, 2019, Metro-North will be holding its first quarter Safety Focus Day.

Mr. Vonashek's full safety report is filed with the records of this meeting and the video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of Mr. Vonashek's remarks.

#### **MTA POLICE DEPARTMENT (MTAPD) REPORT:**

Owen Monaghan, Chief of the MTA Police Department, reported on Long Island Rail Road and Metro-North crime statistics. For the month of January, total major felony crimes system-wide decreased by 30%; 21 compared to 30 in 2018. For Metro-North, in January, total major felony crimes decreased by 41%; 10 compared to 17 in 2018, consisting of one robbery, three felony assaults, one burglary, four grand larcenies, and one grand larceny auto. Of those ten crimes, five were immediately closed by arrest.

Chief Monaghan reported that for the month of January, there were two hate crimes, compared to five in 2018. One of the hate crimes resulted in an immediate arrest. Chief Monaghan

responded to Board Member Moerdler's questions about the disposition of the case. Board Member Moerdler congratulated Chief Monaghan for MTAPD's reduction of hate crimes when compared to New York City and MTA New York City Transit.

Board Member Saul asked for a general update about the 125<sup>th</sup> Street Station and asked if there had been any progress related to homelessness. Chief Monaghan reported that the MTAPD has a constant presence at the 125<sup>th</sup> Street Station and issued 71 summonses during January 2019. In 2018, a total of 607 summonses were issued at the 125<sup>th</sup> Street Station, compared to 152 in 2017. Addressing homelessness, Chief Monaghan reported that the MTAPD had 1,742 contacts with individuals in need and works closely with the BRC to provide necessary services.

Board Member Moerdler asked about case dispositions after the issuance of summonses. Chief Monaghan responded that most summonses go to the Midtown Community Court. The MTAPD works closely with the Midtown Community Court to ensure individuals receive services yet summonses are frequently disposed of in lieu of a penalty. Board Member Moerdler asked the Presidents of Metro-North and Long Island Rail Road to consider having their internal legal departments assist with the prosecution of cases. Board Member Brown asked about recidivism rates and Chief Monaghan responded that he believes recidivism rates are close to 100%.

Chief Monaghan's full report is filed with the records of this meeting. The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of Chief Monaghan's remarks and the discussions between Board Members Moerdler, Brown, and Saul, and Chief Monaghan.

#### **LONG ISLAND RAIL ROAD and METRO-NORTH RAILROAD JOINT INFORMATION ITEM:**

One joint information item was presented to the Committee:

- Project Update on PTC.

President Rinaldi referred to the presentation in the Committee Book and asked the following individuals, who attended the Committee meeting as representatives of the PTC Systems Integrator, to introduce themselves and take seats at the table to respond to questions from the Committee:

Representing Bombardier: Richard Hunter - President, Rail Control Solutions; Ronald Birkelbach – Vice President / Head of Region Americas, Rail Control Solutions; Anthony DeFrancisco – Program Director, Rail Control Solutions and Lee Sander – President, AME.

Representing Siemens: Marc Buncher - CEO Siemens Mobility Inc., and Paul Eliea – Program Director.

Mitchell Pally, Chair of the Long Island Rail Road Committee, thanked the representatives for attending the Committee meeting. Long Island Rail Road Executive Director-PTC Deborah Chin provided an overview of the February 2019 Joint Metro-North/Long Island Rail Road Committee Meeting PTC Project Update. She reported that Metro-North and Long Island Rail Road met the federal compliance requirements at the end of 2018 to request an Alternative Schedule which extends the project's completion date until December 2020.

Through the end of January, both Railroads conducted Revenue Service Demonstration ("RSD") runs. To date, Metro-North has achieved over 80% of its required RSD runs. Because the

software release used to initiate RSD on Long Island Rail Road's Port Washington Branch was not working optimally, Long Island Rail Road tested a new software release last week to improve its ability to complete the required number of RSD runs. Long Island Rail Road plans to resume RSD at the end of March with this new software.

Executive Director Chin stated that, as outlined in the presentation, Metro-North and Long Island Rail Road have developed aggressive internal working schedules to fully implement PTC by the end of 2020. Both Long Island Rail Road and Metro-North plan to extend their RSD territories beyond the pilot lines into Extended Revenue Service Demonstration ("ERSD") on the first non-pilot segments in September/October, and to get their entire territories into ERSD in the first half of 2020. Both Long Island Rail Road and Metro-North plan to submit their Safety plans in July/August with the expectation of getting FRA approval in six to 12 months, in advance of the 2020 deadline. Executive Director Chin stated that she expects to achieve full inter-operability with tenant railroads by December 2020.

Executive Director Chin stated that the Railroads' ability to meet these working schedules is contingent upon the Systems Integrator's ability to meet its schedule commitments and mitigate project risks. The Railroads cannot afford to encounter any new equipment reliability or quality issues.

Since the PTC schedule is moving to the end of 2020, the Railroads are in the process of evaluating their budgets and anticipate that they will need to request additional funds to complete the project. Executive Director Chin then gave a detailed slide presentation about PTC, which outlined the major project concerns and risks to the project, including: 1) achieving interoperability with tenant railroads; and 2) the Railroads' lack of confidence in the ability of the Systems Integrator to support the new December 2020 deadline.

She reviewed concerns regarding PTC equipment reliability and quality control; the impacts of unexpected PTC equipment failures on the RSD segments and ERSD on non-pilot segments; and the provision of inadequate resources by the Systems Integrator resulting in less than full support of both Long Island Rail Road and Metro-North.

Executive Director Chin also reviewed the steps to be taken to achieve full PTC implementation; and, as of January 2019, the status of the Railroads' PTC programs, Working Schedules and Segment RSD readiness; and PTC Timelines and Look-Ahead.

Chair Susan Metzger commented that while the Railroads' independent engineer was not present at this meeting, she had an opportunity to review the report. The independent engineer will be present at today's Capital Program Oversight Committee ("CPOC") meeting.

The Committee Members then engaged in a dialogue with representatives of the Systems Integrator in attendance, asking questions about (among other things) equipment failures, software defects, lack of resources, and the fact that their level of commitment to helping the Railroads achieve full PTC compliance by the December 2020 deadline will be a critical factor in determining the future of their business relationship with the State of New York and the MTA.

The details of the Project Update on PTC are contained in the report filed with the records of this meeting. The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of Executive Director Chin's remarks and the discussion between Committee Members and representatives of the Systems Integrator.

## **METRO-NORTH INFORMATION ITEMS:**

Five information items were presented the Committee:

- Metro-North Adopted Budget/Financial Plan 2019.

President Rinaldi reported that the Adopted Budget/Financial Plan for 2019 is provided in accordance with MTA procedures.

- Metro-North 2018 Annual Operating Results.

President Rinaldi reported that the Metro-North 2018 Annual Operating Results are in the Committee book and she is available to answer any questions from the Committee. John Kesich, Senior Vice President, Operations, reported on specific 2019 compliance goal changes. For East of Hudson service, the overall consist compliance goal for 2019 will be 98.5%. Metro-North's Mean Distance Between Failures ("MDBF") was adversely impacted in 2018 due to PTC equipment failures, and Metro-North did not meet its 2018 MDBF goal of 200,000 miles. In 2018, the MDBF was 144,017 miles. The 32 mechanical failures allocated per month in 2018 is being increased to 40 mechanical failures per month in 2019, which equates to a rolling stock service reliability of 99.8%. For West of Hudson service, Metro-North's OTP goal of 95.5% in 2018 was not met due to issues with NJT. The new 2019 OTP goal is 93.0%.

Board Member Moerdler asked if there were any consequences for failing to meet the stated performance goals. Mr. Kesich responded that for East of Hudson service, the Board holds Metro-North accountable for performance deficiencies. For West of Hudson service, Metro-North and New Jersey Transit have established a working group to review the service agreement to determine if changes need to be made. Mr. Moerdler remarked that service is inadequate for West of Hudson riders and asked Mr. Kesich to explain the difference between performance goals and metrics. President Rinaldi and Mr. Kesich provided clarification, and Mr. Kesich explained that Metro-North is working diligently to deliver service that customers expect and deserve.

- Metro-North 2018 Annual Fleet Maintenance Report.

President Rinaldi reported that the Annual Fleet Maintenance Report is in the Committee book and she is available to answer any questions from the Committee.

- Metro-North Diversity-EEO Report - 4th Quarter 2018.

Given time constraints, it was agreed to address the Diversity – EEO Report at the Diversity Committee Meeting. Chair Metzger stated that, as a general matter, she has asked that workforce diversity be addressed in the operating agency Committee Meetings, not just in the Diversity Committee Meetings. Board Member Vanterpool commented that Latinos are underrepresented in five of the eight Metro-North job categories and requested a historical analysis to be included in the next quarterly report. She also noted that 100% of the Title VI complaints are disposed of in favor of the agency and asked for additional details. Long Island Rail Road Committee Chair, Mitchell Pally, commented that diversity should be included in the Presidents' remarks at the June 2019 Committee Meeting. Chair Metzger remarked that the Board is more interested in diversity efforts, rather than statistics.

- April 14th Schedule Change

President Rinaldi reported that information regarding the April 14<sup>th</sup> Schedule Change is in the Committee book.

The details of the information items are contained in reports filed with the records of this meeting. The video recording of the meeting produced by the MTA and maintained in the MTA records contains a complete record of Board members' discussions of the above items.

#### **METRO-NORTH PROCUREMENTS:**

Two competitive procurements were presented to the Committee:

- Board approval to award a 22-month competitively solicited design-build contract in the not-to-exceed amount of \$9,826,216 to Powell Electrical Systems, Inc. to design and furnish DC traction power switchgear systems for nine Metro-North Hudson and New Haven Line substations.
- Board approval to award a three-year competitively-negotiated public works contract in the not-to-exceed amount of \$2,625,000 to Loram Maintenance of Way, Inc. to provide self-propelled rail grinding services (equipment and personnel) at various points along Metro-North's right of way.

Upon motion duly made and seconded, the Committee approved the foregoing procurements for recommendation to the Board.

The details of the procurements are contained in staff summaries and reports filed with the records of this meeting and in the video recording of the meeting produced by the MTA and maintained in the MTA records.

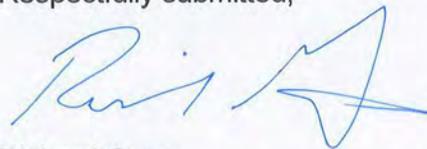
#### **OPERATIONS, FINANCIAL, RIDERSHIP AND CAPITAL PROGRAM REPORTS:**

The details of the Operations, Financial, Ridership and Capital Program Reports are contained in reports filed with the records of this meeting and in the video recording of the meeting produced by the MTA and maintained in the MTA records.

#### **ADJOURNMENT:**

Upon motion duly made and seconded, the Committee unanimously voted to adjourn the meeting.

Respectfully submitted,



Richard Gans  
Vice President, General Counsel and  
Secretary

## 2019 Metro-North Railroad Committee Work Plan

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### I. RECURRING AGENDA ITEMS

#### Responsibility

Approval of Minutes	Committee Chairs & Members
2019 Committee Work Plan	Committee Chairs & Members
President's Report	President/Senior Staff
Safety Report	
MTA Police Report	
Information Items (if any)	
Action Items (if any)	
Procurements	
Agency Reports	Senior Staff
Operations	
Finance	
Ridership	
Capital Program	

### II. SPECIFIC AGENDA ITEMS

#### Responsibility

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#### March 2019

Annual Strategic Investments & Planning Studies	Capital Planning
Annual Elevator & Escalator Report	Engineering
Customer Satisfaction Survey Report	Operations Planning & Analysis
PTC Status Report	Engineering

#### April 2019 (Joint meeting with LIRR)

Final Review of 2018 Operating Budget Results	Finance
2018 Annual Ridership Report	Operations Planning & Analysis
Annual Inventory Report	Procurement
Track Program Quarterly Update	Engineering
MTA Homeless Outreach	MTA
LIRR/MNR PTC Project Update	President

#### May 2019

Diversity/EEO Report – 1 <sup>st</sup> Quarter 2019	Diversity and EEO
PTC Status Report	Engineering
Progress on Way Ahead Strategic Plan	Strategic Initiatives

#### June 2019 (Joint meeting with LIRR)

LIRR/MNR PTC Project Update	President
Accelerated Track Maintenance Report	President/Engineering

#### July 2019

Grand Central Terminal Retail Development	MTA Real Estate
Environmental Audit	Environmental Compliance

Track Program Quarterly Update PTC Status Report	Engineering Engineering
<u>September 2019</u>	
2020 Preliminary Budget (Public Comment)	Finance
2019 Mid-Year Forecast	Finance
2019 Fall Schedule Change	Operations Planning & Analysis
PTC Status Report	Engineering
Diversity/EEO Report – 2 <sup>nd</sup> Quarter 2019	Diversity and EEO
<u>October 2019 (Joint meeting with LIRR)</u>	
2020 Preliminary Budget (Public Comment)	Finance
LIRR/MNR PTC Project Update	President
Track Program Quarterly Update	Engineering
MTA Homeless Outreach	MTA
<u>November 2019</u>	
Review of Committee Charter	Committee Chair & Members
Holiday Schedule	Operations Planning & Analysis
PTC Status Report	Engineering
Progress on Way Ahead Strategic Plan	Strategic Initiatives
<u>December 2019 (Joint meeting with LIRR)</u>	
2020 Final Proposed Budget	Finance
2020 Proposed Committee Work Plan	Committee Chairs & Members
Diversity/EEO Report – 3 <sup>rd</sup> Quarter 2019	Diversity and EEO
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Diversity/EEO Report – 4 <sup>th</sup> Quarter 2019	Diversity and EEO
2020 Spring/Summer Schedule Change	Operations Planning & Analysis

# METRO-NORTH RAIL ROAD COMMITTEE WORK PLAN

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## DETAILED SUMMARY

### I. RECURRING AGENDA ITEMS

#### **Approval of Minutes**

The Committee Chair will request a motion to approve the minutes of the prior month's meeting.

#### **2019 Work Plan**

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

#### **President's Report**

A monthly report will be provided highlighting major accomplishments and progress on key initiatives and performance indicators.

#### **Safety**

A monthly report will be provided highlighting key safety performance statistics and indicators.

#### **Police Activity Report**

MTA Police will highlight the significant police activities incurred during the month reported.

#### **Information Items (if any)**

Materials presented to the Committee for review pertaining to certain agency initiatives and functions.

#### **Action Items (if any)**

Staff summary documents presented to the Board for approval of items affecting business standards and practices.

#### **Procurements**

List of procurement action items requiring Board approval. The Non-Competitive items will be first, followed by the Competitive items and then the Ratifications. The list will include items that need a 2/3 vote of the Board for approval.

#### **Operations**

A monthly report will be provided highlighting key operating and performance statistics and indicators.

#### **Finance**

A monthly report will be provided that compares the Railroad's actual financial performance against its budget and/or forecast both on an accrual and cash basis.

#### **Ridership**

A monthly report will be provided that includes a comparison of actual monthly ticket sales, ridership and revenues with the budget and prior year results.

#### **Capital Program**

A monthly report will be provided highlighting significant capital program accomplishments in the month reported.

## II. SPECIFIC AGENDA ITEMS

### **MARCH 2019**

#### Annual Strategic Investments & Planning Studies

A comprehensive annual report will be provided to the Committee of the Agency's strategic investments & planning studies that will include fleet, facility, infrastructure, station projects, station access improvements, and environmental and feasibility studies.

#### Annual Elevator/Escalator Report

Annual report to the Committee on system-wide reliability and availability for elevators and escalators throughout the system.

#### Customer Satisfaction Survey Report

The committee will be informed on the results of the 2018 survey distributed to customers on the Hudson, Harlem and New Haven Lines and West of Hudson service.

#### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

### **APRIL 2019 (Joint Meeting with LIRR)**

#### Final Review of 2018 Operating Results

A review of the prior year's budget results and their implications for current and future budget performance will be presented to the Committee.

#### 2018 Annual Ridership Report

A report will be presented to the Committee on Metro-North's ridership trends during 2018 based on monthly ticket sales data and the results of train ridership counts conducted by Metro-North.

#### Annual Inventory Report

The Agency will present its annual report on Inventory.

#### Track Program Quarterly Update

A quarterly report will be provided that highlights the progress made on track maintenance work to bring the infrastructure to a state of good repair.

#### MTA Homeless Outreach

MTA Operations Support will provide a bi-annual report on homeless outreach efforts including an update on service providers and placements.

#### LIRR/MNR PTC Project Update

The Committee will be briefed on the status of PTC, including activities to date and the current strategy to meet critical milestones identified in the Rail Safety Improvement Act of 2008. Highlights to include cost of PTC along with operation and implementation risks.

## **MAY 2019**

### Diversity & EEO Report– 1<sup>st</sup> Quarter 2019

A quarterly report to the Committee providing data on key Equal Employment Opportunity (EEO) and Human Resources indicators relating to MNR's EEO and Diversity efforts, such as composition of the agency's workforce, new hires, and discrimination complaints. In alternating quarters, the report will include additional information on diversity initiatives.

### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

### Progress on Way Ahead Strategic Plan

A biannual report to the Committee on Metro-North's progress in setting the standard for safety, reliability and innovation in the delivery of excellent customer service.

## **JUNE 2019** (Joint Meeting with LIRR)

### LIRR/MNR PTC Project Update

The Committee will be briefed on the status of PTC, including activities to date and the current strategy to meet critical milestones identified in the Rail Safety Improvement Act of 2008. Highlights to include cost of PTC along with operation and implementation risks.

### Accelerated Track Maintenance Report

A special report requested by the Metro-North Committee that provides an accelerated plan to complete deferred track maintenance work including the key actions and the incremental cost to complete this plan.

## **JULY 2019**

### Grand Central Terminal Retail Development

MTA Real Estate will provide an annual report on leasing and construction opportunities and financial and marketing information related to retail development in Grand Central Terminal.

### Environmental Audit Report

The Committee will be briefed on the results of the 2019 environmental audit report which is submitted to NYS Department of Environmental Conservation as required by the Environmental Audit Act, as well as the actions implemented to enhance overall compliance, monitoring and reporting.

### Track Program Quarterly Update

A quarterly report will be provided that highlights the progress made on track maintenance work to bring the infrastructure to a state of good repair.

### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

## **SEPTEMBER 2019**

### 2020 Preliminary Budget

Public comment will be accepted on the 2020 Budget.

### 2019 Mid-Year Forecast

The agency will provide the 2019 Mid-Year Forecast financial information for revenue and expense by month.

### 2019 Fall Schedule Change

The Committee will be informed of the schedule changes taking effect for train service on the Hudson, Harlem, New Haven, Pascack and Port Jervis lines for the Fall of 2019.

### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

### Diversity & EEO Report– 2<sup>nd</sup> Quarter 2019

A quarterly report to the Committee providing data on key Equal Employment Opportunity (EEO) and Human Resources indicators relating to MNR's EEO and Diversity efforts, such as composition of the agency's workforce, new hires, and discrimination complaints. In alternating quarters, the report will include additional information on diversity initiatives.

## **OCTOBER 2019** (Joint Meeting with LIRR)

### 2020 Preliminary Budget

Public comment will be accepted on the 2020 Budget.

### LIRR/MNR PTC Project Update

The Committee will be briefed on the status of PTC, including activities to date and the current strategy to meet critical milestones identified in the Rail Safety Improvement Act of 2008. Highlights to include cost of PTC along with operation and implementation risks.

### Track Program Quarterly Update

A quarterly report will be provided that highlights the progress made on track maintenance work to bring the infrastructure to a state of good repair.

### MTA Homeless Outreach

MTA Operations Support will provide a bi-annual report on homeless outreach efforts including an update on service providers and placements.

## **NOVEMBER 2019**

### Review of Committee Charter

Annual review and approval of the MNR Committee Charter.

### Holiday Schedule

The Committee will be informed of Metro-North's service plans for the Thanksgiving and Christmas/New Year's holiday periods.

### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

### Progress on Way Ahead Strategic Plan

A biannual report to the Committee on Metro-North's progress in setting the standard for safety, reliability and innovation in the delivery of excellent customer service.

## **DECEMBER 2019** (Joint Meeting with LIRR)

### 2020 Final Proposed Budget

The Committee will recommend action to the Board on the Final Proposed Budget for 2020.

### 2020 Proposed Committee Work Plan

The Committee Chair will present a draft Metro-North Committee Work Plan for 2020 that will address initiatives to be reported throughout the year.

### Diversity & EEO Report– 3<sup>rd</sup> Quarter 2019

A quarterly report to the Committee providing data on key Equal Employment Opportunity (EEO) and Human Resources indicators relating to MNR's EEO and Diversity efforts, such as composition of the agency's workforce, new hires, and discrimination complaints. In alternating quarters, the report will include additional information on diversity initiatives.

### LIRR/MNR PTC Project Update

The Committee will be briefed on the status of PTC, including activities to date and the current strategy to meet critical milestones identified in the Rail Safety Improvement Act of 2008. Highlights to include cost of PTC along with operation and implementation risks.

## **JANUARY 2020**

### Approval of 2020 Committee Work Plan

The Committee will approve the Proposed Metro-North Railroad Committee Work Plan for 2019 that will address initiatives to be reported on throughout the year.

### Track Program Quarterly Update

A quarterly report will be provided that highlights the progress made on track maintenance work to bring the infrastructure to a state of good repair.

### PTC Status Report

A monthly status report will be provided that highlights the accomplishments, schedule, challenges and risks associated with the PTC implementation.

## **FEBRUARY 2020** (Joint Meeting with LIRR)

### Adopted Budget/Financial Plan 2020

The Agency will present its revised 2020 Financial Plan. These plans will reflect the 2020 Adopted Budget and an updated Financial Plan for 2020 reflecting the out-year impact of any changes incorporated into the 2020 Adopted Budget.

### 2019 Annual Operating Results

A review of the prior year's performance of railroad service will be provided to the Committee.

### 2019 Annual Fleet Maintenance Report

An annual report will be provided to the Committee on the Agency's fleet maintenance plan to address fleet reliability and availability.

### LIRR/MNR PTC Project Update

The Committee will be briefed on the status of PTC, including activities to date and the current strategy to meet critical milestones identified in the Rail Safety Improvement Act of 2008. Highlights to include cost of PTC along with operation and implementation risks.

Diversity & EEO Report– 4<sup>th</sup> Quarter 2019

A quarterly report to the Committee providing data on key Equal Employment Opportunity (EEO) and Human Resources indicators relating to MNR's EEO and Diversity efforts, such as composition of the agency's workforce, new hires, and discrimination complaints. In alternating quarters, the report will include additional information on diversity initiatives.

2020 Spring/Summer Schedule Change

The Committee will be informed of the schedule changes taking effect for train service on the Hudson, Harlem, New Haven, Pascack and Port Jervis lines during the spring and summer of 2020.

# Safety Report

**Justin R. Vonashek**

Vice President, Office of System Safety



March 2019 Safety Focus Day



# Metro-North Railroad

## January 2019 Highlights: Safety Report

MNR's 2019 first quarter Safety Focus Day was held on March 6, 2019 at various work locations systemwide. Safety Focus Day provides opportunities for our employees to discuss relevant safety topics and provide feedback as well as report safety concerns. Some of the topics covered were General Fire Safety, Proper Housekeeping, MNR's Drug and Alcohol Testing Policy and the safety components of MNR's 2016 – 2020 Strategic Plan.

The MNR Strategic Plan for 2016 - 2020 prioritizes comprehensive safety training as a main focal point to improve safety for our customers and employees. To support the safety training component of the plan, MNR introduced Supervising for Safety training in 2017 to reinforce safe work standards, procedures and practices to managers and supervisors. Topics covered for Supervising for Safety training includes, safety leadership structure, System Safety Program Plan, reporting safety incidents and communicating unsafe behaviors to fellow employees. Since its inception, MNR has trained over 600 employees in safety management. Supervising for Safety has contributed to a safer work environment at MNR by promoting a positive and interactive safety culture with employees and management.

MNR continues to see positive trends in reducing employee lost time injuries. For the current 12-month period (February 2018 – January 2019) versus the previous 12-month period (February 2017 – January 2018), lost time injuries per 200,000 working hours were reduced by 19.7%. This decrease can be attributed to various ongoing safety initiatives.

For the current 12-month period (February 2018 – January 2019), the customer reportable injury rate per one million customer rates decreased by 10.3% versus the previous 12-month period (February 2018 – January 2019). MNR will launched its system-wide Spring Safety Campaign for customers during the week of April 1st. The safety message focuses on preventive measures to heighten awareness related spring weather conditions. The poster will be prominently displayed on trains and informational message boards throughout MNR's operating territory

**Justin R. Vonashek**  
Vice President  
Office of System Safety

## January 2019 Safety Report

Performance				
Performance Indicator	12-Month Average			
	February 2016 - January 2017	February 2017 - January 2018	February 2018 - January 2019	
FRA Reportable Customer Accident Rate per Million Customers	1.21	0.87	0.78	
FRA Reportable Employee Lost Time Injury Rate per 200,000 worker hours	2.73	3.05	2.45	
	2018		2019	
	January	Year to Date	January	Year to Date
Grade Crossing Incidents <sup>1</sup>	1	1	0	0
Mainline FRA Reportable Train Derailments	0	0	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	2018		2019	
	January	Year to Date	January	Year to Date
First Responders Trained	44	44	97	97
Employee Safety Training Courses	157	157	118	118
Employees Trained	1,589	1,589	1,382	1,382
Employee Safety Training Hours	18,539	18,539	16,831	16,831
Customer and Community: Focus on Grade Crossings	2018		2019	
	January	Year to Date	January	Year to Date
Broken Gates	5	5	1	1
MTA Police Details	91	91	65	65
Summons	27	27	42	42
Warnings	0	0	3	3
Community Education and Outreach	1,185	1,185	4,795	4,795
Cars Equipped with Cameras	Fleet Size	Total Cars Equipped	% Complete	
Inward / Outward Facing Cab Cameras	956	941	98.43%	
Passenger Compartment Cameras	1,085	909	83.78%	

**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.

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



# Metro-North Railroad

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## February 2019 Highlights: MTA Police Report

- Metro-North Railroad experienced a decrease in the amount of major felonies (11 vs 14) for the month of February compared to the same period last year.
- Year to date Metro-North Railroad is down 11 crimes (20 vs 31).
- There were zero Hate Crimes on Metro-North Railroad for the month of February.

**Owen Monaghan**  
Chief of Police



**METROPOLITAN TRANSPORTATION AUTHORITY  
Police Department  
Metro North Railroad**

**February 2019 vs. 2018**

	<b>2019</b>	<b>2018</b>	<b>Diff</b>	<b>% Change</b>
<b>Murder</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Rape</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Robbery</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>100%</b>
<b>Felony Assault</b>	<b>1</b>	<b>3</b>	<b>-2</b>	<b>-67%</b>
<b>Burglary</b>	<b>2</b>	<b>5</b>	<b>-3</b>	<b>-60%</b>
<b>Grand Larceny</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>20%</b>
<b>Grand Larceny Auto</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Total Major Felonies</b>	<b>11</b>	<b>14</b>	<b>-3</b>	<b>-21%</b>

**Year to Date 2019 vs. 2018**

	<b>2019</b>	<b>2018</b>	<b>Diff</b>	<b>% Change</b>
<b>Murder</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Rape</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Robbery</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0%</b>
<b>Felony Assault</b>	<b>4</b>	<b>5</b>	<b>-1</b>	<b>-20%</b>
<b>Burglary</b>	<b>3</b>	<b>8</b>	<b>-5</b>	<b>-63%</b>
<b>Grand Larceny</b>	<b>9</b>	<b>15</b>	<b>-6</b>	<b>-40%</b>
<b>Grand Larceny Auto</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>100%</b>
<b>Total Major Felonies</b>	<b>20</b>	<b>31</b>	<b>-11</b>	<b>-35%</b>

**INDEX CRIME REPORT**  
**Per Day Average**  
**February 2019**

	<b>Systemwide</b>	<b>LIRR</b>	<b>MNRR</b>	<b>SIRT</b>
<b>Murder</b>	0	0	0	0
<b>Rape</b>	0	0	0	0
<b>Robbery</b>	3	0	2	1
<b>Fel. Assault</b>	2	1	1	0
<b>Burglary</b>	2	0	2	0
<b>Grand Larceny</b>	9	3	6	0
<b>GLA</b>	1	1	0	0
<b>Total</b>	<b>17</b>	<b>5</b>	<b>11</b>	<b>1</b>
<b>Crimes Per Day</b>	<b>0.61</b>	<b>0.18</b>	<b>0.39</b>	<b>0.04</b>



# Metropolitan Transportation Authority Police Department

## Hate Crimes Report (January - February 2019)

Motivation	2019	2018	Diff	% Change
Asian	0	0	0	0 %
Black	1	2	-1	-50 %
Ethnic	0	0	0	0 %
Gender	0	0	0	0 %
Hispanic	0	0	0	0 %
Muslim	0	0	0	0 %
Other	0	1	-1	-100 %
Anti-Semitic	2	2	0	0 %
Sexual Orientation	0	0	0	0 %
White	0	0	0	0 %
<b>Motivation Total</b>	<b>3</b>	<b>5</b>	<b>-2</b>	<b>-40 %</b>

Crime Name	2019	2018	Diff	% Change
Aggravated Harassment #1	0	0	0	0 %
Aggravated Harassment #2	1	0	1	0 %
Felony Assault	0	0	0	0 %
Misdemeanor Assault	0	0	0	0 %
Criminal Mischief #3	1	0	1	0 %
Criminal Mischief #4	1	5	-4	-80 %
Grand Larceny #4	0	0	0	0 %
Menacing #2	0	0	0	0 %
Robbery #2	0	0	0	0 %
<b>Crime Total</b>	<b>3</b>	<b>5</b>	<b>-2</b>	<b>-40 %</b>



# MTA Police Department Arrest Summary: Department Totals

1/1/2019 to 2/28/2019

Arrest Classification	Total Arrests	
	2019	2018
Robbery	2	9
Felony Assault	8	10
Burglary	3	8
Grand Larceny	17	6
Grand Larceny Auto	1	0
Aggravated Harassment	2	1
Aggravated Unlicensed Operator	6	5
Assault-Misdemeanor	12	15
Breach of Peace	7	1
Child Endangerment	1	0
Criminal Contempt	3	2
Criminal Impersonation	1	0
Criminal Mischief	6	9
Criminal Possession Stolen Property	2	2
Criminal Trespass	6	8
Disorderly Conduct	0	1
Drug Offenses	47	5
DUI Offenses	0	3
Falsely Reporting an Incident	2	0
Forgery	3	11
Fraudulent Accosting	4	1
Graffiti	4	2
Identity Theft	1	0
Issue a Bad Check	1	0
Make Terrorist Threat	0	2
Menacing	2	3
Obstruct Government	1	0
Petit Larceny	49	32
Public Lewdness	2	4
Reckless Endangerment	2	0
Resisting Arrest	14	5
Sex Offenses	4	3
Stalking	1	0
Theft of Services	58	35
Warrant Arrest	15	30
Weapons Offenses	2	3
Unauthorized Use Vehicle	1	0
<b>Total Arrests</b>	<b>290</b>	<b>216</b>



**METROPOLITAN TRANSPORTATION AUTHORITY  
Police Department  
System Wide**

**February 2019 vs. 2018**

	<b>2019</b>	<b>2018</b>	<b>Diff</b>	<b>% Change</b>
<b>Murder</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Rape</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Robbery</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>200%</b>
<b>Felony Assault</b>	<b>2</b>	<b>5</b>	<b>-3</b>	<b>-60%</b>
<b>Burglary</b>	<b>2</b>	<b>5</b>	<b>-3</b>	<b>-60%</b>
<b>Grand Larceny</b>	<b>9</b>	<b>7</b>	<b>2</b>	<b>29%</b>
<b>Grand Larceny Auto</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>100%</b>
<b>Total Major Felonies</b>	<b>17</b>	<b>18</b>	<b>-1</b>	<b>-6%</b>

**Year to Date 2019 vs. 2018**

	<b>2019</b>	<b>2018</b>	<b>Diff</b>	<b>% Change</b>
<b>Murder</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Rape</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0%</b>
<b>Robbery</b>	<b>5</b>	<b>6</b>	<b>-1</b>	<b>-17%</b>
<b>Felony Assault</b>	<b>6</b>	<b>10</b>	<b>-4</b>	<b>-40%</b>
<b>Burglary</b>	<b>4</b>	<b>8</b>	<b>-4</b>	<b>-50%</b>
<b>Grand Larceny</b>	<b>20</b>	<b>24</b>	<b>-4</b>	<b>-17%</b>
<b>Grand Larceny Auto</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>100%</b>
<b>Total Major Felonies</b>	<b>37</b>	<b>48</b>	<b>-11</b>	<b>-23%</b>



**Metro-North Railroad**

# **Information Items**



# Metro-North Railroad

## STRATEGIC INVESTMENTS AND PLANNING STUDIES

### STATUS UPDATE

*March 2019*

## METRO-NORTH COMMITTEE



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## **I. INTRODUCTION**

This report provides an overview of major planning studies and key strategic investments made by Metro-North in 2018. Strategic investments and management initiatives play a significant role in improving safety, service and reliability throughout Metro-North Railroad. These efforts have informed the development of Metro-North's 2020-2039 Twenty-Year Needs Assessment. Over the course of 2018, departments throughout the railroad have collaborated on this effort to assess the condition of assets throughout the system and develop strategies for replacing critical infrastructure in need of replacement and adding assets that will improve reliability and meet the growing ridership demand. The Twenty-Year Needs Assessment has been developed within the strategic frameworks of the 2016-2020 Strategic Plan and Way Ahead. In 2018, Metro-North released its Way Ahead plan to proactively respond to growing ridership, changing demographics, and the evolving needs of our customers. Building on the Strategic Plan's priorities of Our People, Our Customers, and Our Infrastructure, Way Ahead is focused on prioritizing safety for customers and employees, improving the rider experience and communications to the customer, and planning for future growth by rehabilitating and replacing existing infrastructure and capacity investments to help the railroad operate more reliably and prepare for future demand.

In April 2018, the third 2015-2019 MTA Capital Program Plan Amendment received final approval from the Capital Program Review Board. Metro-North's \$2.4 billion Capital Program addresses critical priority projects and demonstrates the agency's ongoing commitment to promoting a culture of safety while maintaining and enhancing reliability and customer service. These investments fund the most essential components - rolling stock, stations, track, structures, communications, signals, power, and shops and yards. The majority of these investments focus on state-of-good repair needs, including the final phase of the Harmon Shop electric repair facility and the replacement of the worst performing Genesis locomotives. The program also includes targeted service improvements such as improved customer information technology to provide real-time train information and Wi-Fi capability at stations, and investments that support the MTA's New Fare Payment System Initiative.

Several planning efforts underway in the Capital Program will help Metro-North prepare for the future. The ongoing Maintenance of Equipment/Maintenance of Way Master Plan study will define train maintenance and storage needs for the future, as well as needs for our maintenance of way forces and materials storage. In addition, a study to identify potential property suitable for a train storage yard in New York on the New Haven Line will determine if it is feasible to help meet existing capacity constraints. Metro-North has also begun planning and design efforts in the 2015-2019 Capital Program to improve capacity on the Port Jervis Line west of the Hudson River. These planning efforts help inform Metro-North's 2020-2039 Twenty Year Needs Assessment, leading to development of the 2020-2024 Capital Program this year.

To meet growing and changing customer demands, Penn Station Access will also open a new link for Metro-North's New Haven Line trains directly into Penn Station, New York (PSNY), constructing four new passenger stations in the Bronx, along with new interlockings and other infrastructure along Amtrak's Hell Gate Line necessary to operate this service.

## **CUSTOMER SATISFACTION**

Metro-North Railroad conducted its annual Customer Satisfaction Survey on the three East of Hudson Lines in June 2018. Overall satisfaction with the railroad declined by 3 percentage points to 86% compared with 89% in 2017, as a result of the impact of several severe winter storms and an ongoing extensive infrastructure program.

The survey asks customers to rate their satisfaction with Metro-North on a variety of characteristics in seven major categories of service. Though satisfaction declined in all of these categories, the decrease was limited to one or two percentage points in four of the seven (Home Boarding Station, Courtesy and Responsiveness of Employees, Overall Train Schedules and Grand Central Terminal.)

Satisfaction with overall train service fell by three points (84% satisfied versus 87% in 2017) predominantly due to a significant decline in satisfaction in the On-Time Performance (OTP) category, a key driver of customer satisfaction. OTP in the first half of the year prior to the survey was slightly below the railroad's goal of 93%, largely due to the adverse impact of several severe winter storms and an extensive infrastructure program affecting all three lines. As a result, customer satisfaction with OTP slipped by 5 points, with 73% of customers satisfied with this aspect of service in 2018.

The railroad's frontline employees have perennially been viewed extremely favorably by customers, and this trend continued in 2018. In the survey, 94% of riders were satisfied with their performance. A majority (52%) of riders said they were very satisfied with frontline employees.

An equal percentage of customers (94%) were satisfied with Grand Central Terminal overall, with 45% being very satisfied with the Terminal. GCT has maintained very high satisfaction ratings among MNR customers since the completion of its revitalization 20 years ago.

An important characteristic which did show a slight improvement in 2018 was satisfaction with Value for the Money Using the Railroad. Seven out of 10 customers were satisfied with it, up a point from 69% in 2017.

Looking at the survey results by line, satisfaction with the railroad among New Haven Line customers remained stable at 85%. Hudson Line satisfaction was down 5 points to 88%, while Harlem Line satisfaction decreased 3 points to 87%. Satisfaction among Reverse Peak customers was unchanged, at 88%. West-of-Hudson satisfaction among AM Peak customers dropped 17 points to 64%, as train cancellations (particularly on the Pascack Valley Line) and service issues took their toll on customer satisfaction.

**II. MANAGEMENT INITIATIVES**

**SAFETY**

The following is a summary status of on-going safety initiatives:

<b>METRO-NORTH SAFETY INITIATIVES</b>	
<b>Emergency Management and Fire &amp; Life Safety</b>	Training to public first responders (fire, police, and EMS) in a classroom and field environment. The program teaches first responders how to respond to incidents involving the railroad and provides guidance on safe operations around railroad equipment and the right-of-way. In addition, field training is provided to teach first responders about Metro-North’s equipment and emergency evacuation procedures. In 2018, 133 classes were held, training a total of 2,047 first responders.
	Conduct yearly full-scale “Emergency Preparedness Simulation” to provide first responders with the training and hands-on experience needed to manage rail-based incidents and emergencies. In October, Metro-North conducted a full-scale joint emergency preparedness exercise in the Park Avenue Tunnel that simulated the derailment and evacuation of a passenger train that included response from FDNY, Metro-North and MTAPD.
	Develop, review, and field approval of a strategy for comprehensive integrity testing of all kitchen exhaust systems in Grand Central Terminal. This 4-million-dollar project is currently underway with two of seven ducts nearly completed and all ducts scheduled for completion in 2019.
	Installing reflective and photo-luminescent wayfinding and exit signage throughout the Park Avenue Tunnel to assist passengers in the event they need to evacuate in the tunnel.
	Implementing an Emergency Notification System, as part of an All Agency initiative, that will enable MNR to quickly and effectively convey emergency information to MNR employees.
<b>Ensuring Customer Safety: Safety Education and Community Outreach</b>	Since the inception of TRACKS – Together Railroads and Communities Keeping Safe – in June of 2016, Metro-North has reached over 230,000 individuals. The railroad will continue its effort by visiting every station and public grade crossing throughout the Metro-North territory.
	Coordination with NYSDOT to mark and stripe the roadways at Virginia Rd, Lakeview Ave, and Roaring Brook Rd to prevent drivers from stopping on or too close to the grade crossings. New signage has been added at each of the grade crossings as well. Also, replaced 12 grade crossing surfaces within the right-of-way on the Harlem, Hudson, and the New Haven branch lines. Partnered with WAZE, a community-based GPS Navigation Application, to add Metro-North grade crossings into the app to notify and alert drivers when approaching a railroad grade crossing.
	As a part of our TRACKS program, Metro-North has a suicide prevention campaign in partnership with the National Suicide Prevention Lifeline and Mental Health Association of New York City (MHA-NYC). Information for the suicide prevention helpline is displayed in poster and digital format at 67 LCD kiosks, 124 station kiosks, as well as on-board our trains.

	Weekly safety tweets developed in conjunction with Corporate & Public Affairs highlighting a new safety message to 99,000-plus Twitter followers.
<b>Ensuring Employee Safety</b>	Continued the confidential “close call” reporting system (C3RS) with the transportation, mechanical and engineering departments. C3RS encourages workers to report any potential safety hazard or breach of procedures they may observe by providing them with a convenient, non-confrontational, non-punitive and anonymous way to do so. This is achieved through a partnership among the FRA, NASA, Metro-North, and participating labor organizations. Each incident report goes directly to NASA via an online form. NASA analyzes the details, and “scrubs clean” any identifying elements before presenting it to a Peer Review Team consisting of local representatives from the FRA, MNR and labor unions. The Transportation Department went live in April 2015; Engineering and Mechanical Departments went live on April 18, 2016. Metro-North has had over 4,000 reports since its inception.
	Conducted bi-annual Safety Clean-Up Days at GCT, Brewster, North White Plains, Croton-Harmon, Poughkeepsie, New Haven, Stamford and Springdale yards to remove debris and clutter.
	Conducted quarterly employee Safety Focus Day events to bring attention to safe work practices, the impact of seasonal conditions on work environments, employee fatigue, grade crossing safety, fire safety, and security and trespasser awareness.  These events afford additional opportunities for all employees to provide feedback and safety concerns. Corrective actions are developed and this information is tracked to completion.
	Revised the General Safety Instructions to be reissued as Safety Rules; a comprehensive rule book for all Metro-North Employees. Issued the Safety Rule Book in March 2018.
	Metro-North initially began the Obstructive Sleep Apnea (OSA) program as a pilot with its Locomotive Engineers (LOE) in 2015. Following a successful pilot, Metro-North made the program official and has currently screened all LOE (448). All LOE are now screened for Sleep Apnea as part of their annual physical. In June 2017, the OSA program was expanded to include the conductors. Currently 633 of 994 conductors have been screened. All engineers and conductors with OSA are part of an ongoing monitoring program as part of their annual physical exams.
<b>Safety Excellence Awards</b>	Continued the Safety Excellence Awards program to recognize individual employees, departments, groups and/or districts that have made an exemplary effort to improve Metro-North’s safety, reliability and efficiency

<b>FEDERAL RAILROAD ADMINISTRATION</b>	
<b>Grade Crossing Upgrade</b>	The FRA awarded \$5 million to New York State DOT, as part of a \$25 million nationwide grant package to upgrade the safety at grade crossings. The grant focused on increased safety at railroad crossings, train stations, and tracks across the country. Metro-North work includes the following:

	<ul style="list-style-type: none"> <li>• \$1.34 million to study adding highway traffic signal preemption to seven grade crossings on Metro-North’s Harlem and Port Jervis Lines in New York to activate the traffic signals and allow queued traffic to exit onto the highway prior to the activation of the railroad grade crossing warning systems.</li> <li>• \$1.90 million to study installing upgrades to one grade crossing to mitigate hazardous conditions between highway and rail traffic. NYSDOT and MNR track department are working together to make improvements at Virginia Road, near the North White Plains station.</li> <li>• \$1.91 million to install video surveillance systems to record grade crossing movements at 34 identified grade crossings within Metro-North territory in New York to investigate specific incidents and analyze crossing/traffic operations for targeted modifications to improve safety.</li> </ul>
<b>Positive Train Control (PTC)</b>	<p>Positive Train Control (PTC) components installation is on-going. Systemwide implementation of Civil Speed Enforcement (which prevents overspeed derailments) function was completed in the 1<sup>st</sup> quarter of 2018. Revenue Service Demonstration (RSD) of full PTC functions started November 2018 between Croton-Harmon and Tarrytown. Metro-North met the FRA requirement of 110 successful RSD trips in this segment of the Hudson Line on March 1, 2019. The PTC Safety Plan, which is required for FRA System Certification, is planned to be submitted to FRA by August 2019.</p> <p>MNR is progressing to complete full PTC implementation by December 31, 2020.</p>
<b>System Safety Program Plan (SSPP)</b>	Continued annual review and revision of the MNR System Safety Program Plan to be used as a guide to promote a proactive approach to safety.

<b>NATIONAL TRANSPORTATION SAFETY BOARD</b>	
<b>NTSB Recommendations</b>	Metro-North has progressed National Transportation Safety Board (NTSB) recommendations, while working with both the NTSB and other MTA agencies to ensure the coordination of industry best and safe practices.
<b>Rolling Stock Cameras Forward, Cab, Passenger</b>	Installation of crash and fire-protected inward and outward-facing video recorders and cab audio recorders in our M7 and M8 fleet began in August 2017. Cameras provide 30 days of continuous “first in first out” video storage. To date, 1,776 cars have been fitted with cameras; 909 Cab units and 867 passenger units. Cab unit installation is expected to be completed in the 2 <sup>nd</sup> quarter of 2019, with passenger units being completed in the 3 <sup>rd</sup> quarter of 2019.

## TRACK INFRASTRUCTURE REHABILITATION

Metro-North has continued the extensive system-wide track reconstruction effort that has rebuilt miles of the railroad in the last three years, delivering smoother, safer and more reliable service to customers. From 2014 to 2018, Metro-North has replaced 200,702 ties, installed 41.7 miles of continuous welded rail, rebuilt 171 switches, renewed and/or upgraded 71 railroad crossings, and performed 9,053 welds on joints that connect rails with one another.

In addition to visual track inspections, which are conducted twice a week by inspectors who occupy the tracks being inspected, the track reconstruction and renewal efforts have been guided by an array of detailed track inspections, which can detect issues not seen by visual inspection. The range of high-tech inspections include:

- **Track Geometry:** To measure a variety of geometric parameters of track, including the position, curvature, alignment, smoothness, and the cross level of the two running rails, track geometry cars operated by the Federal Railroad Administration (FRA) and ENSCO system are utilized. ENSCO's measuring system is mounted to Metro-North equipment. The cars use a variety of sensors, measuring systems, and data management systems to create a profile of the track being inspected.
- **Internal Metal Defects and Fatigue:** To detect flaws, defects and metal fatigue inside the steel running rails that trains roll over, Metro-North utilizes Sperry Rail Service, which operates a specialized car over rails and measures them with ultrasonic and induction test equipment.
- **Mismatched Rail Ends:** To identify any instances where the end of a rail does not match up within FRA limits with the beginning of the following rail, Metro-North uses Georgetown Rail Equipment Company's Aurora System, which makes rail measurements of joints that are accurate to within two-hundredths of an inch. Georgetown also measures rail seat deterioration in concrete ties, grades wood ties, and produces reports on rail fasteners and anchors.
- **New Equipment:** Metro-North has purchased and installed Autonomous Geometry Inspection Equipment on three of our revenue train cars so that continuous track geometry measurements will be made as trains carry passengers around the system. This equipment has been running for 8 months and is expected to be fully operational by mid-2020. In addition, Metro-North is in the middle of the purchase of a state-of-the-art self-propelled track inspection car that will start commissioning tests on Metro-North property in 2020. The inspection car will provide the ability to conduct tests at any time system wide. A variety of systems will be on the car that will inspect running rail, third rail, catenary, measure clearances, perform lateral track strength testing, and provide images of the right of way.

## STATION REHABILITATION PROGRAM (formerly the Station Enhancement Program)

The Station Rehabilitation Program continued for the ninth year in 2018. The program provides a cyclical approach to address all station elements and reduce future ongoing maintenance costs. Types of work in this program includes painting structures, changing recycling bins, replacing Customer Information & Passenger Information Displays, replacing signage at station (Directional & Station ID Signs), full replacement of protective film on glass windows (on shelters & overpasses) that prevent scratches from ruining the glass, cleaning the station right-of-way (track), repairing damaged edge boards, installing bird netting (as needed), replacing concrete benches with more comfortable wire ones, repairing tactile warning strip, fixing shelter heaters, installing energy-efficient lighting, and power washing all station exterior surfaces, windows and overpasses.

The majority of the 2018 Station Rehabilitation Program efforts were concentrated on the Harlem Line.

- Bronxville
  - Completed lead abatement on a majority of the station and underpasses
  - Painted of the platform canopy steel and guardrails
  - Painted of the underpasses and walkway
  - Completed concrete and tactile repairs on platform edges
  - Replaced of platform lighting with new LED fixtures
  - Installed of new signage and recycling centers
- Fleetwood
  - Replaced of platform lighting with new LED fixtures
  - Installed New Station ID signs
  - New recycle centers installed
- Tuckahoe
  - Replaced of platform lighting with new LED fixtures
  - Installed New Station ID signs
  - New CIDS and PIDs installed
  - New recycle centers installed

In addition to the work on the Harlem Line, a program was initiated in 2017 to replace all station recycling centers. The campaign will be completed over the next 3 years. By the end of 2018, over 280 centers had already been replaced.

### **MOBILE TICKETING (ETIX)**

Project to implement a new ticketing system for Metro-North and LIRR, giving railroad customers the ability to purchase and display digital tickets using their mobile devices.

- Since rollout of mobile ticketing in August 2016, mobile tickets now account for approximately 30% of ticket sales for the railroads.
- A total of over 36 million tickets have been sold on both railroads using the app generating close to \$850 million in sales for Metro-North and LIRR.

### **STATION LEASING PROGRAM**

To reduce railroad costs for station building operations and maintenance and to increase non-fare revenue system-wide, station leasing efforts are continuing. Current status of the Station Leasing program is:

Stations with existing leases:

- Port Chester
- Tarrytown (The Bakehouse Inc.)
- Tuckahoe (Starbucks)
- Hartsdale (Starbucks)
- Mt. Kisco (Locali Kitchen + Bar)
- Brewster (Dining Car at Brewster)
- Pelham (Houlihan Lawrence Pelham Real Estate, Steam Café)

- Pearl River (Southbound Café & Bar)
- Spring Valley (Golden Krust)
- Peekskill (Stazione PKSL LLC)
- Bedford (Town of Bedford)

Stations to be offered by RFP in 2019:

- Pearl River

Stations leases in negotiations following an RFP:

- Hastings on Hudson
- Rye
- Bronxville

## **TRANSIT ORIENTED DEVELOPMENT (TOD)**

Metro-North continues to work with relevant parties such as local communities and developers to encourage TOD even at stations where we have limited or no property. Coordination of investments and operations with local communities who plan and implement TODs benefit Metro-North, as the proximity of these projects to our service promote increased rail ridership.

### **Harrison TOD**

- Metro-North's first Railroad led TOD primarily on Railroad controlled land was approved in 2014 by the MTA Board and will incorporate residential, retail and expanded parking adjacent to the Harrison station. The project will include 143 housing units (including 7 affordable housing units), 30,000 square feet of retail and commercial space, two landscaped public plazas connecting to the Harrison station platform, and a 756-space parking garage, with 475 spaces dedicated to commuters, replacing and augmenting Metro-North's existing 257-spaces at Harrison.
- Approval for MTA Real Estate to enter into a Joint Development Agreement was received by the MTA Board and executed with AvalonBay Communities, Inc. (the developer) in March 2015.
- The Concept design was approved by the Town/Village of Harrison and Metro-North in late 2015.
- In December 2015 the developer submitted the Petition for Rezoning to the Town/Village of Harrison, initiating the SEQRA and land use approval process.
- The Town/Village of Harrison approved the Site Plan in January 2018.
- Metro-North has approved the 90% design submittal from the developer. The 100% design submittal is currently being reviewed and is expected to be finalized in the 1<sup>st</sup> quarter of 2019.
- In April 2018, the MTA Board authorized MTA Real Estate to execute the Land Disposition and Development Agreement (LDDA) when completed. The LDDA was fully executed in February 2019.
- Site work and construction anticipated to begin in spring 2019.

### **Poughkeepsie TOD**

- MTA Issued a Request for Expression of Interest (RFEI) in December 2017 to explore the potential for redeveloping MTA and City-owned properties in and around Metro-North's Poughkeepsie Station. One proposal was received in April 2018.
- MTA Real Estate, Metro-North, the City of Poughkeepsie and Dutchess County are working toward modifying the offering to include only leasing out the Poughkeepsie Station Building. This new initiative will leverage the City's Waterfront Strategy, Waterfront TOD zoning effort, as well

as the ongoing revitalization effort as part of the federal Opportunity Zone Program. The intention of this effort will be to activate the station with vibrant uses and positive activity, which could catalyze future development around the station.

### **Harriman TOD**

- In 2008, following a comprehensive planning process involving numerous stakeholders in the community, the Village of Woodbury implemented its adopted Comprehensive Plan for TOD which sets forth a series of zoning and development standards which apply to the area at and around Railroad property.
- The adjacent property owner at Harriman Station has submitted conceptual plans to the Village of Woodbury for a multi-use Transit Village type of development called “The Gardens at Harriman Station.” Metro-North has provided comments on the Environmental Review documents issued by the Village of Woodbury for the “Gardens at Harriman” as Metro-North is an adjacent land owner and “Interested Agency.”

### **TOD Support at Multiple Locations**

Metro-North strives to enhance the region’s mobility by leveraging Railroad assets and supporting TOD interest in the communities we serve. Where we own property at a station, we may partner with the local community. Where Metro-North does not own property at a station, we support those communities and work with developers interested in TOD. Over the past year, Metro-North has supported numerous such interests in improving access to the Railroad, including:

- **White Plains Transit District Strategic Plan**

Metro-North continues to support the White Plains Transit District Strategic Plan, which seeks to create an integrated regional transportation hub for rail, bus, taxi and shuttle service, improving connections between White Plains and New York City, Yonkers, New Rochelle, Stamford, CT, and other local activity nodes. A key focus has been the new bus rapid transit (BRT) service the Hudson Link (formerly Lower Hudson Transit Link) operating between Westchester and Rockland Counties, which commenced in 2018. The City of White Plains also released a RFEI for development adjacent to Metro-North’s North White Plains station and is preparing an RFP. Metro-North reviewed elements of certain proposals to ensure they do not adversely impact Railroad operations. Metro-North will continue to support the region’s efforts, while implementing improvements to the White Plains train station as part of the Enhanced Station Initiative which improve the customer experience at the station while supporting the City of White Plains station area redevelopment efforts.

- **Nanuet TOD**

Under a “Cleaner, Greener Communities” grant from the New York State Energy Research and Development Authority, Metro-North worked with the Town of Clarkstown Planning Department and other stakeholders on plans to redevelop Nanuet into a mixed-use, transit-oriented neighborhood centered on a new multi-modal transit station. Metro-North was a member of the Advisory Committee and active participant in the Study, which was completed in fall 2017. The recommendations of the study focus on the Nanuet Hamlet Center, which is home to the Town’s only commuter rail station. New zoning is under development by the Town to better reflect and reinforce the traditional main street layout of the area, while providing opportunity for mixed-use development and housing near the station. Metro-North continues to support the Town as they move forward with zoning changes and redevelopment.

- **Port Chester TOD**

Metro-North has been in discussions with the Village of Port Chester regarding their interest in pursuing potential development projects adjacent to the Metro-North right-of-way, such as mixed-use residential developments proposed on East Broadway and New Broad Street. The Village completed a Mobility and Parking Management Study in 2017 including recommendations. Metro-North supported the study and will remain engaged with the Village on development opportunities around the station. The Village is currently working on updating the zoning code to a form-based code in a process called “Plan the Port,” on which Metro-North has provided comments. The Village is also working on a wayfinding strategy in the downtown area, which Metro-North will be involved with.

- **Tarrytown TOD**

Metro-North and MTA Real Estate continue to work with the Village of Tarrytown to coordinate any traffic and station area improvements associated with its plans to build upon local developments and recent Metro-North capital investments at and adjacent to the station, as well as future development proposals to improve connections between the station and downtown. Metro-North will remain engaged with the Village on potential development opportunities around the station to offer assistance and support as necessary to foster and support expected growth.

- **Mount Vernon West**

MTA Real Estate and Metro-North met with the owner of the former station building regarding his redevelopment plans. This owner is also developing two other high-rise apartment buildings within walking distance of the station. MTA Real Estate requested information from the developer primarily regarding how any new development would impact the pedestrian access to and circulation around the station as well as Metro-North’s ongoing needs at the station. Construction is underway by the developer of a 17-story mixed use development with 189 residential units and 4,200 square feet of retail adjacent to the Station ROW.

- **Wakefield**

A developer approached the Railroad through MTA Real Estate for a proposed mixed-use development of approximately 1,275 residential units and 40,000 square feet of retail space at 241<sup>st</sup> street in the Bronx, immediately south of the Wakefield Station and located between the New Haven and Harlem lines. A small parcel of MTA owned land is part of the development and will have to be offered via an RFP by MTA Real Estate. Metro-North and MTA have been meeting with the developer to ensure that necessary access to and maintenance of operating infrastructure would not be comprised. Metro-North will remain engaged with the developer to offer assistance and support as necessary.

- **University Heights**

Metro-North is coordinating internally with several departments to support MTA Real Estate’s work with the developer proposing a 5 million square foot overbuild mixed-use transit-oriented development atop University Heights Station. This effort is in the preliminary stages, with conceptual drawings and renderings showing the proposed station, platform, access, and development phasing. Metro-North has provided guidance regarding ADA accessibility requirements, minimum vertical and horizontal clearances, maintenance of Metro-North facilities, new equipment installed on our right-of-way, and stormwater design guidelines, as well as planned infrastructure improvements.

## **STATION AREA PLANNING AND PARKING INITIATIVES**

### **Purdy’s / Croton Falls Station Areas**

- Metro-North completed a study evaluating alternatives to resolve the commuter parking shortage in the area which has resulted in up to 250 vehicles parking on roadway shoulders along NYS Route 116 adjacent to Purdy's Station and Croton Falls Road and Route 202 near the Croton Falls Station. Stakeholders in the process include the Towns of North Salem and Somers; New York State Department of Transportation (NYSDOT) Region 8; and the New York City Department of Environmental Protection.
- Metro-North will construct up to 450 surface parking spaces (which will provide space for the 250 vehicles parking in unauthorized parking areas on nearby roads as well as accommodate 200 new spaces) on property in Croton Falls, NY. The project also includes the construction of lighting and sidewalks to connect the new parking lot to an existing sidewalk network.
- A Categorical Exclusion for the project was granted by the Federal Transit Administration.
- MTA Board approved property purchase in April 2018.
- Property acquisition closed in January 2019. Potential abatement and project design have commenced.
- Construction is expected to be completed in June 2021.

### **Southeast**

- To meet future train storage demands at Brewster Yard, Metro-North is planning to replace the existing 1,010-space parking lots at Southeast Station (located north of Brewster Yard) with a parking garage on a Metro-North owned site east of the existing station. The new parking facility will enable Metro-North to expand Brewster Yard on the site of the existing parking lots.
- Planning is underway to perform environmental studies and design for the new parking garage

### **West of Hudson Parking**

Metro-North reduced the cost of annual parking at all West-of-Hudson stations operated by LAZ Parking from \$235 to \$20, a 91% price reduction, resulting in a savings for commuters of over \$215 per year. Daily meter parking fees were also permanently reduced by 55% from \$2.75 a day to \$1.25 a day. Metro-North has experienced an over 90% increase in the number of customers taking advantage of the discounted parking since it was first introduced as a pilot program in 2014. The railroad has 3,766 permit spaces and 995 daily meter spaces at six stations on the Port Jervis Line and three stations on the Pascack Valley Line. Permits are still available at all stations.

### **Hudson Link** (formerly Lower Hudson Transit Link)

Metro-North worked with New York State Department of Transportation (NYSDOT) to implement their Hudson Link (formerly Lower Hudson Transit Link) Cross Hudson (via Governor Mario Cuomo Bridge) bus service that connects residents of Rockland County to Metro-North stations (Tarrytown Station on the Hudson Line and White Plains Station on the Harlem Line) and other locations in Westchester County. Service on the Transit Link began in October 2018. There is a Transit Link bus stop at Metro-North's Spring Valley Intermodal Area as well. This service replaced the TappanZee Express. At the Spring Valley intermodal area, which is owned by Metro-North, NYSDOT upgraded one of the four existing bus bays to accommodate amenities for Transit Link customers (pay stations, Wi-Fi, real time information). Metro-North rehabilitated the three remaining bus bays including resurfacing, new shelters (provided by Rockland County), repair of curb cuts and connection of the bays to one another and the station plaza area through a painted path. Metro-North

also completed a capital project to repave and re-stripe the asphalt parking area at the Spring Valley station.

Metro-North's Enhanced Station Initiatives improvements at White Plains complemented the commencement of the Transit Link service to the Station. Specifically, Transit Link customers using the station entrance at Main and Bank Street were greeted to an upgraded station platform with amenities as well as a Metro-North ticket vending machine upon commencement of service. In the coming year, this entrance will be adorned with mosaic.

### **125th St – Uptown Metro-North Visioning**

Metro-North and MTACC are on the Steering Committee for the Uptown Metro-North Community Planning process managed by WEACTION for Environmental Justice. This is a community-based planning program to leverage the infrastructure improvements in the neighborhood with upcoming 2<sup>nd</sup> Ave Subway, Metro-North's Harlem 125<sup>th</sup> Street station, NYCT 4,5,6 Subway and bus service to provide a plan for transit hub to benefit the community. The Metro-North Harlem-125<sup>th</sup> Street Station is a major transportation hub for the area and the Park Avenue Viaduct traverses along the western portion of the study area. Currently, New York City Department of Transportation is making improvements to address vehicular circulation in the Metro-North Harlem 125<sup>th</sup> Street station area.

Metro-North has also supported MTACC and New York City Transit in the planning for a proposed Second Avenue Subway station proximate to our Harlem-125<sup>th</sup> Street station.

### **Pawling Pedestrian Plan**

Dutchess County requested that Metro-North participate in the Pawling Pedestrian Plan, as one of the focus areas of the study was the Pawling Station Area. Metro-North owns a significant amount of property around Pawling Station and downtown Pawling. Metro-North has provided information regarding pedestrian access, ADA accessibility, recently completed capital improvements, property data, and parking agreement verbiage. Metro-North completed a site visit in August 2018, attended the plan's open house in November 2018, and will be taking part in Task Force meetings. This plan will put forth a set of recommendations for pedestrian improvements, and Metro-North will advise the Village on how to proceed with implementation based on Metro-North's existing procedures.

### **Penn Station Access**

Along with MTACC, Metro-North participates in Station Area Planning efforts including coordinating with New York City agencies both at focused meetings and public walk throughs and workshops to support the proposed four new stations in the Bronx related to the Penn Station Access Project (Hunts Point, Parkchester/Van Nest, Morris Park and Co-op City).

## **RAIL TRAIL INITIATIVES**

Metro-North continues to work with local municipalities, trail advocacy groups, as well as other government agencies (e.g., New York State Parks), to support efforts to advance rail trails at select locations throughout Metro-North service territory. Metro-North's participation and input helps to advance successful, well-designed rail trail projects for the public, while allowing the railroad to protect rail operations, uphold safety and security requirements and promote resiliency standards. Active rail trail projects include:

- **Hudson Highland Fjord Trail/Breakneck Connector:** The Hudson Highland Fjord Trail (HHFT) is a 7-mile shared use trail from Cold Spring to Beacon. The project is being advanced by a working committee of local stakeholders, including local municipalities, elected officials, trail advocacy groups, government agencies and is spearheaded by Scenic Hudson. An environmental consultant is currently preparing an environmental impact statement for the HHFT project, with New York State Parks as the Lead Agency for the EIS process.

The Breakneck Connector, located in the area of Metro-North's Breakneck Ridge Station, is a subset of the HHFT that was determined to have "independent utility" and is advancing as a separate project. The Breakneck Connector addresses project-specific safety concerns related to high pedestrian volumes, inadequate parking, and high traffic speeds on Route 9D generated by the popular Breakneck Ridge trail. The new trail connector will be built primarily on Metro-North property, and leased and operated by the Town of Fishkill. A lease with the Town of Fishkill was approved by the MTA Board. The project will include fencing to safely separate trail users from rail operations, as well as station platform improvements at the Breakneck Ridge Station to be built by the Town.

Scenic Hudson has engaged a landscape architect firm to design both the HHFT and the Breakneck Connector. The firm will develop an overall master plan for the design of the HHFT project, as well as develop project design plans for the Breakneck Connector. Construction for the Breakneck Connector is tentatively planned to begin winter of 2020.

- **Breakneck Ridge Trailhead:** Anticipating the construction of the HHFT and the Breakneck Connector and the resulting increase in visitors to Breakneck Ridge that would result, New York State Parks is seeking to improve the Breakneck Ridge Trailhead by replacing eroded soil and worn trail tread with a natural hardened tread surface and rock steps suited to handle the volume of hiking traffic at the site. The first approximately 500 feet of the Breakneck Ridge trail, including the area of the trailhead, is located on railroad property. In order to advance the project, NYS Parks and MTA/Metro-North are negotiating a land use agreement to allow the rehabilitation work on the trail head to advance in a way that would not interfere with Metro-North's operational and property interests.
- **Bronx Greenway Trail Feasibility Study:** Former State Senator Klein secured a \$250,000 state grant for Metro-North to conduct an engineering feasibility study at the request of the local Community Board (Bronx Community Board 8) to determine whether a trail is feasible west of the tracks in an approximately three-mile stretch heavily used by both Metro-North and Amtrak along the Hudson Line, from an area north of the Spuyten Duyvil Station to the Ludlow Station. The study has assessed the opportunities and challenges in this congested segment of Metro-North's system, evaluating the feasibility of potential trail alignments on a segment by segment basis. The study indicated that trail is potentially feasible, but with numerous existing challenges in the project area, such as safety and security concerns, ensuring integrity of rail operations, trail access constraints, resiliency and storm surge, and constructability and maintainability. The final report was issued in 2018 and a final meeting was held to review the project findings with Bronx Community Board 8.
- **Riverwalk:** This proposed project seeks to develop a trail that connects the existing segmented Riverwalk Trail in Westchester County. The proposed trail would connect the existing Riverwalk Trail segments north and south of the new Mario M. Cuomo Bridge and include a connection to

the shared-use path of the new bridge. A consortium of local shareholders and Scenic Hudson has engaged an engineering consultant to prepare an engineering feasibility study, as well as conduct the environmental review for the project.

- **The Empire State Trail:** As part of the Governor’s initiative to construct the New York Empire State Trail from New York City to Canada and west to Buffalo/Niagara Falls, Metro-North Railroad has been tasked to construct the “Maybrook Trail” a 23-mile shared use path along a portion of Metro-North’s Beacon Line. The northern limit of the project will join the Dutchess County Rail Trail at Hopewell Junction, while the southern limit will be the Village of Brewster in Putnam County. The design work for the Maybrook Trail is underway by the engineering firm WSP, and a RFP for a design-builder to construct the trail has been issued. The goal of the project is to deliver the completed Maybrook Trail segment of the Empire State Trail by the end of 2020. Metro-North is working with Putnam and Dutchess Counties on the design and construction of the trail, preserving the potential for rail operation on the line. Once completed, it is expected that Putnam and Dutchess Counties will operate and maintain this section of the Empire State Trail.
- **Beacon Line Trail and Shuttle:** Metro-North is cooperating with the City of Beacon and Dutchess County to pursue a study for a shuttle service between Beacon Station and Route 9 in Fishkill with an accompanying trail. The trail and shuttle would use a portion of the Beacon Line that currently does not have active rail use and would not be used for the Empire State Trail. Metro-North has granted Beacon and Dutchess County three years to pursue their study of this portion of the Beacon Line.

**CONNECTING SERVICES:**

<p><b>Bronx County</b> <i>Hudson Rail Link</i></p>	<ul style="list-style-type: none"> <li>• Two new buses were purchased and placed into Hudson Rail Link service in 2018.</li> </ul>
<p><b>Rockland County</b> <i>Haverstraw-Ossining Ferry</i></p>	<ul style="list-style-type: none"> <li>• Metro-North Railroad exercised the first two year contract option with NY Waterway to continue providing Haverstraw-Ossining Ferry operations from January 1, 2019 to December 31, 2020.</li> <li>• The Haverstraw ferry dock had reached the end of its useful life and was reconstructed and replaced by a more modern and stable dock. All work on this project was completed in October 2018.</li> </ul>
<p><b>Rockland County</b> <i>Tappan Zee Express</i></p>	<ul style="list-style-type: none"> <li>• The Tappan Zee Express bus service ended and was replaced on October 29, 2018 by the Hudson Link (formerly Lower Hudson Transit Link), a new regional state-run bus service operated by Transdev under contract to NYSDOT. Metro-North provides no financial support for this service. The bus service will continue to connect Rockland County riders to Metro-North stations in Tarrytown and White Plains.</li> </ul>
<p><b>Orange County</b> <i>Newburgh-Beacon Ferry</i></p>	<ul style="list-style-type: none"> <li>• Metro-North exercised the first two year contract option with NY Waterway to continue providing Newburgh-Beacon ferry operations from January 1, 2019 to December 31, 2020.</li> <li>• Conceptual design on a replacement for the Beacon ferry dock continued. A construction completion date has not yet been determined, nor has funding been identified for this project.</li> </ul>

## **ENTERPRISE ASSET MANAGEMENT**

Each of the MTA agencies continues to invest in an Enterprise Asset Management (EAM) system, which includes substantial investments in both business and technology. During 2018, progress was made toward the procurement of Metro North's interim EAM solution.

In 2018, significant work was made in the design and development of the FRA Signal inspection requirements into the Infor EAM system, creation of dashboards to schedule and monitor inspections, and the Infor Transit mobile app. This work establishes the ability to register signal assets remotely in the field through the use of an iPad, pilot test the use of a mobile signal inspection app on an iPad, establish a full integration between the mobile signal inspection app and the Infor EAM desktop system and develop various Infor FRA signal inspection reports.

Metro-North also progressed the development of a full Work Order Management solution to assist the management of Signal and Track Linear assets including asset registration, work request and work order management, and initial GIS integration.

Other activities included the development of a Track proof of concept of the Bentley Optram Linear Data Analytics Model. This allows multiple types of required data such as the data from the geometry cars to be loaded into Optram to enable data visualization, condition data assessments, and linear analysis of the loaded data.

Efforts are underway using a staff augmentation contract to proceed with the configuration and implementation of a MNR Maintenance of Equipment (MofE) EAM Information System (EAM-IS) solution for a multi-year implementation. A project plan was created and is in the final stages of approval.

In order to support the various EAM efforts, an infrastructure for all communication for EAM and building strategies for awareness and change management has been developed. The development and progression of various procurement and hiring activities also aggressively continued.

## **GEOGRAPHIC INFORMATION SYSTEM**

A Geographic Information System (GIS) is a mapping and planning tool used to visually represent asset, operational, legal and topographic data with regard to its location. Metro-North deployed its first Enterprise GIS software in 2014, developing and distributing a uniform set of web mapping viewers designed for all employees, creating a company-wide GIS office and promulgating GIS policies and standards. Current advances have enabled the rollout of mobile device accessibility, allowing field forces to reference and share information without printing out hardcopy maps, calling into the office or being at a desk. GIS is and will continue to be a critical tool to support the organization of Enterprise Asset Management data.

The GIS Concept of Operations Study (ConOps) was completed in 2016 and resulted in the development of the following geospatial business process projects moving forward now:

- Automated Output of Straight Line Diagrams: This project will provide a method to use GIS data to automatically generate and overlay single line drawings on a web interface such as a track chart

and will ultimately be fully integrated with EAM. This project schedule will be determined when funding resources are identified.

- Plan Room Integration: This project will provide online access to as-built drawings in the plan room through the EGIS interface (an EAM funded project). This project started in May 2017, and is expected to be completed by the end of 2019.
- GIS Integration Services for Railroad Property Management (formerly known as “Yardi”): This project provides online access for designated staff to accurate property lines of Metro-North railroad rights-of-way (ROW), stations, leases, yards, utility easements, encumbrances, and other real estate holdings for all professional, technical, and managerial employees to support all service and business functions. This project started in March 2017 and was completed in May 2018.
- Geographic Visualization of Critical Ridership Patterns: This project is to design, build and configure a GIS web-based system for Metro-North Railroad to allow for defined and custom visualization of internally-generated and consultant-sourced ridership data, demographic data, forecasting models, Grand Central Terminal count data, OD survey data, and connecting services information. This project will start in Spring 2019 and will be completed in April 2020.

The following six new GIS business process projects were in progress or developed during 2018:

- Safety Department Emergency Contingency Plan: This project will support employee safety by providing customized GIS web applications to visually depict various internally-generated emergency coordinator data points, evacuation assembly area data, access entrance point data, waste storage facility data, and hospital/first responder/police data for Metro-North Railroad yards and facilities. This project is in progress and will continue in 2019.
- Security Department Customized Incident Story Map Application: This project will provide a customized application to enable designated users to visually review locations of security incidents and support security analysis functions. This project is in progress and will continue in 2019.
- Inventory and Inspection of Retaining Walls: This task is to inventory and inspect all retaining walls located along Metro-North’s right of way using ArcGIS Collector. This project conducted inspections and recorded mapped data on three lines, totaling 168 miles and 655 walls. Data collection and inspections are complete and the contractor is working on final GIS data delivery.
- Visual Train Tracking System Upgrade (VTIS): This project displays a graphical representation of movement on Metro-North territory. The project started in fall 2017, and is managed by MTA IT with GIS support and is expected to be completed in spring 2019.
- Safety Department Inventory of Confined Space Project: This project inventories and inspects all the Confined Space within Metro-North’s Yards and along Right-of-Way (ROW), including Grand Central Terminal using ArcGIS Collector. The project started in May 2018, and the collection for the Yards and Grand Central Terminal was completed in September 2018, and the collection along the ROW will continue in 2019.
- Metro-North Utility Meter Collection Project: This project will inventory and display all the utility meters along Metro-North’s Right-of-Way (ROW) using ArcGIS Collector. The project started in May 2018 and will continue in 2019.

### **III. STRATEGIC CAPITAL INVESTMENTS**

#### **ROLLING STOCK**

**Purchase of 405 M-8 cars for New Haven Line Service (35% share for Metro-North; \$356.1 M, Balance of program (65% share; \$746.7 M) is funded by Connecticut Department of Transportation (CTDOT))**

- 376 cars in married pair configuration and 25 single unpowered cars are in Revenue Service. Repairs for four cars damaged in Bridgeport will be completed by the end of 2019, and the cars will be returned to service.
- The existing M-8 cars have achieved very high mechanical reliability, averaging more than 213 thousand miles between mechanical breakdowns in 2018.
- The M-8 fleet has been going through different phases of systems modification. The phase three modification program commenced in July 2015 and will be completed in mid-February 2019. Both the PTC-Mobile Communications Package and Closed Circuit Television systems were installed as part of Phase III Field Modification Instruction (FMI) program. Phase IV FMI Program is scheduled to commence mid-February 2019 and will include PTC updates. This work is scheduled to be completed in June 2021.

**Purchase of 66 M-8 cars for New Haven Line Service (\$116 M, Balance of program (\$188 M) is funded by CTDOT for the 60 car base))**

- In November 2016, the MTA Board approved an order for 60 additional new M-8 rail cars, and up to a total of 34 option cars, to provide additional capacity on the New Haven Line.
- A change order for the 60 cars was executed in January 2017 and an option for 6 additional cars funded entirely by Metro-North was awarded in June 2018 bringing the total additional car order to 66 units. The 66 cars will allow Metro-North to lengthen rush hour trains, retire the last 36 older M-2 cars, increase safety and flexibility. The cars will supplement the 405 existing M-8 cars already in use on the New Haven Line and New Canaan Branch. New cars will be equipped with Positive Train Control and CCTV.
- The vehicle delivery completion is currently scheduled for January 2021 with warranty support for the 66 cars ending in January 2023, representing the overall completion date for the M8 Program.

#### **GP-35 Locomotive Overhaul (\$11.0 M)**

An in-kind overhaul with complete electrical rewire of six Metro-North GP35 locomotives and the procurement and overhaul of two additional GP35 (total of 8) is underway. The locomotives are in excess of their expected life and are no longer able to perform reliably. The additional GP35s are to replace existing Metro-North GP8/GP9 locomotives. Seven locomotives are complete and on property. The remaining unit is expected to be completed in the 1<sup>st</sup> quarter of 2019.

#### **Dual Mode Locomotive Purchase (\$236.0 M)**

A base order purchase of up to 19 Dual Mode Locomotives to begin replacement of the deteriorating Genesis Locomotive fleet (\$236 M) with options for up to 40 additional units was initiated.

- In 2018, Metro-North initiated a procurement to begin replacement of this 31-unit fleet that is now at the end of its 20-year useful life. The average number of Genesis locomotives in the shop for repairs in a given day has increased 49% from 2013 through 2017, reducing availability for daily service.
- This solicitation includes the design, manufacturing, testing and delivery of Dual Mode Locomotives and is planned for award in 2019.

- Additional options for alternate locomotive configuration for Long Island Rail Road (LIRR) and New York State Department of Transportation (NYSDOT) have been included in the procurement as well, should these properties decide to pursue a locomotive purchase.

## **GRAND CENTRAL TERMINAL**

- **GCT Train Shed /Park Avenue Tunnel Structure (\$90.4 M)** – This rehabilitation project involves the inspection, assessment, design and construction of select areas of the Grand Central Terminal train shed and in the Park Avenue Tunnel, beginning from the bumping posts and extending north to the portal of the tunnel at East 97th Street. A program of priority repairs is underway for the GCT Train Shed; the design of the priority repairs was completed with construction anticipated for award in the 3<sup>rd</sup> quarter of 2019. Work will include steel and concrete repairs and restoration of the paint coat at all the repair locations. In 2017, Metro-North engaged a Program Management consultant to begin the preliminary work of determining how to undergo the phased replacement of the Train Shed. The Program Manager then prepared the scope of work to engage an engineering design consultant to prepare the design for the first section to be replaced in the next Capital Program. The design is scheduled for award in the 1<sup>st</sup> quarter of 2019. The replacement program of the full Train Shed is to be progressed over the next several Capital Programs.
- **GCT Leaks Remediation (\$33.2 M)** - Project to reduce water infiltration at select locations from roadways immediately adjacent to GCT. All field work is completed and the project reached substantial completion in September 2018.

## **ENHANCED STATIONS INITIATIVE (\$135.6 M)**

The Enhanced Stations Initiative seeks to improve comfort and convenience at select stations refining underlying station standards. Metro-North is enhancing the aesthetics and amenities of the stations to improve the passenger's experience. This project improves stations through design innovation and excellence. These enhancements will result in stations that are cleaner and brighter, and will provide more intuitive way-finding signage and twenty-first century amenities such as Wi-Fi and cellular connectivity.

A design-build contract was awarded in December 2017 for this program with work planned at White Plains, Harlem-125<sup>th</sup> Street, Crestwood, Port Chester and Riverdale. The scope varies by station, but elements of work include upgrades to electrical and communication systems including cameras, platform replacement, new signage and navigation systems providing information at street level, fare control areas, and platforms via dashboards and totems, improved street entrances, new LED lighting, charging stations, benches, and leaning bars, and art installations coordinated with MTA Arts and Design. As part of the station enhancement work a considerable amount of state of good repair work is being accomplished at these stations, with White Plains receiving the most rehabilitation with complementary enhancements.

The final design and construction will follow three (3) planned construction stages:

- Stage 1: White Plains Phase I, Port Chester Westchester Avenue Bridge painting, Riverdale Station
- Stage 2 - White Plains Phase II, Port Chester, and Harlem-125th Street
- Stage 3 - Crestwood Station

Metro-North has completed most Stage I activities, including painting the Westchester Avenue Bridge at Port Chester, upgrades to the overpass and installation of the Kiss and Ride at Riverdale, and the upgrades to the entrances and island platform at White Plains. Metro-North is continuing installation of ESI elements at White Plains, Port Chester and Harlem-125th Street, and has begun work at Crestwood. Port Chester and Harlem-125th Street will be completed in the 1<sup>st</sup> quarter of 2019, with Crestwood completed later in 2019 and White Plains completed in the 1<sup>st</sup> half of 2021.

### **CUSTOMER COMMUNICATIONS IMPROVEMENTS (\$213.0 M)**

In December 2017, Metro-North awarded eight contract packages to begin its multi-program Customer Service Initiatives (CSI) to improve customer communications in Grand Central Terminal and at select outlying passenger stations. Improvements include the following:

- Replacement of the existing Grand Central Terminal Visual Information System (VIS) including cable plant, Big Board, gate boards and other displays and head-end (central control)
- Make improvements to the GCT Public Address System and interface the GCT PA System with the new Customer Communication Information System
- New communication links to passenger stations
- Replacement of all wayside public address (PA) systems at passenger stations
- New passenger station digital real-time displays (new and modify existing)
- New customer communication intercoms at passenger stations
- Video Surveillance Systems and upgrade of Video Management System “Head End”
- Cameras (new and modify existing) at passenger stations
- Upgrade/centralization of all elevator control systems.
- Expansion/upgrade/centralization of all electronic access control systems
- New station local area networks (LAN’s) for all station devices

The current Capital Program includes the normal replacement of infrastructure necessary to advance the initial 17 East of Hudson stations plus two West of Hudson stations, including Port Chester, Rye, Harrison, Mamaroneck, Larchmont, New Rochelle, Pelham, Mt. Vernon East, Tremont, Melrose, Harlem-125<sup>th</sup> St, Morris Heights, Spuyten Duyvil, Riverdale, Tarrytown, Ossining, Poughkeepsie, Nanuet and Harriman. Additionally, the Public Address Head End for outlying stations will be replaced at this time. This new Head End will drive the Public Address announcements at all stations even though replacement hardware and VIS will only be included at the initial 17 East of Hudson stations. Metro-North is presently working on upgrades at Harlem-125th Street, Riverdale, Wakefield, Mount Vernon East, and Pelham.

### **NEW FARE PAYMENT SYSTEM**

The MTA New Fare Payment System (NFPS) is based on an account-based system that will be implemented for all MTA bus and subway services as well as both commuter railroads. NFPS will design, develop and implement a new fare payment system that enables the MTA to accept contactless payment cards and payment-enabled phone capabilities for fare payment directly at point of sale.

As part of the NFPS, Metro-North, jointly with Long Island Rail Road (LIRR), developed joint specifications with NYCT for the design for a new fare payment system and configurable vending machines to be installed and deployed in the 2020-2024 Capital Program. The contract was awarded to Cubic in late 2017 and conceptual design commenced in 2018. To date, the NFPS is on track to roll out the first phase of the program on NYCT in spring 2019, which will allow contactless cards to be used at the turnstiles. In the interim, Cubic is working with the railroads on the new TIMs/OBTIMs for the conductors, commencing design of the next generation of mobile ticketing and combining the back-end office with MTA for all ticket purchases. The new system will provide full interoperability with the NYCT NFPS system. As part of this effort, Metro-North is planning to replace its ticketing machines in the next Capital Program.

## **OUTLYING STATIONS IMPROVEMENTS**

### **New Haven Line (NYS Portion)**

- **Rye and Larchmont Priority Repairs (\$7.9 M)**

This project provides for the construction of component repairs at Rye and Larchmont, as identified in the East of Hudson Priority Repairs project. At Larchmont, Metro-North will replace stairs treads and stairs landings and repair concrete spalling on platform surfaces and edges. At Rye, Metro-North will repair concrete spalling and cracks in the platform edges and expansion joints, as well as replace tactile warning strips alongside the platform edges. Due to operational constraints on the New Haven Line, construction at Larchmont will precede construction at Rye. Construction at Rye will commence in November 2019, and construction at Rye will commence after Larchmont is completed, in accordance with other work on the New Haven Line in the vicinity of Rye.

### **Hudson and Harlem Lines**

- **Hartsdale and Scarsdale Station Replacement (\$80.2 M)**

This project provides for the construction of 3 replacement platforms and repairs of one platform at two Harlem Line stations, Hartsdale and Scarsdale. The improvements also include two new elevators at Hartsdale, one new elevator at Scarsdale, and a new Americans with Disabilities Act (ADA) compliant ramp at Scarsdale. Two existing ADA-compliant ramps (one at each station) will be demolished and rebuilt. Procurement for the design-build replacement of both stations is ongoing, with four bidders shortlisted, for an anticipated start date of December 2019.

- **Purdy's Station Elevator Improvements (\$6.7 M)**

This project provides for the replacement of a staircase between Purdy's Station and New York State Route 116 that has been closed since 2012 with an elevator. The elevator will improve access for pedestrians arriving at Purdy's in compliance with the Americans with Disabilities Act. The design contract was awarded in December 2018 and the construction contract is expected to be awarded in December 2019.

- **Expansion Joint Replacement at 13 Stations (\$3.1 M)**

This project addresses some of the priority structural needs identified in the East of Hudson Station Priority Repairs project at select stations on the Harlem and Hudson Lines. The project will replace existing expansion joint materials, and complete concrete spall and crack repairs adjacent to the joints being replaced. Metro-North has identified the following sites for the first

round of repairs and replacements: Valhalla, Hawthorne, Pleasantville, Chappaqua, Mount Kisco, Bedford Hills, Katonah, Goldens Bridge, Purdy's, Croton Falls, Brewster, Cortlandt, Cold Spring. Construction on this project commenced in September 2018.

- **East of Hudson Station Priority Repairs – Assessment/Design (\$4.1 M)**

This project includes the assessment and preliminary design necessary to define priority structural repair needs at select stations on East of Hudson Lines in New York State, including platforms, stairways, piers, and underpasses. On the Upper Hudson Line, locations include Poughkeepsie, New Hamburg, Beacon, Cold Spring, Garrison and Cortlandt. On the Harlem Line, locations include Southeast, Brewster, Croton Falls, Purdy's, Goldens Bridge, Katonah, Bedford Hills, Mount Kisco, Chappaqua, Pleasantville, Hawthorne, Mt Pleasant, Valhalla, North White Plains, White Plains, Hartsdale, Scarsdale and Crestwood. The New Haven Line locations are Larchmont and Rye. The objective is to identify structural priority repairs necessary to address deteriorating elements of the station platforms and prioritize investment needs in the current capital program. As a result, design and construction will be advanced in the 2015-2019 Capital Program to address significant needs at the Hartsdale and Scarsdale stations, including replacement of platforms, new canopy and elevator, and customer information improvements. This will also inform the 2020-2039 Twenty Year Needs Assessment and future capital programs.

#### **West of Hudson**

- **Port Jervis Station Improvements (\$4.44 M)**

The project provides for the replacement of the existing station platform at Port Jervis with a high-level platform, Americans with Disabilities Act (ADA) compliant ramp, as well as station canopy, shelter and Customer Service Initiative elements. The design contract was awarded in December 2018 with the construction contract is expected to be awarded in December 2019.

### **STRUCTURES IMPROVEMENTS**

#### **Undergrade Bridge Program: (\$71.9 M East of Hudson)**

The 2010-2014 and 2015-2019 programs continue previous efforts for the rehabilitation of select undergrade bridges located on the Hudson, Harlem and New Haven Lines in New York State. Scope includes Metro-North Force Account construction, 3<sup>rd</sup> party consultant design of select undergrade bridges, and 3<sup>rd</sup> party consultant inspection and load rating of 367 undergrade bridges.

Work in Progress includes:

- Force Account rehabilitation:
  - HA 14.57 over the Bronx River in Bronxville - Steel repairs and backwall replacement will be completed in 2019.
  - HU 3.01 (102<sup>nd</sup> Street) to HU 3.31 (108<sup>th</sup> Street) in New York – Priority repairs to the Park Avenue Viaduct will be completed in 2019.
- 3<sup>rd</sup> Party design and construction work includes:
  - NH 25.74 over Willet Avenue in Port Chester – The design of the superstructure replacement and substructure rehabilitation is complete. Another bridge located immediately adjacent to Willet Avenue, NH 25.83 over Highland Road, is under design, with completion scheduled for the 2<sup>nd</sup> quarter 2019. Construction of both bridges is scheduled to be awarded in the 4<sup>th</sup> quarter 2019.

- HA 61.06 / HA 61.36 over the Croton River in Patterson – The bids for the replacement of both bridges have been received with award anticipated for the 1<sup>st</sup> quarter 2019.
- HU 4.69 over the Harlem River in New York – The fender rehabilitation project is awaiting approval from the Army Corps of Engineers before advertisement for construction bids can proceed. The design of the superstructure repairs is ongoing with completion scheduled for the 4<sup>th</sup> quarter 2019.
- Hudson and Port Jervis Line Tunnel inspection project received proposals in the 1<sup>st</sup> quarter 2019. Award is anticipated in the 2<sup>nd</sup> quarter 2019.
- HU 3.41 to HU 4.69 Park Avenue Viaduct master plan for replacement and condition inspection will be awarded to the selected design consultant in the 1<sup>st</sup> quarter 2019. This project will help in preparing a strategy for replacing the aged, deteriorated structure over the next several capital programs.

### **Overhead Bridge Program East of Hudson (\$72.2 M)**

The 2010-2014 and 2015-2019 programs continue previous efforts to address overhead bridge state of good repair needs at select locations located on the Hudson, Harlem and New Haven Lines in New York State. Work includes Metro-North Force Account bridge repairs as well as plans for full replacements as warranted.

- 3<sup>rd</sup> Party construction work in this project includes:
  - Mount Vernon bridges: Metro-North is working with the City of Mount Vernon to replace some of the bridges that pass over the New Haven Line in Mt. Vernon. Utilizing a combination of funding from the MTA Capital Program, an earmark from Assemblyman Gary Pretlow and monies due from the City of Mt. Vernon, Metro-North began the design of replacement bridges at 6<sup>th</sup>, 10<sup>th</sup> Avenue, North 14<sup>th</sup> Avenue, 3<sup>rd</sup> Avenue and Fulton Avenue. The 2010-2014 and 2015-2019 Capital Programs allocated funds to design all five of these Mount Vernon bridges and construction for replacement of 6<sup>th</sup>, 10<sup>th</sup>, North 14<sup>th</sup> and 3<sup>rd</sup> Avenue bridges dependent upon timely receipt of funding from the City of Mt. Vernon (\$5 million). Construction for the Fulton Avenue Bridge will proceed in the next program. Construction is proceeding on the replacement of the 14<sup>th</sup> Avenue Bridge. Bids for construction were received for the replacement of the 6<sup>th</sup> and 10<sup>th</sup> Avenue bridges and award is anticipated for the 1<sup>st</sup> quarter of 2019. A package to replace the 3<sup>rd</sup> Avenue Bridge using the Design-Build method is being prepared for advertisement and planned for award in 2019.
  - Prospect Hill Road bridge replacement: This 110-year-old structure traversed the Metro-North Brewster Yard and Harlem Line main tracks, south of the Southeast Station. The bridge was closed on an emergency basis to traffic as it was no longer repairable due to severe deterioration to structural members. A design-build contract to replace this structure was awarded in 2<sup>nd</sup> quarter 2017 and construction was completed in the 4<sup>th</sup> quarter of 2018, and the new bridge has been opened.

### **Undergrade Bridge Program (\$21.2 M West of Hudson)**

The 2010-2014 and 2015-2019 programs continue previous efforts for design, repairs, rehabilitation or replacement to select undergrade bridges located on the Port Jervis Line. This project includes:

- Force Account repairs to the following bridges continued in 2018: JS32.60 in Sloatsburg, Work on JS 63.04 Shea Road, and JS 66.22 Route 207 is scheduled to commence in 2019.
- Consultant inspection and design commenced in December 2017 and continued through 2018, preparing for the rehabilitation or replacement of the following bridges: JS 42.77 Ramapo River,

Harriman, JS 47.53 Estrada Road, Central Valley, JS 47.73 Laura Lane, Central Valley, and JS 47.88 Smith Clove Road, Central Valley.

## **SIGNAL SYSTEM AND POWER INVESTMENTS**

### **Signal System/Cabling Improvements (Harlem, Hudson and New Haven Lines)**

- Design communications and signal improvements for the Upper Hudson Line from Croton-Harmon to Poughkeepsie. The express cabling design was completed in 2017 with design efforts for the pre-wired signal equipment to be completed in 2019.
- Phased construction will begin under the 2015-2019 Capital Program and be completed under the 2020-2024 Capital Program. 2015-2019 work will include express cabling to support PTC as well as procurement of long lead prewired signal equipment. Construction started in 2018 and is expected to be completed in the 1<sup>st</sup> quarter of 2020.
- Harlem Line Wayside communication and signal construction will include express cabling to support a number of strategic initiatives including PTC and CSI improvements. Construction started in 2017 and is expected to be completed in 2020.
- A new communication and signal system for the New York state portion of the New Haven Line was completed in December 2016. The new system supports other upgrades, including PTC, CSI and other wayside signal equipment.

### **Positive Train Control (PTC) (\$ 463.2 M)**

PTC is a system designed to prevent train-to-train collisions, overspeed derailments, incursions into established work zones, and the movement of a train through a switch left in the wrong position. In accordance with the Rail Safety Improvement Act of 2008 that was signed into law, an interoperable PTC system is required on all commuter railroad main-line tracks. MNR is progressing to complete full PTC implementation by December 31, 2020.

- FCC granted Metro-North spectrum modification request to provide spectrum in Orange, Dutchess, Fairfield and New Haven counties completing Metro-North's acquisition of spectrum covering its service territory.
- The SI has completed System and Subsystem hardware Final Design Reviews (FDR). Systemwide implementation of Civil Speed Enforcement (which prevents overspeed derailments) functions was completed in the 1<sup>st</sup> quarter of 2018.
- Metro-North has met FRA's goals to install Wayside Interface Equipment, antenna poles and radio case foundations by December 2018.
- As part of separate contract, Siemens (PHW Inc.) is continuing to furnish ATC and PTC onboard kits for P32 locomotives and cab cars. Metro-North has met FRA's goals to install onboard kits for Metro-North's fleet by December 2018.
- Revenue Service Demonstration (RSD) of full PTC functions started November 2018 between Croton-Harmon and Tarrytown. Metro-North met the FRA requirement of 110 successful RSD trips in this segment of the Hudson Line on March 1, 2019.

### **Harlem Line Capacity Improvements (\$29.9 M)**

Based on a capacity study of the Bronx segment of the Harlem Line, Metro-North installed a new interlocking (CP 109) located between Fordham and Botanical Garden Stations to improve capacity and reliability in this key segment of the railroad. CP-109 was installed in October 2018 and all work is completed.

### **West of Hudson Signal Improvements (\$88.7 M)**

This project includes installation of a new Cab Signal system replacing the existing wayside signal system for the Port Jervis Line between Suffern, NY (MP 31.3) and Sparrowbush, NY (MP 89.9). The project provides for more reliable service, additional capacity and incorporates PTC improvements to enhance the level of safety on the line. New signal system is installed up to Hudson Junction. The remaining section between Hudson Junction and Port Jervis is scheduled to be completed by August 2020.

### **Harlem and Hudson Power Improvements (\$43.7 M)**

This project includes various improvements to the DC traction power supply system on the Hudson and Harlem lines to improve reliability and add capacity to the traction power systems to accommodate increasing loads, to improve acceleration to maintain train schedules, and to add redundancy/reliability in the Park Avenue Tunnel. Work includes:

- Construct the new 86th Street Substation. The existing substation is rated at 3.3MW and is fed from a single Con-Ed source. The new substation will provide 6.6MW of power and utilize two independent feeds from Con-Ed improving the system operation redundancy. The Con-Ed feeder system in Manhattan consists of a highly redundant 13.2 KV underground network serving the adjacent substations with no planned outages by Con Edison during the construction duration. Construction completion is anticipated by the end of 2019.
- Construct a new substation at Brewster (B-52). Construction was combined with the project to replace 3 DC traction substations damaged by Superstorm Sandy. Completion is anticipated in the 3<sup>rd</sup> quarter of 2019.
- Replace the existing negative return reactors at 110th Street with larger size units. Work was completed in 2016.
- Metro-North began construction of a new substation at City Water, with completion planned for 3<sup>rd</sup> quarter 2020. The new substation will address a weaker part of the existing power supply and improve service reliability on the Harlem Line.

### **New Haven Line Traction Power Improvements (New York State) (\$63.1 M)**

The Traction Power supply station at Mt. Vernon, New York (Bridge 23) is being replaced with a new facility for improved reliability and additional capacity. New York Power Authority is implementing this project as a turnkey design-build. Work is ongoing with major equipment fabrication. Project completion is expected by the end of the 1<sup>st</sup> quarter of 2019.

### **New Haven Line Traction Power Investments (in Connecticut) (Funded and managed by CTDOT)**

Metro-North and CTDOT are working on the remaining catenary work. Work continues on replacing the fixed tension overhead wire or catenary system that supplies power to the New Haven Line's electric trains. The new "Auto-Tension" system is more reliable and allows trains to take advantage of the maximum speeds on the Line. The Catenary Project is divided into sections in order to run train service while making a full overhead wire replacement. Four sections have been completed. The final phase of construction for the remaining sections is underway and is scheduled to be completed late spring 2019. This will complete the entire catenary replacement from the New York State line to New Haven.

As part of the larger Atlantic Street Bridge Replacement Project – Phase 2 in Stamford, new catenary is being installed for the extension of Track 7, which is being added as part of the bridge replacement project.

Metro-North and CTDOT are also working on the replacement of the 6 existing Anchor Bridge substations. These substations are located at Woodmont, Devon, two in Bridgeport, and two in Norwalk. Work is complete on 4 substations, with two remaining to be put into service, located in Devon and South Norwalk. The remaining substations are scheduled to be online by the end of summer 2019.

## **SHOPS AND YARDS INVESTMENTS**

### **Harmon Shop and Yard Rehabilitation (\$315.5M in 2010-2014 Capital Program; \$431.6 in 2015-2019 Capital Program)**

This project is part of a multi-phase program for capital improvements and upgrades at Metro-North's Croton-Harmon Shops and Yards.

Phase V is a design-build project being implemented in two stages. Phase V Stage I (funded under the 2010-2014 Capital Program) includes the design-build of a Consist Shop and a new stand-alone Wheel Shop (EMU Annex) which will improve the phasing of the project. All major Stage I work is complete and acceptance testing of major industrial shop equipment and building systems are nearing completion. Transition moves of Metro-North workforces into buildings are being planned. Project completion is anticipated in 1<sup>st</sup> quarter 2019.

Phase V Stage II (funded under the 2015-2019 Capital Program) consists of the design-build of a Running Repair and Support Shops. The contract was awarded to Skanska-ECCOIII-Jacobs team in November 2018. Design development has commenced with multiple design packages already submitted and under Metro-North review.

Master Plan studies for the Maintenance of Equipment (MOE); Maintenance of Way (MOW) and Stores departments were completed in 2018. These studies provide a comprehensive review of Metro-North facilities and chart a path forward for the facilities needed to support our expanding ridership and railcar fleet. These studies inform the 2020-2039 Twenty Year Needs Assessment and the capital investments to be phased over the next several capital programs.

Separately, a feasibility study was kicked off to identify viable opportunities to establish train storage capacity to meet existing needs along the New Haven Line in New York.

### **New Haven Line Projects in Connecticut** (funded and managed by CTDOT)

#### **New Haven Rail Yard**

- The total revised estimated cost of the New Haven Rail Yard Facilities Improvement program is \$ 1.408B, of which \$417 M (Tier 1) is currently funded.
- Renovations to the existing Electrical Multiple Unit (EMU) and the Critical System Replacement (CSR) Shops are complete.
- The Component Change Out Shop (CCO) project was completed in August 2016. Departmental moves, punch list, warranty items and other outstanding items were completed in June 2018. Additional works is still ongoing and expected to be completed by March 2019.

- A revised New Haven Rail Yard Master Plan effort was completed in 2013. Projects will include a 2-track 10-car consist maintenance facility (Service and Inspection Shop) for the M-8 fleet, West end yard, Car wash, M of W facility, East End Connection, Pedestrian Bridge, M8 wheels and HVAC unit storage facility, T&E building expansion, East End Yard, Yard Signal System, Diesel shop/CSR Heavy Repair shop, Running Repair Shop Upgrade etc. 2013 plan was revised in 1<sup>st</sup> quarter of 2017.
- Components of the Master Plan have been completed including: Independent Wheel True Facility; M-8 Acceptance yard; Diesel Storage Yard; M of W facility project is complete as of June 2017.
- Central Distribution Warehouse (CDW) was put in to operation in April 2018. Swiss log continues to resolve software issues (open items) as well as worked on change orders. All open items are expected to be closed out by March 2019.
- Yard Power Upgrade (YPU) is in operation. New feeders were cut-over in November 2018. Punch list items are being worked on.

## **ENERGY SAVINGS**

- Building upon New York’s Executive Order 88 “BuildSmart NY” and Reforming the Energy Vision, Metro-North is implementing the ISO 50001 Energy Management System framework to guide efforts in the most efficient, cost-effective, and environmentally responsible manner possible. Metro-North is the 1<sup>st</sup> railroad in North America to have an Energy Management System with ISO 50001 Certification – a worldwide recognition that indicates the railroad is an above average energy saver and adhering to higher international standards. The ISO compliance supports completion of several energy conservation initiatives; many managed and implemented by employees. ISO (the International Organization for Standardization) brings together experts to share knowledge and develop international standards that support innovation and provide solutions to global challenges. The ISO 50001 standard guides and supports organizations in using and managing energy more efficiently. Adhering to ISO 50001 has guided Metro-North to develop and implement an energy policy and establish objectives, targets and action plans. This will enable Metro-North to reduce our greenhouse gas emissions and other related environmental impacts, as well as reduce costs.
- Building on the work of 2018, Metro-North continues to implement an Environmental Training Program for the Capital Department focusing on environmental compliance, sustainability, and resiliency. This program is being provided jointly by the Capital and Environmental Compliance Departments, and is intended to assure that all requirements and guidelines are considered in the infancy of all capital projects and carried throughout the life of the project and into operation and closeout.
- Completed installation of the Fuel Monitoring and Leak Detection System at Brewster Yard, North White Plains Yard, and Harmon Yard. Similar systems are planned for installation at 525 North Broadway, Poughkeepsie Yard, Mott Haven Yard, Highbridge Yard, and Grand Central Terminal. These new systems will monitor diesel and heating fuel consumption, detect leaks, report back to an enterprise Energy Management System online, and ultimately lead Metro-North to better control how we monitor, manage and consume fuel. This system is an important step towards monitoring consumption of fuel, putting Metro-North in better control of consumption and cost, and ensuring we continually work towards protecting the environment.

- Currently replacing three hundred and seven (307) 1,000-watt High Pressure Sodium high mast yard lighting fixtures with 500-watt LED fixtures at the following locations: Harmon Yard (174 fixtures, installation is 98% completed), Brewster Yard (16 fixtures, installation completed), North White Plains Yard (35 fixtures, installation completed), Highbridge Yard (32 fixtures, installation pending), and Mott Haven Yard (50 fixtures, installation pending). This project is expected to save 153,500 kWh annually. This lighting upgrade will increase the safety of our work force, reduce our high mast yard lighting energy consumption by 50%, reduce maintenance costs, and reduce light pollution, significantly improving community relations in the area. Installation is ongoing, completion is expected by the end of 1<sup>st</sup> quarter 2019. Metro-North expects this project to fully pay for itself in energy and maintenance savings within five years.
- Replacement of T12 fluorescent fixtures with LED fixtures for all 40+ platforms in GCT. The Initial Customer Installation Commitment has been received and is under internal review. Samples have been installed at Track 104, LED selection was approved with color temperature of 3000K. New LED system would have the capability to tie into Building Management System monitoring.
- Metro-North is in the process of installing an EMS – Energy Management System software platform to capture all utility data into a customized interactive system which will allow MNR to track all energy cost and consumption for traction and non-traction electricity, propulsion and non-propulsion diesel fuel, steam heat water and gas. This EMS will allow subject matter experts at MTA and MNR to view cost and consumption on monthly, and diesel deliveries and consumption in live 15-minute intervals. The EMS will also provide 5 years of historical data for benchmarking and budgeting future energy costs. The software is slated for training and commissioning in the 1<sup>st</sup> quarter of 2019.
- Planning underway to install a four-megawatt (4MW) battery on the Upper Harlem Line to stabilize voltage, and correct voltage sags on the 3<sup>rd</sup> rail. The project, Wayside Energy Storage System (WESS), is designed to maintain voltage during peak load requirements and prevent propulsion reductions that cause train delays throughout the Harlem Line. WESS is designed to solve voltage sags due to IR distribution loss between White Plains and Brewster because of the limited number of substations available. Voltage Sag is when DC third rail voltage goes below 500 volts. The (WESS) battery will be placed at Roaring Brook Road in Chappaqua; this location has the most severe voltage sags between 6:00 AM-9:00 AM and 4:00 PM-7:00 PM. A 2003 SYSTRA study indicated that the WESS battery will be designed to:
  1. Supply additional power (kWh) to accommodate heavier and more frequent trains, and allow MNR to temporarily defer building a full substation with additional 13kV Feeders which will cost \$12-15M per substation.
  2. Maintain power delivery to trains between substations to compensate for IR (voltage) Loss in 3rd Rail Distribution.
  3. Recover DC energy via regenerative braking (M8, M9A, possible M7, New Dual Mode Loco). This can be accomplished by modifying WESS to include HV Capacitor Storage.

## **SUPERSTORM SANDY**

On Monday, October 29, 2012 the New York region suffered the devastating effects of Superstorm Sandy. Over 50% of the Hudson Line right-of-way was completely submerged and substations and other power infrastructure systems inundated with salt water were significantly damaged. Falling trees

damaged power lines and feeders, and crushed 3rd rail infrastructure components on the Hudson, Harlem and New York portion of the New Haven Lines.

**Superstorm Sandy Restoration Projects**

In 2013, the MTA’s 2010 – 2014 Capital Program was amended to allocate funds for restoration needs. The program was amended in July 2017 to reflect the updated needs to address these impacts, including the Metro-North Sandy Restoration Program:

<b>Restoration Projects</b>	<b>Cost (\$M)</b>
Rolling Stock Restoration	\$1.1
Right of Way Restoration	\$8.0
Communication & Signal Infrastructure Restoration	\$102.5
Communication & Signal Infrastructure Restoration – Equipment Replacement	\$5.2
Power Infrastructure Restoration	\$170.8
Power Infrastructure Restoration – Substations	\$45.7
Power Infrastructure Restoration - Harlem River Lift Bridge	\$7.6
Power Infrastructure Restoration - Remote Terminal Houses	\$1.3
Metro-North Power Restoration	\$22.1
Metro-North Restoration Reserve	\$23.6

**Superstorm Sandy Resiliency Projects**

Metro-North also identified a need for resiliency projects to better protect the system against future weather events. Metro-North received FTA funding to progress some of the Superstorm Sandy Resiliency projects and continues to work closely with the MTA to advance resiliency projects; this program of work was amended in July 2017 to reflect updated needs:

<b>Resiliency Projects</b>	<b>Cost (\$M)</b>
Rail Vacuum Mitigation	\$6.0
Power and Signal Mitigation	\$50.0
Hudson Line Power and Signal Resiliency	\$33.0
MNR Communications and Signals Infrastructure Resiliency	\$6.5

**Superstorm Sandy Progress:**

The major Sandy work for Metro-North centers on replacing 30+ miles of flooded and damaged infrastructure from the Bronx to Croton-Harmon. In May 2015, Phase I of the two-phased Design-Build contract was awarded for \$164M to replace communications and signal cabling and traction power cables and components, from Greystone (CP-19) to Croton (CP-35.) The Phase II option from Greystone (CP-19) south to the Bronx (CP5) was exercised in November 2016 and work has commenced. In February 2018, Metro-North completed the replacement of cables between Croton-Harmon (CP-35) and Tarrytown (CP-25). Cable replacement between Tarrytown and Greystone (CP-

19) will be completed in 1<sup>st</sup> quarter 2019. Forecast completion date of Phase II of the project is anticipated 2<sup>nd</sup> quarter 2021. The other major Sandy work is the continuation of construction begun in 2014 to replace Hudson Line Substations at Riverdale, Tarrytown and Croton-Harmon. Beneficial use of the substation project is forecasted for April 2019. Replacement of the Harlem River Lift Bridge AC Facility Houses was completed in August 2015.

#### **IV. PLANNING STUDIES**

##### **West of Hudson Regional Transit Access Study**

###### Background:

The West of Hudson Regional Transit Access Study (WHRTAS) examined alternatives for future commuter rail or bus rapid transit service to/from Stewart Airport and the surrounding areas. This service would accommodate the airport's development and regional growth. Metro-North's current objective is to protect the right-of way for future project implementation. Phase I of the Study was completed in 2011 and resulted in a short list of four build alternatives for service to the Airport, including a rail extension from PJJ's Salisbury Mills Station, a BRT solution from PJJ's Salisbury Mills Station, a bus from Beacon Station, and a direct bus from Midtown Manhattan. Phase II was initiated in 2012 to further refine the short list of alternatives and identify a preferred set of alternatives.

###### Progress to Date:

Metro-North completed the technical work necessary to refine the short list of alternatives. A public meeting is planned for early spring 2019 to provide the public an opportunity to view the results of Phase II and the recommended set of preferred alternatives. It is anticipated that the Feasibility Study will be completed in 2019 upon the completion of all outreach activities.

##### **Port Jervis Line Capacity Improvements Project**

###### Background:

Metro-North developed a strategy for improving service on the Port Jervis Line and making it more attractive to customers. This strategy includes expanding capacity to run more frequent service and to enable reverse and off-peak service increases on this largely single-track line. The strategy would entail two capital projects: 1) A new storage yard (at Campbell Hall) to provide for additional peak service and relieve some maintenance activities occurring at Hoboken, and 2) Three passing sidings along the line to allow for reverse commute and off-peak services.

The strategy and proposed improvement projects were initially discussed at a public meeting in Goshen, Orange County in February 2017. Metro-North completed the PJJ Service Strategy Report in 2017, which details the findings and recommendations. The Report and additional project information is available on the MTA's webpage.

###### Progress to Date – Mid-Point Yard Project:

Metro-North awarded a contract to STV Consultants in December 2018 to perform planning, environmental review, and preliminary engineering for the Mid-Point Yard.

###### Upcoming Activities – Mid-Point Yard Project:

The next steps for this project involve confirming the yard requirements, developing the yard layout and initiating the environmental reviews. Funding for the final design and the construction of the Mid-Point Yard Project is anticipated to be available in a future capital program.

###### Progress to Date - Passing Sidings Project:

The Passing Sidings Project is being advanced through design under a separate contract which was awarded in the spring 2018.

###### Upcoming Activities - Passing Sidings Project:

The next steps for this project involve confirming the length and location of the passing sidings, refinement of the service plan and performing preliminary design. Funding for the construction of the Passing Sidings project is anticipated to be available in a future capital program.

### **Penn Station Access (PSA)**

#### Background:

New Metro-North service is being planned on the New Haven Line (NHL) directly to New York Penn Station using Amtrak's existing Hell Gate Line (HGL). This project includes construction of four new passenger stations within the existing rail right of way in areas of the Eastern Bronx that are not currently served by regional rail service, in the vicinity of Co-Op City, Morris Park, Parkchester/Van Nest and Hunts Point. The project also includes infrastructure improvements on the line within the existing right of way and the purchase of rolling stock.

Technical analyses have been ongoing to confirm the project scope and required infrastructure improvements, refine prospective operations, and determine options for acquiring rolling stock. Working together on these activities, Metro-North is responsible for planning the service; ongoing activities include operations and power simulations and travel demand forecasting. MTACC is directing the design and construction of the project and is managing the environmental review process. Amtrak, LIRR and Connecticut Department of Transportation are also significant stakeholders.

#### Progress to Date:

- \$695M in funding towards the PSA project has been programmed in the MTA 2015-2019 Capital Program. Additional funding to complete the project is anticipated to be included in the 2020-2024 Capital Program.
- The MTA Board authorized a General Engineering Consultant (GEC) contract to advance the project into the Preliminary Design Phase. On January 22, 2019, Amtrak, MTA, and Metro-North agreed to a Memorandum of Understanding that commits Amtrak to cooperate in the design, construction and operation of PSA on the HGL.
- A preliminary draft Environmental Assessment (EA) was prepared and submitted to the Federal Transit Administration for review under the National Environmental Policy Act (NEPA).
- An assessment of Value Creation in the vicinity of station areas and comparable case studies were prepared and reviewed for potential co-development/urban realm and public private partnership opportunities. Coordination regarding station planning is ongoing with, the New York City Department of City Planning and the NYC Economic Development Corporation, other City agencies, and the Empire State Development Corporation.
- Travel Demand Forecasts were refined to gain a greater understanding of trip origins and destinations.
- Conceptual Engineering and Operations Simulations have been performed to refine the HGL tracks and stations alignment and the operations along Metro-North's NHL.
- Preliminary power simulations have been performed and power readings have been collected at substations on Metro-North's NHL, Amtrak's HGL, and LIRR infrastructure in Queens and Manhattan.
- Working Groups with the major stakeholders (including Metro-North, MTACC, Amtrak, LIRR and CTDOT) have been used to coordinate the ongoing work. There have also been meetings with the HGL freight operator regarding the coordination of PSA and freight activities on the HGL.

Upcoming Activities:

- Preliminary Engineering will be initiated.
- Operations and Power Simulations will be completed.
- A Draft Environmental Assessment will be made available for public review and comment, pending review by FTA.
- Coordination will continue with:
  - CSX Railroad regarding freight needs in the Hell Gate Line right-of-way
  - Amtrak regarding project designs, construction schedule and support and operations
  - CTDOT regarding project activities and future NHL service
- Exploration of co-development/urban realm and public private partnership opportunities will continue.

# Metro-North Railroad Elevator/Escalator

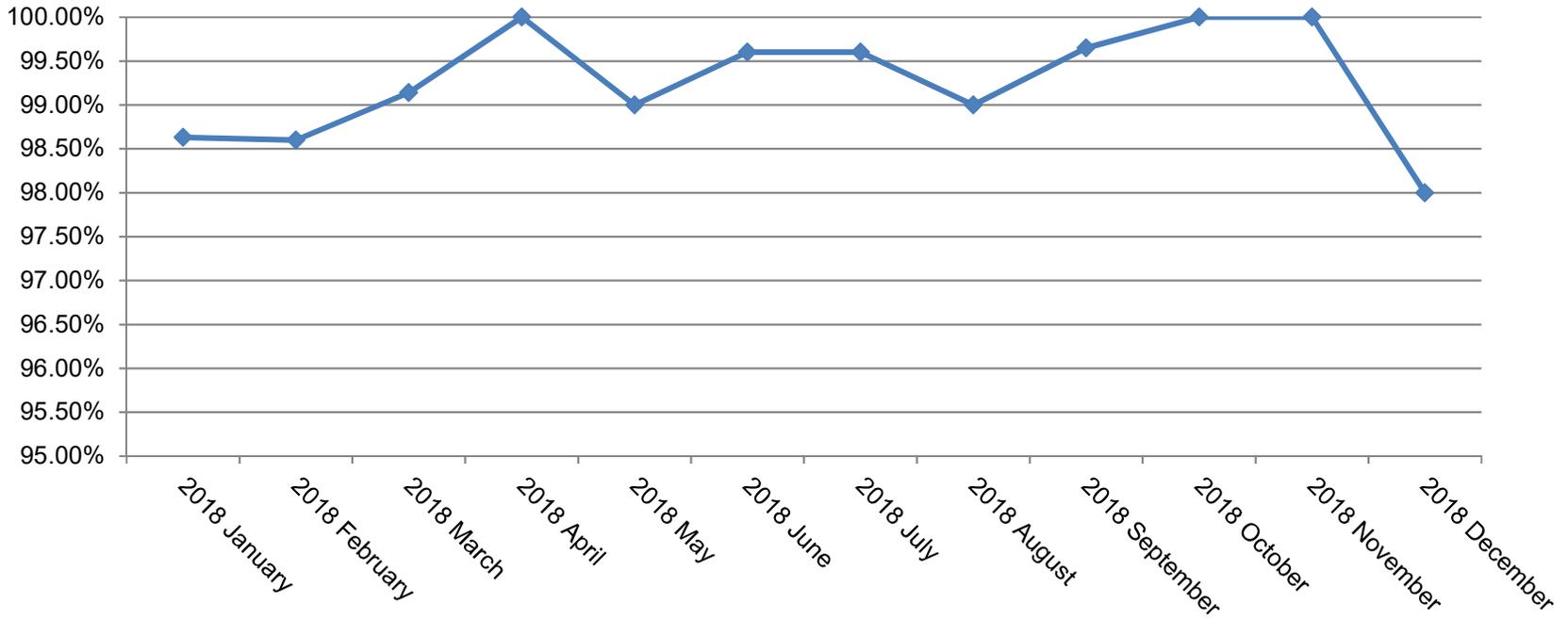
**Year-End Report**

**2018**



**Metro-North Railroad**

# Passenger Elevator Availability



Definition: Availability measures the percent of time that a unit is running and available for customer service **as of 7:00 AM daily.**

## 2018 Elevator Availability by Station - Hudson Line

Elevator Name	Elevator Number	% Available (Mechanical Failures only)	Elevator Name	Elevator Number	% Available (Mechanical Failures only)
ARDSLEY-ON-HUDSON	026N	100.0%	HARLEM 125th	002S	100.0%
ARDSLEY-ON-HUDSON	026S	99.7%	HASTINGS-ON-HUDSON	022N	99.9%
BEACON	056I	99.8%	HASTINGS-ON-HUDSON	022S	100.0%
COLD SPRING	054N	99.5%	GRAND CENTRAL TERMINAL	T-6	99.7%
COLD SPRING	054S	99.9%	GRAND CENTRAL TERMINAL	T-7	98.1%
CORTLANDT	043P	100.0%	GRAND CENTRAL TERMINAL	T-8	99.7%
CORTLANDT	043I	100.0%	GRAND CENTRAL TERMINAL	T-9	100.0%
CORTLANDT	043PW	99.9%	GRAND CENTRAL TERMINAL	T-10	100.0%
CROTON-HARMON	3813	99.6%	GRAND CENTRAL TERMINAL	T-11	99.7%
CROTON-HARMON	3821	99.5%	GRAND CENTRAL TERMINAL	T-12	100.0%
CROTON-HARMON	3842	100.0%	GRAND CENTRAL TERMINAL	T-18	99.5%
CROTON-HARMON	038P	100.0%	GRAND CENTRAL TERMINAL	T-19	95.2%
DOBBS FERRY	024N	100.0%	GRAND CENTRAL TERMINAL	T-20	0.0%
DOBBS FERRY	024S	100.0%	GRAND CENTRAL TERMINAL	WCL	100.0%
GARRISON	050N	100.0%	GRAND CENTRAL TERMINAL NORTH	NE-1	0.0%
GARRISON	050S	98.9%	GRAND CENTRAL TERMINAL NORTH	NE-2	91.7%
GLENWOOD	018N	99.7%	GRAND CENTRAL TERMINAL NORTH	NE-3	98.9%
GLENWOOD	018S	99.8%	GRAND CENTRAL TERMINAL NORTH	NE-5	89.5%
GREYSTONE	020N	99.8%	GRAND CENTRAL TERMINAL NORTH	NE-6	100.0%
GREYSTONE	020S	100.0%			
HARLEM 125th	002N	99.7%			



## 2018 Elevator Availability by Station - Hudson Line

Elevator Name	Elevator Number	% Available (Mechanical Failures only)	Elevator Name	Elevator Number	% Available (Mechanical Failures only)
MORRIS HEIGHTS	004I	100.0%	RIVERDALE	012S	99.9%
OSSINING	3624	99.9%	SCARBOROUGH	034N	100.0%
OSSINING	363	99.9%	SCARBOROUGH	034S	100.0%
OSSINING	036N	99.9%	TARRYTOWN	030N	99.8%
OSSINING	036R	99.8%	TARRYTOWN	030S	99.8%
PEEKSKILL	046N	100.0%	UNIVERSITY HEIGHTS	006N	100.0%
PEEKSKILL	046S	100.0%	YANKEES - E. 153RD STREET	321	100.0%
POUGHKEEPSIE	058N	99.9%	YANKEES - E. 153RD STREET	364	99.9%
POUGHKEEPSIE	058PE	99.9%	YANKEES - E. 153RD STREET	003P	100.0%
POUGHKEEPSIE	058PW	99.8%	YANKEES - E. 153RD STREET	003W	100.0%
POUGHKEEPSIE	058S	99.8%	YONKERS	016N	100.0%
RIVERDALE	012N	99.8%	YONKERS	016S	99.9%



## 2018 Elevator Availability by Station - Harlem Line

Elevator Name	Elevator Number	% Available (Mechanical Failures only)	Elevator Name	Elevator Number	% Available (Mechanical Failures only)
BEDFORD HILLS	152P	100.0%	HAWTHORNE	142I	99.7%
BEDFORD HILLS	152I	100.0%	KATONAH	154P	99.9%
BOTANICAL GARDEN	110N	100.0%	KATONAH	154I	99.9%
BOTANICAL GARDEN	110S	99.9%	MOUNT KISCO	150P	99.9%
BREWSTER	162P	100.0%	MOUNT KISCO	150I	99.2%
BREWSTER	162I	100.0%	MOUNT VERNON WEST	118N	100.0%
CHAPPAQUA	148P	99.7%	MOUNT VERNON WEST	118S	100.0%
CHAPPAQUA	148I	99.8%	NORTH WHITE PLAINS	134N	99.7%
CRESTWOOD	126N	100.0%	NORTH WHITE PLAINS	134P	100.0%
CRESTWOOD	126P	99.9%	NORTH WHITE PLAINS	134S	99.9%
CRESTWOOD	126S	100.0%	PLEASANTVILLE	146I	100.0%
CROTON FALLS	160P	99.7%	PURDYS	158P	100.0%
CROTON FALLS	160I	99.9%	PURDYS	158I	100.0%
FLEETWOOD	120N	99.8%	SCARSDALE	128N	99.9%
FLEETWOOD	120S	99.9%	SOUTHEAST	163P	99.3%
FORDHAM	108N	99.8%	SOUTHEAST	163I	99.8%
FORDHAM	108S	100.0%	TUCKAHOE	124N	99.9%
GOLDENS BRIDGE	156P	100.0%	VALHALLA	136P	99.9%
GOLDENS BRIDGE	156I	100.0%	VALHALLA	136I	100.0%
HAWTHORNE	142P	100.0%	WHITE PLAINS	132I	99.7%



## 2018 Elevator Availability by Station - New Haven Line

Elevator Name	Elevator Number	% Available (Mechanical Failures)
GREENWICH	218E	100.0%
GREENWICH	218T	99.8%
GREENWICH	218W	99.9%
HARRISON	212E	100.0%
HARRISON	212W	100.0%
LARCHMONT	208E	99.8%
LARCHMONT	208W	99.7%
MOUNT VERNON EAST	202E	99.8%
MOUNT VERNON EAST	202W	99.8%
NEW ROCHELLE	206E	100.0%
NEW ROCHELLE	206W	99.8%
RYE	214E	99.8%
RYE	214W	99.9%

These are the only elevators Metro-North maintains on the New Haven Line.



# 2018 Escalator Availability

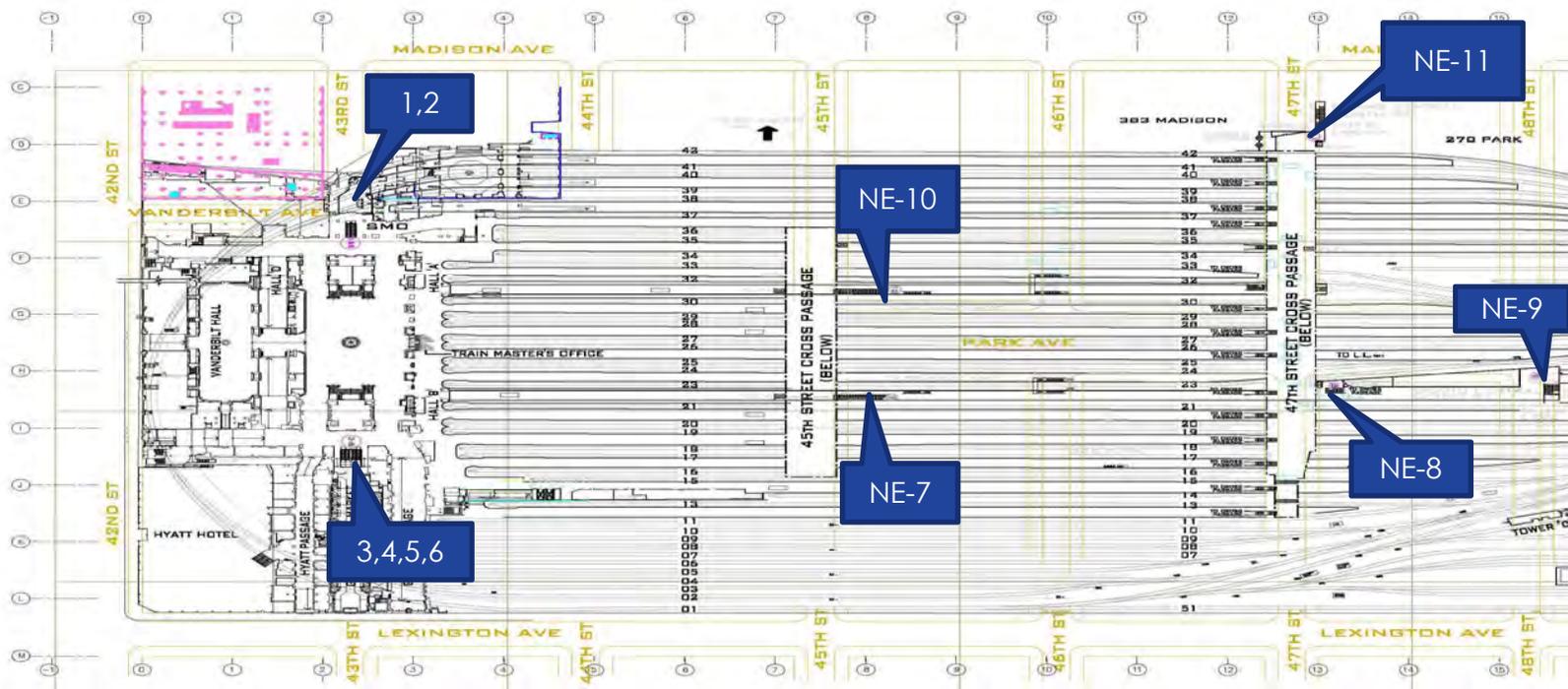
Escalator Number	Escalator Location	% Available	Escalator Number	Escalator Location	% Available
1	West Side near Transit Museum	100%	NE-8	47th ST Cross Passage to East Spine	87%
2	West Side near Transit Museum	100%	NE-9	East Spine to 48th ST and Park	99%
3	East Side near Market	91%	NE-10	45th ST Cross Passage to West Spine	98%
4	East Side near Market	100%	NE-11	47th ST Cross Passage to 47th and Madison	95%
5	East Side near Market	88%	NE-12	245 Park Ave	79%
6	East Side near Market	99%	N	White Plains	100%
NE-7	45th ST Cross Passage to East Spine	93%	S	White Plains	100%

**Notes:**

Availability percentages exclude time escalators are out of service for planned long-term repair.



# Grand Central Escalator Map



# 2018 Customer Satisfaction Survey

Metro-North Railroad



# Overall Context

- Metro-North's 2018 Customer Satisfaction Survey was conducted in June 2018. During the year since the previous customer survey, the railroad continued to follow its strategic vision to become a better railroad through the development and implementation of programs which focus on its employees, its customers and its infrastructure.
- The railroad informed the public about the elements of its strategic vision through the introduction of the Way Ahead program
- Prior research has demonstrated a strong connection between customer satisfaction and on-time performance. Although OTP through the first half of 2018 was only slightly below goal at 92.3%, the six week period just prior to the onboard distribution of the survey was a challenging one for the railroad.
- During that time, OTP was adversely impacted due to some weather-related incidents as well as an increased amount of infrastructure work across all 3 East of Hudson lines which resulted in reduced track capacity and longer running times. For example, construction on the Harlem Line which began in March necessitated a reduced off-peak and late night schedule, which affected customer satisfaction.



# Key Findings

- 86% of East of Hudson customers were satisfied with the railroad overall in 2018, down from 89% the year before. Hudson and Harlem line satisfaction decreased compared to 2017 from 93% to 88% and 90% to 87% respectively. Satisfaction among New Haven Line customers remained the same at 85%.
- Overall satisfaction in all seven of the major service categories on the survey decreased, but in four of them (*Home Boarding Station, Courtesy and Responsiveness of Employees, Train Schedules* and *Grand Central Terminal*) the decline was only by a percentage point or two.
- Satisfaction with *Train Service Overall* fell by three points (84% satisfied versus 87% in 2017) predominantly due to a significant 5 point decline in customer satisfaction with *On-Time Performance* to 73%.
- Although the categories of *Courtesy and Responsiveness of Employees* and *Grand Central Terminal* marginally declined, the vast majority of customers continue to be pleased with them. 94% rated themselves as satisfied with these categories.
- 93% of customers were satisfied with MTA eTix, including 63% who were very satisfied with it.
- Satisfaction with the railroad among Reverse Peak customers remained the same at 88%.
- Among West of Hudson AM Peak customers, satisfaction fell to 64% in 2018 compared to 81% in 2017, principally due to a large decline in satisfaction among Pascack Valley Line customers. This decline was mainly attributable to issues with equipment and crew shortages.



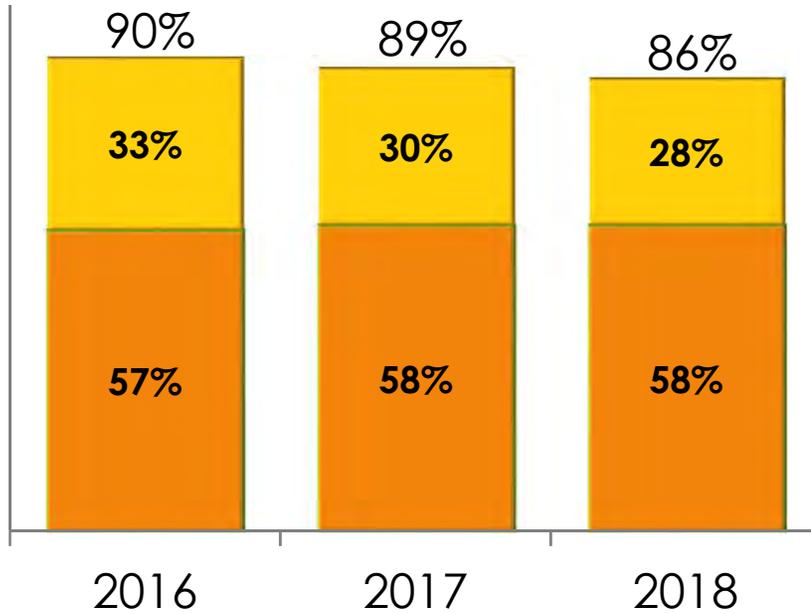
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# METRO-NORTH EAST OF HUDSON SURVEY RESULTS

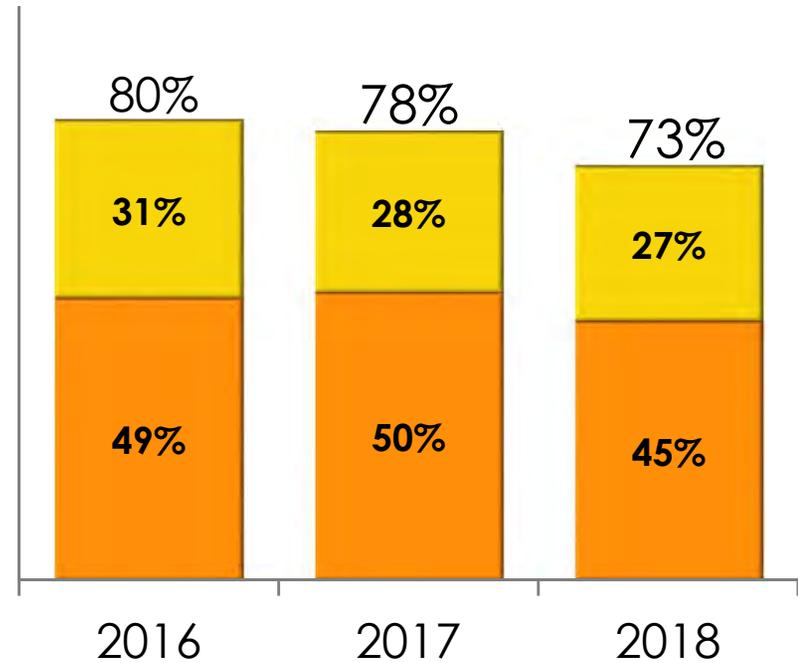


# MNR Overall Customer Satisfaction

## Metro-North Overall



## On-Time Performance



Top Area = Very Satisfied

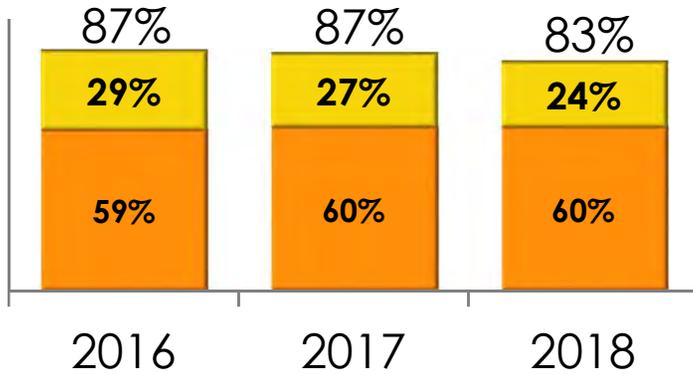
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

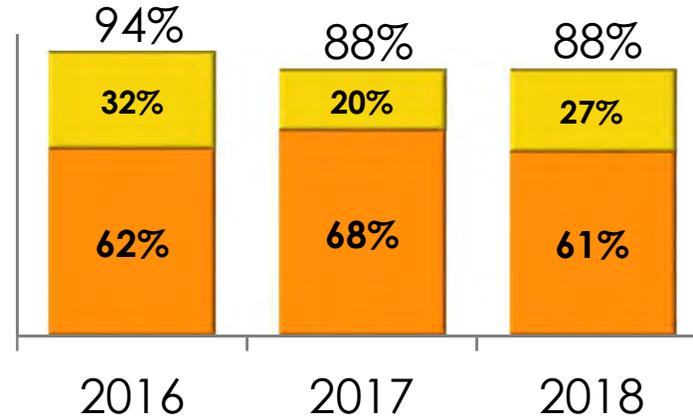


# MNR Overall Customer Satisfaction by Time Period

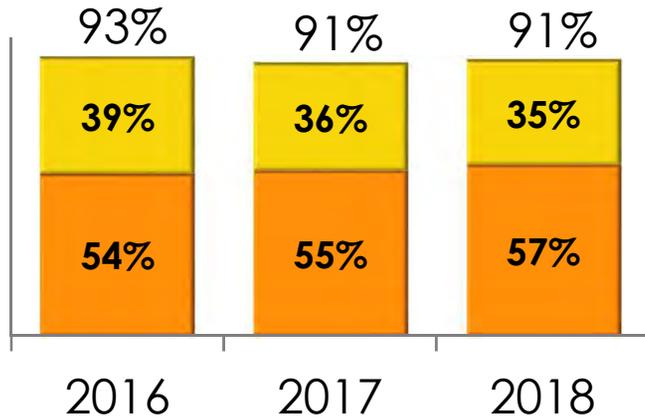
## Peak



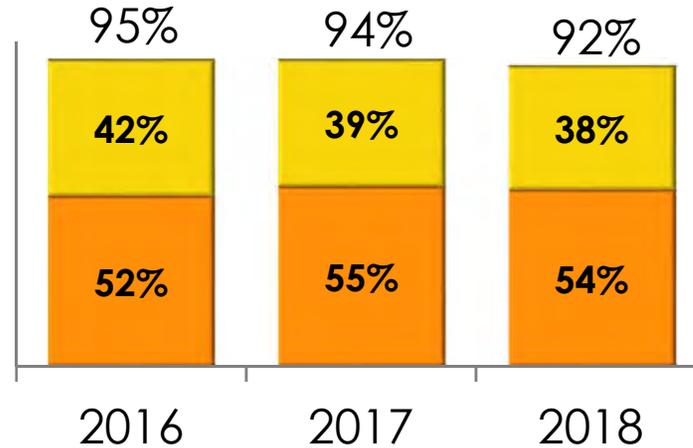
## Reverse Peak



## Weekday Off-Peak



## Weekend Off-Peak



Top Area = Very Satisfied

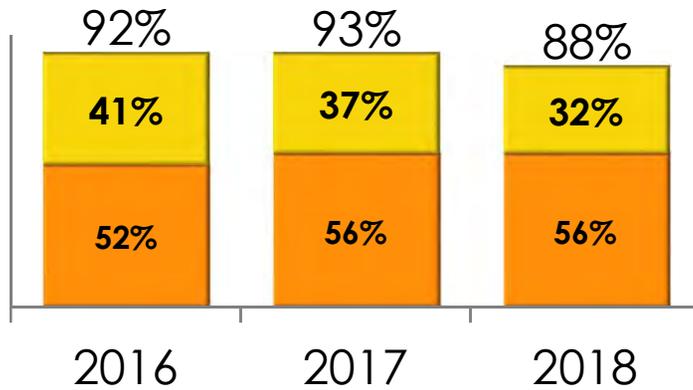
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

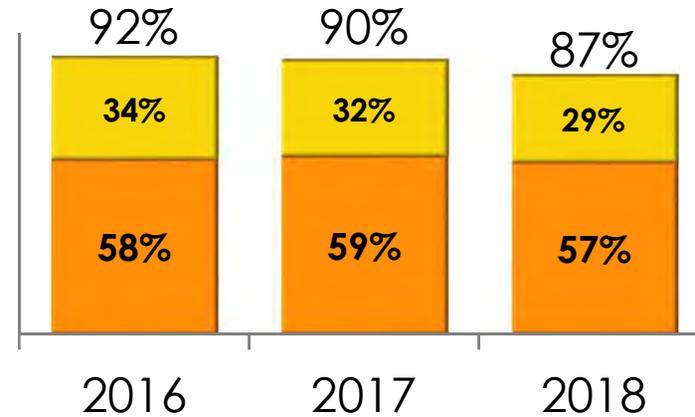


# MNR Overall Customer Satisfaction By Line

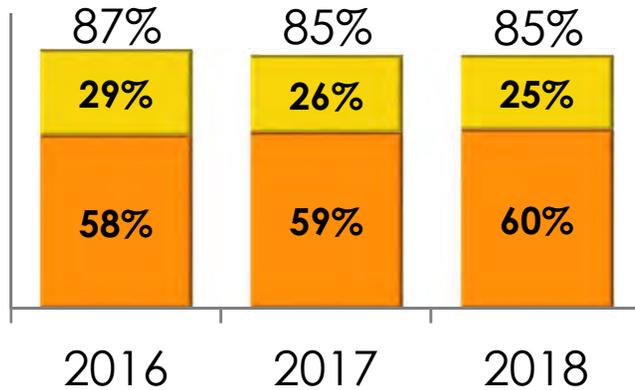
Hudson



Harlem



New Haven



Top Area = Very Satisfied

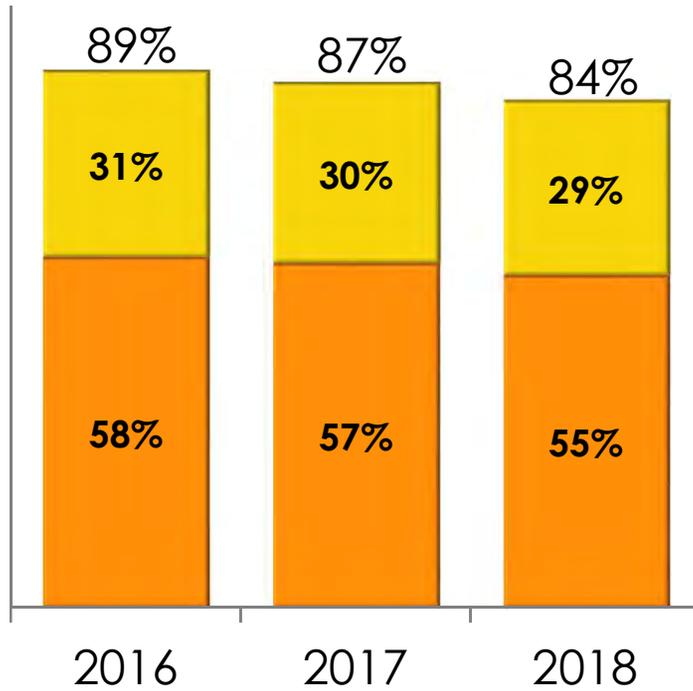
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

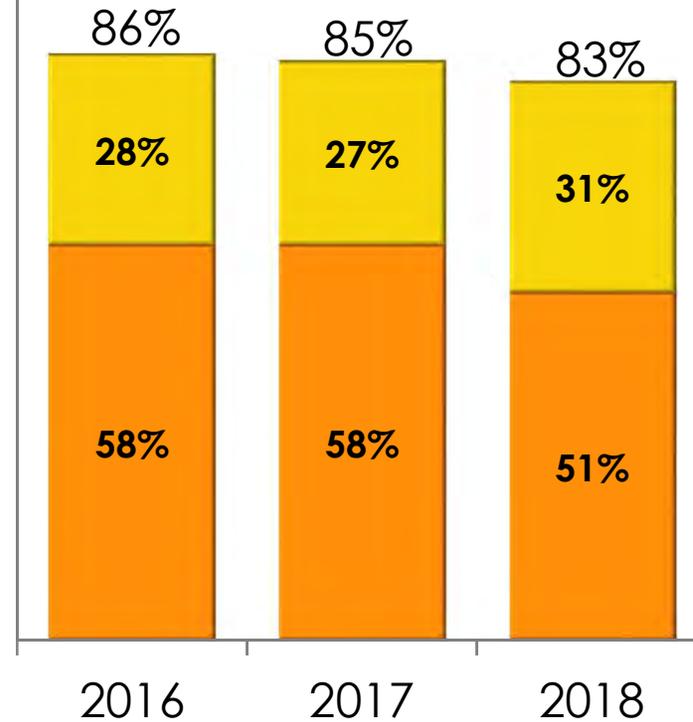


# MNR Train Service and Scheduling

## Train Service Overall



## Overall Train Schedules



Top Area = Very Satisfied

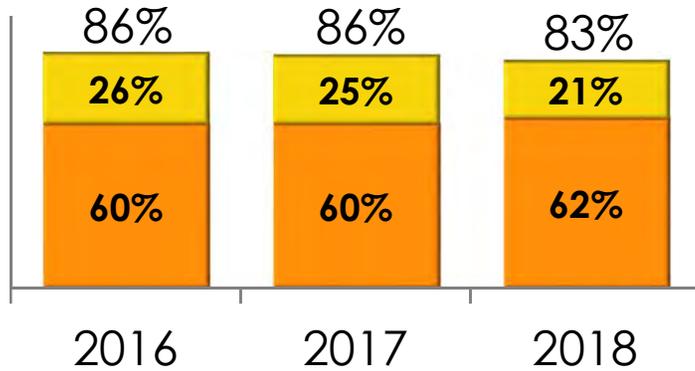
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

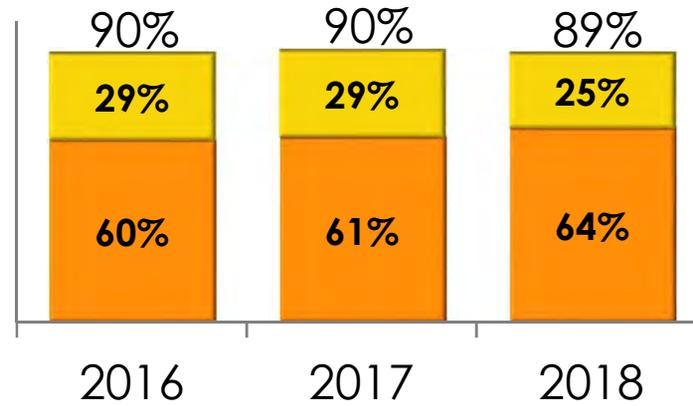


# MNR Overall Communication

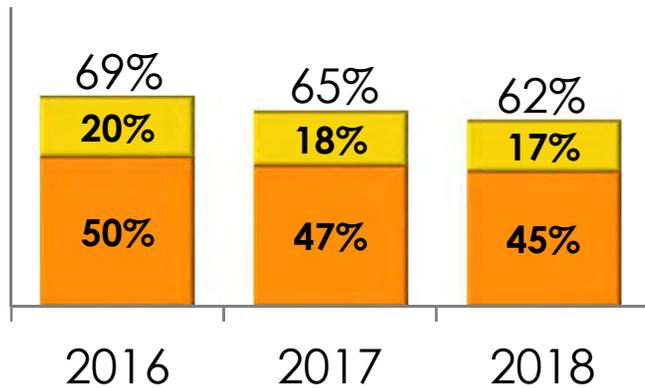
Overall Communication



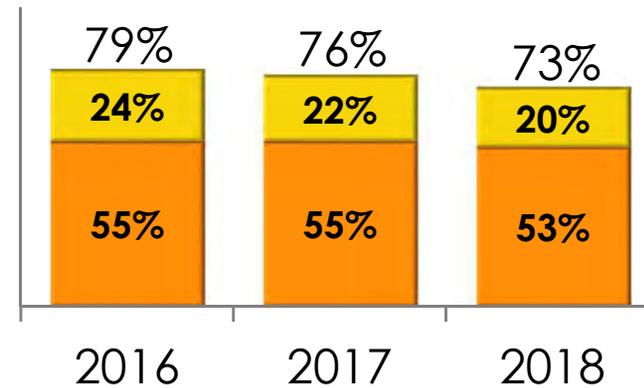
During Normal Service Conditions



During Unplanned Service Disruptions



During Scheduled (Planned) Service Disruptions



Top Area = Very Satisfied

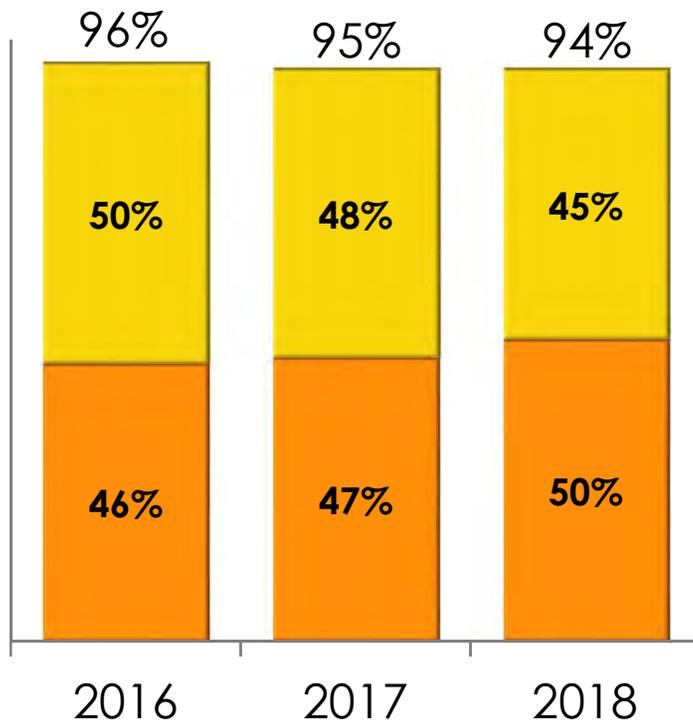
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

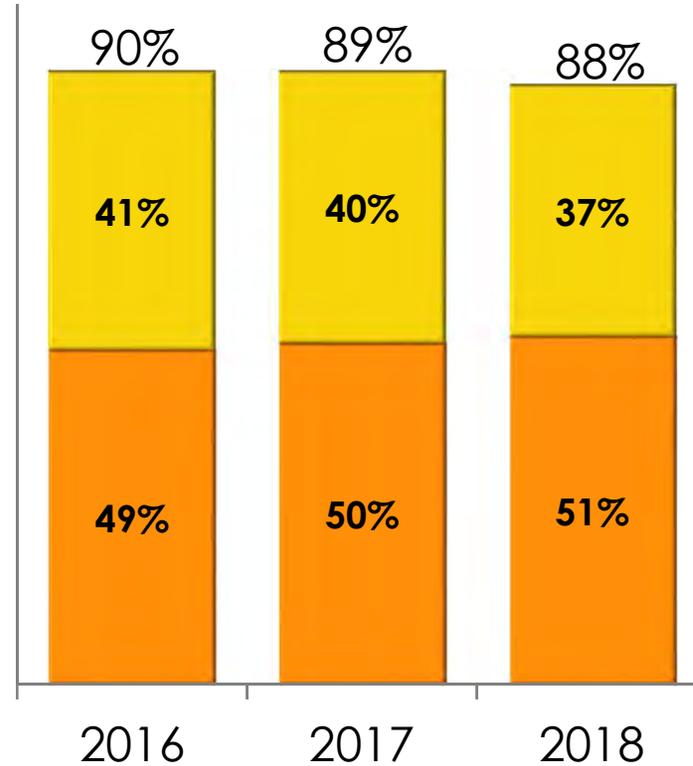


# Grand Central Terminal and Boarding Stations

## GCT Overall



## Home Boarding Station Overall



Top Area = Very Satisfied

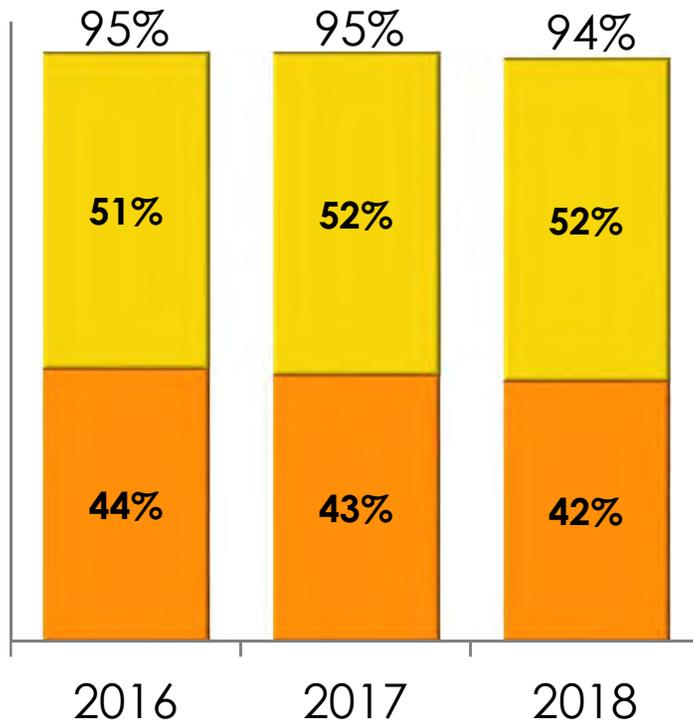
Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding

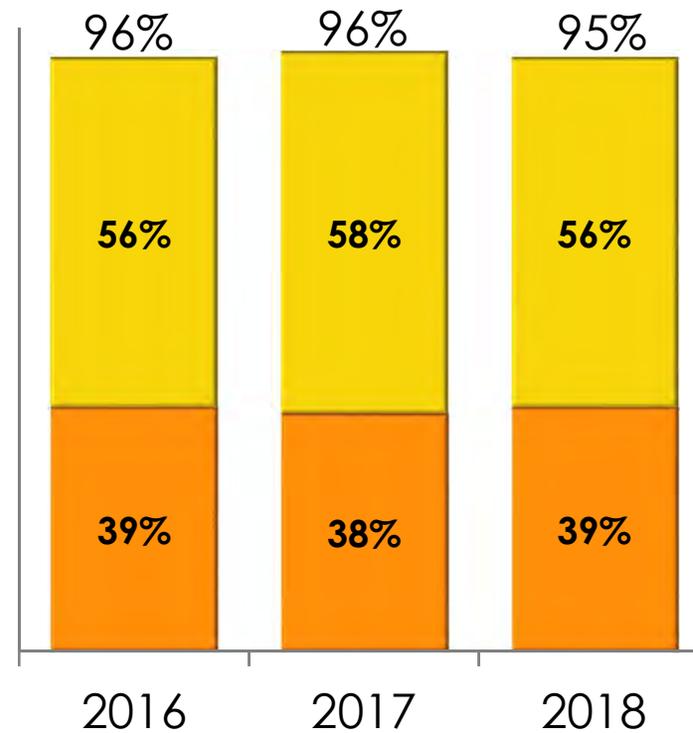


# MNR Employees – Courtesy and Responsiveness

## Overall Employees



## Conductors



Top Area = Very Satisfied

Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding



# East of Hudson: Overview

In addition to the major categories (*Home Boarding Station, On Trains, On-Time Performance, Employees, Schedules, Communications, and Grand Central Terminal*), the 2018 Customer Satisfaction Survey asked customers to rate their satisfaction with specific attributes of service.

63 of these attributes were also included on the 2017 survey.

- ▣ 4 attributes improved.
- ▣ 13 attributes remained the same.
- ▣ 46 attributes declined.

Survey results for all attributes are contained in the Appendix.



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# EAST OF HUDSON REVERSE PEAK SURVEY RESULTS



# Reverse Peak: Overview

In addition to the major categories (*Home Boarding Station, On Trains, On-Time Performance, Employees, Schedules, Communications, and Grand Central Terminal*), the 2018 Customer Satisfaction Survey asked customers to rate their satisfaction with specific attributes of service.

63 of these attributes were also included on the 2017 survey.

- ▣ 33 characteristics improved.
- ▣ 11 characteristics remained the same.
- ▣ 19 characteristics declined.



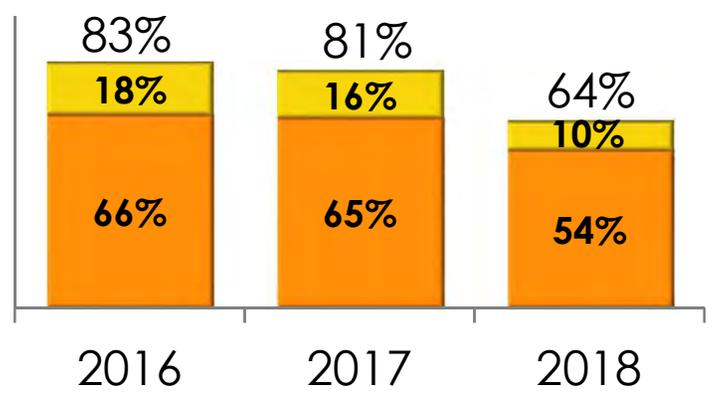
# WEST OF HUDSON SURVEY RESULTS

- The 2018 West of Hudson Customer Satisfaction Survey was conducted on October 10<sup>th</sup> and 11<sup>th</sup> 2018.
- Survey distribution was moved to the Fall to avoid surveying customers soon after the removal from the schedule of 2 NY Pascack Valley Line express trains in June 2018.
- The results are based on a representative sample of 358 AM Peak customers.

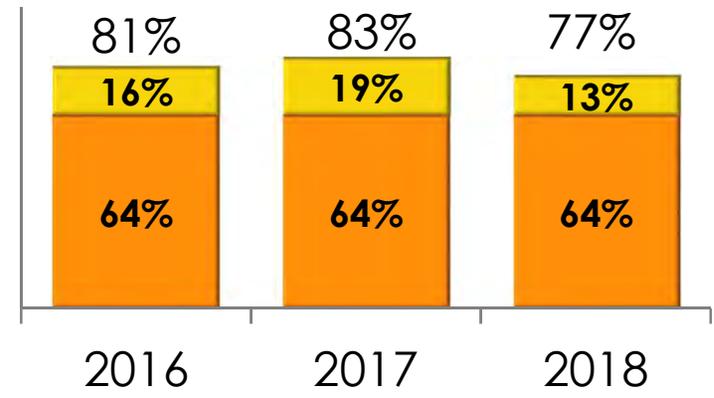


# MNR Overall Customer Satisfaction

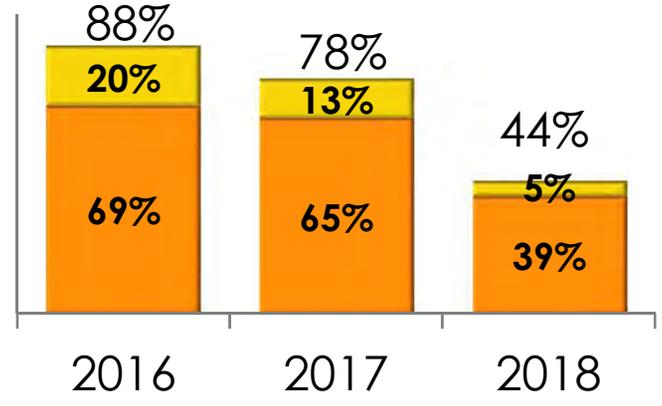
## West of Hudson Total



## Port Jervis



## Pascack Valley

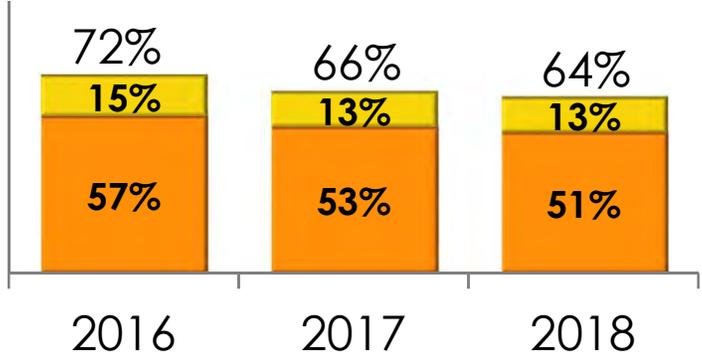


Top Area = Very Satisfied    Bottom Area = Satisfied  
Very Satisfied + Satisfied may not equal total due to rounding

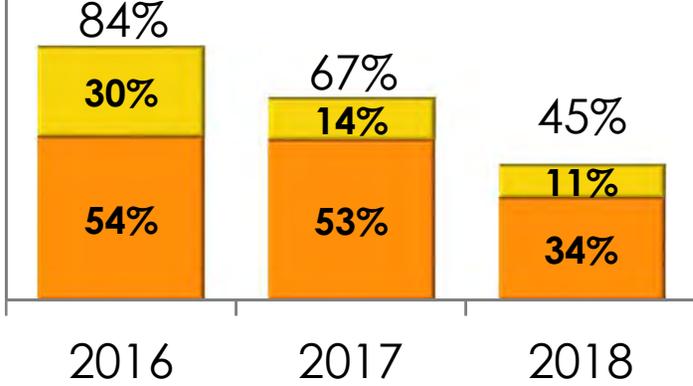


# MNR Train Service By Line: West of Hudson

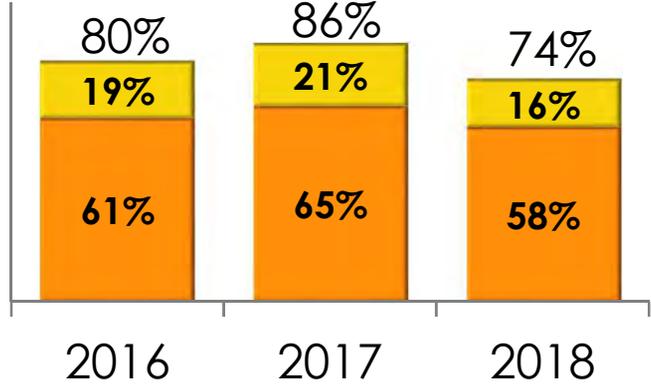
On-Time Performance – Port Jervis



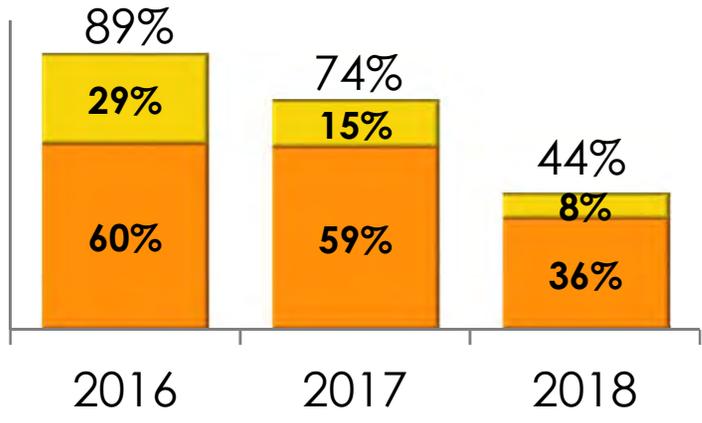
On-Time Performance – Pascack Valley



MNR Train Service Overall – Port Jervis



MNR Train Service Overall – Pascack Valley



Top Area = Very Satisfied

Bottom Area = Satisfied

Very Satisfied + Satisfied may not equal total due to rounding



# West of Hudson: Overview

- Considerable differences in satisfaction levels existed between Port Jervis and Pascack Valley Line customers.
- Satisfaction with MNR overall declined 6 points to 77% among Port Jervis Line customers in 2018 but plummeted 34 points to just 44% satisfied among Pascack Valley Line customers, compared to 78% the year before.
- In 2018, Pascack Valley Line customers experienced the temporary elimination of 2 express trains, as well as various other train cancellations and short consists, which had a big negative impact on their satisfaction.



# West of Hudson: Overview

In addition to the 8 major service categories (*Home Boarding Station, On Trains, On-Time Performance, Employees, Train Schedules, Communications, Hoboken Terminal and Secaucus Junction*), the 2018 Customer Satisfaction Survey asked customers to rate their satisfaction with specific characteristics of service.

58 of these characteristics were also included on the 2017 survey.

- 1 characteristic improved
- 2 characteristics remained the same
- 55 characteristics declined

Survey results for all characteristics are contained in the Appendix.



# West of Hudson: Overview

Significant differences existed between the two lines.

Of the 58 characteristics which could be compared to their 2017 levels:

- On the Port Jervis Line:
  - 9 characteristics improved.
  - 6 characteristics remained the same
  - 43 characteristics declined.
  
- On the Pascack Valley Line:
  - 0 characteristics improved
  - 3 characteristics remained the same
  - 55 characteristics declined



# Appendix

- Methodology
- Full Set of Attribute Ratings:
  - East of Hudson
  - West of Hudson
- Questionnaires



# Methodology

- The MNR survey used an onboard distribution methodology among a sample of trains.
- A total of 5,607 East of Hudson and 358 West of Hudson surveys were completed and tabulated, as follows:

	East of Hudson Survey					West of Hudson
	Total	AM Peak	Off-Peak	Weekend	Reverse Peak	AM Peak
Completed Surveys	5,607	2,276	1,133	1,966	232	358
Survey dates		6/21 -6/28	6/21-6/28	6/24-6/25	6/21-6/28	10/11-12
Trains sampled	125	42	32	30	10	11



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# **SERVICE ATTRIBUTE RATINGS**

## **East of Hudson**

### **2014-2018**



# EAST OF HUDSON

## TOTAL SATISFIED

	2014	2015	2016	2017	2018
	%	%	%	%	%
1. Metro-North Railroad overall	73	83	90	89	86↓
2. Value for the money using the railroad	59	64	73	69	70↑
<b>Home Boarding Station</b>					
3. Your home boarding station overall	87	87	90	89	88↓
4. Directional signage to the station	87	88	89	89	89
5. Personal security	87	86	81	81	81
6. Cleanliness inside the station building (excluding restrooms)	84	84	85	85	83↓
7. Maintenance of the station	84	85	87	92	91↓
8. Sound quality of audio announcements	71	77	77	76	76
9. Availability of parking on weekdays	67	66	69	66	66
10. Security of your car while parked at the station	88	88	91	89	88↓
11. Maintenance of station and platforms during snow/ice events	N/A	N/A	89	86	85↓
12. Safety condition at station at all other times	N/A	N/A	N/A	92	91↓
13. Cleanliness of platforms and outdoor shelters	85	86	90	88	86↓
14. Cleanliness of the track area around the station	80	80	84	84	81↓
15. Homeless outreach at your home boarding station	N/A	N/A	N/A	N/A	66



EAST OF HUDSON	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>On Trains (AM &amp; PM)</b>					
16. MNR train service overall	72	83	89	87	84↓
17. On-time performance	58	74	80	78	73↓
18. The safe operation of the train	N/A	78	91	96	95↓
19. Availability of seats on train	69	67	76	73	71↓
20. Condition of seats on train	N/A	82	87	86	85↓
21. The temperature on the train	84	85	89	89	89
22. Personal security	93	92	92	92	94↑
23. Cleanliness of the restrooms	68	66	68	66	64↓
24. Cleanliness of train's interior (excluding restrooms)	81	83	86	86	85↓
25. Sound quality of audio announcements	79	79	82	80	78↓
26. Train interior maintenance – lights, floors, windows, etc. (excluding seats)	N/A	88	91	91	91
27. Quiet Car Program	87	80	83	87	86↓



EAST OF HUDSON	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Courtesy and Responsiveness of Our Employees</b>					
28. The overall courtesy and responsiveness of our employees	92	93	95	95	94↓
29. Conductors	93	94	96	96	95↓
30. Ticket Sellers	89	90	93	92	93↑
31. Customer Service Representatives (ushers) in GCT	89	91	92	91	91
32. Information booth and Station Master's Office Personnel at GCT	90	91	93	92	91↓
33. Telephone Information Center Representatives	86	87	86	84	84
34. Professional Appearance of Conductors	94	94	97	97	96↓
35. MTA Police	N/A	92	94	94	94



<h1>EAST OF HUDSON</h1>	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Train Scheduling</b>					
36. Overall schedule of trains	77	81	86	85	83 ↓
37. The weekday AM and PM peak schedule to and from your station	76	79	85	85	83 ↓
38. The weekday off-peak schedule to and from your station (including late night train service)	78	81	83	82	81 ↓
39. The weekend schedule to and from your station	79	81	83	82	80 ↓
<b>Communication</b>					
40. Overall communication to you	78	84	86	86	83 ↓
41. Overall communication during normal service conditions	85	88	90	90	89 ↓
42. Our overall communications during <u>scheduled</u> service disruptions (alternative busing, etc.)	69	78	79	76	73 ↓
43. Overall communications during <u>unplanned</u> service disruptions	56	67	69	65	62 ↓



<b>EAST OF HUDSON</b>	<b>TOTAL SATISFIED</b>				
	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
<b>Communication (During Normal Service Conditions)</b>					
<b>44. Real time train information at your home boarding station</b>	N/A	N/A	82	82	81↓
<b>45. Other communication at your home boarding station</b>	N/A	N/A	84	83	82↓
<b>46. On board our trains</b>	82	85	87	86	85↓
<b>47. At GCT</b>	84	86	89	88	86↓
<b>48. On our website (www.mta.info)</b>	81	86	87	82	82
<b>49. Via our email alerts (if you subscribe)</b>	81	85	87	86	83↓
<b>50. Via our social media sites (on Facebook and Twitter)</b>	79	82	82	80	78↓
<b>51. Through the Train Time Mobile App. (if used)</b>	79	85	86	83	83
<b>52. With the Automated Phone System (Schedules, Fares, etc.)</b>	78	82	83	83	83
<b>53. With Customer Service Center Representatives</b>	77	81	83	81	79↓



<h1>EAST OF HUDSON</h1>	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Communication (During Unplanned Service Disruptions)</b>					
<b>54. Real time train information at your home boarding station</b>	N/A	N/A	70	68	65↓
<b>55. Other communication at your home boarding station</b>	N/A	N/A	73	71	69↓
<b>56. On board our trains</b>	63	71	78	75	73↓
<b>57. At GCT</b>	65	72	78	76	70↓
<b>58. On our website (www.mta.info)</b>	67	75	79	75	71↓
<b>59. Through the "Service Status" box on our website</b>	67	76	79	77	72↓
<b>60. Via our e-mail alerts (if you subscribe)</b>	69	79	80	80	75↓
<b>61. Via our social media sites (on Facebook and Twitter)</b>	68	75	77	74	72↓
<b>62. Through the Train Time Mobile App (if used)</b>	70	76	78	76	72↓
<b>63. With the automated phone system for schedules, fares, etc.</b>	71	76	79	79	75↓
<b>64. With Customer Services Center representatives</b>	70	75	78	77	72↓



<b>EAST OF HUDSON</b>	<b>TOTAL SATISFIED</b>				
	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
<b>Grand Central Terminal (GCT)</b>					
<b>65. Grand Central Terminal overall</b>	<b>96</b>	<b>95</b>	<b>96</b>	<b>95</b>	<b>94</b> ↓
<b>66. The Station Master's Office, including the customer waiting area</b>	<b>91</b>	<b>91</b>	<b>93</b>	<b>92</b>	<b>90</b> ↓
<b>67. Personal security</b>	<b>93</b>	<b>94</b>	<b>93</b>	<b>94</b>	<b>93</b> ↓
<b>68. Presence of MTA police</b>	<b>91</b>	<b>94</b>	<b>94</b>	<b>94</b>	<b>95</b> ↑
<b>69. Sound quality of audio announcements</b>	<b>81</b>	<b>78</b>	<b>83</b>	<b>83</b>	<b>82</b> ↓
<b>70. Cleanliness of GCT (excluding restrooms)</b>	<b>92</b>	<b>90</b>	<b>90</b>	<b>91</b>	<b>90</b> ↓
<b>71. Cleanliness of restrooms in GCT</b>	<b>64</b>	<b>63</b>	<b>65</b>	<b>64</b>	<b>64</b>
<b>72. Physical condition of restrooms</b>	<b>N/A</b>	<b>65</b>	<b>66</b>	<b>64</b>	<b>63</b> ↓



EAST OF HUDSON	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
MTA eTix					
73. MTA eTix overall	N/A	N/A	N/A	93	93
74. Ease of Use	N/A	N/A	N/A	94	92 ↓



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# **SERVICE ATTRIBUTE RATINGS**

## **West of Hudson**

### **2014-2018**



WEST OF HUDSON	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
1. Metro-North Railroad overall	88	82	83	81	64 ↓
2. Value for the money using the railroad	73	66	71	59	49 ↓
<b>Home Boarding Station</b>					
3. Your home boarding station overall	90	89	92	90	84 ↓
4. Directional signage to the station	89	86	88	88	83 ↓
5. Personal security	86	83	84	79	79
6. Cleanliness inside the station building (excluding restrooms)	84	83	86	81	73 ↓
7. Maintenance of the station	84	84	88	89	81 ↓
8. Sound quality of audio announcements	54	51	49	47	31 ↓
9. Availability of parking on weekdays	95	93	96	93	90 ↓
10. Security of your car while parked at the station	92	89	92	92	88 ↓
11. Maintenance of station and platforms during snow/ice events	N/A	N/A	81	71	68 ↓
12. Cleanliness of platforms and outdoor shelters	88	88	89	85	82 ↓
13. Cleanliness of the track area around the station	88	85	88	85	83 ↓
14. Safety conditions at station at all other times	N/A	N/A	N/A	89	85 ↓
15. Homeless outreach at your home boarding station	N/A	N/A	N/A	N/A	63 ↓



# WEST OF HUDSON

## TOTAL SATISFIED

	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>On Trains (AM &amp; PM)</b>					
16. MNR train service overall	89	84	84	81	61 ↓
17. On-time performance	86	81	77	67	56 ↓
18. Safety from accidents	N/A	94	93	88	85 ↓
19. Availability of seats on train	85	86	83	76	73 ↓
20. Condition of seats on train	N/A	88	87	81	78 ↓
21. The temperature on the train	88	86	87	88	79 ↓
22. Personal security	97	95	96	93	90 ↓
23. Cleanliness of the restrooms	67	66	64	66	58 ↓
24. Cleanliness of train's interior (excluding restrooms)	89	90	90	87	79 ↓
25. Sound quality of audio announcements	75	74	75	65	53 ↓
26. Train interior maintenance – lights, floors, windows, etc. (excluding seats)	N/A	85	89	88	76 ↓
27. Quiet Commute Program	91	87	90	90	86 ↓



<h1>WEST OF HUDSON</h1>	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Courtesy and Responsiveness of Our Employees</b>					
28. The overall courtesy and responsiveness of our employees	95	92	94	90	88↓
29. Conductors	96	94	94	94	88↓
30. Ticket Sellers	95	92	92	92	86↓
31. Metro-North Telephone Information Center representatives (In NY: 511)	81	78	82	79	76↓
32. MTA Police	N/A	93	92	90	92↑
<b>Train Scheduling</b>					
33. Overall train schedules	64	62	65	65	49↓
34. The weekday AM and PM peak schedule to and from your station	71	65	70	70	55↓
35. The weekday off-peak schedule to and from your station including late night service	51	49	51	51	40↓
36. The weekend schedule to and from your station	57	51	52	51	47↓
37. Connections to trains to/from NY Penn Station	N/A	N/A	N/A	70	61↓



WEST OF HUDSON	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Communication</b>					
38. Overall communication to you	76	76	72	74	55 ↓
39. Overall communication during normal service conditions	82	83	80	80	66 ↓
40. Our overall communications during <u>scheduled</u> service disruptions (alternative busing, etc.)	N/A	N/A	N/A	N/A	45 ↓
41. Overall communications during <u>unplanned</u> service disruptions	58	57	54	54	33 ↓
<b>Communication during normal service conditions</b>					
42. At your boarding station	72	69	65	64	51 ↓
43. On board our trains	84	83	79	78	65 ↓
44. At Hoboken Terminal	81	78	77	77	62 ↓
45. At Secaucus Junction	84	83	80	79	69 ↓
46. At Penn Station New York	71	69	69	71	52 ↓
47. On the Metro-North website (www.mta.info)	82	82	82	83	67 ↓
48. On the NJ Transit website (www.njtransit.com)	83	83	82	82	66 ↓
49. Metro-North's social media sites (Facebook, Twitter)	78	75	76	71	54 ↓
50. With Metro-North's automated phone system for schedules, fares, etc.	77	71	70	71	69 ↓
51. With Metro-North's Customer Service Center Representatives	69	71	74	71	60 ↓
52. With NJ Transit's automated phone system for schedules, fares, etc.	70	66	73	65	53 ↓
53. With NJ Transit's Travel Information Center Representatives	70	72	77	67	55 ↓



<h1>WEST OF HUDSON</h1>	TOTAL SATISFIED				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Communication (During Unplanned Service Disruptions)</b>					
54. At your boarding station	52	53	49	51	31 ↓
55. On board our trains	72	65	66	67	50 ↓
56. At Hoboken Terminal	68	65	66	66	47 ↓
57. At Secaucus Junction	68	71	72	69	47 ↓
58. At Penn Station New York	60	65	60	62	36 ↓
59. In the "Service Status" box on the Metro-North website	70	72	71	71	51 ↓
60. With Metro-North's automated phone system for schedules, fares, etc.	69	77	67	65	48 ↓
61. With Metro-North's Customer Service Center Representatives	69	78	71	67	47 ↓
62. On the NJ Transit website (www.njtransit.com)	75	79	78	68	48 ↓
63. With NJ Transit's automated phone system for schedules, fares, etc.	67	71	71	64	43 ↓
64. With NJ Transit's Telephone Information Center Representatives	69	74	68	62	41 ↓



<b>WEST OF HUDSON</b>	<b>TOTAL SATISFIED</b>				
	2014	2015	2016	2017	2018
	%	%	%	%	%
<b>Hoboken Terminal</b>					
65. Hoboken Terminal Overall	83	80	75	74	62 ↓
66. Personal Security in Hoboken Terminal	90	84	85	82	76 ↓
67. Cleanliness of restrooms	72	72	57	53	49 ↓
68. Physical condition of restrooms	N/A	73	57	55	47 ↓
69. Cleanliness of the Terminal (excluding restrooms)	85	81	77	78	68 ↓
70. Connections to PATH/Ferry	N/A	N/A	N/A	85	80 ↓
<b>Secaucus Junction</b>					
71. Secaucus Junction Overall	94	84	89	89	83 ↓
72. Personal Security	99	92	95	92	92



# East of Hudson Questionnaire

## Customer Satisfaction Survey 2018

Si Ud. prefiere completar una version de esta encuesta en Espanol, por favor llame a Metro-North Railroad al 511. En Connecticut: 877-690-5114. Se la haremos llegar a Ud. por correo.



## Dear MTA Metro-North Customer:

Thank you for riding Metro-North today. To help us find out if your recent travel on Metro-North has been as convenient and comfortable as we would like it to be, please take some time to complete this survey. Your input will let us know what we need to do to improve your experience on our trains and at our stations.

When you have completed the survey, please return it to our representative on your train today or the one who will meet this train in Grand Central Terminal. If you prefer, you may mail it back to us within the next three days. The postage has already been paid. Please use only tape to seal it - not staples.

You can also complete the survey online. Just go to [www.MNRSurveyEast.com](http://www.MNRSurveyEast.com). To access the survey, you will need the 5 digit code contained on the front cover of this questionnaire.

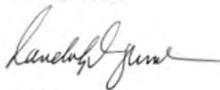
Thank you for your time and cooperation.

Sincerely,

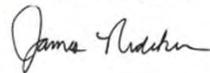
Catherine A. Rinaldi  
President, MTA Metro-North Railroad



Randolph Glucksman  
Chair, Metro-North Rail  
Commuter Council



James Redeker  
Commissioner, Connecticut  
Department of Transportation



Jim Gildea  
Chair, Connecticut Metro-North  
Commuter Rail Council



## Instructions

Please circle one of the numbers in the scale that best reflects your opinion of our service. Circle numbers 1 or 2 if you are "very dissatisfied" with our performance on a regular basis. Circle numbers 3, 4, or 5 to indicate you are generally "dissatisfied" with our service levels and delivery. Circle numbers 6, 7 or 8 if you are generally "satisfied" with our service. Circle 9 or 10 to indicate you are "very satisfied" with aspects of our service.

If you are not familiar with a particular aspect, please circle NA.

### OVER THE PAST 12 MONTHS:

## Metro-North Overall

How satisfied are you with:

	1	2	3	4	5	6	7	8	9	10	NA
1. Metro-North overall											
2. Value for the money using the railroad											

## Your Home Boarding Station

How satisfied are you with:

	1	2	3	4	5	6	7	8	9	10	NA
3. Your home boarding station overall											
4. Directional signage to the station											
5. Personal security at the station											
6. Cleanliness inside the station building (excluding restrooms)											
7. Cleanliness of platforms and outdoor shelters											
8. Cleanliness of the area along the tracks (the right of way)											
9. Maintenance of station and platforms during snow/ice events											
10. Maintenance of station at all other times											
11. Safety conditions at station at all other times											
12. Sound quality of audio announcements											
13. Availability of parking on weekdays											
14. Security of your car while parked at the station											
15. Homeless outreach at your home boarding station											

## On Trains (All time periods)

How satisfied are you with:

	1	2	3	4	5	6	7	8	9	10	NA
16. MNR train service overall											
17. On-time performance											
18. The safe operation of the train											
19. Availability of seats on trains											
20. Condition of seats on trains											

	1	2	3	4	5	6	7	8	9	10	NA
21. The temperature in the train											
22. Personal security on trains											
23. Cleanliness of the restrooms											
24. Cleanliness of train's interior (excluding restrooms)											
25. Sound quality of audio announcements											
26. Train interior maintenance - lights, floors, windows, etc (excluding seats)											
27. The Quiet Car program											

## Courtesy and Responsiveness of Employees

How satisfied are you with:

	1	2	3	4	5	6	7	8	9	10	NA
28. The overall courtesy and responsiveness of our employees											
29. Conductors											
30. Ticket Sellers											
31. Customer Service Representatives (Ushers) in Grand Central Terminal											
32. Information Booth and Station Master's Office Personnel at Grand Central Terminal											
33. Telephone Information Center Representatives (in NY: 511; in CT: 877-690-5114)											
34. Professional appearance of conductors											
35. MTA Police											

## Train Scheduling

How satisfied are you with:

	1	2	3	4	5	6	7	8	9	10	NA
36. Overall train schedules											
37. The weekday AM and PM peak schedule to or from your station											
38. The weekday off-peak schedule to and from your station including late night service											
39. The weekend schedule to and from your station											



## Communication

How satisfied are you with:

- |  | Disatisfied | Very Disatisfied | Satisfied | Very Satisfied | NA |   |   |   |   |    |    |
|--|-------------|------------------|-----------|----------------|----|---|---|---|---|----|----|
| 40. a. Our overall communications to you   | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| b. Our overall communications during normal service conditions                                       | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| c. Our overall communications during <u>scheduled</u> service disruptions (alternative busing, etc.) | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| d. Our overall communications during <u>unplanned</u> service disruptions                            | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |

### Communication during normal service conditions

How satisfied are you with the information we give to you:

- |   |     |                |     |          |   |   |   |   |   |    |    |
|---|-----|----------------|-----|----------|---|---|---|---|---|----|----|
| 41. Real time train information at your home boarding station                                 | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 42. Other communication at your home boarding station   | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 43. On board our trains   | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 44. At Grand Central Terminal   | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 45. On our website (www.mta.info)   | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 46. Via our email alerts (if you subscribe)   | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 47. Via our social media sites (on Facebook and Twitter)                                      | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 48. Through the TrainTime Mobile App (if used)  | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 49. With the automated phone system for schedules, fares, etc.                                | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 50. With Customer Service Center Representatives (in NYC: 511, In CT: 877-690-5114)           | 1   | 2              | 3   | 4        | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 51. Which one method do you use most frequently to get information about Metro-North service? |     |                |     |          |   |   |   |   |   |    |    |
| ___ MNR Website   | ___ | email          | ___ | Facebook |   |   |   |   |   |    |    |
| ___ Seat Notice   | ___ | Train Time app | ___ | Twitter  |   |   |   |   |   |    |    |
| ___ News Media  | ___ | Instagram      |     |          |   |   |   |   |   |    |    |
| ___ Other Social Media Site (Specify: _____)  |     |                |     |          |   |   |   |   |   |    |    |
| ___ Other: _____  |     |                |     |          |   |   |   |   |   |    |    |
| ___ I don't know how to contact Metro-North   |     |                |     |          |   |   |   |   |   |    |    |

### Communication during unplanned service disruptions

How satisfied are you with the information we give you about the length and cause of the unplanned service disruption :

- |   | Disatisfied | Very Disatisfied | Satisfied | Very Satisfied | NA |   |   |   |   |    |    |
|---|-------------|------------------|-----------|----------------|----|---|---|---|---|----|----|
| 52. Real time train information at your home boarding station                       | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 53. Other communication at your home boarding station                               | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 54. On board our trains   | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 55. At Grand Central Terminal   | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 56. On our website (www.mta.info)   | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 57. Through the "Service Status" box on our website                                 | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 58. Via our email alerts (if you subscribe)   | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 59. Via our social media sites (on Facebook and Twitter)                            | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 60. Through the TrainTime Mobile App (if used)                                      | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 61. With the automated phone system for schedules, fares, etc.                      | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |
| 62. With Customer Service Center Representatives (in NYC: 511, In CT: 877-690-5114) | 1           | 2                | 3         | 4              | 5  | 6 | 7 | 8 | 9 | 10 | NA |

## Grand Central Terminal (GCT)

How satisfied are you with:

- |   |   |   |   |   |   |   |   |   |   |    |    |
|---|---|---|---|---|---|---|---|---|---|----|----|
| 63. Grand Central Terminal overall  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 64. The Station Master's Office in GCT, including the customer waiting area | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 65. Personal security in GCT  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 66. Presence of MTA Police in GCT   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 67. Sound quality of audio announcements                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 68. Cleanliness of GCT (excluding restrooms)                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 69. Cleanliness of restrooms in GCT (if used)                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |
| 70. Physical condition of restrooms (if used)                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | NA |

71. a. Please tell us if you are aware or unaware of the following Metro-North programs by checking the appropriate boxes below.

AWARE UNWARE

- |     |     |  |
|-----|-----|--|
| ___ | ___ | ConnectWithUs – Monthly forums where MNR Senior Leadership meets with customers to answer questions and get feedback.                                      |
| ___ | ___ | TRACKS -a freeway safety education community outreach program designed to promote safe behaviors at or around railroad grade crossings and tracks.         |
| ___ | ___ | #BeThe1To Help Them Connect – Suicide Prevention Poster Campaign.  |
| ___ | ___ | Homeless outreach at outlying stations (not including GCT)   |
| ___ | ___ | STAR Program – Railroad management employees who volunteer to provide supplemental customer assistance during major service disruptions and planned events |
| ___ | ___ | Zipcar – an hourly car sharing service   |
| ___ | ___ | Metro-North Deals & Getaways – Discount packages with rail fare  |
| ___ | ___ | MTA eTix- a mobile ticketing app that lets you purchase and use Metro-North tickets directly on your smartphone or mobile device                           |

b. If you use MTA eTix to purchase and use rail tickets, how satisfied are you with it overall? (Use the same scale as in Q. 1-70.)

1 2 3 4 5 6 7 8 9 10 NA

c. How satisfied are you with its ease of use?

1 2 3 4 5 6 7 8 9 10 NA

72 a. If you are aware of Metro-North Deals & Getaways, where did you find out about them?

\_\_\_ MNR website \_\_\_ At a MNR station

\_\_\_ Word of mouth \_\_\_ On Social Media

\_\_\_ Other (Please specify): \_\_\_\_\_

b. Have you ever purchased a Metro-North Deal or Getaway?

\_\_\_ Yes \_\_\_ No





85. Which of the following categories includes your age?

- Under 18 years old       45-54 years old  
 18-24 years old       55-64 years old  
 25-34 years old       65 years old or more  
 35-44 years old

86. Are you:     Male     Female     Other

87. How long have you been riding Metro-North?

- Less than one year  
 1 -3 years       5 - 10 years  
 3 - 5 years       10 years or more

88. What is your home zip code? \_\_\_\_\_

89. In which county or borough do you reside? \_\_\_\_\_

90. Are you:

- White  
 Black or African American  
 Asian  
 American Indian or Alaska Native  
 Native Hawaiian and Other Pacific Islanders  
 Other (Please specify) \_\_\_\_\_

91. Are you of Hispanic origin?     Yes     No

92. In which country were you born?

- United States     Other (Specify: \_\_\_\_\_)

93. In which country or countries were your parents/ancestors born?

- United States     Dominican Republic  
 Mexico             Jamaica  
 China               Other (Specify: \_\_\_\_\_)

94. Which language would be most helpful for you to receive Metro-North written or electronically displayed information in?

- English             Another language (specify) \_\_\_\_\_  
 Spanish             No preference

95. Which language would be most helpful for you to understand Metro-North announcements or to converse in with Metro-North personnel (e.g. to ask for travel directions)?

- English             Another language (specify) \_\_\_\_\_  
 Spanish             No preference

96. a. What is the primary language spoken in your home?

- English             Another Language (specify: \_\_\_\_\_)  
 Spanish

b. How well do you speak English?

- Very well       Not well  
 Well             Not at all

97. Including yourself, how many people lived in your household in 2017?

- 1       3       5-6       9 or more  
 2       4       7-8

98. What was your approximate annual 2017 household income before taxes and other deductions?

- Under \$12,500       \$75,000 to \$99,999  
 \$12,500 - \$24,999       \$100,000 to \$149,999  
 \$25,000 - \$37,499       \$150,000 to \$199,999  
 \$37,500 - \$49,999       \$200,000 to \$299,999  
 \$50,000 - \$74,999       \$300,000 or more

If you are not satisfied with our performance in any of the areas in questions 1 through 71, please explain why below. Please also include any other comments you might have (service suggestions, safety-related comments, safety conditions, suggestions for railroad improvements, etc) .

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If you are interested in participating in future Metro-North market research projects, please write your name, street address, email address and day or evening phone numbers below. All information will be kept confidential.

Name: \_\_\_\_\_

Street: \_\_\_\_\_

City/Town \_\_\_\_\_ Zip Code \_\_\_\_\_

E-mail Address \_\_\_\_\_

Phone (H) \_\_\_\_\_ (W) \_\_\_\_\_

**Thank you for taking the time to complete this survey.**



# West of Hudson Questionnaire

## Customer Satisfaction Survey 2018

Si Ud. prefiere completar una version de esta encuesta en Espanol, por favor llame a Metro-North Railroad al 511. Se la haremos llegar a Ud. por correo.



## Dear MTA Metro-North Customer:

Thank you for riding Metro-North today. To help us find out if your recent travel on Metro-North has been as convenient and comfortable as we would like it to be, please take some time to complete this survey. Your input will allow us to discuss ways to improve with NJ TRANSIT.

When you have completed the survey, please return it to our representative on your train today or the one who will meet this train in Hoboken Terminal or Secaucus Junction. If you prefer, you may mail it back to us within the next three days. The postage has already been paid. Please use only tape to seal it - not staples.

You can also complete the survey online. Just go to [www.MNRSurveyWest.com](http://www.MNRSurveyWest.com). To access the survey, you will need the 5 digit code contained on the front cover of this questionnaire.

Thank you for your time and cooperation.

Sincerely,



Catherine Rinaldi  
President, MTA Metro-North Railroad



Randolph Glucksman  
Chair, Metro-North Rail Commuter Council

## Instructions

In the first portion of this survey, please tell us how satisfied you have been with various aspects of our services over the past 12 months, beginning with your overall rating, then the environment of your home station and ending when you leave the train.

Please circle one of the numbers in the scale that best reflects your opinion of our service. Circle numbers 1 or 2 if you are "very dissatisfied" with our performance on a regular basis. Circle numbers 3, 4, or 5 to indicate you are generally "dissatisfied" with our service levels and delivery. Circle numbers 6, 7 or 8 if you are generally "satisfied" with our service. Circle 9 or 10 to indicate you are "very satisfied" with aspects of our service.

If you are not familiar with a particular aspect, please circle NA.

OVER THE PAST 12 MONTHS:

## Metro-North Overall

How satisfied are you with:

	Disatisfied	Very Dissatisfied	Satisfied	Very Satisfied	NA
1. Metro-North overall	12	345	678	910	NA
2. Value for the money using the railroad	12	345	678	910	NA

## Your Home Boarding Station

How satisfied are you with:

3. Your home boarding station overall	12	345	678	910	NA
4. Directional signage to the station	12	345	678	910	NA
5. Personal security	12	345	678	910	NA
6. Cleanliness inside the station building (excluding restrooms)	12	345	678	910	NA
7. Cleanliness of platforms and outdoor shelters	12	345	678	910	NA
8. Cleanliness of the track area along the tracks (the right of way)	12	345	678	910	NA
9. Maintenance of station and platforms during snow/ice events	12	345	678	910	NA
10. Safety conditions at station at all other times	12	345	678	910	NA
11. Maintenance of station at all other times	12	345	678	910	NA
12. Sound quality of audio announcements	12	345	678	910	NA
13. Availability of parking on weekdays	12	345	678	910	NA
14. Security of your car while parked at the station	12	345	678	910	NA
15. Homeless outreach at your home boarding station	12	345	678	910	NA

## On Trains (All time periods)

How satisfied are you with:

16. MNR train service overall	12	345	678	910	NA
17. On-time performance	12	345	678	910	NA
18. The safe operation of the train	12	345	678	910	NA
19. Availability of seats on trains	12	345	678	910	NA

## On Trains (continued)

	Disatisfied	Very Dissatisfied	Satisfied	Very Satisfied	NA
20. Condition of seats on trains	12	345	678	910	NA
21. The temperature in the train	12	345	678	910	NA
22. Personal security on trains	12	345	678	910	NA
23. Cleanliness of the restrooms	12	345	678	910	NA
24. Cleanliness of train's interior (excluding restrooms)	12	345	678	910	NA
25. Sound quality of audio announcements	12	345	678	910	NA
26. Train interior maintenance- lights, floors, windows, etc. (excluding seats)	12	345	678	910	NA
27. The Quiet Commute Program	12	345	678	910	NA

## Courtesy and Responsiveness of Railroad Employees

How satisfied are you with:

28. The overall courtesy and responsiveness of railroad employees	12	345	678	910	NA
29. Conductors	12	345	678	910	NA
30. Ticket Sellers	12	345	678	910	NA
31. Metro-North Telephone Information Center representatives (in NY: 511)	12	345	678	910	NA
32. MTA Police	12	345	678	910	NA

## Train Scheduling

How satisfied are you with:

33. Overall train schedules	12	345	678	910	NA
34. The weekday AM and PM peak schedule to or from your home station	12	345	678	910	NA
35. The weekday off-peak schedule to and from your home station	12	345	678	910	NA
36. The weekend schedule to and from your home station	12	345	678	910	NA
37. Connections to trains to/from NY Penn Station	12	345	678	910	NA



## Communication

How satisfied are you with our overall communication:

	Disatisfied	Very Disatisfied	Satisfied	Very Satisfied	
38. a. To you in all service conditions	12	345	678	910	NA
b. During normal service conditions	12	345	678	910	NA
c. During scheduled service disruptions (alternative busing, etc.)	12	345	678	910	NA
d. During unplanned service disruptions	12	345	678	910	NA

### Communication during normal service conditions

How satisfied are you with the information we give to you:

39. At your home boarding station	12	345	678	910	NA
40. On board our trains	12	345	678	910	NA
41. At Hoboken Terminal	12	345	678	910	NA
42. At Secaucus Junction	12	345	678	910	NA
43. At Penn Station New York	12	345	678	910	NA
44. On the Metro-North website (www.mta.info)	12	345	678	910	NA
45. On the NJ TRANSIT website (www.njtransit.com)	12	345	678	910	NA
46. With Metro-North's social media sites (Facebook, Twitter)	12	345	678	910	NA
47. With Metro-North's automated phone system for schedules, fares, etc. (In NY: 511)	12	345	678	910	NA
48. With Metro-North's Customer Service Center Representatives (In NY: 511)	12	345	678	910	NA
49. With NJ TRANSIT's automated phone system for schedules, fares, etc. (973-275-5555)	12	345	678	910	NA
50. With NJ TRANSIT's Travel Information Center Representatives (973-275-5555)	12	345	678	910	NA
51. Which method do you use most frequently to get information about Metro-North service?					
___ MNR Website	___ NJT Website	___ Facebook			
___ Seat Notice	___ Twitter				
___ News Media	___ Instagram				
___ Other Social Media Site (Specify: _____)					
___ Other method _____					
___ I don't know how to contact Metro-North					

## Communication (cont.)

### Communication during unplanned service disruptions

How satisfied are you with the information we give you about the length and cause of the unplanned service delay :

	Disatisfied	Very Disatisfied	Satisfied	Very Satisfied	
52. At your home boarding station	12	345	678	910	NA
53. On board our trains	12	345	678	910	NA
54. At Hoboken Terminal	12	345	678	910	NA
55. At Secaucus Junction	12	345	678	910	NA
56. At Penn Station New York	12	345	678	910	NA
57. In the "Service Status" box on the Metro-North website (www.mta.info)	12	345	678	910	NA
58. With Metro-North's automated phone system for schedules, fares, etc. (In NY: 511)	12	345	678	910	NA
59. With Metro-North's Customer Service Center Representatives (In NY: 511)	12	345	678	910	NA
60. On the NJ TRANSIT website (www.njtransit.com)	12	345	678	910	NA
61. With NJ TRANSIT's automated phone system for schedules, fares, etc. (973-275-5555)	12	345	678	910	NA
62. With NJ TRANSIT'S Telephone Information Center Representatives (973-275-5555)	12	345	678	910	NA

## Hoboken Terminal

How satisfied are you with:

63. Hoboken Terminal overall	12	345	678	910	NA
64. Personal security in Hoboken Terminal	12	345	678	910	NA
65. The connections to PATH/Ferry	12	345	678	910	NA
66. Have you used any of the restrooms in Hoboken Terminal during the past 12 months?					
___ Yes (continue)	___ No (Go to Q.69)				
67. Cleanliness of restrooms	12	345	678	910	NA
68. Physical condition of the restroom	12	345	678	910	NA
69. Cleanliness of the terminal (excluding restrooms)	12	345	678	910	NA

## Secaucus Junction

How satisfied are you with:

70. Secaucus Junction overall	12	345	678	910	NA
71. Personal security in Secaucus Junction	12	345	678	910	NA

## About Your Trip

72. a. At what station did you board this train today? (Please Print)

b. Is this your home boarding station?

\_\_\_ Yes \_\_\_ No

c. If no, please print your home boarding station. \_\_\_\_\_

73. During the 2017-2018 snow season, when you arrived at your home boarding station were the platforms, stairs and walkways usually:

Cleared \_\_\_ Yes \_\_\_ No

Salted \_\_\_ Yes \_\_\_ No

Snowed-covered \_\_\_ Yes \_\_\_ No

Icy \_\_\_ Yes \_\_\_ No

74. The MTA promotes security awareness through slogans such as "If You See Something, Say Something" and "New Yorkers Keeping New York Safe". How likely are you to report suspicious items or behavior to Police or train crews?

\_\_\_ Very likely \_\_\_ Not Very Likely

\_\_\_ Somewhat Likely \_\_\_ Not At All Likely

75. Please tell us if you are aware or unaware of the following Metro-North programs by checking the appropriate boxes below.

Aware Unaware

\_\_\_ \_\_\_ ConnectWithUs – Social media communication with Metro-North

\_\_\_ \_\_\_ TRACKS -a free safety education community outreach program designed to promote safe behaviors at or around railroad grade crossings and tracks

\_\_\_ \_\_\_ #BeThe1To Help Them Connect – Suicide Prevention Program

\_\_\_ \_\_\_ Homeless outreach at outlying stations

\_\_\_ \_\_\_ Zipcar – an hourly car sharing service

\_\_\_ \_\_\_ Metro-North Deals & Getaways – Discount packages with rail fare



## About Your Trip (cont.)

76. a. If you are aware of Metro-North Deals & Getaways, where did you find out about them?

- MNR website                       At a MNR station  
 Word of mouth                       On Social Media  
 Other (Please specify): \_\_\_\_\_

b. Have you ever purchased a Metro-North Deal or Getaway?  
 Yes     No

77. How do you usually travel to your home station?

- Dropped off at station     Walk  
 Drive and Park                       Taxi  
 Carpool/Vanpool                       Bicycle  
 Public Bus (Route No. \_\_\_\_\_ Operator: \_\_\_\_\_)  
 Ridesharing programs (e.g. UBER, Lyft)  
 Rental car (e.g. Enterprise, Zipcar)  
 Other (Please specify) \_\_\_\_\_

78. How frequently do you travel on Metro-North?

- 6-7 days per week                       3 – 4 days per week  
 5 days per week                       1 – 2 days a month  
 1 – 2 days per week  
 Other (Specify frequency) \_\_\_\_\_

79. a. What type of ticket are you using today?

- Monthly                       Weekly                       10 Trip  
 One Way                       Off Peak Round Trip  
 Seniors/Disabled Persons/Medicare Recipients

b. Where did you purchase this ticket?

- Ticket Vending Machine     Mail & Ride  
 Ticket Window                       Onboard the Train  
 On a Mobile Device  
 Other (Please Specify): \_\_\_\_\_

80. At which station will you end this trip today?

- Hoboken Terminal                       Secaucus Junction  
 Other (Specify) \_\_\_\_\_

81. When you leave the train, how will you get to your final destination?

- NYC subway or bus                       PATH – WTC Line  
 Ferry to midtown Manhattan                       PATH – 33rd St. Line  
 Ferry to downtown Manhattan                       Walk  
 Rental car (e.g. Enterprise, Zipcar)  
 Transfer to another train to Penn Station  
 Ridesharing programs (e.g. UBER, Lyft)  
 Other (specify) \_\_\_\_\_

82. a. (MANHATTAN-BOUND CUSTOMERS ONLY) Which of the following areas of Manhattan will be your final destination today?

- Above 60th Street  
 34th-60th Streets, 5th Avenue and EAST  
 34th-60th Streets WEST of 5th Avenue  
 14th-33rd Streets  
 Canal Street to 13th Street  
 Below Canal Street

b. During rail service disruptions to Manhattan, which alternative service do you primarily use?

- None, still use regular rail service  
 Drive to the Hudson Line and use (specify which station: \_\_\_\_\_)  
 Take Tappan Zee Express bus to Tarrytown station  
 Take Ferry to Beacon station  
 Take Express Bus to Manhattan (Operator: \_\_\_\_\_)  
 Drive alone/with others to Manhattan  
 Do not make the trip  
 Other (Specify: \_\_\_\_\_)

83. What is the zip code of your final destination today?

\_\_\_\_\_

84. What is the purpose of your trip today?

- Commute to or from work  
 Travel to or from school  
 For business reasons (but not for commuting)  
 Shopping                       Personal reasons  
 Entertainment                       Other

## About You

85. Which types of recreational activities do you enjoy going to?  
 (Check as many as apply)

- Museums  
 Family Attractions  
 Expos  
 Live Shows (theater, concerts, etc.)  
 Sporting Events  
 Sightseeing  
 Cultural Events (parades, festivals, etc.)  
 Tours  
 Other (Please Specify): \_\_\_\_\_



86. Which of the following categories includes your age?
- |   |   |
|---|---|
| <input type="checkbox"/> Under 18 years old | <input type="checkbox"/> 45-54 years old      |
| <input type="checkbox"/> 18-24 years old    | <input type="checkbox"/> 55-64 years old      |
| <input type="checkbox"/> 25-34 years old    | <input type="checkbox"/> 65 years old or more |
| <input type="checkbox"/> 35-44 years old    |   |

87. Are you:  Male  Female  Other

88. How long have you been riding Metro-North?
- Less than one year
- 1 – 3 years
- 3 – 5 years
- 5 – 10 years
- 10 years or more

89. What is your home zip code?

90. In which county do you reside?
- Orange  Rockland
- Other (Specify: \_\_\_\_\_)

Metro-North is required by the Federal Transit Administration to ask Questions 91-99 in order to retain federal funding for the railroad

91. Are you:
- White
- Black or African American
- American Indian or Alaska Native
- Native Hawaiian and Other Pacific Islanders
- Asian
- Other (Specify: \_\_\_\_\_)

92. Are you of Hispanic origin?  Yes  No

93. In which country were you born?

United States  Other (Specify: \_\_\_\_\_)

94. In which country or countries were your parents/ancestors born?

United States  Dominican Republic

Mexico  Jamaica

China  Other (Specify: \_\_\_\_\_)

95. Which language would be most helpful for you to receive Metro-North written or electronically displayed information in?

English  Another language (specify) \_\_\_\_\_

Spanish  No preference

96. Which language would be most helpful for you to understand Metro-North announcements (or to converse in with railroad personnel, e.g., to ask for travel directions)?

English  Another language (specify) \_\_\_\_\_

Spanish  No preference

- 97 a. What is the primary language spoken in your home?
- English  Another language (specify: \_\_\_\_\_)
- Spanish
- b. How well do you speak English?
- Very well  Not well
- Well  Not at all

98. Including yourself, how many people lived in your household in 2017?

1  3  5-6  9 or more

2  4  7-8

99. What was your approximate annual 2017 household income before taxes and other deductions?

<input type="checkbox"/> Under \$12,500	<input type="checkbox"/> \$75,000 to \$99,999
<input type="checkbox"/> \$12,500 – \$24,999	<input type="checkbox"/> \$100,000 to \$149,999
<input type="checkbox"/> \$25,000 - \$37,499	<input type="checkbox"/> \$150,000 to \$199,999
<input type="checkbox"/> \$37,500 - \$49,999	<input type="checkbox"/> \$200,000 to \$299,999
<input type="checkbox"/> \$50,000 - \$74,999	<input type="checkbox"/> \$300,000 or more

If you are not satisfied with our performance in any of the areas in questions 1 through 71, please explain why below. Please also include any other comments or service suggestions. (Safety-related comments, station conditions, suggestions for railroad improvements, etc.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If you are interested in participating in future Metro-North market research projects, please write your name, street address, email address and day or evening phone numbers below. All information will be kept confidential.

Name: \_\_\_\_\_

Street: \_\_\_\_\_

City/Town \_\_\_\_\_ Zip Code \_\_\_\_\_

E-mail Address \_\_\_\_\_

Phone (H) \_\_\_\_\_ (W) \_\_\_\_\_

**Thank you for taking the time to complete this survey.**



# **MNR Committee Meeting MARCH 2019**

## **PTC Project Update March 25, 2019**

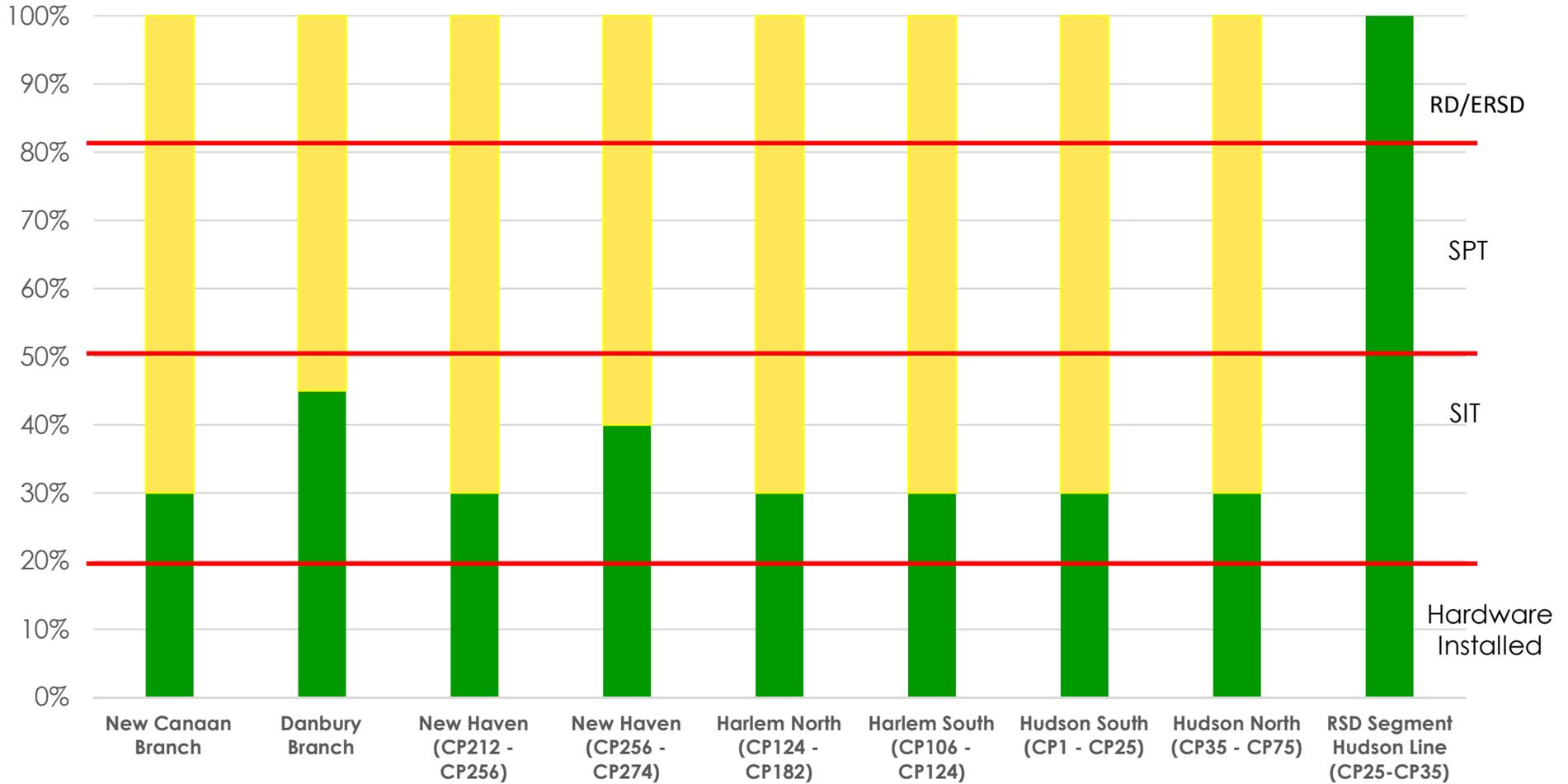


# MNR Overall PTC Project Status

Item	Comments
Schedule	<ul style="list-style-type: none"><li data-bbox="583 574 1745 623">❑ Completed 110 FRA required RSD runs on March 1, 2019.</li><li data-bbox="583 743 1719 846">❑ Remain on target to achieve full PTC Implementation by December 2020.</li></ul>
Budget	\$546M (Including CDOT Share)



# MNR Segment RSD Readiness

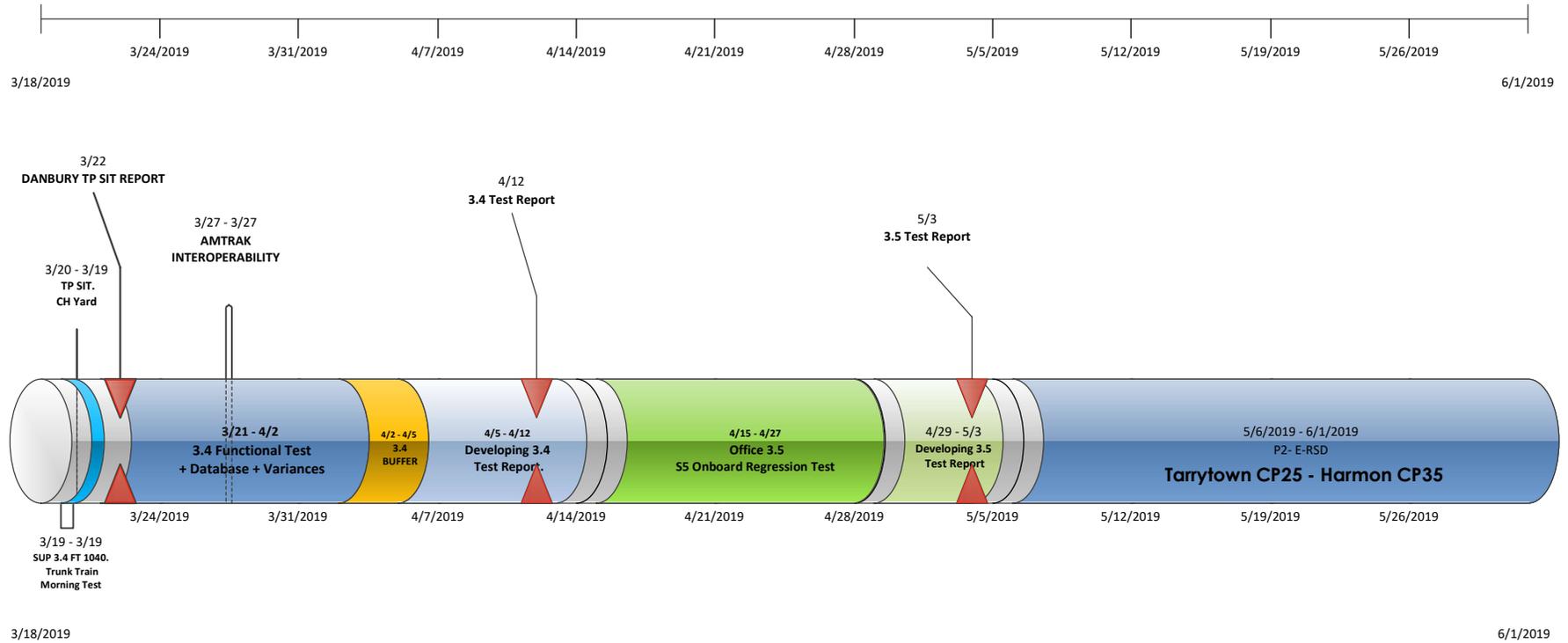


SIT = Site Integration Testing, SPT = Site Performance Testing, (E)RSD/ERSD = (Extended) Revenue Service Demonstration.

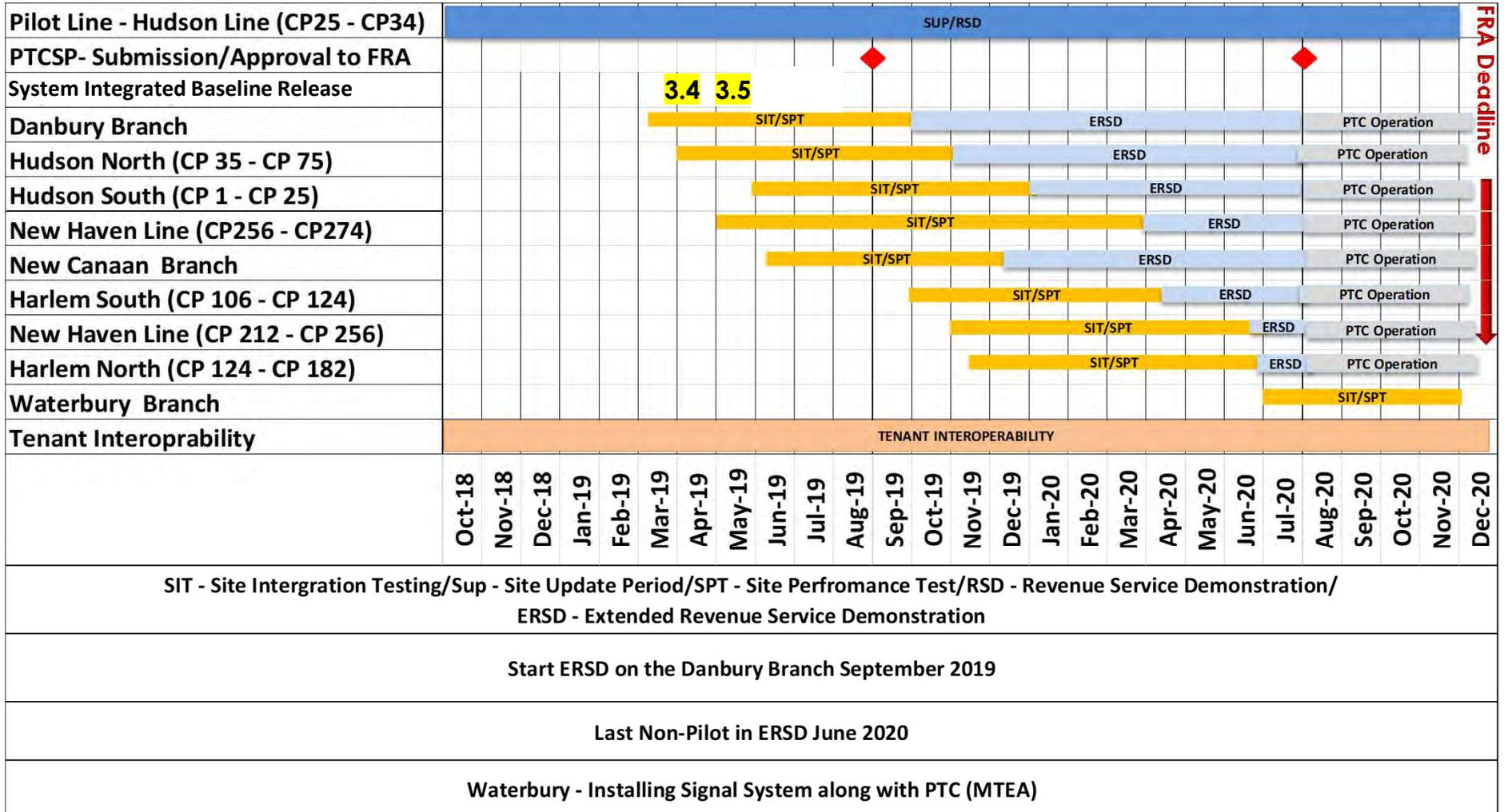


■ % complete    ■ Remaining

# MNR Regression Testing Timeline



# MNR Working Schedule and Sequence



# MNR Project Update as of March 20, 2019

- As of March 1, 2019, MNR completed **110** RSD successful trips between Tarrytown and Croton-Harmon per FRA requirement – Major milestone accomplished.
- Submitted February/March 2019 RSD Test Reports to the FRA for approval.
- Received FRA Approval of its Alternative Schedule on March 5, 2019.
- Completed/tested office Software upgrade to 3.4.0.1 as of March 12, 2019.
- Danbury Branch:
  - Completed programming transponders from CSE to Full PTC functionality.
  - Completed Transponder Site Integration Testing.
  - Continuing Radio Case Site Integration Testing.
- Hudson Line (Tarrytown – Croton Harmon RSD Segment)
  - Programming transponders to include interoperability functions for Amtrak/CSX.
  - Updating Radio Cases (Frequency update, Field Mods, Configuration Changes).
  - Start Site update procedure testing 3.4 (OBC - S4B/MCM - 1.8/Office - 3.4.0.1)



# MNR Project Risks and Concerns

- Siemens Undercar Scanner/Antenna, CTV unit and interconnection harness are being recalled due to a calibration issue.

## **Mitigation:**

- Joint LIRR/MNR QA team will monitor Siemens Quality Control Plan to repair, test and calibrate the units.
- An audit/inspection plan has been established to audit Siemens Pittsburgh Facility In-Process Manufacturing plan periodically starting April 2019 to the end of the project. SI must meet their proposed delivery schedule each week to allow MNR to complete their installations by July 2019.

- Unexpected PTC equipment failures will adversely impact train service on the RSD/ERSD segments.

## **Mitigation:**

- Continuously monitor the reliability of PTC equipment in real time before it can delay the implementation of ERSD on other segments



# MNR Project Risks and Concerns

- GE PTC Radio recall of 70+ (on-board and wayside).

## **Mitigation:**

- Working and monitoring the SI to ensure a pool of retro-fitted radio are available to be replaced
- Completion of the project depends on timely resolution of all tenant Railroads being interoperable with our wayside and solving boundary issues with Amtrak.

## **Mitigation:**

- Continue working with our tenants to resolve any boundary concerns as they enter MNR territory.
- Align design between MNR and Amtrak Safety Server to develop the protocol to communicate between them which require changes to SI's current plan.
- This updated design needs to be delivered as part of System Software release 3.7 in December 2019.



# MNR PTC Timeline and Look-ahead

## **Feb 2019**

- ✓ Started Radio Case Site Integration Testing (SIT) - Danbury Branch (10 locations).
- ✓ Programmed the Transponders full PTC package - Danbury Branch.
  - ✓ Performed civil speed testing for both passenger and freight.
  - ✓ Tested the transponder linking distances, confirmed PTS.
- ✓ Introduced M3's into RSD towards completing the required 110 RSD runs on Hudson line (Tarrytown to Croton-Harmon) for FRA approval.
- ✓ Installed and tested Cellular connectivity on the Hudson Line.
- ✓ Submitted RSD Test Report for the month of January 2019.

## **March 2019**

- ✓ Completed 110 RSD trains on Hudson line (Tarrytown to Croton-Harmon) for FRA approval.
- Continue to perform Radio Case SIT – Danbury Branch.
- Continue Installing and testing Cellular connectivity on the Hudson Line.
- ✓ Installed Office 3.4.0.1 on March 12, 2019.
- Start SUP testing on the RSD segment (Office 3.4.0.1/OBC S4B/MCM 1.8).
- Update Transponders on the RSD segment to accommodate Amtrak/CSX interoperability.
- Perform Amtrak/CSX Rev 10 interoperability testing with the FRA.
- ✓ Submitted RSD Test Reports for February and March 2019.
- Work with NJT to start SIT on the Port Jervis Line.



# MNR PTC Timeline and Look-ahead (cont'd.)

## **April 2019**

- ❑ Start SUP testing on the RSD segment (Office 3.5/OBC S5).
- ❑ Monitor train capacity within the RSD segment.
- ❑ Continue Installing and testing Cellular connectivity on the Hudson Line.
- ❑ Continue to perform Radio Case SIT – Danbury Branch.
- ❑ Start Site Performance Testing (SPT) – Danbury Branch.

## **May 2019**

- ❑ Continue running full PTC functionality on the RSD segment.
- ❑ Place 10-15 trains into post RSD utilizing OBC Sw. S5.
- ❑ Amtrak/CSX running utilizing Rev 10
- ❑ Start Site Performance Testing on the Danbury Line.
- ❑ Approval from the FRA to move into ERSD.
- ❑ Continue Site Performance Testing on the Danbury Line.
- ❑ Start Radio Case Site Integration Testing (SIT) – Upper Hudson Line.



# MNR PTC Timeline and Look-ahead (cont'd.)

## **June 2019**

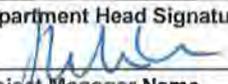
- ❑ Continue performing SPT on the Danbury Line
- ❑ Continue Site Integration Testing on the New Haven Line (CP255 – CP274).
- ❑ Continue Start Radio Case Site Integration Testing (SIT) – Hudson Line.
- ❑ Program the Transponders full PTC package – Upper Hudson Line/New Canaan Branch.
- ❑ Start transponder SIT to confirm linking distances, PTS - Upper Hudson Line/New Canaan Branch.

## **July – December 2019**

- ❑ Continue SIT/SPT on remaining segments.
- ❑ Place Danbury, New Canaan Branch, Lower/Upper Hudson Line into ERSD (full PTC functionality).
- ❑ Submit PTCSP.

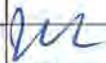


# Staff Summary

Subject <b>LEASE AGREEMENT FOR HASTINGS STATION</b>
Department <b>REAL ESTATE</b>
Department Head Name <b>JOHN N. LIEBER</b>
Department Head Signature 
Project Manager Name <b>ALICIA BIGGS</b>

Date <b>MARCH 25, 2019</b>
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	MNR Committee	3/25/19		X	
2	Finance Committee	3/25/19	X		
3	Board	3/27/19	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal		
2	Chief Development Officer		
3	Chief of Staff		
4	Chief Financial Officer		

**AGENCY:** Metropolitan Transportation Authority ("MTA") and MTA Metro-North Railroad ("Metro-North")

**LESSEE:** The Good Witch LLC

**LOCATION:** Hastings-on-Hudson Station, Hudson Line, Westchester County

**ACTIVITY:** Lease for a coffee bar and bakery/café

**ACTION REQUESTED:** Authority to enter into lease agreement

**TERM:** Ten years, plus approximately a 255 day build out period

**SPACE:** 1,650 sq. ft. (±) station building, plus a license for dedicated parking adjacent to the station building

**COMPENSATION:** \$42,000 for lease year 1 with 3% annual increases through lease year 10

## COMMENTS:

Pursuant to Metro-North and MTA Real Estate's station leasing program, a request for proposals ("RFP") was issued seeking offers to utilize and maintain the Hastings Station Building (the "Building"), consisting of a kitchen/prep area, office space, waiting room and restrooms.

In response to the RFP, one proposal was received from The Good Witch LLC for \$42,000 in the first lease year with 3% annual increases over the term of the lease for use of the Building as generally described below. The proposed rent is equivalent to a present value of \$335,305.45 using a 7% discount rate. An independent appraisal estimated an annual market rent of \$43,000 per year.

The principal for The Good Witch LLC, Joanna Prisco, has been a food writer and recipe developer for the past 15 years. She has operated a roaming pop-up shop around the river towns of the Lower Hudson Valley for the past year and a half, appearing at farmers markets, kids concerts and flea markets. She proposes to operate a family-friendly coffee shop that serves internationally inspired pastries and sandwiches. The Lessee seeks to become a community gathering place by offering a rotating calendar of events that will attract both children and adults. Metro-North will reserve rights for use of the waiting area and restrooms for its customers during the minimum hours of 6:00am to 10:00am and at any other time that the café is open.

The Lessee proposed improvements to the Building that will provide a modern, airy feel. Ms. Prisco will provide a limited, personal guaranty for project completion and rent payment and will assume responsibility for the day-to-day operation and

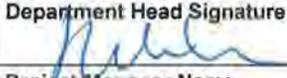
# Staff Summary

## **FINANCE COMMITTEE MEETING LEASE AGREEMENT FOR HASTINGS STATION (Cont'd.)**

maintenance of the Building, including any non-structural repairs required in the Building and the designated parking adjacent to the station building.

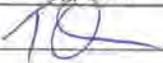
Based on the foregoing, MTA Real Estate requests authorization for MTA and Metro-North to enter into a lease agreement with The Good Witch LLC on the above-described terms and conditions.

# Staff Summary

Subject <b>LICENSE AGREEMENT FOR PURDY'S STATION</b>
Department <b>REAL ESTATE</b>
Department Head Name <b>JOHN N. LIEBER</b>
Department Head Signature 
Project Manager Name <b>ALICIA BIGGS</b>

Date <b>MARCH 25, 2019</b>
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	MNR Committee	3/25/19		X	
1	Finance Committee	3/25/19	X		
2	Board	3/27/19	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal		
2	Chief Development Officer		
3	Chief of Staff		
4	Chief Financial Officer		

**AGENCY:** Metropolitan Transportation Authority ("MTA") and MTA Metro-North Railroad ("Metro-North")

**LICENSEE:** Hayfields LLC

**LOCATION:** Purdy's Station, Hudson Line, Westchester County

**ACTIVITY:** Retail sale of coffee, pastries, take-out dinners, gift items, and flowers in addition to concierge services such as shoe repair, dry cleaning, etc.

**ACTION REQUESTED:** Authority to enter into license agreement

**TERM:** Five years (plus approximately a 135 day build out period), with one five-year extension option, subject to at will revocation on 60 days' notice, at no cost

**SPACE:** 240 sq. ft.± free-standing building plus a license to use a single designated parking space adjacent to the station building and a designated area for an exterior storage cabinet

**COMPENSATION:** \$4,113.18 for license year 1 with 3% annual increases throughout the term

**COMMENTS:**

In response to a 2018 request for proposals ("RFP") to license the stand-alone building at Metro-North's Purdy's station, one response was received. Hayfields LLC has proposed an annual fixed license fee compensation of \$4,113.18 for the first license year with 3% annual increases over the term of the license. Such rent exceeds the projected market value of the space as determined by MTA Real Estate's independent consultant. Over the initial five-year term, the present value of the proposed fixed license fee compensation, using a 7% discount rate, is \$17,836.11.

Hayfields LLC, who operates as Hayfields Market, is a well-known staple in the North Salem area which offers fresh produce, dry goods, high-quality baked goods, coffee and smoothies. They are also known for their wide array of floral arrangements as well as garden accents and decor. They host several local events on a weekly basis including live music events, trivia nights and various foodie events. They plan on using the Location as an annex for their main location serving beverage and bakery items in addition to a sit down/take-out café. The services offered at this location will center around the needs of Metro-North's customers.

In lieu of providing a personal guarantee, Hayfields has agreed to post a 12-month security deposit based on the 5<sup>th</sup> license year's proposed fixed license fee compensation. A review of their financials indicate that they have the capability to complete the improvements and operate a successful location. Hayfields will assume responsibility for the day to day operation and maintenance of the building, including the non-structural repairs to the building.

# Staff Summary

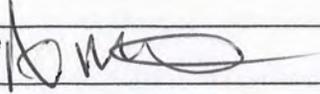
## FINANCE COMMITTEE MEETING LICENSE AGREEMENT FOR PURDY'S STATION (Cont'd.)

Based on the foregoing, MTA Real Estate requests authorization for MTA and Metro-North to enter into a license agreement with Hayfields LLC on the above-described terms and conditions

**Subject** Request for Authorization to Award Various Procurements

**Department** Procurement and Material Management

**Department Head Name**  
Al Muir, Sr. Director

**Department Head Signature** 

**Project Manager Name**

**Date**  
March 19, 2019

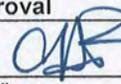
**Vendor Name**  
Various

**Contract Number**  
Various

**Contract Manager Name**  
Various

**Table of Contents Ref #**

Board Action					
Order	To	Date	Approval	Info	Other
1	M-N Comm. Mtg.	3-25-19	x		
2	MTA Board Mtg.	3-27-19	x		

Internal Approvals			
	Approval		Approval
X	President 	X	V.P. & General Counsel 
X	Executive Vice President 	X	V.P. Capital Programs 
X	Sr. V.P. Operations 	X	Executive Director Management & Budget 

Internal Approvals (cont.)							
Order	Approval	Order	Approval	Order	Approval	Order	Approval

**PURPOSE:**

To obtain approval of the Board to award various contracts/contract modifications and purchase orders, and to inform the MTA Metro-North Railroad Committee of these procurement actions.

**DISCUSSION:**

**MNR proposes to award non-competitive procurements in the following categories:**

	<u># of Actions</u>	<u>\$ Amount</u>
<u>Schedules Requiring Two-Thirds Vote (or more, where noted)</u>	NONE	
<u>Schedules Requiring Majority Vote</u>		
Schedule H: Modifications to Personal/Miscellaneous Service Contracts	1	\$1,300,000
• Swisslog Logistics, Inc. \$1,300,000		
	<hr/> 1	<hr/> \$1,300,000

SUB TOTAL:

**MNR proposes to award competitive procurements in the following categories:**

<u>Schedules Requiring Two-Thirds Vote (or more, where noted)</u>	<u># of Actions</u>	<u>\$ Amount</u>
Schedule C: Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)	1	\$33,622,070
• Arch Associates, LLC \$33,622,070		
 <u>Schedules Requiring Majority Vote</u>		
Schedule I: Modifications to Purchase and Public Work Contracts	1	\$8,856,286
• Judlau-TC Electric Joint Venture \$8,856,286		
SUB TOTAL:	2	\$42,478,356

**MNR presents the following procurement actions for Ratification:**

<u>Schedules Requiring Two-Thirds Vote (or more, where noted)</u>	NONE
<u>Schedules Requiring Majority Vote</u>	NONE
SUB TOTAL:	3
TOTAL:	3      \$43,778,356

The contractors noted above and on the following Staff Summary Sheets have been found in all respects responsive and responsible, and are in compliance with State laws and regulations concerning procurements.

**BUDGET IMPACT:** The purchases/contracts will result in obligating MNR operating and capital funds in the amount listed. Funds are available in the current MNR operating/capital budgets for this purpose.

**RECOMMENDATION:** That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

## METROPOLITAN TRANSPORTATION AUTHORITY

WHEREAS, in accordance with Section 1265-a and Section 1209 of the Public Authorities law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous procurement contracts, and certain change orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in the annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.

2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which it is deemed in the public interest to obtain authorization to solicit competitive proposals through a publicly advertised RFP for the reasons specified therein the Board declares it to be impractical or inappropriate to utilize a procurement process inviting sealed bids with award to the lowest responsive/responsible bidder.

3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.

4. The Board ratifies each action taken set forth in Schedule D for which ratification is requested.

5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; and vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.

6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

MARCH 2019

METRO-NORTH RAILROAD

LIST OF NON-COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Schedules Requiring Majority Vote:

H. Modifications to Personal /Miscellaneous Service Contracts

(Approvals/Staff Summaries required for substantial change orders and change orders that cause the original contract to equal or exceed the monetary or durational threshold required for Board approval)

1. **Swisslog Logistics, Inc.                      \$1,300,000 (not-to-exceed)                      Staff Summary Attached**  
**On-site Electro-Mechanical Technician**

Approval is requested for a contract modification in the not-to-exceed amount of \$1,300,000 to the firm Swisslog Logistics Inc. (Swisslog) for an on-site electro-mechanical technician to maintain Metro-North's industrial Automated Storage and Retrieval System (ASRS), located in the Metro-North New Haven Central Distribution Warehouse Facility.

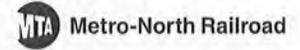
In 2016, CDOT procured and funded, a new Central Distribution Facility to house an industrial Automated Storage and Retrieval System (ASRS) at a cost of \$21,000,000. The firm Swisslog Logistics, Inc. (Swisslog) was selected by CDOT to furnish and install the state of the art industrial ASRS. The ASRS which encompasses the entire 155,000 sq. ft. facility, requires the addition of an on-site electro-mechanical technician. The technician is trained and qualified on this system and will provide on-going / day-to-day technical maintenance services to the systems' numerous conveyors, lifts, shuttle cars custom loader / fork truck. Through the commissioning of the ASRS, and as part of the purchase, CDOT provided for the on-site technician. At this time, Metro-North and CDOT seek to maintain the high level of service to ensure limited down time and high system availability by continuing to maintain an on-site technician.

Metro-North negotiated with Swisslog, the Original Equipment Manufacturer (OEM) and sole provider of service to the system an average annual cost of \$130,000 per year which included an overall reduction of \$210,000 for the 10-year period. Additionally, a review of the base scope of the preventive maintenance services was conducted and confirmed no redundant scope of work existed.

Metro-North completed a responsibility review of Swisslog Logistics as defined in the All Agency Responsibility Guidelines in connection with this award recommendation, which yielded no significant adverse information (SAI).

The total not-to exceed amount of \$1,300,000 includes a negotiated credit of \$210,000 for the cost of the original contract and is to be funded by the MNR Operating Budget (\$455,000) and by CDOT (\$845,000).

**Schedule H: Modifications to Personal Service and Miscellaneous Service Contracts**



Item Number: H

<b>Vendor Name (&amp; Location)</b> Swisslog Logistics, Inc., Newport News, Virginia	
<b>Description</b> On-site electro-mechanical technician to support the Swisslog Automated Storage and Retrieval System (ASRS)	
<b>Contract Term (including Options, if any)</b> Five years with a five-year option	
<b>Option(s) included in Total Amount?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Procurement Type</b>	<input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Non-competitive: Sole Source
<b>Solicitation Type</b>	<input type="checkbox"/> RFP <input type="checkbox"/> Bid <input checked="" type="checkbox"/> Other: Modification
<b>Funding Source</b> <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
<b>Requesting Dept./Div. &amp; Dept./Div. Head Name:</b> Procurement & Material Management, Al Muir, Sr. Director	

<b>Contract Number</b> 76514	<b>AWO/Modification #</b> 1
<b>Original Amount:</b>	\$2,750,000
<b>Prior Modifications:</b>	\$ 0
<b>Prior Budgetary Increases:</b>	\$ 0
<b>Current Amount:</b>	\$2,750,000
<b>This Request:</b>	\$1,300,000 (not-to-exceed)
<b>% of This Request to Current</b>	47%
<b>% of Modifications (including This Request) to Original Amount:</b>	47%

**Discussion:**

Approval is requested for a contract modification in the not-to-exceed amount of \$1,300,000 to the firm Swisslog Logistics Inc. (Swisslog) for an on-site electro-mechanical technician to maintain Metro-North's industrial Automated Storage and Retrieval System (ASRS), located in the Metro-North New Haven Central Distribution Warehouse Facility.

In 2016, CDOT procured and funded, a new Central Distribution Facility to house an industrial Automated Storage and Retrieval System (ASRS) at a cost of \$21,000,000. The firm Swisslog Logistics, Inc. (Swisslog) was selected by CDOT to furnish and install the state of the art industrial ASRS. The ASRS which encompasses the entire 155,000 sq. ft. facility, requires the addition of an on-site electro-mechanical technician. The technician is trained and qualified on this system and will provide on-going / day-to-day technical maintenance services to the systems' numerous conveyors, lifts, shuttle cars custom loader / fork truck. Through the commissioning of the ASRS, and as part of the purchase, CDOT provided for the on-site technician. At this time, Metro-North and CDOT seek to maintain the high level of service to ensure limited down time and high system availability by continuing to maintain an on-site technician.

Metro-North negotiated with Swisslog, the Original Equipment Manufacturer (OEM) and sole provider of service to the system an average annual cost of \$130,000 per year which included an overall reduction of \$210,000 for the 10-year period. Additionally, a review of the base scope of the preventive maintenance services was conducted and confirmed no redundant scope of work existed.

Metro-North completed a responsibility review of Swisslog Logistics as defined in the All Agency Responsibility Guidelines in connection with this award recommendation, which yielded no significant adverse information (SAI).

The total not-to exceed amount of \$1,300,000 includes a negotiated credit of \$210,000 for the cost of the original contract and is to be funded by the MNR Operating Budget (\$455,000) and by CDOT (\$845,000).

MARCH 2019

METRO-NORTH RAILROAD

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Schedules Requiring Two-Thirds Vote:

**C. Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)  
(Staff Summaries required for items requiring Board approval)**

**1. Arch Associates, LLC \$33,622,070 (not-to-exceed) Staff Summary Attached  
Design-Build Construction of the Empire State Trail Maybrook Trailway Section**

Approval is requested to award a 26-month competitively solicited and negotiated Design-Build contract (RFP process, eleven proposals received; four shortlisted) to Arch Associates, LLC in the not-to-exceed amount of \$33,622,070 to design and construct the Maybrook Trailway section of the Empire Trail Initiative, from Brewster to Hopewell Junction in Putnam and Dutchess Counties, NY, adjacent to Metro-North's Beacon Line. In accordance with MTA policy regarding the use of Design-Build, Metro-North also seeks approval of the payment of stipends to shortlisted firms who were not selected to receive the award.

The Maybrook Trailway is a planned 23-mile segment of Empire State Trail, which will span from the New York Harbor to the Canadian border and from Albany to Buffalo. Designed for hikers and bikers, the Trailway will connect the Putnam County Trailway at Brewster with the Dutchess Rail Trail at Hopewell Junction, providing a direct link to the Walkway over the Hudson at Poughkeepsie. The Trailway will utilize part of the right-of-way of Metro-North's dormant Beacon Line, while preserving the existing underground fiber optic cable installations and the rail line for potential future use.

The major elements of this Design-Build (DB) Project include design documentation, drainage improvements, excavation and construction of retaining walls, repair or replacement of multiple bridges and culverts, re-routing of utilities, installation of asphalt pavement, and signage and fencing. Additionally, accessible trailhead parking areas will be constructed and security improvements made to an adjacent MTA Police facility.

Board approval is requested in the not-to-exceed amount of \$33,622,070 in addition to a stipend of \$150,000 to be paid to shortlisted firms who were not selected to receive the award. This procurement is to be funded by the State of New York.

**Schedules Requiring Majority Vote:**

**I. Modifications to Purchase and Public Work Contracts**

**(Approvals/Staff Summaries required for individual change orders greater than \$250K. Approvals without Staff Summaries required for change orders greater than 15% of previously approved amount which are also at least \$50K)**

**2. Judlau-TC Electric Joint Venture \$8,856,286 (not-to-exceed) Staff Summary Attached  
**Design/Build Power/C&S Infrastructure Improvements CP-5-CP-35****

Approval is requested for a contract modification in the not-to-exceed amount of \$8,856,286 to the firm Judlau-TC Electric Joint Venture for the federally-funded Design/Build Power/C&S Infrastructure Improvements from Mott Haven (CP-5) to Croton-Harmon (CP-35).

As a result of Superstorm Sandy, a significant portion of Metro-North's Hudson Line was completely submerged and Power and Communication & Signal (C&S) infrastructure systems were inundated with salt water and significantly damaged. As part of that infrastructure restoration program, a design/build contract was competitively solicited and awarded in May 2015 to the firm Judlau-TC Electric Joint Venture. Phase 1 of the project from Greystone to Croton-Harmon totaled \$105,521,300, and is approaching conclusion; Phase 2 was included in the original competitive solicitation, involves the area between Mott Haven to Greystone, and was elected in November 2016 in the amount of \$86,898,700. The key contract work for both phases includes hardening of C&S and power infrastructure components via installation of elevated equipment platforms and installation of new power and C&S cabling in conduits and cable troughs for protection against future water damage.

Approval is requested at this time for a contract modification in the not-to-exceed amount of \$8,856,286 for additional and adjusted quantities of various unit bid items to complete Phase 2, due to plan revisions to reduce risk to the railroad and unknown field conditions. It was not feasible or desirable to fully investigate all field conditions existing on the 35-mile Hudson Line prior to solicitation and award of this contract. A full investigation of all subsurface conditions would have greatly extended the pre-solicitation design period such that the availability of federal funds would have been jeopardized. Accordingly, the contract was bid as a combination of lump sum items and estimated unit price quantities, which provided a reasonable allocation of risk between Metro-North and the contractor. Placing the risk of subsurface conditions on the contractor, where neither Metro-North nor the contractor had the ability to fully investigate those conditions before the start of the contractor, would have resulted in a higher initial contract price based on the contractor's need to include a very high level of contingency in its price.

In fact, field conditions have dictated that alternate design considerations and construction means & methods be implemented, and unit prices adjusted or renegotiated, in order to reduce or eliminate conflicts with existing buried utilities to lessen service impacts by reducing the need for track outages and to minimize interference with existing signal power or communication cable/fiber installations.

It is recommended at this time that a contract modification be approved in the not-to-exceed amount of \$8,856,286. Funding is included in the MTA Capital Program through the FTA funded Sandy Emergency Relief Program.

# Staff Summary

Item Number C					
Dept. & Dept. Head Name: Procurement and Material Management, Al Muir, Sr. Director					
Division & Division Head Name: Executive Vice President, Susan Doering					
<b>Board Reviews</b>					
Order	To	Date	Approval	Info	Other
1	M-N Comm.Mtg.	3-25-19	x		
2	MTA Board Mtg.	3-27-19	x		
<b>Internal Approvals</b>					
Order	Approval	Order	Approval		
x	President <i>CAR</i>	<i>SCW</i>	Executive Director Mgmt. & Budget		
x	<i>JHL</i> Sr. V.P. Operations	<i>SCW</i>	V.P. Capital Programs		
x	<i>JHL</i> V.P. & General Counsel	<i>X</i>			

SUMMARY INFORMATION	
Vendor Name Arch Associates, LLC	Contract Number 10000442201
Description Design-Build Construction of the Empire State Trail Maybrook Trailway Section	
Total Amount \$33,622,070 (not-to-exceed)	
Contract Term (including Options, if any) 26 months	
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

## Narrative

### I. PURPOSE/RECOMMENDATION:

Approval is requested to award a 26-month competitively solicited and negotiated Design-Build contract (RFP process, eleven proposals received; four shortlisted) to Arch Associates, LLC in the not-to-exceed amount of \$33,622,070 to design and construct the Maybrook Trailway section of the Empire Trail Initiative, from Brewster to Hopewell Junction in Putnam and Dutchess Counties, NY, adjacent to Metro-North's Beacon Line. In accordance with MTA policy regarding the use of Design-Build, Metro-North also seeks approval of the payment of stipends to shortlisted firms who were not selected to receive the award.

### II. DISCUSSION:

The Maybrook Trailway is a planned 23-mile segment of Empire State Trail, which will span from the New York Harbor to the Canadian border and from Albany to Buffalo. Designed for hikers and bikers, the Trailway will connect the Putnam County Trailway at Brewster with the Dutchess Rail Trail at Hopewell Junction, providing a direct link to the Walkway over the Hudson at Poughkeepsie. The Trailway will utilize part of the right-of-way of Metro-North's dormant Beacon Line, while preserving the existing underground fiber optic cable installations and the rail line for potential future use.

The major elements of this Design-Build (DB) Project include design documentation, drainage improvements, excavation and construction of retaining walls, repair or replacement of multiple bridges and culverts, re-routing of utilities, installation of asphalt pavement, and signage and fencing. Additionally, accessible trailhead parking areas will be constructed and security improvements made to an adjacent MTA Police facility.

On May 24, 2017, the Board approved use of the Request for Proposal (RFP) process for this project. The RFP, dated August 16, 2018, was advertised in the New York State Contract Reporter, New York Post, El Dario, Daily Challenge, Engineering News Record, The Poughkeepsie Journal and posted on Metro-North's website. On September 13, 2018, eleven Phase 1 qualification proposals from DB teams were received. These proposals were reviewed against the Phase 1 criteria, which emphasized past experience and performance on

# Staff Summary

projects of similar type and scope (including DB experience); the qualifications of vendor personnel; the financial resources of the proposers as well as their diversity practices.

The Selection Committee, representing Metro-North's Procurement and Material Management, Capital Engineering, and Capital Construction Management departments, selected four teams to be advanced to Phase 2: (1) Grace Industries; 2) A. Servidone/B. Anthony JV; 3) L&T Construction; 4) Arch Associates, LLC (Arch).

To ensure that each of the shortlisted firms had a complete understanding of the scope of work, one-on-one meetings were held on October 22, 2018. Cost and technical proposals were requested and received on November 6, 2018, which were evaluated against the Phase 2 criteria. Phase 2 criteria emphasized project cost; confidence in the proposer's ability to complete the project on time and within budget; the proposer's understanding of the work scope and their technical approach; and design innovation and proposed cost savings alternatives.

Gross sum proposal prices were received in the following amounts: 1) Grace Industries \$62,779,600; 2) A. Servidone/B. Anthony JV \$53,929,780; 3) L&T Construction \$48,772,278; 4) Arch \$36,995,370. Arch's lower cost (almost \$12M below their closest competitor) was attributed to their innovativeness in design by re-profiling grades to minimize the need to import and dispose of soils, while reducing the number of retaining walls through the corridor.

While all four shortlisted firms were deemed qualified to design and construct this project, the Selection Committee elected to negotiate with Arch based upon their excellent technical approach, cost saving measures and overall best value for this project. McLaren, Arch's design partner, has extensive experience in major trailway construction near, or in place of, many railroads, including the Walkway over the Hudson, Albany Riverwalk, Putnam Trailway, Shore Parkway Greenway Trail, and Fjord Trail Breakneck Connector. Arch proposed viable design alternatives and construction concepts that were deemed to be well-engineered, time and labor efficient, and compliant with the preliminary design. To align project costs with the NYS Empire State Trial funding available, Metro-North was able to reduce Arch's price to \$33,622,070 through negotiations and scope reduction.

Metro-North completed a responsibility review of Arch Associates LLC as defined in the All Agency Responsibility Guidelines in connection with this award recommendation, which yielded no significant adverse information (SAI).

Finally, in accordance with MTA policy regarding the use of DB, which seeks to enhance competition and defray proposal costs, Metro-North also seeks approval of the payment of stipends to the other short-listed firms. As provided in the contract documents, each of these three firms will receive \$50,000.

### **III. D/M/WBE INFORMATION:**

The MTA Department of Diversity and Civil Rights (DDCR) established 15% MBE, 15% WBE, and 6% SDVOB goals for this project. Arch's pre-award submittal package is currently under review by DDCR and the contract will not be awarded until DDCR requirements have been satisfied.

### **IV. IMPACT ON FUNDING:**

Board approval is requested in the not-to-exceed amount of \$33,622,070 in addition to a stipend of \$150,000 to be paid to shortlisted firms who were not selected to receive the award. This procurement is to be funded by the State of New York.

### **V. ALTERNATIVES:**

Metro-North does not have the expertise and capability to perform the required design and construction services as specified.

**Schedule I: Modifications to Purchase and Public Works Contracts**

Item Number: I

<b>Vendor Name (&amp; Location)</b> Judlau-TC Electric Joint Venture 26-15 Ulmer St. College Point, NY 11354	<table border="1"> <tr> <th data-bbox="867 306 1305 338">Contract Number</th> <th data-bbox="1310 306 1547 338">AWO/Modification #</th> </tr> <tr> <td data-bbox="867 344 1305 396">39881</td> <td data-bbox="1310 344 1547 396">50-63</td> </tr> </table>		Contract Number	AWO/Modification #	39881	50-63
Contract Number	AWO/Modification #					
39881	50-63					
<b>Description</b> Design/Build Power/C&S Infrastructure Improvements CP-5 to CP-35	<table border="1"> <tr> <td data-bbox="867 443 1305 495"><b>Original Phase 1</b></td> <td data-bbox="1310 443 1547 495">\$105,521,300</td> </tr> </table>		<b>Original Phase 1</b>	\$105,521,300		
<b>Original Phase 1</b>	\$105,521,300					
<b>Contract Term (including Options, if any)</b>	<table border="1"> <tr> <td data-bbox="867 516 1305 548"><b>Prior Modifications:</b></td> <td data-bbox="1310 516 1547 548">\$16,046,986</td> </tr> <tr> <td data-bbox="867 554 1305 585"><b>Option – Phase 2</b></td> <td data-bbox="1310 554 1547 585">\$86,898,700</td> </tr> </table>		<b>Prior Modifications:</b>	\$16,046,986	<b>Option – Phase 2</b>	\$86,898,700
<b>Prior Modifications:</b>	\$16,046,986					
<b>Option – Phase 2</b>	\$86,898,700					
50 Months	<table border="1"> <tr> <td data-bbox="867 575 1305 627"><b>Prior Budgetary Increases:</b></td> <td data-bbox="1310 575 1547 627">\$0.00</td> </tr> </table>		<b>Prior Budgetary Increases:</b>	\$0.00		
<b>Prior Budgetary Increases:</b>	\$0.00					
<b>Option(s) included in Total Amount?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<table border="1"> <tr> <td data-bbox="867 634 1305 665"><b>Current Amount:</b></td> <td data-bbox="1310 634 1547 665">\$ 208,656,943</td> </tr> </table>		<b>Current Amount:</b>	\$ 208,656,943		
<b>Current Amount:</b>	\$ 208,656,943					
<b>Procurement</b> <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	<table border="1"> <tr> <td data-bbox="867 672 1305 758"><b>This Request:</b></td> <td data-bbox="1310 672 1547 758">\$8,856,286 (not-to-exceed)</td> </tr> </table>		<b>This Request:</b>	\$8,856,286 (not-to-exceed)		
<b>This Request:</b>	\$8,856,286 (not-to-exceed)					
<b>Solicitation Type</b> <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	<table border="1"> <tr> <td data-bbox="867 764 1305 816"><b>% of This Request to Current Amount:</b></td> <td data-bbox="1310 764 1547 816">4.2 %</td> </tr> </table>		<b>% of This Request to Current Amount:</b>	4.2 %		
<b>% of This Request to Current Amount:</b>	4.2 %					
<b>Funding Source</b> <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	<table border="1"> <tr> <td data-bbox="867 827 1305 888"><b>% of Modifications (including This Request) to Original Amount:</b></td> <td data-bbox="1310 827 1547 888">23.6%</td> </tr> </table>		<b>% of Modifications (including This Request) to Original Amount:</b>	23.6%		
<b>% of Modifications (including This Request) to Original Amount:</b>	23.6%					
<b>Requesting Dept./Div. &amp; Dept./Div. Head Name:</b> Procurement & Material Management, Al Muir, Sr. Director						

**Discussion and Background:**

Approval is requested for a contract modification in the not-to-exceed amount of \$8,856,286 to the firm Judlau-TC Electric Joint Venture for the federally-funded Design/Build Power/C&S Infrastructure Improvements from Mott Haven (CP-5) to Croton-Harmon (CP-35).

As a result of Superstorm Sandy, a significant portion of Metro-North's Hudson Line was completely submerged and Power and Communication & Signal (C&S) infrastructure systems were inundated with salt water and significantly damaged. As part of that infrastructure restoration program, a design/build contract was competitively solicited and awarded in May 2015 to the firm Judlau-TC Electric Joint Venture. Phase 1 of the project from Greystone to Croton-Harmon totaled \$105,521,300, and is approaching conclusion; Phase 2 was included in the original competitive solicitation, involves the area between Mott Haven to Greystone, and was elected in November 2016 in the amount of \$86,898,700. The key contract work for both phases includes hardening of C&S and power infrastructure components via installation of elevated equipment platforms and installation of new power and C&S cabling in conduits and cable troughs for protection against future water damage.

Approval is requested at this time for a contract modification in the not-to-exceed amount of \$8,856,286 for additional and adjusted quantities of various unit bid items to complete Phase 2, due to plan revisions to reduce risk to the railroad and unknown field conditions. It was not feasible or desirable to fully investigate all field conditions existing on the 35-mile Hudson Line prior to solicitation and award of this contract. A full investigation of all subsurface conditions would have greatly extended the pre-solicitation design period such that the availability of federal funds would have been jeopardized. Accordingly, the contract was bid as a combination of lump sum items and estimated unit price quantities, which provided a reasonable allocation of risk between Metro-North and the contractor. Placing the risk of subsurface conditions on the contractor, where neither Metro-North nor the contractor had the ability to fully investigate those conditions before the start of the contractor, would have resulted in a higher initial contract price based on the contractor's need to include a very high level of contingency in its price.

In fact, field conditions have dictated that alternate design considerations and construction means & methods be implemented, and unit prices adjusted or renegotiated, in order to reduce or eliminate conflicts with existing buried utilities to lessen service impacts by reducing the need for track outages and to minimize interference with existing signal power or communication cable/fiber installations.

## Schedule I: Modifications to Purchase and Public Works Contracts

The specific contract changes are as follows:

- 1) Based on pre-solicitation assumptions made by the railroad, it was anticipated that installing C&S cable trough above signal power conduits in an over/under configuration would be the most advantageous methodology for efficient installation. However, this over/under configuration requires an approximate excavation depth of 6'. It became apparent during the construction that this configuration was causing actual interference with existing railroad utilities and increased the potential to encounter substantial quantities of subsurface rock. The implementation of this configuration would be made more expensive by the requirement for OSHA-approved safety sheeting to protect workers and any adjoining facilities. It was determined that an alternate configuration would allow a significantly shallower, thus safer excavation that would encounter less rock. This revised methodology while increasing certain contractor costs benefits Metro-North by allowing a less obtrusive installation adjacent to the track structure, reducing the potential for negative effect on train operations. The project cost directly related to this field change, after the reduction of certain unit items along with the increase of previously defined units yielded a net not-to-exceed amount of \$3,166,000.
- 2) The railroad had initially specified a minimum offset of the installation of cable troughs and other infrastructure of 12" from the edge of tie. However, it was determined during the construction phase that this specified offset would negatively impact the future maintenance of the track structure, and therefore the railroad determined to increase the infrastructure distance from edge of tie to 30". In connection with this design change, the railroad allowed for the installation of eight-4" diameter C&S conduits in lieu of trough reducing interfaces with adjacent property owners, existing wetlands, slopes, rock outcroppings, and the Hudson River. This change allows for the installation of hardened cable conduits to be used above ground where field conditions dictate, increasing resiliency and protecting the railroad's critical infrastructure. These alternate designs necessitated the creation of new contract unit items for this installation method that were not originally envisioned in the contract documents. The project cost related to this field change, after the reduction of certain unit items along with the increase of other units yielded a net not-to-exceed amount of \$6,821,286.00.
- 3) The remaining adjustment and the addition of a new contract item represent the installation of 20" trough in lieu of the 40" trough, which is a contract item. Contract documents called for precast concrete cable trough to be installed throughout the project limits to house new communication and fiber optic signal cables. The contractor received approval to use 40"-wide cable through interlocking areas to accommodate the additional communication and fiber optic cable in these areas. However, the revised installation parameters made it impossible to install 40" wide trough in some locations. The contractor was then given approval to install 20"-wide trough in lieu of 40"-wide trough within interlockings. These adjustments yielded a not-to-exceed credit amount of (\$1,131,000).

The result of these additions and deletions will be a net not-to-exceed amount of \$8,856,286 to complete Phase 2. The design changes and revised unit bid items have been negotiated by Metro-North and the contractor and are deemed fair and reasonable. Similar unit adjustments for Phase 1 were approved by the Board in April 2018.

In connection with a previous contract awarded to the Contractor, the Contractor was found to be responsible notwithstanding significant adverse information pursuant to the All-Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Interim Executive Director in consultation with the MTA General Counsel. No new SAI has been found relating to the Contractor and the Contractor has been found to be responsible.

**Schedule I: Modifications to Purchase and  
Public Works Contracts**

It is recommended at this time that a contract modification be approved in the not-to-exceed amount of \$8,856,286. Funding is included in the MTA Capital Program through the FTA funded Sandy Emergency Relief Program.

# Operations Report

**John Kesich**

Senior Vice President, Operations



M7 EMU



M8 EMU



Comet 5 Cab Car

## **February 2019 Highlights: Operations Report**

February service delivery operated above goal at 96.3% overall with 96.1% in peak periods. OTP has been operating above 93% since December 8<sup>th</sup> when the 2018 Infrastructure work came to an end.

**Hudson Line – 97.1%** with 97.3% in peak

99.3% of trains arrived within 10” of schedule with 5 (0.12%) cancelled or terminated

**Harlem Line – 97.5%** with 96.6% in peak

99.0% of trains arrived within 10” of schedule with 6 (0.11%) cancelled or terminated

**New Haven Line – 95.0%** with 94.9% in peak

98.2% of trains arrived within 10” of schedule with 22 (0.29%) cancelled or terminated

In February 2.4% of trains arrived 6-10” late with 33 (0.19%) cancelled or terminated.

Overall, 98.7% of trains arrived within 10” of schedule.

### **Service Performance Improvement Metrics**

Metric	Change from 2018	2019 Goal	YTD Target	YTD Actual	Difference	
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

**Consist Compliance:** 99.3% overall with 98.4% during Peak.

We completed M8 Single car on-board video installations which improved availability. We also have additional M8 cars out of service due to on-going warranty modifications.

Due to significant ridership increases on the New Haven we have the minimum number cars to support the daily requirement. The additional 66 new M8 cars will start to be available for service late this year with delivery completion in the Fall of 2020.

**West of Hudson Service** operated below goal at 90.7% due to MNR Infrastructure Work, NJT equipment failures and NJT manpower issues on the Port Jervis Line.

**Pascack Valley – 95.4%**

**Port Jervis – 84.3%**

### **Cancelled Trains**

6 (0.4%) PVL: 0, PJJ: 6

2 - no available Engineer

4 - NJT equipment failures

## **Equipment Performance**

Fleet Availability was good during February.

Fleet MDBF in January operated above goal at 187,644 against the 2019 goal of 165,000.

Our 31 Genesis locomotives are at the end of their useful life and we are proceeding with a RFP for their replacement.

## **John Kesich**

Senior Vice President  
Operations

Performance Summary			2019 Data			2018 Data		
			Annual Goal	February	YTD thru February	February	YTD thru February	
<b>On Time Performance</b> <i>(Trains that arrive at their final destination within 5 minutes 59 seconds of scheduled arrival time)</i>	<b>System</b>	<b>Overall</b>	<b>93.0%</b>	<b>96.3%</b>	<b>96.1%</b>	<b>96.3%</b>	<b>94.2%</b>	
		AM Peak	93.0%	94.8%	92.6%	95.2%	91.6%	
		AM Reverse Peak	93.0%	97.2%	95.7%	98.3%	96.1%	
		PM Peak	93.0%	97.1%	97.3%	97.3%	93.5%	
		<b>Total Peak</b>	<b>93.0%</b>	<b>96.1%</b>	<b>95.0%</b>	<b>96.6%</b>	<b>93.1%</b>	
		Off Peak Weekday	93.0%	95.4%	95.9%	94.9%	93.2%	
		Weekend	93.0%	98.3%	98.3%	98.5%	97.9%	
		<b>Hudson Line</b>	<b>Overall</b>	<b>93.0%</b>	<b>97.1%</b>	<b>96.3%</b>	<b>95.5%</b>	<b>94.2%</b>
			AM Peak	93.0%	95.7%	91.3%	93.9%	92.0%
			AM Reverse Peak	93.0%	97.1%	93.9%	98.6%	98.2%
			PM Peak	93.0%	99.1%	98.6%	97.1%	93.4%
			<b>Total Peak</b>	<b>93.0%</b>	<b>97.3%</b>	<b>94.7%</b>	<b>95.9%</b>	<b>93.4%</b>
			Off Peak Weekday	93.0%	95.6%	96.1%	93.6%	92.5%
			Weekend	93.0%	99.1%	99.2%	98.0%	98.1%
		<b>Harlem Line</b>	<b>Overall</b>	<b>93.0%</b>	<b>97.5%</b>	<b>97.2%</b>	<b>97.6%</b>	<b>94.9%</b>
			AM Peak	93.0%	95.7%	93.5%	97.5%	91.5%
			AM Reverse Peak	93.0%	97.5%	96.2%	98.1%	93.2%
			PM Peak	93.0%	97.2%	97.8%	97.1%	93.7%
			<b>Total Peak</b>	<b>93.0%</b>	<b>96.6%</b>	<b>95.7%</b>	<b>97.4%</b>	<b>92.7%</b>
			Off Peak Weekday	93.0%	97.9%	97.7%	96.9%	94.9%
			Weekend	93.0%	98.5%	98.7%	99.0%	98.5%
		<b>New Haven Line</b>	<b>Overall</b>	<b>93.0%</b>	<b>95.0%</b>	<b>95.2%</b>	<b>95.9%</b>	<b>93.8%</b>
			AM Peak	93.0%	93.4%	92.6%	94.3%	91.5%
			AM Reverse Peak	93.0%	97.0%	96.2%	98.5%	97.6%
			PM Peak	93.0%	95.7%	96.0%	97.7%	93.5%
			<b>Total Peak</b>	<b>93.0%</b>	<b>94.9%</b>	<b>94.5%</b>	<b>96.3%</b>	<b>93.2%</b>
			Off Peak Weekday	93.0%	93.5%	94.5%	94.2%	92.4%
		Weekend	93.0%	97.8%	97.6%	98.5%	97.2%	
<b>Operating Statistics</b>	<b>Trains Scheduled</b>			<b>17,568</b>	<b>36,976</b>	<b>17,574</b>	<b>36,951</b>	
	<b>Avg. Delay per Late Train (min)</b> <small>excluding trains cancelled or terminated</small>			11.1	11.7	13.1	15.0	
	<b>Trains Over 15 min. Late</b> <small>excluding trains cancelled or terminated</small>		2,300	87	238	136	517	
	<b>Trains Canceled</b>		230	4	13	10	118	
	<b>Trains Terminated</b>		230	29	47	8	35	
	<b>Percent of Scheduled Trips Completed</b>		99.8%	99.8%	99.8%	99.9%	99.6%	
<b>Consist Compliance</b>	<b>System</b>	<b>Overall</b>	<b>98.5%</b>	<b>99.3%</b>	<b>98.9%</b>	<b>99.0%</b>	<b>98.6%</b>	
<i>(Percent of trains where the number of seats provided was greater than or equal to the required number of seats per loading standards)</i>		AM Peak	97.0%	98.0%	96.7%	97.9%	97.0%	
		AM Reverse Peak	99.5%	100.0%	100.0%	100.0%	100.0%	
		PM Peak	97.0%	98.2%	97.6%	97.4%	96.0%	
		<b>Total Peak</b>	<b>97.0%</b>	<b>98.4%</b>	<b>97.5%</b>	<b>98.0%</b>	<b>96.2%</b>	
		Off Peak Weekday	99.5%	99.7%	99.6%	99.5%	99.4%	
		Weekend	99.5%	99.7%	99.5%	99.8%	99.7%	
		<b>Hudson Line</b>	AM Peak	99.0%	100.0%	99.9%	99.3%	99.0%
			PM Peak	99.0%	99.7%	99.7%	98.8%	97.6%
		<b>Harlem Line</b>	AM Peak	97.0%	98.3%	98.4%	97.3%	96.0%
			PM Peak	97.0%	97.8%	98.5%	98.4%	97.8%
		<b>New Haven Line</b>	AM Peak	95.0%	96.4%	93.0%	97.4%	96.5%
			PM Peak	95.0%	97.7%	95.2%	95.7%	93.6%

**SYSTEM Category of Delay**

Delay Minutes / Delay Threshold	% Total	January	2019 Data		2018 Data		YTD 2019 Vs 2018
			February	YTD thru February	February	YTD thru February	
<b>Engineering (Scheduled)</b>	14.9%	86	169	255	115	341	-86
<b>Engineering (Unscheduled)</b>	20.0%	409	228	637	481	2,063	-1,427
<b>Maintenance of Equipment</b>	26.5%	362	301	663	191	778	-115
<b>Transportation</b>	4.1%	51	46	98	65	120	-23
<b>Capital Projects</b>	5.0%	113	56	169	42	51	119
<b>Weather and Environmental</b>	6.3%	103	72	175	10	739	-564
<b>Police</b>	6.9%	216	79	295	103	345	-50
<b>Customers</b>	2.9%	79	33	112	60	130	-18
<b>Other</b>	13.4%	132	153	285	299	373	-88
<b>3rd Party Operations</b>	0.0%	1	0	1	2	6	-4
<b>TOTAL</b>	100.0%	1,551	1,137	2,688	1,366	4,944	-2,257
<b>HUDSON LINE</b>	% Total	January	February	YTD thru February	February	YTD thru February	YTD 2019 Vs 2018
Engineering (Scheduled)	18.2%	16	35	50	42	97	-47
Engineering (Unscheduled)	13.5%	77	26	103	134	910	-807
Maintenance of Equipment	34.4%	109	66	175	85	211	-36
Transportation	2.1%	12	4	16	21	34	-18
Capital Projects	3.6%	68	7	75	34	42	33
Weather and Environmental	10.4%	33	20	54	1	100	-46
Police	6.3%	51	12	63	29	44	19
Customers	5.7%	18	11	29	14	22	7
Other	5.7%	58	11	70	44	50	20
3rd Party Operations	0.0%	1	0	1	0	2	-1
<b>TOTAL</b>	100.0%	443	192	636	404	1,512	-876
<b>HARLEM LINE</b>	% Total	January	February	YTD thru February	February	YTD thru February	YTD 2019 Vs 2018
Engineering (Scheduled)	1.1%	10	3	14	12	91	-77
Engineering (Unscheduled)	28.9%	112	81	193	126	543	-350
Maintenance of Equipment	33.6%	80	94	173	43	248	-75
Transportation	3.2%	12	9	21	7	22	-1
Capital Projects	1.4%	31	4	35	6	6	29
Weather and Environmental	10.7%	56	30	86	5	243	-157
Police	7.5%	54	21	75	15	118	-43
Customers	1.4%	23	4	27	14	46	-19
Other	12.1%	9	34	43	64	73	-30
3rd Party Operations	0.0%	0	0	0	0	0	0
<b>TOTAL</b>	100.0%	387	280	667	292	1,390	-723
<b>NEW HAVEN LINE</b>	% Total	January	February	YTD thru February	February	YTD thru February	YTD 2019 Vs 2018
Engineering (Scheduled)	19.7%	60	131	191	61	152	39
Engineering (Unscheduled)	18.2%	220	121	340	221	610	-270
Maintenance of Equipment	21.2%	174	141	314	62	320	-6
Transportation	5.1%	27	34	60	36	65	-5
Capital Projects	6.8%	14	45	59	2	2	57
Weather and Environmental	3.3%	14	22	36	4	397	-361
Police	6.9%	111	46	157	59	183	-26
Customers	2.6%	38	17	55	31	62	-7
Other	16.2%	65	108	172	191	250	-78
3rd Party Operations	0.0%	0	0	0	2	4	-4
<b>TOTAL</b>	100.0%	723	665	1,384	669	2,045	-661

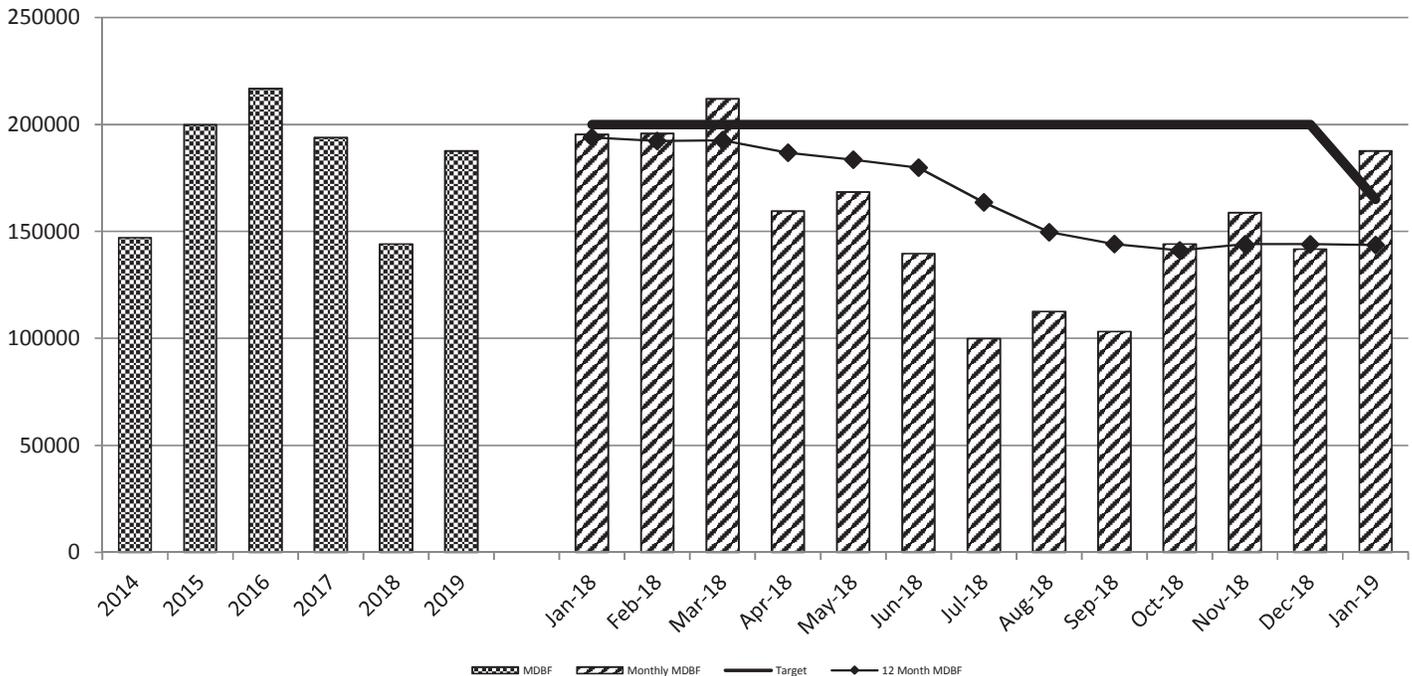
**EVENTS RESULTING IN 10 or MORE LATE (L), CANCELED (C) or TERMINATED (T) TRAINS**

Date	Day	DESCRIPTION OF EVENT	Number of Late Trains														
			AM Peak			AM Reverse			PM Peak			Off Peak			TOTAL		
			L	C	T	L	C	T	L	C	T	L	C	T	Late	Cxld	Term
02/12	Tue	Delays due to inclement weather conditions.	0	0	0	0	0	0	9	0	0	4	0	0	13	0	0
02/19	Tue	Overhead substation fire at Devon.	14	0	0	4	0	0	0	0	0	24	0	2	42	0	2
02/22	Fri	The 21 Switch was unable to reverse to normal at CP143.	0	0	0	0	0	0	4	0	0	11	0	0	15	0	0
02/22	Fri	Train 567 swapped equipment at 125th Street Station account multiple penalty applications.	0	0	0	0	0	0	10	0	0	5	0	0	15	0	0
02/22	Fri	Congestion from CP1 to CP5 due to defective insulated rail joint.	0	0	0	0	0	0	5	0	0	23	0	0	28	0	0
02/25	Mon	A broken catenary hanger just north of Talmadge Hill at Cat 164 due to strong winds.	0	0	0	0	0	0	1	0	5	9	0	1	10	0	6
02/27	Wed	Train dispatching caused congestion in GCT.	10	0	0	1	0	0	0	0	0	4	0	0	15	0	0
<b>TOTAL FOR MONTH</b>			24	0	0	5	0	0	29	0	5	80	0	3	138	0	8
<b>146</b>																	

	2019 Data								2018 Data		
	Equip-ment Type	Total Fleet Size	MDBF Goal (miles)	Jan MDBF (miles)	Primary Failure Goal	Jan No. of Primary Failures	YTD MDBF thru Jan (miles)	12 month MDBF Rolling Avg (miles)	Jan MDBF (miles)	Jan No. of Primary Failures	YTD MDBF thru Jan (miles)
<b>Mean Distance Between Failures</b>	M8	405	280,000	257,430	9	10	257,430	210,577	314,782	8	314,782
	M3	138	80,000	319,297	4	1	319,297	78,918	69,345	4	69,345
	M7	334	330,000	219,026	6	9	219,026	296,602	509,789	4	509,789
	Coach	209	200,000	184,008	8	8	184,008	158,273	245,049	6	245,049
	P-32	31	21,000	38,409	9	5	38,409	18,579	19,546	10	19,546
	BL-20	12	13,000	19,301	4	2	19,301	15,651	20,343	2	20,343
	<b>Fleet</b>	<b>1129</b>	<b>165,000</b>	<b>187,644</b>	<b>40</b>	<b>35</b>	<b>187,644</b>	<b>143,612</b>	<b>195,420</b>	<b>34</b>	<b>195,420</b>
	M8		280,000	257,430	9	10	257,430	194,502	327,664	8	327,664
M3/7		229,000	229,053	10	10	229,053	220,501	289,567	8	289,567	
Diesel/Coach		80,000	113,514	21	15	113,514	76,589	94,802	18	94,802	

Mean Distance Between Failures (MDBF) is the average number of miles a railcar or locomotive travels in revenue service before breaking down and causing a delay. The higher the MDBF, the more reliable the equipment and the service.

### ALL FLEETS Mean Distance Between Failures 2014 - 2019



<b>West of Hudson Performance Summary</b>			<b>2019 Data</b>			<b>2018 Data</b>		
			Annual Goal	February	YTD thru February	February	YTD thru February	
<b>On Time Performance</b> <i>(Trains that arrive at their final destination within 5 minutes 59 seconds of scheduled arrival time)</i>	<b>West of Hudson Total</b>	<b>Overall</b>	<b>93.0%</b>	<b>90.7%</b>	<b>90.4%</b>	<b>95.1%</b>	<b>92.8%</b>	
		AM Peak	93.0%	93.1%	89.2%	94.7%	90.4%	
		PM Peak	93.0%	87.4%	87.3%	90.7%	91.9%	
		<b>Total Peak</b>	<b>93.0%</b>	<b>90.3%</b>	<b>88.3%</b>	<b>92.8%</b>	<b>91.1%</b>	
		Off Peak Weekday	93.0%	87.6%	89.6%	95.0%	92.3%	
		Weekend	93.0%	97.1%	94.9%	98.9%	96.3%	
		<b>Pascack Line</b>	<b>Overall</b>	<b>93.0%</b>	<b>95.4%</b>	<b>93.7%</b>	<b>99.0%</b>	<b>95.8%</b>
		AM Peak	93.0%	96.2%	93.2%	97.4%	94.4%	
		PM Peak	93.0%	95.5%	92.5%	98.5%	97.1%	
		<b>Total Peak</b>	<b>93.0%</b>	<b>95.9%</b>	<b>92.9%</b>	<b>97.9%</b>	<b>95.7%</b>	
		Off Peak Weekday	93.0%	93.8%	93.8%	99.2%	94.9%	
		Weekend	93.0%	97.7%	94.6%	100.0%	97.6%	
		<b>Port Jervis Line</b>	<b>Overall</b>	<b>93.0%</b>	<b>84.3%</b>	<b>85.9%</b>	<b>89.7%</b>	<b>88.6%</b>
		AM Peak	93.0%	89.5%	84.6%	91.2%	85.0%	
		PM Peak	93.0%	78.1%	81.3%	81.6%	85.8%	
		<b>Total Peak</b>	<b>93.0%</b>	<b>83.8%</b>	<b>82.9%</b>	<b>86.4%</b>	<b>85.4%</b>	
		Off Peak Weekday	93.0%	79.3%	84.0%	89.1%	88.7%	
		Weekend	93.0%	96.1%	95.3%	96.9%	94.2%	
	<b>Operating Statistics</b>	<b>Trains Scheduled</b>		<b>1,512</b>	<b>3,187</b>	<b>1,546</b>	<b>3,259</b>	
	<b>Avg. Delay per Late Train (min)</b> <small>excluding trains cancelled or terminated</small>		33.1	26.5	18.3	21.4		
	<b>Trains Over 15 min. Late</b> <small>excluding trains cancelled or terminated</small>	300	60	138	28	100		
	<b>Trains Canceled</b>	60	6	10	5	17		
	<b>Trains Terminated</b>	60	6	11	6	10		
	<b>Percent of Scheduled Trips Completed</b>	99.4%	99.2%	99.3%	99.3%	99.2%		
<b>Consist Compliance*</b> <i>(Percent of trains where the number of coaches provided met the scheduled requirement)</i>	<b>System - AM</b>		<b>99.0%</b>	<b>97.3%</b>	<b>98.3%</b>	<b>99.3%</b>	<b>96.9%</b>	
	Pascack Valley - AM		99.0%	96.5%	97.7%	99.1%	96.2%	
	Port Jervis - AM		99.0%	98.1%	98.8%	99.7%	97.7%	

\*Consist Compliance Reporting for West of Hudson PM Peak trains is currently unavailable.

**WEST OF HUDSON**
**EVENTS RESULTING IN 5 or MORE LATE (L), CANCELED (C) or TERMINATED (T) TRAINS**

Date	Day	DESCRIPTION OF EVENT	Number of Late Trains														
			AM Peak			PM Peak			Off Peak			Weekend			TOTAL		
			L	C	T	L	C	T	L	C	T	L	C	T	Late	Cxld	Term
02/01	Fri	Trains held for late connections at Secaucus account Amtrak catenary failure.	0	0	0	1	0	0	4	0	0	0	0	0	5	0	0
<b>TOTAL FOR MONTH</b>			0	0	0	1	0	0	4	0	0	0	0	0	5	0	0
												<b>5</b>					



**FEBRUARY 2019 STANDEE REPORT**

**East of Hudson**

			FEB 2018	YTD 2018	FEB 2019	YTD 2019
<b>Daily Average</b>	Hudson Line	Program Standees	0	0	0	0
		Add'l Standees	7	21	0	3
<b>Total Standees</b>			<b>7</b>	<b>21</b>	<b>0</b>	<b>3</b>
<b>AM Peak</b>	Harlem Line	Program Standees	0	0	0	0
		Add'l Standees	109	128	14	24
<b>Total Standees</b>			<b>109</b>	<b>128</b>	<b>14</b>	<b>24</b>
	New Haven Line	Program Standees	0	0	0	0
		Add'l Standees	55	87	77	153
<b>Total Standees</b>			<b>55</b>	<b>87</b>	<b>77</b>	<b>153</b>
<b>EAST OF HUDSON TOTAL - AM PEAK</b>			<b>171</b>	<b>237</b>	<b>91</b>	<b>180</b>
<b>Daily Average</b>	Hudson Line	Program Standees	0	0	0	0
		Add'l Standees	0	8	0	0
<b>Total Standees</b>			<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>
<b>PM Peak</b>	Harlem Line	Program Standees	0	0	0	0
		Add'l Standees	12	38	14	9
<b>Total Standees</b>			<b>12</b>	<b>38</b>	<b>14</b>	<b>9</b>
	New Haven Line	Program Standees	0	0	0	0
		Add'l Standees	98	136	81	148
<b>Total Standees</b>			<b>98</b>	<b>136</b>	<b>81</b>	<b>148</b>
<b>EAST OF HUDSON TOTAL - PM PEAK</b>			<b>110</b>	<b>181</b>	<b>95</b>	<b>157</b>

**West of Hudson**

			FEB 2018	YTD 2018	FEB 2019	YTD 2019
<b>Daily Average</b>	Port Jervis Line	Program Standees	0	0	0	0
		Add'l Standees	0	0	0	0
<b>Total Standees</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>AM Peak</b>	Pascack Valley Line	Program Standees	0	0	0	0
		Add'l Standees	0	0	0	0
<b>Total Standees</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>WEST OF HUDSON TOTAL - AM PEAK</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\* Consist compliance and Standee Reporting for the West of Hudson Peak trains is currently unavailable .

**Definitions**

Weekday standees are calculated based on the most recent average weekday customer counts for the train's maximum load point. For Hudson, Harlem and most New Haven Line trains, this point occurs at GCT/125th St.. However, for certain New Haven Line trains, this maximum load point is east of Stamford.

"Program Standees" is the average number of customers in excess of programmed seating capacity.

"Additional Standees" reflect the impact of reduced train car consists reported as consist compliance less than 100%.

**Note:** These statistics do not include the effects of daily ridership variation or uneven distribution of customers within trains. Holidays and Special Events for which there are special equipment programs are not included.

Operations Planning and Analysis/jc

## ELEVATOR AND ESCALATOR OPERATING REPORT FOR MONTH OF February 2019

<b>Elevator Availability</b>	<b>2019</b>		<b>2018</b>	
	February	Year to Date	February	Year to Date
Grand Central Terminal	87.50%	87.19%	93.75%	93.75%
Harlem	99.90%	99.95%	100.00%	99.93%
Hudson	99.92%	99.96%	100.00%	99.97%
New Haven	99.69%	99.85%	100.00%	100.00%
Overall Average	96.75%	96.74%	98.44%	98.41%

*GCT Availability for February 2019 is impacted by the NE-1 Elevator being Out of Service due to East Side Access construction since February 2017. The T-20 Elevator (leftmost B-Hall elevator) is Out of Service for conversion for Tracking Center Program*

<b>Escalator Availability</b>	<b>2019</b>		<b>2018</b>	
	February	Year to Date	February	Year to Date
Grand Central Terminal	75.00%	60.35%	96.08%	93.75%
White Plains	100.00%	100.00%	100.00%	100.00%
Overall Average	87.50%	80.17%	98.04%	96.88%

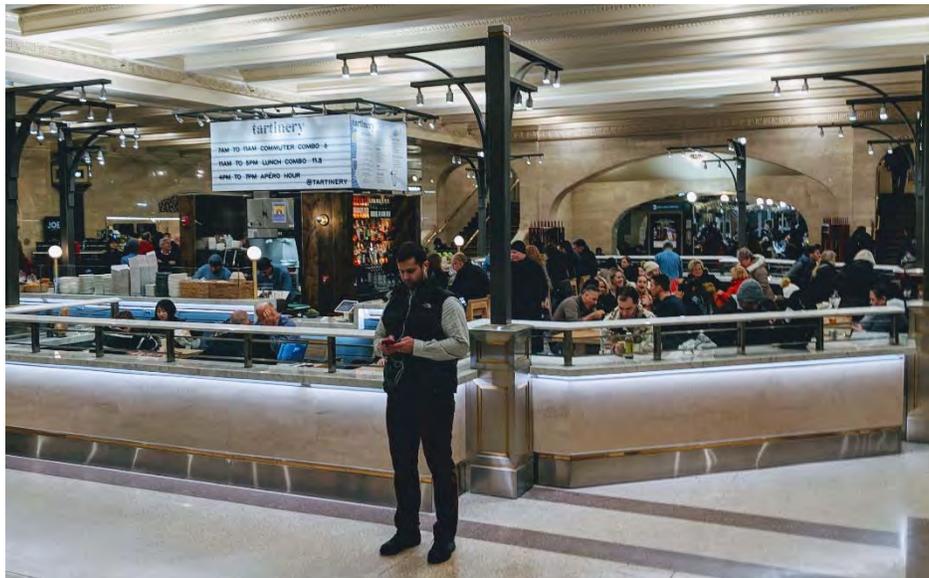
*Escalator #9 (East Spine to 48th Street and Park) had been Out of Service since January 13 for repair to the brake coil and motor. Escalator #12 (245 Park Ave) has been Out of Service since October 16 for repairs to the step chain.*

*PLEASE NOTE: Escalators #3, #4, #5 and #6 (East Side near Market) are all Out of Service for scheduled service upgrade work and is excluded from report through July of 2020.*

# Finance Report

Steven Weiss

Executive Director, Management & Budget



*The Grand Central Dining Concourse welcomed two new vendors, Art Bird & Whiskey Bar and Tartinery. Both vendors moved into the newly renovated areas at the center of the lower level. Prior to renovation, Metro-North demolished the old kiosks, prepared the locations, and installed new terrazzo flooring and the bench surrounds. Both Art Bird & Whiskey Bar and Tartinery designed their center work areas and counter designs with Metro-North approval.*



# Metro-North Railroad

## January 2019 Highlights: Financial Report

The Metro-North Railroad’s Monthly Financial Report provides year-to-date fiscal information comparing actual revenues, expenses and staffing levels to the Adopted Budget and key financial performance indicators.

### Summary of Non-Reimbursable Year-to-Date (YTD) January 2019 Financial Results

Ridership and accrual results, versus the Adopted Budget, are summarized as follows:

- Ridership of 6.9 million, which includes East of Hudson ridership of 6.7 million and West of Hudson ridership of 0.1 million, was 0.4% favorable vs. budget. Consequently, farebox revenue of \$57.9 million was \$0.5 million or 0.9% higher than budget.
- Total revenue of \$62.6 million was \$0.8 million or 1.2% higher than budget primarily due to higher farebox revenue and net GCT retail income.
- Total expenses of \$112.7 million were \$4.5 million or 3.9% favorable vs. budget primarily due to lower discretionary contractual spending in the maintenance and other operating contracts and professional services categories.

Financial results for Year-to-Date (YTD) January 2019 are presented in the table below and compared to the Adopted Budget.

January 2019 Year-to-Date Results					
(in millions)					
				Fav/(Unfav) Variance	
	Adopted Budget	Actual		\$ Var	% Var
<b>Total Revenue</b>	\$61.9	\$62.6		\$0.8	1.2%
<b>Total Expenses before Non-Cash Liability Adjs.</b>	117.2	112.7		4.5	3.9%
<b>Other Non-Cash Liabilities</b>	25.7	23.7		2.0	7.9%
<b>Net Surplus/(Deficit) after Non-Cash Liability Adjs.</b>	(81.1)	(73.7)		7.3	9.1%
<b>Cash Adjustments</b>	17.4	11.3		(6.1)	-35.2%
<b>Net Cash Surplus/(Deficit)</b>	(\$63.7)	(\$62.5)		\$1.2	1.9%

**Steven Weiss**

Executive Director, Management & Budget

## **NON-REIMBURSABLE and REIMBURSABLE SUMMARY**

January 2019 YTD Net Deficit (Non-Reimbursable and Reimbursable) of \$73.7 million was \$7.3 million or 9.1% favorable vs. the Adopted Budget.

Major drivers of the January 2019 YTD favorable result of \$7.3 million include lower Non-Reimbursable Expenses of \$6.6 million mainly due to both favorable maintenance contracts, professional services and timing of non-cash liability adjustments as well as favorable Non-Reimbursable Revenues of \$0.8 million primarily due to higher farebox revenue (\$0.5 million).

January 2019 YTD Reimbursable Expenses of \$15.5 million was \$8.6 million favorable vs. the Adopted Budget primarily due to timing for several capital projects including Connecticut Positive Train Control and the Waterbury Branch Signal System Installation.

### **REVENUE/RIDERSHIP**

- **Farebox Revenue** – YTD was \$0.5 million or 0.9% favorable vs. the Adopted Budget primarily due to higher non-commutation ridership on the New Haven Line.
  - YTD Ridership of 6.9 million was 0.4% favorable vs. the Adopted Budget and 1.4% favorable vs. YTD 2018.
- **Other Operating Revenue** – YTD was \$0.3 million or 6.0% favorable vs. the Adopted Budget primarily due to higher net GCT retail income.
- **Capital and Other Reimbursements** – YTD was \$8.6 million or 35.8% unfavorable vs. the Adopted Budget due to scheduling and timing changes noted above.

### **TOTAL EXPENSES (Non-Reimbursable and Reimbursable)**

**Total Expenses** – YTD expenses of \$151.8 million were \$15.2 million or 9.1% favorable vs. the Adopted Budget.

**Labor Expenses (including fringes and overhead recoveries)** of \$98.0 million YTD were \$1.9 million unfavorable vs. the Adopted Budget.

- **Payroll** – YTD was \$1.0 million unfavorable vs. the Adopted Budget which primarily reflects higher than anticipated sick and vacation bank reserve requirements.
- **Overtime** – YTD was \$0.7 million unfavorable vs. the Adopted Budget due to higher Reimbursable activity in various projects such as the Harlem Line and West of Hudson Signal Improvement Projects and the New Haven Line Interlocking Project as well as Winter Storm Harper Preparations and Coverage.

**Non-Labor Expenses** of \$30.1 million YTD were \$15.0 million favorable vs. the Adopted Budget.

- **Electric Power** – YTD results were \$1.9 million favorable vs. the Adopted Budget due to the timing of invoices.
- **Fuel** – YTD expenses were \$0.4 million favorable vs. the Adopted Budget due to a lower diesel fuel price per gallon.
- **Maintenance & Other Operating Contracts** – YTD was \$2.0 million favorable vs. the Adopted Budget due to lower Reimbursable project activity primarily for the Signal Replacement from Greenwich to South Norwalk Project and the timing of Non-Reimbursable expenses for Ticket Vending Machine (TVM) maintenance and other various expenses.
- **Professional Services** – YTD was \$8.5 million favorable vs. the Adopted Budget due to lower Reimbursable project activity primarily for the Connecticut Positive Train Control and Waterbury Branch Signal System Installation Projects as well as lower than anticipated Non-Reimbursable expenses for consulting and engineering services.

- **Materials & Supplies** – YTD was \$1.5 million favorable vs. the Adopted Budget due to lower Reimbursable project activity primarily for the Connecticut Positive Train Control Project partially offset by increased usage for Infrastructure Repairs and Reliability Centered Maintenance (RCM) Programs.
- **Other Business Expenses** – YTD was \$0.5 million favorable vs. the Adopted Budget due to lower travel, office supplies, memberships and subscriptions, and other miscellaneous expenses.

**Depreciation and Other Non-Cash Liability Adjustments** were \$2.0 million favorable vs. the YTD Adopted Budget primarily due to timing.

### **CASH DEFICIT SUMMARY**

January YTD Net Cash Deficit of \$62.5 million was \$1.2 million or 1.9% favorable to the Adopted Budget. This is mainly due to revised milestone scheduling of capital projects and timing of payments in several expenditure categories.

### **FINANCIAL PERFORMANCE MEASURES**

- Adjusted Farebox Operating Ratio of 58.1% was 5.1% favorable vs. the Adopted Budget.
- Adjusted Cost per Passenger of \$15.87 was \$1.32 favorable vs. the Adopted Budget.
- Revenue per Passenger of \$8.44 was \$0.07 favorable vs. the Adopted Budget.

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**ACCRUAL STATEMENT of OPERATIONS by CATEGORY**  
**January 2019**  
(\$ in millions)

SCHEDULE I - A

	Nonreimbursable				Reimbursable				Total			
	Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)	
			Variance	Percent			Variance	Percent			Variance	Percent
<b>Revenue</b>												
Farebox Revenue	\$57.378	\$57.873	\$0.495	0.9	\$0.000	\$0.000	\$0.000	-	\$57.378	\$57.873	\$0.495	0.9
Vehicle Toll Revenue	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Other Operating Revenue	4.474	4.740	0.266	6.0	0.000	0.000	0.000	-	4.474	4.740	0.266	6.0
<i>Capital &amp; Other Reimbursements:</i>												
MTA	0.000	0.000	0.000	-	10.206	9.958	(0.248)	(2.4)	10.206	9.958	(0.248)	(2.4)
CDOT	0.000	0.000	0.000	-	13.490	4.493	(8.996)	(66.7)	13.490	4.493	(8.996)	(66.7)
Other	0.000	0.000	0.000	-	0.457	1.061	0.604	*	0.457	1.061	0.604	*
Total Capital and Other Reimbursements	0.000	0.000	0.000	-	24.152	15.512	(8.640)	(35.8)	24.152	15.512	(8.640)	(35.8)
<b>Total Revenue/Receipts</b>	<b>\$61.852</b>	<b>\$62.613</b>	<b>\$0.761</b>	<b>1.2</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>(\$8.640)</b>	<b>(35.8)</b>	<b>\$86.004</b>	<b>\$78.125</b>	<b>(\$7.879)</b>	<b>(9.2)</b>
<b>Expenses</b>												
<i>Labor:</i>												
Payroll	\$45.570	\$46.645	(\$1.075)	(2.4)	\$4.130	\$4.047	\$0.083	2.0	\$49.701	\$50.693	(\$0.992)	(2.0)
Overtime	9.155	9.181	(0.026)	(0.3)	1.399	2.051	(0.652)	(46.6)	10.553	11.232	(0.678)	(6.4)
Health and Welfare	9.992	10.058	(0.066)	(0.7)	1.294	1.326	(0.032)	(2.5)	11.286	11.384	(0.098)	(0.9)
OPEB Current Payment	2.917	2.901	0.016	0.5	0.000	0.000	0.000	-	2.917	2.901	0.016	0.5
Pensions	9.230	9.166	0.064	0.7	0.889	0.948	(0.059)	(6.6)	10.120	10.114	0.005	0.1
Other Fringe Benefits	10.899	10.984	(0.085)	(0.8)	0.967	1.043	(0.076)	(7.9)	11.866	12.027	(0.161)	(1.4)
Reimbursable Overhead	(4.414)	(5.657)	1.243	28.2	4.139	5.329	(1.190)	(28.7)	(0.274)	(0.327)	0.053	19.3
<b>Total Labor</b>	<b>\$83.349</b>	<b>\$83.278</b>	<b>\$0.071</b>	<b>0.1</b>	<b>\$12.819</b>	<b>\$14.745</b>	<b>(\$1.926)</b>	<b>(15.0)</b>	<b>\$96.168</b>	<b>\$98.023</b>	<b>(\$1.855)</b>	<b>(1.9)</b>
<i>Non-Labor:</i>												
Electric Power	\$6.666	\$4.801	\$1.866	28.0	\$0.000	\$0.000	\$0.000	-	\$6.666	\$4.801	\$1.866	28.0
Fuel	2.189	1.817	0.371	17.0	0.000	0.000	0.000	-	2.189	1.817	0.371	17.0
Insurance	1.523	1.338	0.185	12.2	0.281	0.191	0.090	32.1	1.804	1.529	0.276	15.3
Claims	0.092	0.017	0.075	81.1	0.000	0.000	0.000	-	0.092	0.017	0.075	81.1
Paratransit Service Contracts	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Maintenance and Other Operating Contracts	8.914	8.276	0.638	7.2	1.420	0.107	1.313	92.5	10.334	8.383	1.952	18.9
Professional Service Contracts	3.731	1.913	1.818	48.7	6.937	0.209	6.728	97.0	10.668	2.122	8.546	80.1
Materials & Supplies	8.084	9.031	(0.946)	(11.7)	2.676	0.245	2.430	90.8	10.760	9.276	1.484	13.8
Other Business Expenses	2.652	2.188	0.464	17.5	0.019	0.015	0.004	19.1	2.671	2.203	0.467	17.5
<b>Total Non-Labor</b>	<b>\$33.852</b>	<b>\$29.381</b>	<b>\$4.471</b>	<b>13.2</b>	<b>\$11.333</b>	<b>\$0.767</b>	<b>\$10.566</b>	<b>93.2</b>	<b>\$45.185</b>	<b>\$30.148</b>	<b>\$15.037</b>	<b>33.3</b>
<i>Other Adjustments:</i>												
Other	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
<b>Total Other Adjustments</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>
<b>Total Expenses before Non-Cash Liability Adjs.</b>	<b>\$117.201</b>	<b>\$112.659</b>	<b>\$4.542</b>	<b>3.9</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>\$8.640</b>	<b>35.8</b>	<b>\$141.353</b>	<b>\$128.171</b>	<b>\$13.182</b>	<b>9.3</b>
Depreciation	20.542	18.872	1.670	8.1	0.000	0.000	0.000	-	20.542	18.872	1.670	8.1
OPEB Obligation	4.833	4.599	0.234	4.8	0.000	0.000	0.000	-	4.833	4.599	0.234	4.8
GASB68 Pension Adjustment	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Environmental Remediation	0.333	0.201	0.132	39.7	0.000	0.000	0.000	-	0.333	0.201	0.132	39.7
<b>Total Expenses</b>	<b>\$142.910</b>	<b>\$136.331</b>	<b>\$6.579</b>	<b>4.6</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>\$8.640</b>	<b>35.8</b>	<b>\$167.062</b>	<b>\$151.843</b>	<b>\$15.219</b>	<b>9.1</b>
<b>Net Surplus/(Deficit)</b>	<b>(\$81.058)</b>	<b>(\$73.718)</b>	<b>\$7.340</b>	<b>9.1</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>(\$81.058)</b>	<b>(\$73.718)</b>	<b>\$7.340</b>	<b>9.1</b>
<i>Cash Conversion Adjustments:</i>												
Depreciation	20.542	18.872	(1.670)	(8.1)	0.000	0.000	0.000	-	20.542	18.872	(1.670)	(8.1)
Operating/Capital	(6.815)	(2.491)	4.324	63.5	0.000	0.000	0.000	-	(6.815)	(2.491)	4.324	63.5
Other Cash Adjustments	3.638	(5.129)	(8.766)	*	0.000	0.000	0.000	-	3.638	(5.129)	(8.766)	*
<b>Total Cash Conversion Adjustments</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>
<b>Net Cash Surplus/(Deficit)</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>

**Notes:**  
-- Results are based on the preliminary close of the general ledger and are subject to review and adjustment. Please note that the current months' actuals do not include post-close adjustments, which will be captured in the subsequent month's YTD results.  
-- Differences are due to rounding.  
\* Variance exceeds 100%.

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**ACCRUAL STATEMENT of OPERATIONS by CATEGORY**  
**January Year-To-Date**  
(\$ in millions)

SCHEDULE I - B

	Nonreimbursable				Reimbursable				Total			
	Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)	
			Variance	Percent			Variance	Percent			Variance	Percent
<b>Revenue</b>												
Farebox Revenue	\$57.378	\$57.873	\$0.495	0.9	\$0.000	\$0.000	\$0.000	-	\$57.378	\$57.873	\$0.495	0.9
Vehicle Toll Revenue	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Other Operating Revenue	4.474	4.740	0.266	6.0	0.000	0.000	0.000	-	4.474	4.740	0.266	6.0
<i>Capital &amp; Other Reimbursements:</i>												
MTA	0.000	0.000	0.000	-	10.206	9.958	(0.248)	(2.4)	10.206	9.958	(0.248)	(2.4)
CDOT	0.000	0.000	0.000	-	13.490	4.493	(8.996)	(66.7)	13.490	4.493	(8.996)	(66.7)
Other	0.000	0.000	0.000	-	0.457	1.061	0.604	*	0.457	1.061	0.604	*
Total Capital and Other Reimbursements	0.000	0.000	0.000	-	24.152	15.512	(8.640)	(35.8)	24.152	15.512	(8.640)	(35.8)
<b>Total Revenue/Receipts</b>	<b>\$61.852</b>	<b>\$62.613</b>	<b>\$0.761</b>	<b>1.2</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>(\$8.640)</b>	<b>(35.8)</b>	<b>\$86.004</b>	<b>\$78.125</b>	<b>(\$7.879)</b>	<b>(9.2)</b>
<b>Expenses</b>												
<i>Labor:</i>												
Payroll	\$45.570	\$46.645	(\$1.075)	(2.4)	\$4.130	\$4.047	\$0.083	2.0	\$49.701	\$50.693	(\$0.992)	(2.0)
Overtime	9.155	9.181	(0.026)	(0.3)	1.399	2.051	(0.652)	(46.6)	10.553	11.232	(0.678)	(6.4)
Health and Welfare	9.992	10.058	(0.066)	(0.7)	1.294	1.326	(0.032)	(2.5)	11.286	11.384	(0.098)	(0.9)
OPEB Current Payment	2.917	2.901	0.016	0.5	0.000	0.000	0.000	-	2.917	2.901	0.016	0.5
Pensions	9.230	9.166	0.064	0.7	0.889	0.948	(0.059)	(6.6)	10.120	10.114	0.005	0.1
Other Fringe Benefits	10.899	10.984	(0.085)	(0.8)	0.967	1.043	(0.076)	(7.9)	11.866	12.027	(0.161)	(1.4)
Reimbursable Overhead	(4.414)	(5.657)	1.243	28.2	4.139	5.329	(1.190)	(28.7)	(0.274)	(0.327)	0.053	19.3
<b>Total Labor</b>	<b>\$83.349</b>	<b>\$83.278</b>	<b>\$0.071</b>	<b>0.1</b>	<b>\$12.819</b>	<b>\$14.745</b>	<b>(\$1.926)</b>	<b>(15.0)</b>	<b>\$96.168</b>	<b>\$98.023</b>	<b>(\$1.855)</b>	<b>(1.9)</b>
<i>Non-Labor:</i>												
Electric Power	\$6.666	\$4.801	\$1.866	28.0	\$0.000	\$0.000	\$0.000	-	\$6.666	\$4.801	\$1.866	28.0
Fuel	2.189	1.817	0.371	17.0	0.000	0.000	0.000	-	2.189	1.817	0.371	17.0
Insurance	1.523	1.338	0.185	12.2	0.281	0.191	0.090	32.1	1.804	1.529	0.276	15.3
Claims	0.092	0.017	0.075	81.1	0.000	0.000	0.000	-	0.092	0.017	0.075	81.1
Paratransit Service Contracts	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Maintenance and Other Operating Contracts	8.914	8.276	0.638	7.2	1.420	0.107	1.313	92.5	10.334	8.383	1.952	18.9
Professional Service Contracts	3.731	1.913	1.818	48.7	6.937	0.209	6.728	97.0	10.668	2.122	8.546	80.1
Materials & Supplies	8.084	9.031	(0.946)	(11.7)	2.676	0.245	2.430	90.8	10.760	9.276	1.484	13.8
Other Business Expenses	2.652	2.188	0.464	17.5	0.019	0.015	0.004	19.1	2.671	2.203	0.467	17.5
<b>Total Non-Labor</b>	<b>\$33.852</b>	<b>\$29.381</b>	<b>\$4.471</b>	<b>13.2</b>	<b>\$11.333</b>	<b>\$0.767</b>	<b>\$10.566</b>	<b>93.2</b>	<b>\$45.185</b>	<b>\$30.148</b>	<b>\$15.037</b>	<b>33.3</b>
<i>Other Adjustments</i>												
Other	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
<b>Total Other Adjustments</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>
<b>Total Expenses before Non-Cash Liability Adjs.</b>	<b>\$117.201</b>	<b>\$112.659</b>	<b>\$4.542</b>	<b>3.9</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>\$8.640</b>	<b>35.8</b>	<b>\$141.353</b>	<b>\$128.171</b>	<b>\$13.182</b>	<b>9.3</b>
Depreciation	20.542	18.872	1.670	8.1	0.000	0.000	0.000	-	20.542	18.872	1.670	8.1
OPEB Obligation	4.833	4.599	0.234	4.8	0.000	0.000	0.000	-	4.833	4.599	0.234	4.8
GASB68 Pension Adjustment	0.000	0.000	0.000	-	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Environmental Remediation	0.333	0.201	0.132	39.7	0.000	0.000	0.000	-	0.333	0.201	0.132	39.7
<b>Total Expenses</b>	<b>\$142.910</b>	<b>\$136.331</b>	<b>\$6.579</b>	<b>4.6</b>	<b>\$24.152</b>	<b>\$15.512</b>	<b>\$8.640</b>	<b>35.8</b>	<b>\$167.062</b>	<b>\$151.843</b>	<b>\$15.219</b>	<b>9.1</b>
<b>Net Surplus/(Deficit)</b>	<b>(\$81.058)</b>	<b>(\$73.718)</b>	<b>\$7.340</b>	<b>9.1</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>(\$81.058)</b>	<b>(\$73.718)</b>	<b>\$7.340</b>	<b>9.1</b>
<i>Cash Conversion Adjustments:</i>												
Depreciation	20.542	18.872	(1.670)	(8.1)	0.000	0.000	0.000	-	20.542	18.872	(1.670)	(8.1)
Operating/Capital	(6.815)	(2.491)	4.324	63.5	0.000	0.000	0.000	-	(6.815)	(2.491)	4.324	63.5
Other Cash Adjustments	3.638	(5.129)	(8.766)	*	0.000	0.000	0.000	-	3.638	(5.129)	(8.766)	*
<b>Total Cash Conversion Adjustments</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>
<b>Net Cash Surplus/(Deficit)</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>

**Notes:**

-- Results are based on the preliminary close of the general ledger and are subject to review and adjustment. Please note that the current months' actuals do not include post-close adjustments, which will be captured in the subsequent month's YTD results.

-- Differences are due to rounding.

\* Variance exceeds 100%.

**MTA METRO-NORTH RAILROAD**  
**ACCRUAL STATEMENT OF OPERATIONS BY CATEGORY**  
**EXPLANATION OF VARIANCE BETWEEN ADOPTED BUDGET AND ACTUAL RESULTS**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**JANUARY 2019**  
**(\$ in millions)**

		Current Month vs. Adopted Budget		
Generic Revenue or Expense Category	Non Reimb. or Reimb.	Variance Fav (Unfav)		Reason for Variance
		\$	%	
OTHER OPERATING REVENUE	Non-Reimb	\$0.266	6.0%	Higher GCT retail net income partially offset by lower advertising revenue due to a reduced MNR allocation of the overall MTA contracted advertising revenue.
CAPITAL AND OTHER REIMBURSEMENTS	Reimb	(\$8.640)	(35.8%)	Lower reimbursements reflect scheduling and timing changes in capital project expenditures.
OVERTIME	Non-Reimb	(\$0.026)	(0.3%)	See overtime tables.
	Reimb	(\$0.652)	(46.6%)	See overtime tables.
PENSIONS	Reimb	(\$0.059)	(6.6%)	Higher activity in Positive Train Control.
OTHER FRINGE BENEFITS	Reimb	(\$0.076)	(7.9%)	Higher activity in Positive Train Control.
REIMBURSABLE OVERHEAD	Non-Reimb	\$1.243	28.2%	The non-reimbursable and reimbursable variances reflect higher activity driven by the 2018 Cyclical Track Program focused on track maintenance on the Harlem and Hudson lines, Positive Train Control, the West of Hudson Signal Installation Project and the Cable Installation Project along the Harlem line.
	Reimb	(\$1.190)	(28.7%)	
ELECTRIC POWER	Non-Reimb	\$1.866	28.0%	Primarily due to timing of invoices.
FUEL	Non-Reimb	\$0.371	17.0%	Reflects lower diesel fuel price per gallon.
INSURANCE	Non-Reimb	\$0.185	12.2%	Reflects lower than budgeted premiums for Station Liability and All Agency Excess.
	Reimb	\$0.090	32.1%	Reflects lower activity in the Insulated Joint Replacement Project, the Turnouts and Switch Renewal Project throughout the GCT Trainshed, and the Harmon to Poughkeepsie and West of Hudson Signal Installation Projects.
CLAIMS	Non-Reimb	\$0.075	81.1%	Reflects a lower passenger claims provision than budgeted.
MAINTENANCE AND OTHER OPERATING CONTRACTS	Non-Reimb	\$0.638	7.2%	Reflects the timing of expense for Ticket Vending Machine (TVM) maintenance as well as other miscellaneous maintenance and operating contracts partially offset by a lease payment to Amtrak for two P-42 locomotives.
	Reimb	\$1.313	92.5%	Reflects lower activity in the following projects: Signal Replacement from Greenwich to South Norwalk, Transformer Rehabilitation which replaces components that are at the end of their useful life and Camera Installations for the non-M-8 Fleet.

**MTA METRO-NORTH RAILROAD**  
**ACCUAL STATEMENT OF OPERATIONS BY CATEGORY**  
**EXPLANATION OF VARIANCE BETWEEN ADOPTED BUDGET AND ACTUAL RESULTS**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**JANUARY 2019**  
**(\$ in millions)**

		Current Month vs. Adopted Budget		
Generic Revenue or Expense Category	Non Reimb. or Reimb.	Variance Fav (Unfav)		Reason for Variance
		\$	%	
PROFESSIONAL SERVICE CONTRACTS	Non-Reimb	\$1.818	48.7%	Primarily due to lower than anticipated consulting and engineering services.
	Reimb	\$6.728	97.0%	Reflects timing in the Connecticut Positive Train Control Project and lower activity in the Waterbury Branch Signal System Installation Project.
MATERIAL AND SUPPLIES	Non-Reimb	(\$0.946)	(11.7%)	Increased usage for infrastructure repairs and Reliability Centered Maintenance (RCM) Programs partially offset by lower Obsolete reserves and other inventory adjustments.
	Reimb	\$2.430	90.8%	Reflects timing of the Connecticut Positive Train Control and lower activity in the following projects: Connection of the East End Component Change Out Shop to MNR's mainline tracks, Waterbury Branch Signal System Installation, Connecticut Track Program, Turnouts and Switch Renewal throughout the GCT Trainshed, and Replacement of the Vital Relays on the Hudson and Harlem Lines.
OTHER BUSINESS EXPENSES	Non-Reimb	\$0.464	17.5%	Primarily due to lower travel, office supplies, memberships and subscriptions, and other miscellaneous expenses.
	Reimb	\$0.004	19.1%	Reflects lower activity in the Harlem & Hudson Lines Power Improvements Project.
DEPRECIATION	Non-Reimb	\$1.670	8.1%	Reflects lower capitalization of assets than budgeted due to timing differences in project completions and assets reaching beneficial use.
ENVIRONMENTAL REMEDIATION	Non-Reimb	\$0.132	39.7%	Reflects timing of projects requiring remediation.
OPERATING CAPITAL	Non-Reimb	\$4.324	63.5%	Reflects lower activity in the following projects: Track Geometry Car Purchase, Renovation of the GCT Training Facility, GCT Escalators Replacement, Upper Harlem Pole Replacement, Maybrook Trailway, Installation of Cameras for the non-M-8 Fleet and the Power Control Scada Upgrade.

\* Variance exceeds 100%.

**MTA Metro-North Railroad**  
**February Financial Plan - 2019 Adopted Budget**  
**Non-Reimbursable/Reimbursable Overtime**  
(\$ in millions)

	January					Year To Date(January)						
	Adopted Budget		Actual		Var. - Fav/(Unfav)		Adopted Budget		Actual		Var. - Fav/(Unfav)	
	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$	Hours	\$
<b>NON-REIMBURSABLE OVERTIME</b>												
<u>Scheduled Service</u> <sup>1</sup>	62,882	\$ 4.024	69,072	\$ 4.068	(6,190)	(\$0.044)	62,882	\$ 4.024	69,072	\$ 4.068	(6,190)	(\$0.044)
					-9.8%	-1.1%					-9.8%	-1.1%
<u>Unscheduled Service</u>	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
<u>Programmatic/Routine Maintenance</u>	47,948	\$ 2.856	52,344	\$ 3.003	(4,396)	(\$0.147)	47,948	\$ 2.856	52,344	\$ 3.003	(4,396)	(\$0.147)
					-9.2%	-5.1%					-9.2%	-5.1%
<u>Unscheduled Maintenance</u>	375	\$ 0.020	10	\$ 0.001	365	\$0.020	375	\$ 0.020	10	\$ 0.001	365	\$0.020
					97.4%	97.5%					97.4%	97.5%
<u>Vacancy/Absentee Coverage</u> <sup>2</sup>	21,936	\$ 1.249	26,882	\$ 1.463	(4,947)	(\$0.214)	21,936	\$ 1.249	26,882	\$ 1.463	(4,947)	(\$0.214)
					-22.6%	-17.1%					-22.6%	-17.1%
<u>Weather Emergencies</u>	16,673	\$ 1.005	30,279	\$ 1.718	(13,607)	(\$0.713)	16,673	\$ 1.005	30,279	\$ 1.718	(13,607)	(\$0.713)
					-81.6%	-71.0%					-81.6%	-71.0%
<u>Safety/Security/Law Enforcement</u> <sup>3</sup>	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
<u>Other</u>	0	\$ -	0	\$ (1.072)	-	\$1.072	0	\$ -	0	\$ (1.072)	-	\$1.072
Subtotal	149,813	\$ 9.155	178,587	\$ 9.181	(28,774)	(\$0.026)	149,813	\$ 9.155	178,587	\$ 9.181	(28,774)	(\$0.026)
					-19.2%	-0.3%					-19.2%	-0.3%
<b>REIMBURSABLE OVERTIME</b>	22,442	\$ 1.399	0	\$ 2.051	22,442	(\$0.652)	22,442	\$ 1.399	0	\$ 2.051	22,442	(\$0.652)
					100.0%	-46.6%					100.0%	-46.6%
<b>TOTAL OVERTIME</b>	<b>172,255</b>	<b>\$ 10.553</b>	<b>178,587</b>	<b>\$ 11.232</b>	<b>(6,332)</b>	<b>(\$0.678)</b>	<b>172,255</b>	<b>\$ 10.553</b>	<b>178,587</b>	<b>\$ 11.232</b>	<b>(6,332)</b>	<b>(\$0.678)</b>
					<b>-3.7%</b>	<b>-6.4%</b>					<b>-3.7%</b>	<b>-6.4%</b>

NOTE: Percentages are based on each type of Overtime and not on Total Overtime.

\* Exceeds 100%

<sup>1</sup> Includes Service Delay and Tour Length related overtime.

<sup>2</sup> Excludes T&E crew coverage (included in Scheduled Service category).

<sup>3</sup> Not Applicable.

MTA Metro-North Railroad  
February Financial Plan - 2019 Adopted Budget  
Non-Reimbursable/Reimbursable Overtime  
(\$ in millions)

	January			Year To Date(January)		
	Var. - Fav./(Unfav)		Explanations	Var. - Fav./(Unfav)		Explanations
	Hours	\$		Hours	\$	
<b>NON-REIMBURSABLE OVERTIME</b>						
<u>Scheduled Service</u> <sup>1</sup>	(6,190)	(\$0.044)	Reflects service coverage versus available staff and train dispatchment needs.	(6,190)	(\$0.044)	Reflects service coverage versus available staff and train dispatchment needs.
	-9.8%	-1.1%		-9.8%	-1.1%	
<u>Unscheduled Service</u>	0	\$ -		0	\$ -	
<u>Programmatic/Routine Maintenance</u>	(4,396)	(\$0.147)	Higher Reliability Centered Maintenance (RCM) in Maintenance of Equipment.	(4,396)	(\$0.147)	Higher Reliability Centered Maintenance (RCM) in Maintenance of Equipment.
	-9.2%	-5.1%		-9.2%	-5.1%	
<u>Unscheduled Maintenance</u>	365	\$0.020		365	\$0.020	
	97.4%	97.5%		97.4%	97.5%	
<u>Vacancy/Absentee Coverage</u> <sup>2</sup>	(4,947)	(\$0.214)	Higher vacation, sick and vacancy coverage requirements.	(4,947)	(\$0.214)	Higher vacation, sick and vacancy coverage requirements.
	-22.6%	-17.1%		-22.6%	-17.1%	
<u>Weather Emergencies</u>	(13,607)	(\$0.713)	Storm preparations and coverage for Winter Storm Harper as well as extremely cold weather.	(13,607)	(\$0.713)	Storm preparations and coverage for Winter Storm Harper as well as extremely cold weather.
	-81.6%	-71.0%		-81.6%	-71.0%	
<u>Safety/Security/Law Enforcement</u> <sup>3</sup>	0	\$ -		0	\$ -	
<u>Other</u>	0	\$1.072	Reflects timing differences related to payroll and calendar cutoff dates.	0	\$1.072	Reflects timing differences related to payroll and calendar cutoff dates.
<b>Subtotal</b>	<b>(28,774)</b>	<b>(\$0.026)</b>		<b>(28,774)</b>	<b>(\$0.026)</b>	
	-19.2%	-0.3%		-19.2%	-0.3%	
<b>REIMBURSABLE OVERTIME</b>	22,442	(\$0.652)	Reflects higher activity in both the Harlem Wayside and West of Hudson Signal Improvement Projects as well as the New Haven Line Interlocking Project.	22,442	(\$0.652)	Reflects higher activity in both the Harlem Wayside and West of Hudson Signal Improvement Projects as well as the New Haven Line Interlocking Project.
	100.0%	-46.6%		100.0%	-46.6%	
<b>TOTAL OVERTIME</b>	<b>(6,332)</b>	<b>(\$0.678)</b>		<b>(6,332)</b>	<b>(\$0.678)</b>	

NOTE: Percentages are based on each type of Overtime and not on Total Overtime.  
\* Exceeds 100%

<sup>1</sup> Includes Service Delay and Tour Length related overtime.

<sup>2</sup> Excludes T&E crew coverage (included in Scheduled Service category)

<sup>3</sup> Not Applicable

**MTA METRO-NORTH RAILROAD**  
**2019 Overtime Report**  
**Overtime Legend**

**REVISED OVERTIME DECOMPOSITION LEGEND DEFINITIONS**

<b><u>Type</u></b>	<b><u>Definition</u></b>
<i>Scheduled Service</i>	Crew book/Regular Run/Shift hours (above 8 hours) required by train crews, bus/tower/block operators, transportation supervisors/dispatchers, fare sales and collection, Train & Engineers, as well as non-transportation workers whose work is directly related to providing service (includes coverage for holidays).
<i>Unscheduled Service</i>	Service coverage resulting from extraordinary events not related to weather, such as injuries, mechanical breakdowns, unusual traffic, tour length, late tour relief, and other requirements that arise that are non-absence related.
<i>Programmatic/Routine Maintenance</i>	<i>Program Maintenance</i> work for which overtime is planned (e.g. Railroad Tie Replacement, Sperry Rail Testing, Running Board Replacement Programs). This also includes <i>Routine Maintenance</i> work for which OT has been planned, as well as all other maintenance <u>not resulting from extraordinary events</u> , including running repairs. Program/Routine maintenance work is usually performed during hours that are deemed more practical in order to minimize service disruptions, and includes contractual scheduled pay over 8 hours.
<i>Unscheduled Maintenance</i>	Resulting from an <u>extraordinary event</u> (not weather-related) requiring the use of unplanned maintenance to perform repairs on trains, buses, subway and bus stations, depots, tracks and administrative and other facilities, including derailments, tour length and weekend coverage.
<i>Vacancy/Absentee Coverage</i>	Provides coverage for an absent employee or a vacant position.
<i>Weather Emergencies</i>	Coverage necessitated by extreme weather conditions (e.g. snow, flooding, hurricane, and tornadoes), as well as preparatory and residual costs.
<i>Safety/Security/Law Enforcement</i>	Coverage required to provide additional customer & employee protection and to secure MTA fleet facilities, transportation routes, and security training.
<i>Other</i>	Includes overtime coverage for clerical, administrative positions that are eligible for overtime.
<i>Reimbursable Overtime</i>	Overtime incurred to support projects that are reimbursed from the MTA Capital Program and other funding sources.

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**CASH RECEIPTS AND EXPENDITURES**  
(\$ in millions)

SCHEDULE III

	January 2019				Year-to-Date			
	Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)	
			Variance	Percent			Variance	Percent
<b>Receipts</b>								
Farebox Receipts	\$56.329	\$59.006	\$2.677	4.8	\$56.329	\$59.006	\$2.677	4.8
Toll Receipts	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Other Operating Receipts	6.801	15.640	8.839	*	6.801	15.640	8.839	*
<i>Capital &amp; Other Reimbursements:</i>								
MTA	13.104	1.950	(11.154)	(85.1)	13.104	1.950	(11.154)	(85.1)
CDOT	13.490	5.852	(7.638)	(56.6)	13.490	5.852	(7.638)	(56.6)
Other	0.457	0.934	0.477	*	0.457	0.934	0.477	*
Total Capital and Other Reimbursements	27.050	8.736	(18.314)	(67.7)	27.050	8.736	(18.314)	(67.7)
<b>Total Receipts</b>	<b>\$90.180</b>	<b>\$83.382</b>	<b>(\$6.798)</b>	<b>(7.5)</b>	<b>\$90.180</b>	<b>\$83.382</b>	<b>(\$6.798)</b>	<b>(7.5)</b>
<b>Expenditures</b>								
<i>Labor:</i>								
Payroll	\$54.602	\$53.826	\$0.776	1.4	\$54.602	\$53.826	\$0.776	1.4
Overtime	11.993	12.649	(0.656)	(5.5)	11.993	12.649	(0.656)	(5.5)
Health and Welfare	12.361	10.751	1.610	13.0	12.361	10.751	1.610	13.0
OPEB Current Payment	2.917	2.855	0.062	2.1	2.917	2.855	0.062	2.1
Pensions	10.174	10.975	(0.801)	(7.9)	10.174	10.975	(0.801)	(7.9)
Other Fringe Benefits	13.046	13.233	(0.187)	(1.4)	13.046	13.233	(0.187)	(1.4)
GASB Account	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Reimbursable Overhead	(0.000)	0.000	(0.000)	(100.0)	(0.000)	0.000	(0.000)	(100.0)
<b>Total Labor</b>	<b>\$105.093</b>	<b>\$104.289</b>	<b>\$0.804</b>	<b>0.8</b>	<b>\$105.093</b>	<b>\$104.289</b>	<b>\$0.804</b>	<b>0.8</b>
<i>Non-Labor:</i>								
Electric Power	\$6.840	\$7.187	(\$0.347)	(5.1)	\$6.840	\$7.187	(\$0.347)	(5.1)
Fuel	2.148	1.553	0.595	27.7	2.148	1.553	0.595	27.7
Insurance	2.232	0.000	2.232	100.0	2.232	0.000	2.232	100.0
Claims	0.092	0.629	(0.537)	*	0.092	0.629	(0.537)	*
Paratransit Service Contracts	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Maintenance and Other Operating Contracts	9.969	15.932	(5.963)	(59.8)	9.969	15.932	(5.963)	(59.8)
Professional Service Contracts	10.661	2.986	7.675	72.0	10.661	2.986	7.675	72.0
Materials & Supplies	11.936	11.890	0.046	0.4	11.936	11.890	0.046	0.4
Other Business Expenditures	4.902	1.381	3.521	71.8	4.902	1.381	3.521	71.8
<b>Total Non-Labor</b>	<b>\$48.780</b>	<b>\$41.558</b>	<b>\$7.222</b>	<b>14.8</b>	<b>\$48.780</b>	<b>\$41.558</b>	<b>\$7.222</b>	<b>14.8</b>
<i>Other Adjustments:</i>								
Other	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Other Post Employment Benefits	0.000	0.000	0.000	-	0.000	0.000	0.000	-
<b>Total Other Adjustments</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>
<b>Total Expenditures</b>	<b>\$153.873</b>	<b>\$145.847</b>	<b>\$8.026</b>	<b>5.2</b>	<b>\$153.873</b>	<b>\$145.847</b>	<b>\$8.026</b>	<b>5.2</b>
<b>Net Cash Deficit ( excludes Opening Cash Balance)</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>	<b>(\$63.693)</b>	<b>(\$62.465)</b>	<b>\$1.228</b>	<b>1.9</b>
<b>Subsidies</b>								
MTA	50.166	52.235	2.069	4.1	50.166	52.235	2.069	4.1
CDOT	13.527	12.500	(1.027)	(7.6)	13.527	12.500	(1.027)	(7.6)
<b>Total Subsidies</b>	<b>\$63.693</b>	<b>\$64.735</b>	<b>\$1.042</b>	<b>1.6</b>	<b>\$63.693</b>	<b>\$64.735</b>	<b>\$1.042</b>	<b>1.6</b>
<b>Cash Timing and Availability Adjustment</b>	<b>\$0.000</b>	<b>\$14.330</b>	<b>\$14.330</b>	<b>-</b>	<b>\$0.000</b>	<b>\$14.330</b>	<b>\$14.330</b>	<b>-</b>

**Notes:**

-- Results are preliminary and subject to audit review.  
-- Differences are due to rounding.

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**CASH RECEIPTS AND EXPENDITURES**  
**EXPLANATION OF VARIANCE BETWEEN BUDGET AND ACTUAL RESULTS**  
(\$ in millions)

Generic Receipt or Expense Category	January Month vs Budget		
	Variance Fav (Unfav)		Reason for Variance
	\$	%	
FARE REVENUE	2.677	4.8%	Timing of cash in transit combined with higher non-commutation ridership on the New Haven Line and higher commutation ridership on the Hudson Line partially offset by lower commutation ridership on the Harlem Line.
OTHER OPERATING REVENUE	8.839	*	Primarily due to timing of PRIIA reimbursements.
CAPITAL AND OTHER REIMBURSEMENTS:			
MTA	(11.154)	(85.1%)	Lower cash receipts than budgeted combined with lower capital related project activity.
CDOT	(7.638)	(56.6%)	Lower capital related project activity partially offset by higher cash receipts than budgeted.
OTHER	0.477	*	Higher reimbursable related project activity combined with higher cash receipts than budgeted.
OVERTIME	(0.656)	(5.5%)	Reflects higher activity in both the Harlem Wayside and West of Hudson Signal Improvement Projects as well as the New Haven Line Interlocking Project.
HEALTH & WELFARE	1.610	13.0%	Timing of payments for Dental & Vision premiums for employees.
PENSIONS	(0.801)	(7.9%)	Timing of Final Actuarially Determined Contribution (ADC) payment for 2018.
ELECTRIC POWER	(0.347)	(5.1%)	Timing of payments.
FUEL	0.595	27.7%	Lower diesel fuel prices than budgeted combined with timing of payments.
INSURANCE	2.232	100.0%	No payments made in January for insurance premiums.
CLAIMS	(0.537)	*	Timing of payments relating to passenger injury claims relating to Spuyten Duyvil.
MAINTENANCE & OTHER OPERATING CONTRACTS	(5.963)	(59.8%)	Timing of 3rd Qtr. payment for MTA Police Services.
PROFESSIONAL SERVICE CONTRACTS	7.675	72.0%	Primarily due to revised milestone scheduling of capital related projects (Positive Train Control, Waterbury Branch Cab Signal, Power Control Scada Upgrade and Bridge Monitor Installation).
OTHER BUSINESS EXPENSES	3.521	71.8%	Timing of New Jersey Transit subsidy payment, CSX recovery and capital related project activity (GCT 7B Renovation).
CDOT SUBSIDY RECEIPTS	(1.027)	(7.6%)	Lower deficit than budgeted.

\* Variance exceeds 100%

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**CASH CONVERSION (CASH FLOW ADJUSTMENT)**  
(\$ in millions)

	January 2018				Year-to-Date			
	Adopted Budget	Actual	Favorable (Unfavorable)		Adopted Budget	Actual	Favorable (Unfavorable)	
			Variance	Percent			Variance	Percent
<b>Receipts</b>								
Farebox Revenue	(\$1.049)	\$1.133	\$2.182	*	(\$1.049)	\$1.133	\$2.182	*
Toll Revenue	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Other Operating Revenue	2.327	10.900	8.573	*	2.327	10.900	8.573	*
<i>Capital &amp; Other Reimbursements:</i>								
MTA	2.898	(8.008)	(10.906)	*	2.898	(8.008)	(10.906)	*
CDOT	0.000	1.359	1.359	-	0.000	1.359	1.359	-
Other	0.000	(0.127)	(0.127)	-	0.000	(0.127)	(0.127)	-
Total Capital and Other Reimbursements	2.898	(6.776)	(9.674)	*	2.898	(6.776)	(9.674)	*
<b>Total Revenue/Receipts</b>	<b>\$4.176</b>	<b>\$5.257</b>	<b>\$1.081</b>	<b>25.9</b>	<b>\$4.176</b>	<b>\$5.257</b>	<b>\$1.081</b>	<b>25.9</b>
<b>Expenditures</b>								
<i>Labor:</i>								
Payroll	(\$4.902)	(\$3.133)	\$1.768	36.1	(\$4.902)	(\$3.133)	\$1.768	36.1
Overtime	(1.439)	(1.417)	0.022	1.5	(1.439)	(1.417)	0.022	1.5
Health and Welfare	(1.075)	0.633	1.707	*	(1.075)	0.633	1.707	*
OPEB Current Payment	0.000	0.046	0.000	-	0.000	0.046	0.046	-
Pensions	(0.055)	(0.861)	(0.806)	*	(0.055)	(0.861)	(0.806)	*
Other Fringe Benefits	(1.180)	(1.206)	(0.026)	(2.2)	(1.180)	(1.206)	(0.026)	(2.2)
GASB Account	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Reimbursable Overhead	(0.274)	(0.327)	(0.053)	(19.3)	(0.274)	(0.327)	(0.053)	(19.3)
<b>Total Labor</b>	<b>(\$8.925)</b>	<b>(\$6.266)</b>	<b>\$2.659</b>	<b>29.8</b>	<b>(\$8.925)</b>	<b>(\$6.266)</b>	<b>\$2.659</b>	<b>29.8</b>
<i>Non-Labor:</i>								
Electric Power	(\$0.174)	(\$2.386)	(\$2.213)	*	(\$0.174)	(\$2.386)	(\$2.213)	*
Fuel	0.041	0.264	0.224	*	0.041	0.264	0.224	*
Insurance	(0.428)	1.529	1.957	*	(0.428)	1.529	1.957	*
Claims	0.000	(0.612)	(0.612)	-	0.000	(0.612)	(0.612)	-
Paratransit Service Contracts	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Maintenance and Other Operating Contracts	0.365	(7.549)	(7.915)	*	0.365	(7.549)	(7.915)	*
Professional Service Contracts	0.007	(0.864)	(0.871)	*	0.007	(0.864)	(0.871)	*
Materials & Supplies	(1.176)	(2.614)	(1.438)	*	(1.176)	(2.614)	(1.438)	*
Other Business Expenses	(2.231)	0.822	3.053	*	(2.231)	0.822	3.053	*
<b>Total Non-Labor</b>	<b>(\$3.595)</b>	<b>(\$11.410)</b>	<b>(\$7.815)</b>	<b>*</b>	<b>(\$3.595)</b>	<b>(\$11.410)</b>	<b>(\$7.815)</b>	<b>*</b>
<i>Other Adjustments:</i>								
Other	0.000	0.000	0.000	-	0.000	0.000	0.000	-
<b>Total Other Adjustments</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>\$0.000</b>	<b>-</b>
<b>Total Expenditures Adjustments before Non-Cash Liability Adjs.</b>	<b>(\$12.520)</b>	<b>(\$17.676)</b>	<b>(\$5.156)</b>	<b>(41.2)</b>	<b>(\$12.520)</b>	<b>(\$17.676)</b>	<b>(\$5.156)</b>	<b>(41.2)</b>
Depreciation	20.542	18.872	(1.670)	(8.1)	20.542	18.872	(1.670)	(8.1)
OPEB Obligation	4.833	4.599	(0.234)	4.8	4.833	4.599	(0.234)	4.8
GASB68 Pension Adjustment	0.000	0.000	0.000	-	0.000	0.000	0.000	-
Environmental Remediation	0.333	0.201	(0.132)	(39.7)	0.333	0.201	(0.132)	39.7
<b>Total Expenditures Adjustments</b>	<b>\$13.189</b>	<b>\$5.996</b>	<b>(\$7.193)</b>	<b>(54.5)</b>	<b>\$13.189</b>	<b>\$5.996</b>	<b>(\$7.193)</b>	<b>(54.5)</b>
<b>Total Cash Conversion Adjustments</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>	<b>\$17.365</b>	<b>\$11.253</b>	<b>(\$6.113)</b>	<b>(35.2)</b>

**Notes:**

-- Results are based on the preliminary close of the general ledger and are subject to review and adjustment. Please note that the current months' actuals do not include post-close adjustments, which will be captured in the subsequent month's YTD results.

-- Differences are due to rounding.

\* Variance exceeds 100%.

**MTA METRO-NORTH RAILROAD**  
**FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET**  
**RIDERSHIP/UTILIZATION**  
**JANUARY 2019**  
(in millions)

	MONTH			VARIANCE			
				Fav/(Unfav)			
	ADOPTED BUDGET	2019	2018 <sup>(A)</sup>	ADOPTED BUDGET		2018	
<b><u>FAREBOX REVENUE</u></b>							
<i>Harlem Line - Commutation</i>	9.387	9.271	9.321	(0.116)	-1.2%	(0.050)	-0.5%
<i>Harlem Line - Non-Commutation</i>	7.488	7.459	7.425	(0.029)	-0.4%	0.034	0.5%
<b>TOTAL HARLEM LINE</b>	<b>\$16.875</b>	<b>\$16.729</b>	<b>\$16.745</b>	<b>(\$0.145)</b>	<b>-0.9%</b>	<b>(\$0.016)</b>	<b>-0.1%</b>
<i>Hudson Line - Commutation</i>	6.114	6.259	6.083	0.145	2.4%	0.175	2.9%
<i>Hudson Line - Non-Commutation</i>	6.072	6.082	5.890	0.011	0.2%	0.192	3.3%
<b>TOTAL HUDSON LINE</b>	<b>\$12.186</b>	<b>\$12.341</b>	<b>\$11.973</b>	<b>\$0.155</b>	<b>1.3%</b>	<b>\$0.368</b>	<b>3.1%</b>
<i>New Haven Line - Commutation</i>	13.171	13.202	13.146	0.031	0.2%	0.056	0.4%
<i>New Haven Line - Non-Commutation</i>	13.981	14.436	13.809	0.455	3.3%	0.627	4.5%
<b>TOTAL NEW HAVEN LINE</b>	<b>\$27.152</b>	<b>\$27.638</b>	<b>\$26.955</b>	<b>\$0.486</b>	<b>1.8%</b>	<b>\$0.683</b>	<b>2.5%</b>
<b>All Lines - Commutation</b>	<b>28.672</b>	<b>28.731</b>	<b>28.550</b>	<b>0.060</b>	<b>0.2%</b>	<b>0.181</b>	<b>0.6%</b>
<b>All Lines - Non-Commutation</b>	<b>27.541</b>	<b>27.977</b>	<b>27.124</b>	<b>0.436</b>	<b>1.6%</b>	<b>0.853</b>	<b>3.1%</b>
<b>TOTAL EAST OF HUDSON LINES</b>	<b>\$56.212</b>	<b>\$56.708</b>	<b>\$55.674</b>	<b>\$0.496</b>	<b>0.9%</b>	<b>\$1.034</b>	<b>1.9%</b>
<b>West of Hudson<sup>(B)</sup></b>	<b>\$1.166</b>	<b>\$1.165</b>	<b>\$1.171</b>	<b>(0.001)</b>	<b>-0.1%</b>	<b>(0.006)</b>	<b>-0.5%</b>
<b>TOTAL FAREBOX REVENUE</b>	<b>\$57.378</b>	<b>\$57.873</b>	<b>\$56.845</b>	<b>\$0.495</b>	<b>0.9%</b>	<b>\$1.028</b>	<b>1.8%</b>
<b><u>RIDERSHIP</u></b>							
<i>Harlem Line - Commutation</i>	1.410	1.384	1.396	(0.026)	-1.9%	(0.012)	-0.9%
<i>Harlem Line - Non-Commutation</i>	0.817	0.810	0.811	(0.007)	-0.9%	(0.001)	-0.2%
<b>TOTAL HARLEM LINE</b>	<b>2.226</b>	<b>2.193</b>	<b>2.207</b>	<b>(0.033)</b>	<b>-1.5%</b>	<b>(0.013)</b>	<b>-0.6%</b>
<i>Hudson Line - Commutation</i>	0.783	0.797	0.776	0.014	1.8%	0.021	2.7%
<i>Hudson Line - Non-Commutation</i>	0.535	0.536	0.521	0.001	0.3%	0.015	3.0%
<b>TOTAL HUDSON LINE</b>	<b>1.318</b>	<b>1.334</b>	<b>1.297</b>	<b>0.015</b>	<b>1.2%</b>	<b>0.036</b>	<b>2.8%</b>
<i>New Haven Line - Commutation</i>	1.853	1.844	1.842	(0.009)	-0.5%	0.001	0.1%
<i>New Haven Line - Non-Commutation</i>	1.307	1.344	1.292	0.037	2.8%	0.052	4.0%
<b>TOTAL NEW HAVEN LINE</b>	<b>3.160</b>	<b>3.188</b>	<b>3.135</b>	<b>0.028</b>	<b>0.9%</b>	<b>0.053</b>	<b>1.7%</b>
<b>Total Ridership East of Hudson</b>							
<b>All Lines - Commutation</b>	<b>4.046</b>	<b>4.025</b>	<b>4.014</b>	<b>(0.021)</b>	<b>-0.5%</b>	<b>0.010</b>	<b>0.3%</b>
<b>All Lines - Non-Commutation</b>	<b>2.659</b>	<b>2.690</b>	<b>2.624</b>	<b>0.031</b>	<b>1.2%</b>	<b>0.066</b>	<b>2.5%</b>
<b>TOTAL EAST OF HUDSON LINES</b>	<b>6.704</b>	<b>6.714</b>	<b>6.638</b>	<b>0.010</b>	<b>0.1%</b>	<b>0.076</b>	<b>1.1%</b>
<b>West of Hudson<sup>(B)</sup></b>	<b>0.131</b>	<b>0.146</b>	<b>0.130</b>	<b>0.015</b>	<b>11.4%</b>	<b>0.015</b>	<b>11.8%</b>
<b>TOTAL EAST &amp; WEST OF HUDSON LINES</b>	<b>6.835</b>	<b>6.860</b>	<b>6.769</b>	<b>0.025</b>	<b>0.4%</b>	<b>0.091</b>	<b>1.4%</b>

<sup>(A)</sup> 2018 Ridership figures have been restated to simulate the 2019 calendar.

<sup>(B)</sup> West of Hudson current year actuals are preliminary and prior year actuals are stated as received from New Jersey Transit.

**MTA METRO-NORTH RAILROAD**  
**2019 ADOPTED BUDGET VS. ACTUALS**  
**TOTAL FULL-TIME POSITIONS AND FULL-TIME EQUIVALENTS**  
**January 31, 2019**

<u>Department</u>	<u>Adopted Budget</u>	<u>Actual</u>	<u>Favorable (Unfavorable) Variance</u>	<u>Notes</u>
<b>Administration</b>				
President	3	3	-	
Labor Relations	17	14	3	
Safety	58	54	4	A
Security	25	24	1	
Office of the Executive VP	9	9	-	
Corporate & Public Affairs	19	16	3	
Customer Service	66	60	6	A, B
Legal	13	13	-	
Claims	12	11	1	
Environmental Compliance & Svce	7	7	0	
Human Resources	52	45	7	A, B
Training	87	86	1	
Employee Relations & Diversity	6	5	1	
VP Planning	2	2	-	
Operations Planning & Analysis	22	21	1	
Capital Planning & Programming	16	13	3	
Long Range Planning	8	8	-	
VP Finance & Info Systems	1	-	1	
Controller	79	74	5	A, B
Budget	22	17	5	B
Procurement & Material Management	26	27	(1)	
<b>Total Administration</b>	<b>550</b>	<b>508</b>	<b>42</b>	
<b>Operations</b>				
Operations Administration	91	74	17	B
Transportation	1,617	1,641	(24)	C
Customer Service	401	366	35	B
Metro-North West	38	31	7	
<b>Total Operations</b>	<b>2,147</b>	<b>2,111</b>	<b>36</b>	
<b>Maintenance</b>				
Maintenance of Equipment	1,680	1,660	20	B
Maintenance of Way	2,088	2,058	30	B
Procurement & Material Mgmt	127	118	9	
<b>Total Maintenance</b>	<b>3,895</b>	<b>3,836</b>	<b>59</b>	
<b>Engineering/Capital</b>				
Construction Management	38	36	2	
Engineering & Design	82	77	5	B
<b>Total Engineering/Capital</b>	<b>120</b>	<b>113</b>	<b>7</b>	
<b>Total Positions</b>	<b>6,712</b>	<b>6,570</b>	<b>142</b>	
<b>Non-Reimbursable</b>	<b>6,113</b>	<b>5,992</b>	<b>120</b>	
<b>Reimbursable</b>	<b>599</b>	<b>577</b>	<b>22</b>	
<b>Total Full-Time</b>	<b>6,711</b>	<b>6,569</b>	<b>142</b>	
<b>Total Full-Time-Equivalents (of part-time positions)</b>	<b>1</b>	<b>1</b>	<b>-</b>	

**Notes**

- (A) Variance reflects higher attrition than planned.
- (B) Variance reflects delayed hiring of vacant positions.
- (C) Variance reflects less attrition than planned

**MTA METRO-NORTH RAILROAD**  
**2019 ADOPTED BUDGET VS. ACTUALS**  
**TOTAL FULL-TIME POSITIONS AND FULL-TIME EQUIVALENTS**  
**January 31, 2019**

FUNCTION/OCCUPATION	Adopted Budget	Actual	Favorable (Unfavorable) Variance
<b>Administration</b>			
Managers/Supervisors	188	175	13
Professional, Technical, Clerical	362	333	29
Operational Hourlies	-	-	-
<b>Total Administration</b>	<b>550</b>	<b>508</b>	<b>42</b>
<b>Operations</b>			
Managers/Supervisors	263	243	20
Professional, Technical, Clerical	233	204	29
Operational Hourlies	1,651	1,665	(14)
<b>Total Operations</b>	<b>2,147</b>	<b>2,111</b>	<b>36</b>
<b>Maintenance</b>			
Managers/Supervisors	652	639	13
Professional, Technical, Clerical	490	465	25
Operational Hourlies	2,753	2,732	21
<b>Total Maintenance</b>	<b>3,895</b>	<b>3,836</b>	<b>59</b>
<b>Engineering/Capital</b>			
Managers/Supervisors	49	46	3
Professional, Technical, Clerical	71	67	4
Operational Hourlies	-	-	-
<b>Total Engineering/Capital</b>	<b>120</b>	<b>113</b>	<b>7</b>
<b>Total Positions</b>			
Managers/Supervisors	1,152	1,104	48
Professional, Technical, Clerical	1,156	1,069	87
Operational Hourlies	4,404	4,396	8
<b>Total Positions</b>	<b>6,712</b>	<b>6,570</b>	<b>142</b>

**MTA METRO-NORTH RAILROAD  
2019 ADOPTED BUDGET VS. ACTUALS  
January 31, 2019**

<u>Agency-wide (Non-Reimbursable and Reimbursable)</u>	<u>Adopted Budget</u>	<u>Actual</u>	<u>Favorable (Unfavorable) Variance</u>	<u>Explanation of Variances</u>
<i>Functional Classification:</i>				
Administration	550	508	42	Primarily reflects delayed hiring of vacant positions and higher attrition than planned
Operations	2,147	2,111	36	Primarily reflects delayed hiring of vacant positions
Maintenance	3,895	3,836	59	Primarily reflects delayed hiring of vacant positions
Engineering / Capital	120	113	7	
<b>Total Agency-wide Headcount</b>	<b>6,712</b>	<b>6,570</b>	<b>142</b>	
Non-Reimbursable	6,113	5,992	120	
Reimbursable	599	577	22	

**MTA METRO-NORTH RAILROAD  
FEBRUARY FINANCIAL PLAN - 2019 ADOPTED BUDGET  
MONTHLY PERFORMANCE INDICATORS <sup>(A)</sup>  
JANUARY 2019**

	MONTH			VARIANCE	
	BUD	2019	2018	Fav/(Unfav)	
				BUD	2018
Farebox Operating Ratio					
Standard <sup>(B)</sup>	47.6%	51.8%	51.9%	4.3%	0.0%
Adjusted <sup>(C)</sup>	53.0%	58.1%	58.5%	5.1%	-0.3%
Cost per Passenger					
Standard <sup>(B)</sup>	\$17.59	\$16.27	\$16.20	\$1.32	(\$0.07)
Adjusted <sup>(C)</sup>	\$17.19	\$15.87	\$15.80	\$1.32	(\$0.07)
Passenger Revenue/Passenger	\$8.36	\$8.44	\$8.40	\$0.07	\$0.03

(A) Monthly Performance Indicators include both East and West of Hudson revenue and expenses.

(B) Standard Farebox Operating Ratio and Cost Per Passenger indicators reflect MTA-wide adopted calculations that exclude non-cash liability adjustments: Depreciation, Other Post Employment Benefits, Environmental Remediation (GASB-49), and the NHL share of MTA Police, Business Service Center and IT costs.

(C) Adjusted Fare Operating Ratio and Cost Per Passenger indicators have been adjusted for comparability between Metro-North and the LIRR and are being presented only at the railroad operating committees. These adjustments are not being used MTA-wide. Adjustments have been made to reflect all operating revenues and significant financial impacts that are outside management's control. These adjustments include: Inclusion of Other Operating Revenue, Removal of OPEB retiree expenses, and Inclusion of estimated farebox revenue from an equalization of the Connecticut fare structure.

**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

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

Metric	Annual Goal	YTD thru February
CREDIT CARD CHARGEBACK RATE	0.045%	0.076%
FARE NOT COLLECTED RATES	2.43%	4.0%
INCORRECT FARE COLLECTED RATES	12.5%	17.9%
NUMBER OF e-TIX REFUNDS PROCESSED	25,413	4,640

# Ridership Report

Michael Shiffer  
Vice President, Planning



New Hamburg Station Platform on a snowy winter's morning

*Photo courtesy of Linda Morris*



# Metro-North Railroad

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## March 2019 Highlights: Ridership Report

(Note: January West of Hudson data is not yet available from NJT)

### January 2019 vs. 2018

- East of Hudson ridership increased 1.1% vs. January 2018 and was 0.1% above Budget
  - Commutation ridership increased 0.3%
  - Non-Commutation ridership increased 2.5%
- East of Hudson ridership by line:
  - Hudson Line ridership increased 2.8%
  - Harlem Line ridership decreased 0.6%
  - New Haven Line ridership increased 1.7%
- Large increases in non-commutation ridership can be attributed to better weather which occurred during January
  - Total monthly snowfall was 1.1 inches in January 2019 (NY Central Park) vs. 11.2 inches in January 2018.
  - It was slightly warmer in January 2019 than in January 2018 (average monthly temperature was 32.5 degrees vs. 31.7 degrees last January).

**Michael Shiffer**  
Vice President  
Planning

**JANUARY 2019 RIDERSHIP & REVENUE REPORT  
MTA METRO-NORTH RAILROAD**

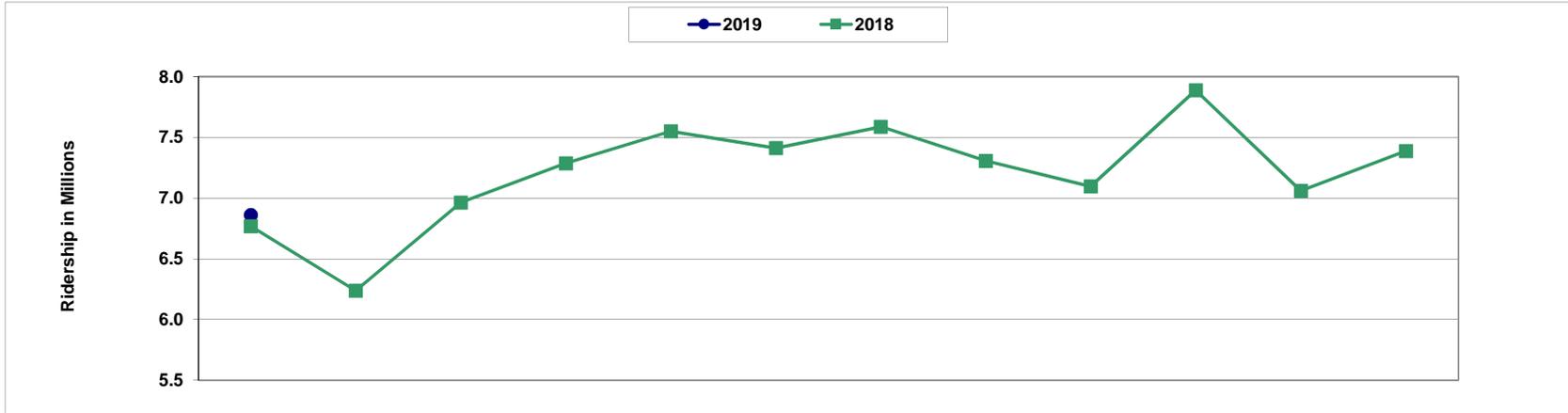
**EXECUTIVE SUMMARY**

**January Ridership and Revenue (millions)**

	Jan 2019	% Change vs. 2018
Total Rail Ridership	6.860	+1.4% ▲
Commutation Ridership	4.109	+0.5% ▲
Non-Commutation Ridership	2.751	+2.7% ▲
Connecting Service Ridership	.050	+10.1% ▲
Total MNR System Ridership	6.910	+1.4% ▲
Rail Revenue	\$57.9	+1.8% ▲

**JANUARY RAIL RIDERSHIP (1)**

- January's Total Rail Ridership was 1.4% above 2018 and 0.4% above budget.

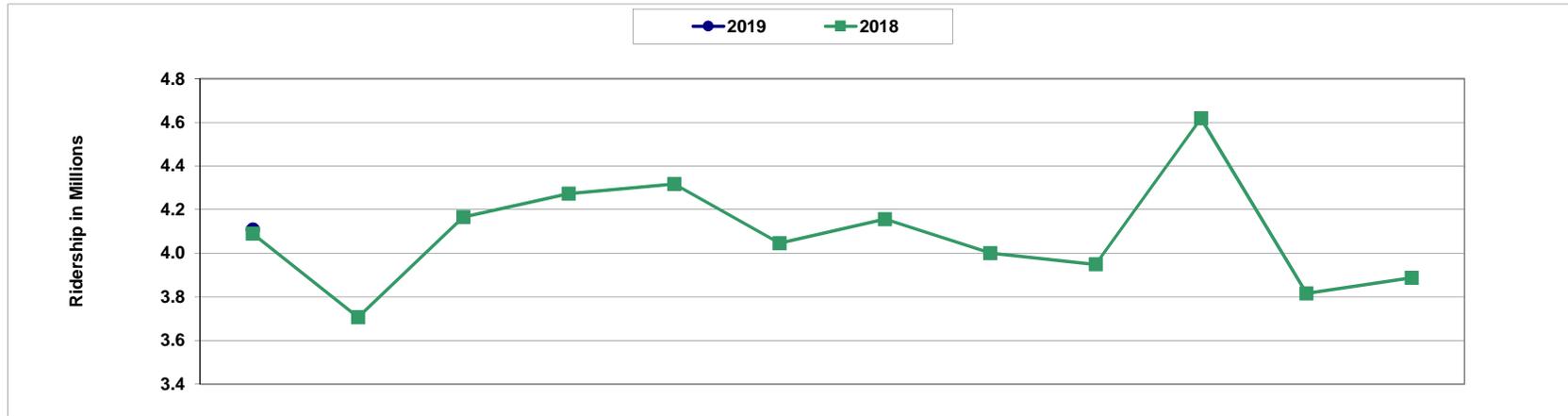


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y-T-D Total
<b>2019</b>	6.9												6.9
<b>2018</b>	6.8	6.2	7.0	7.3	7.5	7.4	7.6	7.3	7.1	7.9	7.1	7.4	6.8
<b>PCT CHG.</b>	1.4%												1.4%

1) Includes East and West of Hudson.

**JANUARY RAIL COMMUTATION RIDERSHIP (1)**

- January's Rail Commutation Ridership was 0.5% above 2018 and 0.3 below budget.

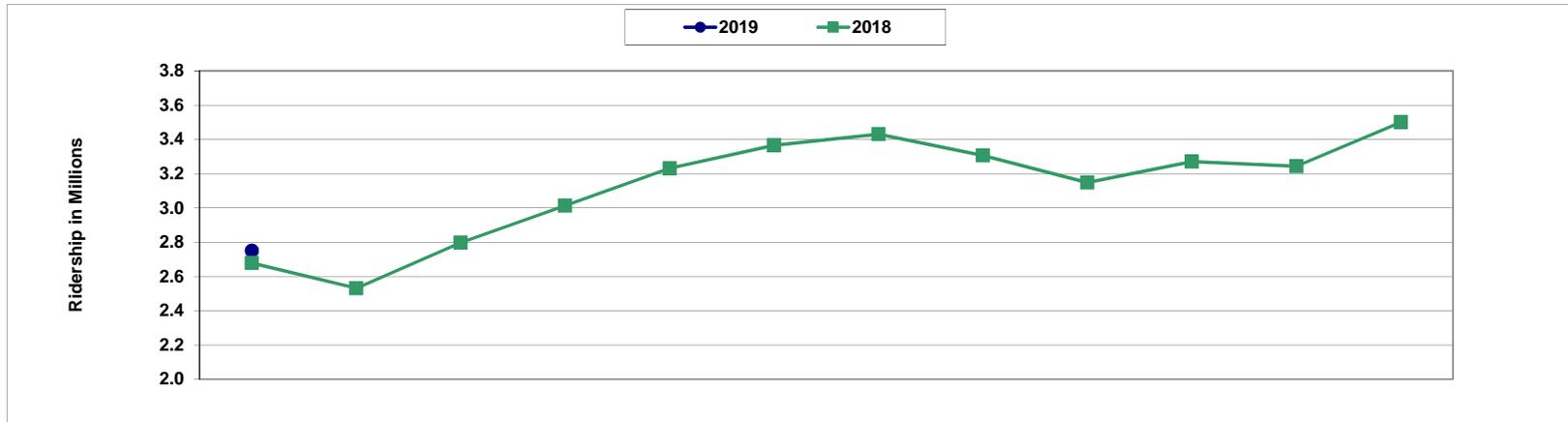


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y-T-D Total
<b>2019</b>	4.1												4.1
<b>2018</b>	4.1	3.7	4.2	4.3	4.3	4.0	4.2	4.0	3.9	4.6	3.8	3.9	4.1
<b>PCT CHG.</b>	0.5%												0.5%

1) Includes East and West of Hudson.

**JANUARY RAIL NON-COMMUTATION RIDERSHIP (1)**

• January's Rail Non-Commutation Ridership was 2.7% above 2018 and 1.4% above budget.

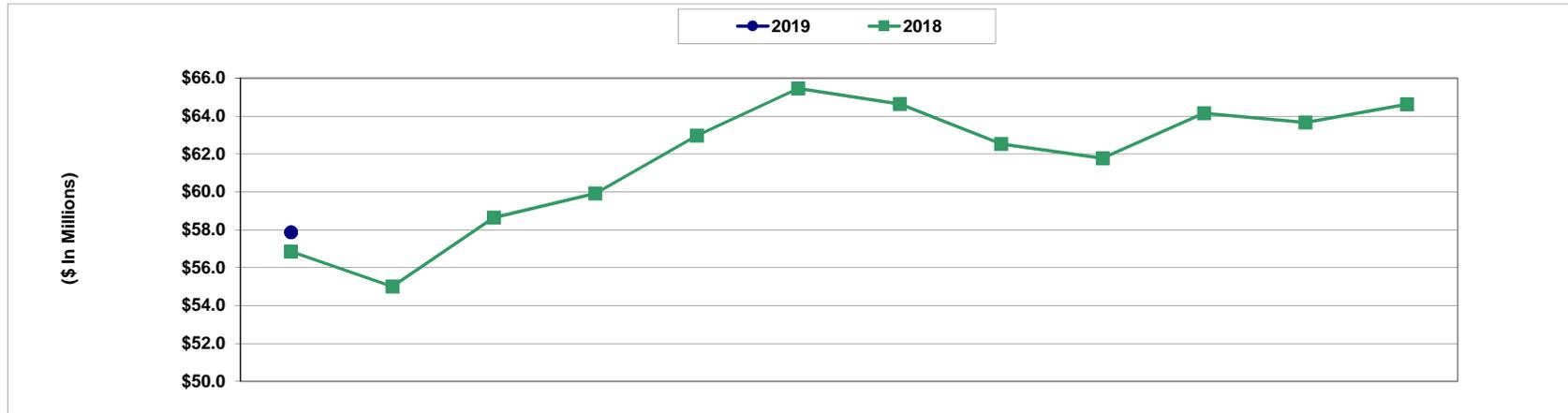


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y-T-D Total
<b>2019</b>	<b>2.8</b>												<b>2.8</b>
<b>2018</b>	<b>2.7</b>	<b>2.5</b>	<b>2.8</b>	<b>3.0</b>	<b>3.2</b>	<b>3.4</b>	<b>3.4</b>	<b>3.3</b>	<b>3.1</b>	<b>3.3</b>	<b>3.2</b>	<b>3.5</b>	<b>2.7</b>
<b>PCT CHG.</b>	<b>2.7%</b>												<b>2.7%</b>

1) Includes East and West of Hudson.

JANUARY RAIL REVENUE (1)

• January's Total Rail Revenue was 1.8% above 2018 and 0.9% above budget.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Y-T-D Total
<b>2019</b>	\$57.9												\$57.9
<b>2018</b>	\$56.8	\$55.0	\$58.6	\$59.9	\$63.0	\$65.5	\$64.6	\$62.5	\$61.8	\$64.2	\$63.7	\$64.6	\$56.8
<b>PCT CHG.</b>	1.8%												1.8%

1) Includes East and West of Hudson.

MTA METRO-NORTH RAILROAD  
RIDERSHIP SUMMARY  
JANUARY 2019

TICKET TYPE/SERVICE	JANUARY 2019	JANUARY 2019	VARIANCE VS. BUDGET		JANUARY 2018	CHANGE FROM 2018	
	ACTUAL	BUDGET	AMOUNT	PERCENT	RESTATE (1)	AMOUNT	PERCENT
<b>RAIL COMMUTATION RIDERSHIP</b>							
East of Hudson	4,024,628	4,045,837	(21,209)	-0.5%	4,014,341	10,287	0.3%
West of Hudson	84,709	76,192	8,517	11.2%	75,777	8,932	11.8%
<b>Total Rail Commutation Ridership</b>	<b>4,109,337</b>	<b>4,122,029</b>	<b>(12,692)</b>	<b>-0.3%</b>	<b>4,090,118</b>	<b>19,219</b>	<b>0.5%</b>
<b>RAIL NON-COMMUTATION RIDERSHIP</b>							
East of Hudson	2,689,816	2,658,597	31,219	1.2%	2,624,073	65,743	2.5%
West of Hudson	61,159	54,773	6,386	11.7%	54,645	6,514	11.9%
<b>Total Rail Non-Commutation Ridership</b>	<b>2,750,975</b>	<b>2,713,370</b>	<b>37,605</b>	<b>1.4%</b>	<b>2,678,718</b>	<b>72,257</b>	<b>2.7%</b>
<b>TOTAL RAIL RIDERSHIP</b>							
East of Hudson	6,714,444	6,704,434	10,010	0.1%	6,638,414	76,030	1.1%
West of Hudson (2)	145,868	130,965	14,903	11.4%	130,422	15,446	11.8%
<b>TOTAL RAIL RIDERSHIP</b>	<b>6,860,312</b>	<b>6,835,399</b>	<b>24,913</b>	<b>0.4%</b>	<b>6,768,836</b>	<b>91,476</b>	<b>1.4%</b>
<b>CONNECTING SERVICES RIDERSHIP (3)</b>	<b>50,549</b>	<b>50,300</b>	<b>249</b>	<b>0.5%</b>	<b>45,903</b>	<b>4,646</b>	<b>10.1%</b>
<b>TOTAL MNR SYSTEM RIDERSHIP</b>	<b>6,910,861</b>	<b>6,885,699</b>	<b>25,162</b>	<b>0.4%</b>	<b>6,814,739</b>	<b>96,122</b>	<b>1.4%</b>

Notes:

- 1) 2018 ridership figures have been restated to eliminate calendar impacts on ridership.
- 2) West of Hudson ridership figures are preliminary.
- 3) Includes Hudson Rail Link, Haverstraw-Ossining Ferry and Newburgh-Beacon Ferry.

MTA METRO-NORTH RAILROAD  
RIDERSHIP SUMMARY  
2019 YEAR-TO-DATE

TICKET TYPE/SERVICE	2019	2019	VARIANCE VS.		2018	CHANGE FROM 2018	
	YTD ACTUAL	YTD BUDGET	AMOUNT	PERCENT	RESTATED (1)	AMOUNT	PERCENT
<b>RAIL COMMUTATION RIDERSHIP</b>							
East of Hudson	4,024,628	4,045,837	(21,209)	-0.5%	4,014,341	10,287	0.3%
West of Hudson	84,709	76,192	8,517	11.2%	75,777	8,932	11.8%
<b>Total Rail Commutation Ridership</b>	<b>4,109,337</b>	<b>4,122,029</b>	<b>(12,692)</b>	<b>-0.3%</b>	<b>4,090,118</b>	<b>19,219</b>	<b>0.5%</b>
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<b>TOTAL RAIL RIDERSHIP</b>							
East of Hudson	6,714,444	6,704,434	10,010	0.1%	6,638,414	76,030	1.1%
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MTA METRO-NORTH RAILROAD  
RIDERSHIP BY LINE  
JANUARY 2019

LINE	JANUARY 2019 ACTUAL	JANUARY 2018 RESTATE <sup>(1)</sup>	CHANGE FROM 2018	
			AMOUNT	PERCENT
<b>EAST OF HUDSON</b>				
Harlem Line	2,193,301	2,206,702	(13,401)	-0.6%
Hudson Line	1,333,515	1,297,102	36,413	2.8%
New Haven Line	3,187,628	3,134,610	53,018	1.7%
<b>Total East of Hudson</b>	<b>6,714,444</b>	<b>6,638,414</b>	<b>76,030</b>	<b>1.1%</b>
<b>WEST OF HUDSON</b>				
Port Jervis Line	87,000	75,689	11,311	14.9%
Pascack Valley Line	58,868	54,733	4,135	7.6%
<b>Total West of Hudson (2)</b>	<b>145,868</b>	<b>130,422</b>	<b>15,446</b>	<b>11.8%</b>
<b>TOTAL RAIL RIDERSHIP</b>	<b>6,860,312</b>	<b>6,768,836</b>	<b>91,476</b>	<b>1.4%</b>
<b>CONNECTING SERVICES PROVIDED BY METRO-NORTH CONTRACTORS</b>				
Hudson Rail Link	36,227	35,762	465	1.3%
Haverstraw-Ossining Ferry (3)	10,373	7,687	2,686	34.9%
Newburgh-Beacon Ferry	3,949	2,454	1,495	60.9%
<b>Total Connecting Services</b>	<b>50,549</b>	<b>45,903</b>	<b>4,646</b>	<b>10.1%</b>
<b>TOTAL MNR SYSTEM</b>	<b>6,910,861</b>	<b>6,814,739</b>	<b>96,122</b>	<b>1.4%</b>

Notes:

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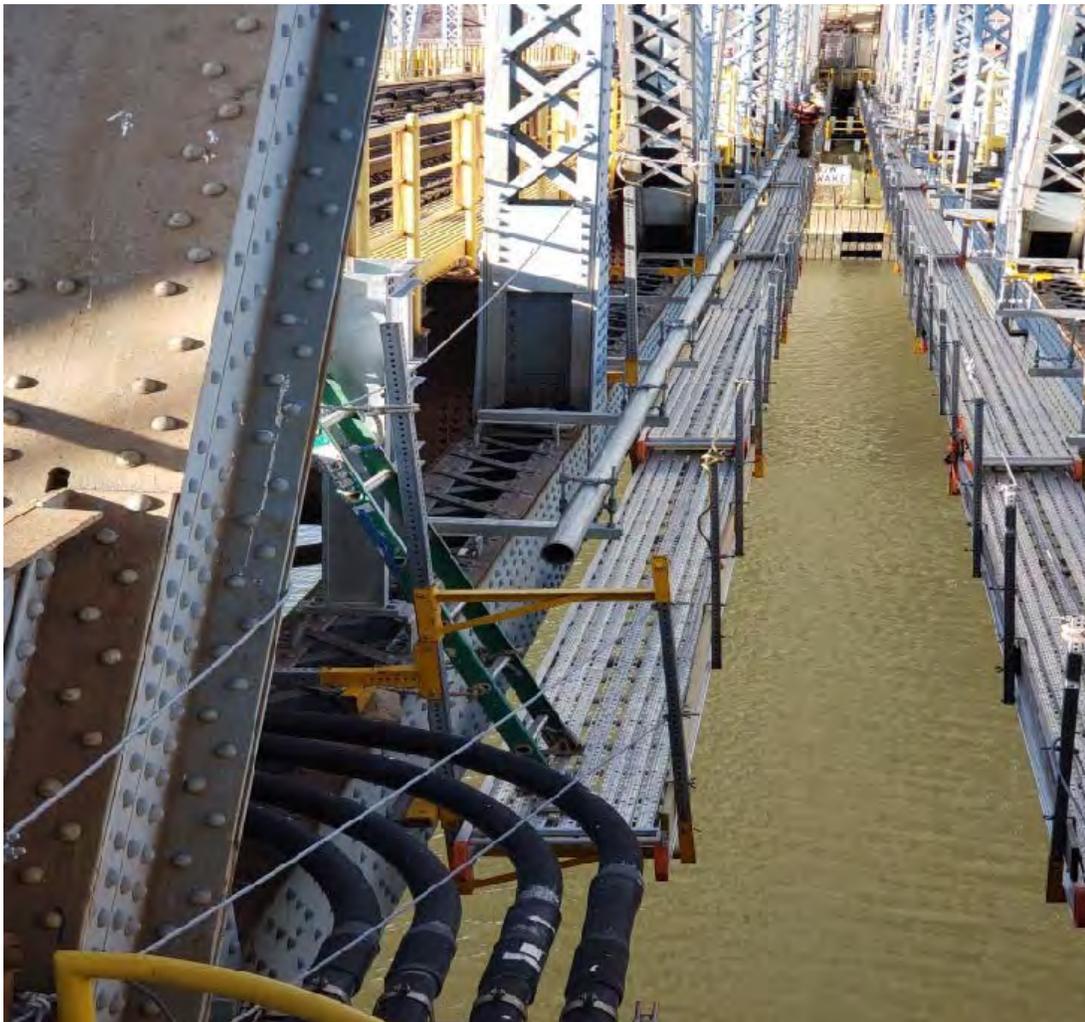
MTA METRO-NORTH RAILROAD

RIDERSHIP BY LINE  
2019 YEAR-TO-DATE

TICKET TYPE/SERVICE	2019 YTD ACTUAL	2018 YTD RESTATE <sup>(1)</sup>	CHANGE FROM 2018	
			AMOUNT	PERCENT
<b>EAST OF HUDSON</b>				
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Notes:

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**Harlem River Lift Bridge Security Upgrades**  
**Fire Standpipe Installation on Track 1**



# Metro-North Railroad

## February 2019 Highlights: Capital Program Status Report

The purpose of the Capital Program Status Report is to provide a monthly and year-to-date overview of the progress of Metro-North’s Capital Program including a brief discussion of the current month’s project highlights. The report focuses primarily on providing a summary of achievements regarding design and construction awards, project completions and contract closeouts. The point of contact for the report is John Kennard, Vice President, Capital Program Management.

In the month of February, Metro-North awarded project tasks totaling \$28 million including the Replacement of the 6th and 10<sup>th</sup> Avenue Bridges. Metro-North substantially completed \$60.5 million including the Turnouts – Mainline High-Speed project. Metro-North had no scheduled closeouts.

Metro-North’s performance against its 2019 Capital Project Goal was:

(\$ in Millions)

	<u>Annual Planned</u>	<u>Planned thru 2/28</u>	<u>Achieved thru 2/28</u>	<u>% thru 2/28</u>
Design Awards*	\$39.1	\$2.8	\$0.2	7%
Construction Awards*	\$228.2	\$21.6	\$22.8	106%
Substantial Completions	\$428.3	\$9.2	\$63.7	692%
Closeouts*	\$31.5	\$0.0	\$0.0	0%

\*Does not include support costs

**John Kennard**  
Vice President  
Capital Programs

**CAPITAL PROGRAM  
HIGHLIGHTS  
February 28, 2019**

**ROLLING STOCK**

**M-8 Procurement Option**

Metro-North, in partnership with Connecticut Department of Transportation, executed an agreement with the manufacturer in January 2017 to purchase 60 additional M-8 cars for the New Haven Line. An additional 6 cars of an up to 34 car option were ordered in June 2018 under the last option which brings the total of additional cars to 66 – 33 “A” Cars and 33 “B” Cars. The new cars will begin to arrive in the fourth quarter 2019. These cars will be fully interoperable and benefit from parts compatibility, reducing operating and future procurement costs with the 405 M-8 cars already purchased. Review and approval of obsolete components replacement continues to ensure specification and performance compliance and backward compatibility with the existing M-8 fleet. Production continues of carbody structural sub-assemblies and truck frame assemblies in Japan and shipment continues to Lincoln, Nebraska. Preparations are in-process to set-up M8 car shell assembly line and place production tooling in same at Kawasaki’s Lincoln, Nebraska (KMM) facility. Shipments of closed-circuit television (CCTV) and Positive Train Control (PTC) – MCP Kits are being finalized for use in production of the additional 66 cars and are expected to commence in early April 2019.

**GRAND CENTRAL TERMINAL (GCT)**

**GCT Utilities (fire suppression system upgrade at lower level of train shed and utility tunnels, and replacement of 49<sup>th</sup> St. existing fire pump)**

*Lower Level* – Continued with installation of fire stand pipe, heat tracing, fire alarm cables, power feeds and seismic piping at 43rd, 44th, 45th and 46th Street crossings. Complete installation of insulation, commence fire alarm pretesting, patching, labeling and tagging of valves and pipes.

*Upper Level* – Continued fire alarm pretesting, patching and labeling and tagging of valves and pipes.

*Street Level* – Continued fire alarm pretesting, patching and labeling and tagging of valves and pipes.

*Utility Tunnel* – Completed pretesting of fire alarm panel in Area PT01 and installation of heat trace cables and power feeds at East Tunnel. Continued fire alarm pretesting, patching and labeling and tagging of valves and pipes.

Overall project completion is anticipated in April 2019.

## **Grand Central Terminal Public Address and Visual Information and Real Time Train Database System (RTTDS) Replacements**

The purpose of this project is to replace, update and consolidate the existing Public Address (PA) and Visual Information Systems (VIS) in order to provide improved information to Metro-North customers. The project is divided into three GCT contracts (PA/VIS & RTTDS, Cable Plant, and Big Boards & Gate Boards) which are critical to the implementation of the global Customer Service Initiative Project.

- The final Factory Acceptance Testing for RTTDS (Real Time Train Detection System) and PA/VIS is complete and accepted with comments being addressed. The General User Interface (GUI) is being refined based on comments from the factory acceptance test.
- Construction of the Customer Service Equipment Room 7C and the GCT cable plant continues. Conduit and cable are being installed to the Big Board, Information Board, Gate Board, and visual information system (VIS) cabinets.
- Mass production of Gate Boards and Big Boards is complete. Mobilization is underway at site and preparation for backup system and Big Board installation is underway. Shipping of Big Boards to GCT is in preparation.

## ***STATIONS/PARKING/FACILITIES***

### **Customer Service Initiative (CSI) - Outlying Stations Public Announcement/Visual Information and Surveillance/ Access Control Systems**

The CSI project will enhance the customers' experience and improve operations with a system-wide upgrade of the public address, visual information and video surveillance/access control systems at twenty (20) Metro-North stations and facilities throughout New York. This project also includes upgrades to elevator monitoring, providing network connectivity for new and existing equipment and real-time data improvements.

The Design-Builder has completed 100% design drawings for the first group of five stations (Mt. Vernon East, Larchmont, Pelham, Riverdale and North White Plains IT room), and 75% design drawings for the second group of stations (Harlem-125<sup>th</sup> St., Rye, Harrison and New Rochelle) and the third group of stations (Mamaroneck, Port Chester, Melrose and Tremont); and 100% design development is in progress for the fourth group of stations (Ossining, Morris Heights, Spuyten Duyvil and Tarrytown). Site work including raceway installation continues at Mt. Vernon East, Pelham, Harlem-125<sup>th</sup>, Wakefield, Harrison and Riverdale Stations. Raceway and conduit installation at North White Plains IT room continues.

Installation of node houses (48 VDC power plants) at all 33 locations is complete and submission of closeout documents is underway. Design development for facility enhancements continue and surveys continue at Ossining, Morris Heights, Spuyten Duyvil and Tarrytown Stations. Design development continues for: video, access control, elevator & escalator management and security systems.

## **Station Improvement Initiatives at Harlem-125th Street, Riverdale, Crestwood, White Plains and Port Chester**

The purpose of this project is to develop and improve station aesthetics, introduce new technology, and develop sustainability initiatives. A key focus will be to transform and elevate the customer experience at the White Plains Station, Metro-North's third busiest station. White Plains Station improvements will include a renovated and expanded waiting room including new bathrooms, upgraded HVAC, Wi-Fi, charging stations, benches, a new heated side platform, new island platform canopy, and entrance enhancements at Main St., Hamilton Ave., Mott St. Tunnel and the main entrance. The Crestwood, Port Chester and Riverdale Stations will receive a new canopy, waiting plaza, and improvements in station overpasses (Riverdale and Crestwood). Harlem-125th Street will receive station building and platform improvements, as well as, an enhanced lighting installation under the viaduct.

The design portion of the contract is progressing with various packages under review by key stakeholders. Site work is also underway as follows:

- White Plains Station – Phase 2 – On-going installation of island platform canopy ceiling, restrooms, and electrical systems. Structural, crack and spall repairs have commenced in the Mott Street stairs. This station is scheduled for completion in March 2021.
- Harlem-125<sup>th</sup> Street Station – Phase 2 – The new restrooms and Ticket Vending Machine room are substantially complete. The lobby floor is undergoing minor tile replacements. The south plaza lighting installation is ongoing. This station is scheduled for completion in April 2019.
- Port Chester Station – Phase 2 – The Kiss & Ride canopy, plaza, stairs, and ramp are substantially complete. The project achieved substantial completion on February 28, 2019.

There are various interim milestone completion dates at each station, with overall project completion in December 2020.

## **POWER**

### **Power, C&S Infrastructure Restoration Phase I & II – Sandy (Design-Build)**

- *Phase I* – The purpose of this project is to replace and restore to a state of good repair the power and communication and signal (C&S) equipment and infrastructure that were destroyed, damaged and/or compromised by Super Storm Sandy on over 16 miles of railroad along the Hudson Line from CP 19 (Greystone) to CP 35 (Croton-Harmon). Continue installation of conduits for communication and signal power; and snowmelters and sectionalizing switches. Continue installation of cables/conduits at track crossings. Performing cable pulling and replacing positive feeders at different substations. Equipment testing and commissioning are underway.
- *Phase II* – Replace and restore to a state of good repair the power and C&S equipment and infrastructure that were destroyed, damaged and/or compromised by Super Storm Sandy on over 14 miles of railroad along the Hudson Line from CP 5 (Bronx) to CP 19

(Greystone). Work will include replacement of C&S cable, fiber optic cable, equipment and components, with significant work that is at-grade as well as in and around the track bed adjacent to the Hudson River.

- Continued test pits and surveys for Phase II design finalization. 100% design has been submitted and review by key stakeholders continues.

Overall project completion of Phase I and II is anticipated in the first quarter 2021.

### **Power Infrastructure Restoration – Substations – Sandy**

- *Tarrytown* – Continued with Con Edison final high-tension field inspection and pre-energization testing; grounding work at the transformers; finalizing Supervisory Control and Data Acquisition (SCADA); and commenced deenergization of the substation power control room.
- *Croton-Harmon* – Completed battery room positive & negative conduits and cables installation. Installation of the 15 kV feeders and continued with substation power control energization.
- *Riverdale* – Continued with installation of: bathroom fixtures and plumbing, heat, ventilation and air conditioning (HVAC) work and performed cable pulling and connection of the permanent feed for the power supply. Continued with Con Edison final high-tension field inspection and pre-energization testing. Energization of the substation power control room is underway at the Crew Quarter Building.

Substantial completion for the three substations is forecasted for April 2019.

### **Harlem & Hudson Lines Power Improvements**

- *Construction of 86<sup>th</sup> Street Substation and 110<sup>th</sup> Street Negative Return Reactors*
  - *110th St. (replacement of negative return reactors in the substation under the viaduct):* Operating as of July 2016.
  - *86th St.* – Demolition and removal of equipment on the east and west platforms continues. Completed the Negative Equalizer/Battery Rooms on the east platform. Placed concrete for wall opening lintel for Power Control Room Emergency Exit completed.

AC and DC Switchgear equipment are currently in storage. Set-up of AC switchgear equipment with the DC switchgear equipment will follow in the second quarter 2019. Substantial completion is scheduled for August 2019.

- *The Brewster Substation* –Continued cable installation and duct bank conduits tie-in; communication cable pulling and 15kV manhole work. Supervisory Control and Data Acquisition testing is underway. Substantial completion is anticipated in April 2019.

### **Substation Replacement Bridge - 23**

- *Mount Vernon East* – Con Edison approved meter pan to be installed in March 2019. Signal Substation operating training to be provided to Metro-North personnel by the end of March 2019.
- *Catenary work between Mount Vernon and New Rochelle* - All work is complete.
- *New Rochelle* – Relay switch control to be furnished by March 2019 for Metro-North's use. Final programming of the Integrated Communications Optical Network (ICON) system is complete.

Overall project completion is anticipated in March 2019.

## **TRACK AND STRUCTURES**

### **Undergrade Bridge Program (2015 to 2019 Program) – East of Hudson**

Patterson Bridge Replacements: The construction contract to replace two undergrade bridges located just north of Patterson, NY, received bid in January 2019, with contract award anticipated in April 2019. All permitting from outside agencies are in place to construct this project in an environmentally sensitive area.

### **Overhead Bridge Program (2010 – 2014 Program) – East of Hudson**

- Final design documents are nearing completion for the Fulton Avenue Bridge Replacements. Supplementary boring near the proposed bridge pier, the design of the historical plaques to be installed on the new bridge and coordination for the relocation of existing C&S conduits are on-going.
- 14<sup>th</sup> Avenue Bridge, Mt. Vernon, NY (Design-Build contract) – Completed installation of mini-caissons and tiebacks on the north abutment. Installation of mini-caissons on the south abutment is underway with tiebacks to follow. The bridge will be opened for vehicular traffic by end of August 2019.

### **Overhead Bridge Program (2015 to 2019 Program) – East of Hudson**

- 6th and 10th Avenue Bridge Replacement, Mt. Vernon - The construction contract was awarded in February 2019 and the construction supervision and inspection services contract is anticipated to be awarded in March 2019.
- 3rd Avenue Bridge Replacement, Mt. Vernon - Request for design-build proposals will be solicited in April 2019.

### **Harlem River Lift Bridge (HRLB) Security Upgrades**

Construction submittals are on-going. Installation work of the following continues: on-going standpipe installation on bridge spans pending track outages; vertical fencing fabrication to be installed on four bridge members to protect counterweight blocks; on-going staircase installation and door installation at the communication sheds at Manhattan and Bronx divisions. Project is anticipated to achieve substantial completion in March 2019.

### **Harlem River Lift Bridge Power Cable Tie**

The purpose of this project is to furnish and install a new Bronx-Manhattan power cable tie system to provide back-up power between the two sides of the Harlem River Lift Bridge. The new power cable will be installed in the existing duct bank/manhole system of the existing tunnel that spans across the Harlem River. Construction submittal phase continues. Switchgear and transformer equipment are in storage and to be installed. Substantial completion is scheduled for January 2020.

### **2018 Cyclical Track Program**

The 2018 Cyclical Track Program consists of the replacement of 38,400 wood ties, 10 miles of continuous welded rail (CWR), and surfacing of 140 miles of track. Since the start of the program, Metro-North forces have installed approximately 16,182 ties, 6.01 miles of rail, surfaced 16.79 miles of track, and performed 1,029 welds for CWR on the Hudson, Harlem, and the New York State portion of the New Haven Lines.

## **COMMUNICATIONS AND SIGNAL**

### **Positive Train Control (PTC)**

Subsystem designs are being finalized. Software enhancements and corrections continue. Factory Acceptance Testing (FAT) for sub-system level software for On-Board version S3 and Office version 3.3.1 were completed. FAT for integrated system software versions 3.2 and 3.3 were completed. All communication site locations have been approved by the Federal Communications Commission (FCC). Civil Speed Enforcement is available on all lines for use by Amtrak, freight and Metro-North Advanced Civil Speed Enforcement System equipped rolling stock for revenue service. All wayside and on-board PTC equipment installations to support Revenue Service Demonstration (RSD) have been completed. Third party contract work for communications infrastructure installation is complete. Continued Site Acceptance Testing (SAT) on non-pilot segments. Initiated RSD on Pilot line on November 21, 2018. Training of employees continues. Interoperability discussions with Amtrak and Freight carriers continue. The project has met all the Federal Railroad Administration (FRA) requirements for 2018 for PTC compliance and to qualify for a revised schedule. Alternative schedule with updated Implementation Plan which outlines non-pilot segment commissioning plan was submitted to the FRA.

### **West of Hudson Signal Improvements**

The purpose of this project is to install a new 100 Hz Cab Signal system replacing the existing antiquated system on the Port Jervis Line between Suffern, NY (MP 31.3) and Sparrowbush, NY (MP 89.9), with the work divided into five segments. Metro-North forces are continuing to work on installations in preparation for a series of cut overs. Cut over from CP Valley to CP Hudson Junction was complete in January 2019. The next cut over from CP Hall to CP Hudson Junction is scheduled for March 22<sup>nd</sup>, 2019.

### **Hudson Line Communication and Express Cable Installation**

The purpose of the project is for the engineering, procurement, installation and the testing of fiber optic and copper cables and related installation materials, enclosures, equipment, conduits and hardware from CP 35 (Harmon) to CP 75 (Poughkeepsie).

Construction submittals phase is on-going. Field survey, soil testing, and test pits are all on-going at various locations. Continued installing cable trough and conduit along segment one near the Peekskill and the Croton-Harmon Station. Segment one is scheduled for completion in December 2020.

### **Harlem Line Wayside Communications & Signal System Infrastructure Improvements**

The purpose of the project is for the engineering, procurement, installation and the testing of fiber optic and copper cables and related installation materials, enclosures, equipment, conduits and hardware along CP 112 (Woodlawn) to CP 154 (Southeast).

Construction submittals phase is on-going. Field survey, soil testing, and test pits are all on-going at various locations. Installation of pullboxes is on-going at segment one near the Crestwood, Scarsdale, Hartsdale and White Plains Station. Segment one is scheduled for completion in December 2019.

## **SHOPS AND YARDS**

### **Harmon Shop Improvements**

#### *Phase V, Stage I Design-Build*

- *Consist Shop Facility (CSF)* – DC power testing and commissioning is underway. Permanent DC power is anticipated to be applied in March 2019.
- *EMU (Electric Multiple Unit) Annex Building* – A Temporary Certificate of Occupancy was issued for the 2nd floor support shops, while 1st floor Industrial equipment testing is ongoing. Coordinating the phased User Department move into the facility began with second floor administrative areas and support shops. Continuing final testing and training on industrial equipment.

*Yard Utilities and Miscellaneous* – Mitigating DC Power component failure at the DC substation with the equipment manufacturer to facilitate the application of permanent DC power inside the CSF shop.

Overall, Phase V, Stage I substantial completion is anticipated in March 2019.

*Phase V, Stage II Preliminary Design* - The scope of this work includes the demolition of the remainder of Building 6 as well as the associated Building 5 storeroom and the construction of the balance of the Phase V Electric Car Shop and Support Shop facilities.

- On-going site survey to facilitate the design development of the Running Repair and Support Shop. Submitted the 90% early electrical construction drawings and the 90% Building #6 demolition drawings for Metro-North stakeholder's review. Design development of construction documents for the new Running Repair and Support Shop continues. Release for Construction (RFC) Bldg. 6 demolition drawings and RFC early electrical drawings are due in April 2019.

# 2019 MNR Capital Program Goals

As of February 28, 2019

In Millions

